



Report to City Council

TO: Mayor and City Council

FROM: Marshall Eyerman, Chief Financial Officer/City Treasurer

AGENDA DATE:

TITLE: ACQUISITION OF SOUTHERN CALIFORNIA EDISON STREET LIGHTS

RECOMMENDED ACTION

1. Discuss the possible financing options for the acquisition of Southern California Edison (SCE) street lights.
2. Provide direction to begin negotiations with the Western Riverside Council of Governments and The PFM Group to develop the financing plan for the purchase of the street lights.

SUMMARY

On October 18, 2016, the City Council approved the Purchase and Sale Agreement, including the Light Pole License Agreement with Southern California Edison (SCE) to acquire approximately 9,411 street lights. At that time, staff was directed to bring back financing options, energy efficient conversion options and review of the street light standards back to the City Council for consideration.

On December 7, 2016, the Finance Sub Committee received a presentation from The PFM Group as the Financial Advisor to the Western Riverside Council of Governments (WRCOG). The presentation discussed the current status of WRCOG's financing team activities and the potential financing options for the region.

On December 14, 2016, the Utility Commission received a presentation from The Energy Network as the first step in the examination of light emitting diode (LED) lighting technologies. Additionally, from November through early January, the City of Hemet and WRCOG collaborated to create the region's largest street light demonstration sites to allow for members of the public to view and comment on a variety of new street light technologies.

This report provides a summary of the multiple financing options available for the City's purchase of the street lights. The discussions on energy efficient conversion options and review of the street light standards will be brought back at a later date for consideration.

DISCUSSION

The Purchase and Sale Agreement with SCE is for the acquisition of approximately 9,411 SCE owned street lights for a purchase price of not-to-exceed \$4.9 million. Buying the street lights will transition them from SCE's LS-1 (utility owned and maintained) tariff to its LS-2 (city owned and maintained) tariff. The Light Pole License Agreement provides SCE with an existing and future easement on the 9,411 poles for existing and future wireless communicating devices. SCE uses the wireless communication to collect and relay data from meters, and to collect, relay and communicate with SCE distribution equipment. Final approval of the Agreement and the sale of the street lights are subject to approval from the California Public Utilities Commission (CPUC) and approval of a financing plan by the City Council.

Acquisition of the SCE street lights provides the City with an opportunity to control certain costs and reduce the projected funding shortfall in the street light program. However, the City does not have control over SCE's proposed increases to the tariffs. If the actual increases exceed the projected increases, it will negatively impact the projected savings.

As street lights are installed within the City, they are currently dedicated to the utility provider. The utility provider owns the lights and is responsible for O&M, risk management, knock-down replacements, and energizing the street lights. The two utility providers, SCE and Moreno Valley Utility (MVU), charge the City a monthly tariff to maintain and illuminate approximately 11,500 street lights. Street lights within Moreno Valley are designated under the LS-1 (SCE) or SL-1 (MVU) tariff. This tariff is for utility owned and maintained street lights.

The City and the Moreno Valley Community Services District levies a parcel charge and/or parcel tax ("parcel charge") on the annual property tax bills. Revenue received from the parcel charge funds a portion of the street lighting program. The City does not levy street lighting parcel charges against those parcels located within the Edgemont Community Services District (ECSD). Street light service to the ECSD is provided by an independent special district, which levies parcel charges to pay for the street lights within its boundaries. Street lights located within the ECSD are not included within the City's street lighting program. A map of the ECSD is attached to this report.

As utility costs have increased over the years, parcel charge revenue received to support the street light program has not kept pace, creating a funding shortfall. The General Fund has been funding the shortfalls since fiscal year (FY) 2010/11. The FY 2015/16 unaudited shortfall is estimated at \$400,000. Based on SCE's past practice of continuing to increase its monthly tariff, the annual shortfall is anticipated to grow to an estimated \$1,800,000 by FY 2035/2036. Unless new revenue sources or cost saving

measures can be identified, the General Fund will have a liability to continue meeting the funding shortfall.

Over the years, a number of alternatives to reduce expenditures have been explored to include removing street lights, turning off street lights, and converting the street lights to energy efficient lighting (e.g. LED). None of these options provide enough of a cost savings to warrant implementation.

In 2011, the City spearheaded the formation of the Coalition for Affordable Street Lights (Coalition) to jointly participate in SCE's 2012 General Rate Case (GRC). The Coalition includes other cities also served by SCE. The GRC is the process SCE goes through every three years to modify its tariff. During the 2012 GRC settlement discussions, the Coalition expressed concern over the rising costs to provide street lighting services and cities' inability to control costs. In response, SCE announced a street light purchase program in March of 2012. Three years later, SCE announced the end of the program, but agreed to honor the program with those cities that requested a purchase price prior to August 2015 and entered into SCE's Purchase and Sale Agreement within 1-year of receiving the purchase price. On October 27, 2015, SCE provided a purchase price of \$4.9 million for Moreno Valley's 9,411 street lights.

Following the City's acquisition of the SCE street lights, the monthly tariff will change from the LS-1 tariff to the lower LS-2 tariff. The LS-2 tariff will cover the SCE's cost to transmit the energy to the street lights and the cost of the energy. Ownership costs (e.g. O&M, risk management, knock-down replacements, and customer service) will become the responsibility of the City. By owning the street lights, the City could realize a potential cumulative cost savings of up to \$3.6 million over a 20-year period. These savings include estimated ownership and acquisition costs.

Ownership of the street lights provides the City with greater control over O&M costs. If the City elects to upgrade the street lights to an energy efficient lighting system (e.g. LED) there will be additional savings in energy costs. Converting to energy efficient lighting is estimated to provide an additional potential cumulative cost savings of up to \$4.4 million or a total of \$8 million in savings (net of costs to convert to LED) over a 20-year period when compared to the projected funding shortfall of the current, SCE ownership scenario.

WESTERN REGIONAL COUNCIL OF GOVERNMENTS

In December 2014, the Executive Committee of the Western Regional Council of Governments (WRCOG) directed WRCOG staff to develop a regional street light program on behalf of its member jurisdictions. WRCOG's regional program includes an inventory of the street lights, acquiring the street lights and retrofitting them to LED technology, and providing the ongoing O&M of the street lights. Because Moreno Valley has its own utility, it has not been party to WRCOG's efforts. However, WRCOG and Moreno Valley have been working cooperatively together as each navigates simultaneously through the analysis process. Moreno Valley has the ability to opt-in to WRCOG's regional program at any point and for any portion of WRCOG's program.

Financing

On September 12, 2016, the Executive Committee approved WRCOG staff's recommendation to select Bank of America Public Capital Corporation ("BofA") to provide financing for the acquisition and retrofit of street lights to LED technology. The BofA option provides a "direct placement lease" which is secured by the street lights. BofA was selected after WRCOG conducted a competitive bidding process.

Operation and Maintenance

O&M of street lights included as part of WRCOG's regional program will be provided by a contractor selected via a competitive procurement process. The contractor will provide routine O&M and will handle customer service related calls on behalf of those cities participating in the regional program. WRCOG anticipates issuing a request for proposal in October.

LED Regional Demonstration Area

WRCOG selected the City of Hemet as a location for a Regional Demonstration Area to test LED street lights. Five different locations within Hemet, which include multiple land use types (e.g. residential, commercial, industrial, etc.), were identified. Various LED types from 12 vendors have been installed for the public to view and provide input. WRCOG plans to conduct multiple educational tours in October and November. The public will be invited to complete surveys indicating their preference of LED type based on the type of land use. WRCOG will distribute a media kit to its member jurisdictions outlining the specifics of the survey process in early October.

FISCAL IMPACT

The not-to-exceed purchase price of the street lights is \$4.9 million. The current financial modeling projects the City could save \$3.6 million over 20 years if it acquires the street lights. Additionally, with conversion to LED technology, the City may save a total amount of \$8 million over the same 20-year time period. Based on the estimated savings in the tariff with the purchase (LS-1 to LS-2) and energy costs with LED conversion, the City's General Fund will still be required to subsidize the street light program between \$400,000 to \$1 million annually for an estimated total amount of \$13.2 million over the 20-year time period. The shortfall increases through year 15 (term of projected debt service) and decreases the remaining five years of the 20-year period. If the street lights are not purchased the projected shortfall ranges from \$400,000 to \$1.8 million annually for an estimated total amount of \$21.6 million over the 20-year time period.

Multiple options for the financing of the purchase are being explored to include:

Option	Estimated/Potential Structure	Benefit	Challenges
WRCOG issued Bond (PFM Group)	<ul style="list-style-type: none"> • 15 years • 4-5% 	<ul style="list-style-type: none"> • Low interest rate • Leverage WRCOG financial and legal teams experience and pooled financing 	<ul style="list-style-type: none"> • Conduit issuer, no asset to pledge
City Issued Bonds	<ul style="list-style-type: none"> • 15 years • 4-5% 	<ul style="list-style-type: none"> • Low interest rate • Uses City approved Financing Team 	<ul style="list-style-type: none"> • High cost of issuance • Credit and issuance process
City Reserve Funds	<ul style="list-style-type: none"> • 15 years • 4-5% 	<ul style="list-style-type: none"> • Low interest rate 	<ul style="list-style-type: none"> • Depletes current reserve balances
CLEEN at CA I Bank	<ul style="list-style-type: none"> • 10 years • 1-2% 	<ul style="list-style-type: none"> • Low interest rate • State Agency established to help muni borrowers 	<ul style="list-style-type: none"> • Individual credit process • Timing uncertainty • Taxable funds not available • Higher annual payments
California Energy Commission	<ul style="list-style-type: none"> • 10 years • 1-2% 	<ul style="list-style-type: none"> • Low interest rate • State Agency established to help muni borrowers 	<ul style="list-style-type: none"> • Limited funds available • Only available for retrofit portion • Taxable funds not available • Higher annual payments
Direct Placement Lease	<ul style="list-style-type: none"> • 15 years • 4-5% 	<ul style="list-style-type: none"> • Low interest rate • Flexible timing • Taxable and Tax-exempt 	<ul style="list-style-type: none"> • Credit and issuance process • Document development
ENCO	<ul style="list-style-type: none"> • Negotiable 	<ul style="list-style-type: none"> • Low interest rate 	<ul style="list-style-type: none"> • May impact existing contract

Based on the potential savings from the purchase of the streetlights, the recommended option is to proceed with the financing through WRCOG. While the City has pursued the streetlight purchase over the past couple years, WRCOG has been proceeding down the same path. By utilizing WRCOG and their legal and financing team, the City will be able to leverage our knowledge and experience along with the efforts and knowledge of WRCOG and their team. While this structure does not add any additional cost to the City, the pooled financing structure may provide additional efficiencies and cost savings to the City and our regional neighbors.

In addition to the potential savings from the purchase of the street lights, additional savings may be realized by converting the street lights (SCE and MVU) to LED technology. The conversion cost is estimated to be \$4.25 million. The project may be eligible for energy rebates provided through SCE for approximately \$1.5 million, leaving

an estimated conversion cost of just over \$2.75 million. The conversion cost may be funded through options similar to the options for financing the purchase of the street lights. The conversion cost does not include those street lights within and under control of the ECSD

Additional Opportunities

Ownership of the street lights also provides an opportunity to take advantage of emerging technologies. The network of real estate the street lights provide enables their use for additional services that can benefit our community and can create opportunities to generate additional revenue. For example, the City of Los Angeles uses street lights for electric vehicle charging stations while other communities use them to create a wireless mesh network of radio nodes. The nodes are used for smart cities applications and position a city for developing a communication network. Examples of these applications include the ability to collect data on traffic mobility, sense movement on the streets, turn off street lights when sidewalks and roads are empty, detect ground shifts and send earthquake warnings, and act as WiFi hotspots.

NOTIFICATION

Posting of the agenda.

PREPARATION OF STAFF REPORT

Prepared By:
Marshall Eyerman
Chief Financial Officer/City Treasurer

Concurred By:
Candace E. Cassel
Special Districts Division Manager

Concurred By:
Jeannette Olko
Electric Utility Division Manager

CITY COUNCIL GOALS

Public Facilities and Capital Projects. Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

Positive Environment. Create a positive environment for the development of Moreno Valley's future.

Community Image, Neighborhood Pride and Cleanliness. Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

CITY COUNCIL STRATEGIC PRIORITIES

- 1. Economic Development**
- 2. Public Safety**
- 3. Library**
- 4. Infrastructure**
- 5. Beautification, Community Engagement, and Quality of Life**
- 6. Youth Programs**

Objective 4.1: Develop a Moreno Valley Utility Strategic Plan to prepare for the 2020 expiration of the ENCO Utility Systems agreement.

ATTACHMENTS

1. WRCOG Financing Staff Report
2. WRCOG Finance Sub Committee Presentation
3. Study Session July 12, 2016

DRAFT



Western Riverside Council of Governments Executive Committee

Staff Report

Subject: Regional Streetlight Program Activities Update

Contact: Tyler Masters, Program Manager, masters@wrcoq.cog.ca.us, (951) 955-8378

Date: September 12, 2016

Requested Action:

1. Recommend, for those jurisdictions interested in using financing for the acquisition and retrofitting of streetlights, that they utilize Bank of America Public Capital Corporation (which was deemed the most responsive during the bid process by WRCOG staff and its Financial Advisor, Public Financial Management, for being able to provide the most competitive financing for the Regional Streetlight Program).

WRCOG's Regional Streetlight Program will assist member jurisdictions with the acquisition and retrofit of their Southern California Edison (SCE)-owned and operated streetlights. The Program has three phases, which include 1) streetlight inventory; 2) procurement and retrofitting of streetlights; and 3) ongoing operations and maintenance. The overall goal of the Program is to provide significant cost savings to the member jurisdictions.

Program Update

At the direction of the WRCOG Executive Committee, WRCOG is developing a Regional Streetlight Program that will allow jurisdictions (and Community Service Districts) to purchase the streetlights within their boundaries that are currently owned / operated by SCE. Once the streetlights are owned by the member jurisdiction, the lamps will then be retrofitted to Light Emitting Diode (LED) technology to provide more economical operations (i.e., lower maintenance costs, reduced energy use, and improvements in public safety). Local control of its streetlight system allows jurisdictions opportunities to enable future revenue generating opportunities such as digital-ready networks, and telecommunications and IT strategies.

The goal of the Program is to provide cost-efficiencies for local jurisdictions through the purchase, retrofit, and maintenance of streetlights within jurisdictional boundaries, without the need of additional jurisdictional resources. As a regional Program, WRCOG is working with each of the jurisdictions to move through the acquisition process, develop financing recommendations, develop / update regional and community-specific streetlight standards, and manage the regional operations and maintenance agreement that will increase the level of service currently being provided by SCE.

Cash-flow meeting update: WRCOG staff has conducted streetlight cash-flow meetings with the Cities of Calimesa, Eastvale, Hemet, Lake Elsinore, Menifee, Murrieta, Norco, Perris, San Jacinto, Temecula, Wildomar, the County of Riverside, and with the Rubidoux and Jurupa Community Services Districts. Meetings with remaining jurisdictions are being scheduled.

The purpose of the cash-flow meetings is to provide jurisdictional staff (i.e., Finance Director, City Manager, senior staff, etc.) with the financial information needed for staff to make a recommendation on whether it is feasible to move forward with the acquisition and retrofit of the streetlights currently owned by SCE.

On a regional basis, WRCOG is identifying a 50-60% reduction in utility bills after streetlight acquisition and retrofit to LED fixtures. These savings are due primarily to reductions in maintenance and energy costs. Additionally, WRCOG has developed a feasibility model that includes a variety of financial sensitivities, including utility cost reductions, energy cost reductions, operations and maintenance costs (including pole knockdown replacement costs), debt service of ownership, and LED retrofit for each jurisdiction's streetlight system, and also includes a re-lamp reserve. The re-lamp reserve is a reserve to set aside funds to ensure that in 15 years (when the LED streetlights are projected to wear out) each jurisdiction will have funds to retrofit to the next generation of energy efficient street lighting, without negatively impacting the jurisdiction's general fund. This model has been provided to each member jurisdiction for their review. This tool will allow City staff to toggle variables (interest rates, re-lamp reserve, number of poles, etc.) to quantify how cash flows are impacted in various scenarios.

Financing Update: On August 18, 2016, (WRCOG Technical Advisory Committee), August 10, 2016, (WRCOG Administration & Finance Committee), and July 28, 2016, (WRCOG Finance Director's Committee), Public Financial Management (PFM), consultant on this Program, provided presentations on the financing strategies being proposed. Each of the Committees have approved the requested action provided in this staff report. A copy of PFM's recommendation memo, which also outlines the bid process that was undertaken, is attached.

WRCOG and PFM staff considered numerous financing options. These options included WRCOG-pool financing, individual city-issues bonds, California Infrastructure bank loans, California Energy Commission, and direct placement lease financing options. Member jurisdictions have expressed interest in the WRCOG-pool and direct placement lease options as potential financing structures. The WRCOG-pool option would allow WRCOG to set up a single transaction and release the funds to jurisdictions on a needed basis; however, this structure could potentially encounter timing challenges given the fact that each jurisdiction will be moving through the acquisition and retrofit processes at different times. The alternative structure (Direct placement lease) would allow for additional flexibility on timing, and allow for slightly differentiated jurisdictional interest rates given credit ratings. Upon Executive Committee authorization, staff will begin to work with Bank of America to develop a financing structure for acquisition and retrofit of the streetlights.

Background on the bid process: On March 7, 2016, WRCOG released a Request for Bids (RFB) to select a financing vendor that would provide capital to member jurisdictions for the acquisition process at a competitive rate. WRCOG staff and PFM have been working with Bank of America, which was deemed the most responsive and best option during the bid process and meets the needs of the Program. Bank of America has proven to have the following:

1. Ability to provide financing to all participating jurisdictions in the Program
2. Provide financing for both purchase and LED retrofit
3. Streetlights accepted as sole collateral
4. Able to finance as either taxable or tax-exempt debt
5. Smart City usage permitted
6. The qualifications and experience of the proposing firm
7. Competitive fee proposal for all jurisdictions

Regional Demonstration Area Update: During the week of August 29 through September 2, 2016, WRCOG is creating a Regional Streetlight Demonstration Area in five different locations throughout the City of Hemet to showcase various LED streetlights from 11 different vendors. The Demonstration Areas incorporate multiple land use types (residential, commercial, industrial, etc.) that jurisdictional leaders, staff, and members of the public will be able to view and provide feedback.

To gain additional input, staff will coordinate multiple educational tours in October / November 2016. The use of electronic and physical surveys will be used to gain feedback from the public. Results from the surveys will be used to assess preferences of the LED lights and rank the selection of viable LED lights to use for the Program. The Streetlights will be marked with a designated pole tag to help stakeholders identify which lights are or are not part of the Program.

A media kit is being developed and will include sample press releases, brochures and informational items, a “frequently asked questions” sheet, signage, social media language, and a map of the Demonstration Areas. The media kit will be available for all member jurisdictions to distribute to their community within the next week.

The following is a map depicting Demonstration Area locations and a sample of the streetlight pole identification tag that will be used.



Map of Demonstration Areas



City of Hemet streetlight pole identification tag on the left.

Demonstration Area Streetlight tag identification tag on the right.

Recommendation and selection of the new lighting fixtures is expected to be provided to and considered by WRCOG Committees at the conclusion of the Demonstrations Areas in early 2017.

Prior WRCOG Actions:

August 18, 2016: The WRCOG Technical Advisory Committee recommended, for those jurisdictions interested in using financing for the acquisition and retrofitting of streetlights, that they utilize Bank of America Public Capital Corporation (which was deemed the most responsive during the bid process by WRCOG staff and its Financial Advisor, Public Financial Management, for being able to provide the most competitive financing for the Regional Streetlight Program).

August 10, 2016: The WRCOG Administration & Finance Committee recommended, for those jurisdictions interested in using financing for the acquisition and retrofitting of streetlights, that they utilize Bank of America Public Capital Corporation (which was deemed the most responsive during the bid process by WRCOG staff and its Financial Advisor, Public Financial Management, for being able to provide the most competitive financing for the Regional Streetlight Program).

WRCOG Fiscal Impact:

Activities for the Regional Streetlight Program are included in the Agency's adopted Fiscal Year 2016/2017 Budget under the Energy Department.

Attachment:

1. PFM Streetlight Financing Partner Recommendation.

Item 5.E

Regional Streetlight Program
Activities Update

Attachment 1

PFM Streetlight Financing Partner
Recommendation

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July 21, 2016

Memorandum

To: Western Riverside Council of Governments:
Rick Bishop, Executive Director
Barbara Spoonhour, Director of Energy and Environmental Programs
Tyler Masters, Program Manager
Anthony Segura, Staff Analyst

From: Public Financial Management, Inc.
Laura Franke, Managing Director
Felicia Williams, Senior Managing Consultant

CC: Phil Bowman, Muni-Fed Energy
Jim Filanc, Southern Contracting

Re: Western Riverside County of Governments:
RFP # S-727, Financing for Streetlight Acquisition & Retrofit

On behalf of Western Riverside Council of Governments (“WRCOG”), Public Financial Management, Inc. (“PFM”) has been pleased to assist with the solicitation, evaluation and additional consideration of funding partner selection for the Regional Streetlight Program. Based on the offers received and questioning of the respondents, we recommend the appointment of Bank of America Public Capital Corporation (“BAPCC”) to serve as funding partner for WRCOG’s Regional Streetlight Program (the “Program”).

On March 7, 2016, WRCOG solicited Requests For Bids from the 56 firms identified in the following table. The table indicates which of the solicited firms responded.

Lender	Response	Lender	Response	Lender	Response
Banc of America Public Capital Corp	✓	GE Capital	-	Siemens Financial Services	-
Bank of Marin	-	Hannon Armstrong	-	Signature Bank	x
Bank of the West	-	Holman Capital	-	Solano First Credit Union	-
Barclays	-	IBEW	-	SolarMax	✓
BB&T	-	I-Bank	x	Sovereign Bank	-
BBVA Compass	✓	JP Morgan Chase	x	State Street Bank and Trust Company	-
BMO Harris	-	KeyBank	-	Stifel	-
BNY Mellon	-	Lance Capital	-	STRS	-
California Bank and Trust	-	Mitsubishi	-	Sumitomo Mitsui Banking Corporation	-
CapitalOne Public Funding	-	Mizuho	-	Suntrust Bank	-
Citi	-	NECA	-	TD Bank	-
Citizens Bank	-	New Resource Bank	-	Travis Credit Union	-
City National Bank	-	Northern Trust	-	Umqua Bank	-
Comerica Leasing Corp	-	Oppenheimer	-	Union Bank	-
Duetsche Bank	-	PNC Bank	x	Wells Fargo Bank	-
Eas West Bank	-	RBC	-	Western Alliance Equipment Finance	-
First Republic Bank	-	Rockfleet Financial	-	Wulff, Hansen & Co.	✓
First Security Leasing	-	Rosemawr Management	-	Zion's Bank/NSB	-
Fremont Bank	-	Santander	-		

In evaluating the responses received, the primary considerations were:

- (1) Provide financing for all participating jurisdictions in the Program
- (2) Provide financing for both purchase and LED retrofit
- (3) Streetlights accepted as sole collateral
- (4) Able to finance as either taxable or tax-exempt debt
- (5) Smart City usage permitted
- (6) The qualifications and experience of the proposing firm
- (7) Competitive fee and interest rate proposals for all jurisdictions

After receiving the proposals, telephone interviews were scheduled with the respondents. Through these interviews PFM discerned that one of the firms was not proposing a compliant structure to serve as funding partner:

- SolarMax suggested a structure that would not be viable under the regulatory framework for streetlight acquisition. The structure suggested would require that SolarMax become the purchaser of the streetlights from Southern California Edison (“SCE” or “Edison”) and then sell the streetlights to the jurisdictions after retrofitting. In addition to the financial structuring concerns, SolarMax indicated a requirement for use of their equipment, and a significantly higher borrowing rate than the other respondents. WRCOG’s evaluation team discussed these concerns with SolarMax during the verbal evaluation and no additional information or follow up was provided by the bidder.

Of the remaining bidders, it was determined that BBVA was qualified but lacked the depth of specific streetlight experience of the other two bidders. Wulff, Hansen initially provided a vague level of specificity in their response; and after several conversations, provided a formal bid from an investor, Hannon Armstrong, who would actually provide capital for the transactions. Wulff, Hansen's representative is a former energy service company finance professional with experience in this type of project finance; and, Hannon Armstrong, is a real estate investment trust that specifically invests in energy-related improvements. Wulff, Hansen and Hannon Armstrong provide a reasonable alternative, but the coordination between the two firms relative to the timing of providing their bid raised concerns on their ability to meet the Program's schedule and conform to timely processing needs. The remaining bidder, Bank of America, provided a complete and timely bid, was able to respond to questions relative to the content of that bid, has demonstrated experience with other streetlight financing; and, upon request, and was able to verbally indicate pricing levels that were in the range expected by the evaluation team.

Given their experience, understanding of Program needs and competitive pricing, it is PFM's opinion and recommendation that the Program appoints Bank of America as the funding partner for the WRCOG Streetlight Program. We appreciate your consideration of this recommendation, and we are available to provide additional information or answer any questions you have.

Desired Components	Bank of America	BBVA Compass	Solar Max	Wulff, Hansen / Hannon Armstrong
Able to provide financing to all cities? ¹	Yes	Maybe	Yes	Yes
Financing for purchase, retrofit and soft costs	Yes	Yes	Yes	Yes
Enhancement / Reserve requirements	Maybe	Maybe	No	Jurisdictions will deposit one year of lease payments into a DS Reserve Fund at closing
15 year financing term	Yes	Yes	Yes	Yes (up to 23 years)
12 month construction period	Yes	Yes	Yes	Yes
Streetlights sole collateral	Yes	Yes - strong credit cities. Weaker credit cities may need essential property as additional collateral	Yes	Yes
Smart cities usage allowed	Yes	Maybe	Yes, but reserve right of first refusal. If Solar Max product exists for smart city purpose, SolarMax product must be used.	Yes
Indicative² 15 year Tax-Exempt Rate	2.25 – 2.75%	2.75 – 3.25%	No. Tax-exempt financing has no benefits to foreign investors	4.64%
Indicative 15 year Taxable Rate	3.50 – 4.25%	4.25 – 4.60%	8.0% for 15 year term	4.64%

¹ Banks are all subject to additional credit approvals, Solar Max not.

Desired Components	Bank of America	BBVA Compass	Solar Max	Wulff, Hansen / Hannon Armstrong
5 year optional call	2% premium (200 bps) on any payment date after fifth year	+15-30 bps on interest rate	No	3% premium (300 bps) on any payment date after fifth year
10 year optional call	2% premium (200 bps) on any payment date after fifth year	No additional spread/premium	No	No premium after ten years
Fees	Usual and customary fees ³ , including lender counsel	Lender counsel fee \$5k-\$10k / transaction	0.5% (50 bps) \$2,000 doc fee	Usual and customary fees, no charge for lender counsel
Flexible/open to additional retrofit financing for already owned streetlights	Yes	Yes	Yes	Yes
Flexible/open to additional jurisdictions not originally in the program	Yes	Yes	Yes	Yes

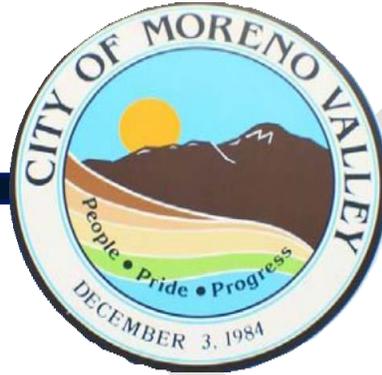
² Indicative rates were provided verbally by Bank of America and BBVA. Final rates will be subject to individual credit and market conditions at the time of pricing.

³ Fees include standard transaction closing costs: Bond Counsel, Financial Advisor, Escrow Agent, CDIAC fees, insurance.

Desired Components	Bank of America	BBVA Compass	Solar Max	Wulff, Hansen / Hannon Armstrong
Notes / Considerations	<p>All subject to underwriting and credit approval/ due diligence</p> <p>Has extensive experience working with streetlight financing.</p>	<p>All subject to underwriting and credit approval/ due diligence</p>	<p>Financing dependent on use of Solar Max products</p> <p>EB-5 funding is only available to the retrofit costs and has a 5 year maximum term</p>	<p>All subject to underwriting and credit approval/ due diligence</p>

In addition to the responses detailed above, California I-Bank and Signature Public Funding indicated an interest in future opportunities, though likely on a city-by-city basis.

JP Morgan and PNC were not able to get approval to submit an indication of interest.



Financing for Streetlight Acquisition & LED upgrades

December 7, 2016

Streetlight
Program



DRAFT

WRCOG Streetlight Program Team



- **Western Riverside Council of Governments**

- Sponsoring agency and regional Program coordinator



- **PFM Environmental Finance Group**

- Financial advisor to WRCOG, providing expertise in project economics modeling, program financial structure and design



- **Southern Contracting**

- Technical expertise, gathering equipment and technology requirements

- **Muni-Fed Energy**



- Clean energy development and consulting, identifying and structuring effective energy savings solutions



- **Best Best & Krieger**

- Legal Counsel

Financing Solicitation Goals

Credit

- Single provider for all participants
- Defined approval process

Pricing

- Taxable and Tax-exempt options
- Consideration for enhancement option
- Reasonable fee structure

Flexibility

- Security is equipment only
- Smart cities installations allowed
- Additional cities and / or additional upgrades

Financing Options Considered

OPTION	BENEFITS	CHALLENGES
WRCOG-issued Bond	<ul style="list-style-type: none"> - Low interest cost - Single transaction - Funds available to all 	<ul style="list-style-type: none"> - Conduit issuer, no asset to pledge - Timing - Cost/benefit allocations during transition period
Individual City-issued Bond	<ul style="list-style-type: none"> - Mitigates timing challenge - Low interest rate - Single transaction per muni 	<ul style="list-style-type: none"> - High costs of issuance - Small individual amounts - Credit and issuance process
CLEEN at CA I-Bank	<ul style="list-style-type: none"> - Low interest rate - State agency established to help muni borrowers 	<ul style="list-style-type: none"> - Individual credit process - Timing uncertainty - Taxable funds not available
California Energy Commission (CEC)	<ul style="list-style-type: none"> - Low interest rate - State agency established to help muni borrowers 	<ul style="list-style-type: none"> - Limited funds available - Only available for retrofit portion - Taxable funds not available
Direct placement lease	<ul style="list-style-type: none"> - Flexible timing - Single set of documents - Market rates aligned to borrower and timing - Taxable AND Tax-exempt 	<ul style="list-style-type: none"> - Interest rate may be set individually - Document modification options will be limited



Notice of Financing Solicitation

<u>Lender</u>	<u>Response</u>	<u>Lender</u>	<u>Response</u>	<u>Lender</u>	<u>Response</u>
Banc of America Public Capital Corp	✓	GE Capital	-	Siemens Financial Services	-
Bank of Marin	-	Hannon Armstrong	-	Signature Bank	✘
Bank of the West	-	Holman Capital	-	Solano First Credit Union	-
Barclays	-	IBEW	-	SolarMax	✓
BB&T	-	I-Bank	✘	Sovereign Bank	-
BBVA Compass	✓	JP Morgan Chase	✘	State Street Bank and Trust Company	-
BMO Harris	-	KeyBank	-	Stifel	-
BNY Mellon	-	Lance Capital	-	STRS	-
California Bank and Trust	-	Mitsubishi	-	Sumitomo Mitsui Banking Corporation	-
CapitalOne Public Funding	-	Mizuho	-	Suntrust Bank	-
Citi	-	NECA	-	TD Bank	-
Citizens Bank	-	New Resource Bank	-	Travis Credit Union	-
City National Bank	-	Northern Trust	-	Umqua Bank	-
Comerica Leasing Corp	-	Oppenheimer	-	Union Bank	-
Duetsche Bank	-	PNC Bank	✘	Wells Fargo Bank	-
Eas West Bank	-	RBC	-	Western Alliance Equipment Finance	-
First Republic Bank	-	Rockfleet Financial	-	Wulff, Hansen & Co.	✓
First Security Leasing	-	Rosemawr Management	-	Zion's Bank/NSB	-
Fremont Bank	-	Santander	-		

✓ = Written Response
 ✘ = Interest expressed without Written Response

- Sent to 56 Firms
- Open to the Public

Financing Bid Evaluation & Recommendation



- Bank of America recommended
 - Most experienced
 - Dedicated Energy Services group
 - Best offer within established conditions
 - Credit
 - Pricing
 - Security
 - Flexibility



Moreno Valley Participation in Program Financing

- Moreno Valley's participation will enhance overall regional profile
 - Established City with own utility
 - Existing "A+" credit rating from Standard & Poor's
 - Team player with demonstrated leadership
- Comprehensive financing package
- Financing team in place and functioning collaboratively on behalf of region
 - WRCOG legal counsel review of financing docs
 - Pooled enhancement reduces overall cost for all participants
 - Expectation of no additional City property encumbrance
- Timing of financing set to correspond to individual cities' timeline
- Optional Program features: technical/policy assistance and shared O&M services

Cash Flow Model Development

- Using SCE valuation data
- Variables accounted for in cash flow model:
 - Current utility cost - **recent tariff updates effective October 1, 2016 are incorporated**
 - Reduction in utility cost for streetlight ownership
 - LED retrofit energy savings
 - Ongoing operation & maintenance costs (includes knockdowns)
 - Re-lamp reserve (assuming conservative 15 year useful life)
 - Debt financing to cover cost of acquisition and LED retrofit
- Assuming taxable rates in order to maintain revenue opportunity post-ownership

Tax-Exempt vs Taxable Financing

Tax-Exempt vs. Taxable Financing per \$1 Million			
	Tax-Exempt	Taxable	Difference
Interest Rate	3.45%	4.65%	1.20%
Total 15 Year Debt Service ⁽¹⁾	\$1,297,749	\$1,411,148	\$113,399
Annual Debt Service Payment ⁽¹⁾	\$86,517	\$94,077	\$7,560
Taxable Financing w/ Pole Revenue			
Annual Per Pole Revenue (\$/Pole/year) ⁽²⁾		\$7,500	
Financing Cost Break Even: # of Poles		2	
Taxable Annual Debt Service		\$94,077	
Less Annual Pole Revenue (2 x \$7500)		-\$15,000	
New Debt Service		\$79,077	
10% limit for tax exempt financing		\$8,652	

⁽¹⁾ Debt service based on \$1million debt service only. Does not include admin, O&M and relamp reserves.

⁽²⁾ Assumes net revenue from three carriers at \$2,500 each.

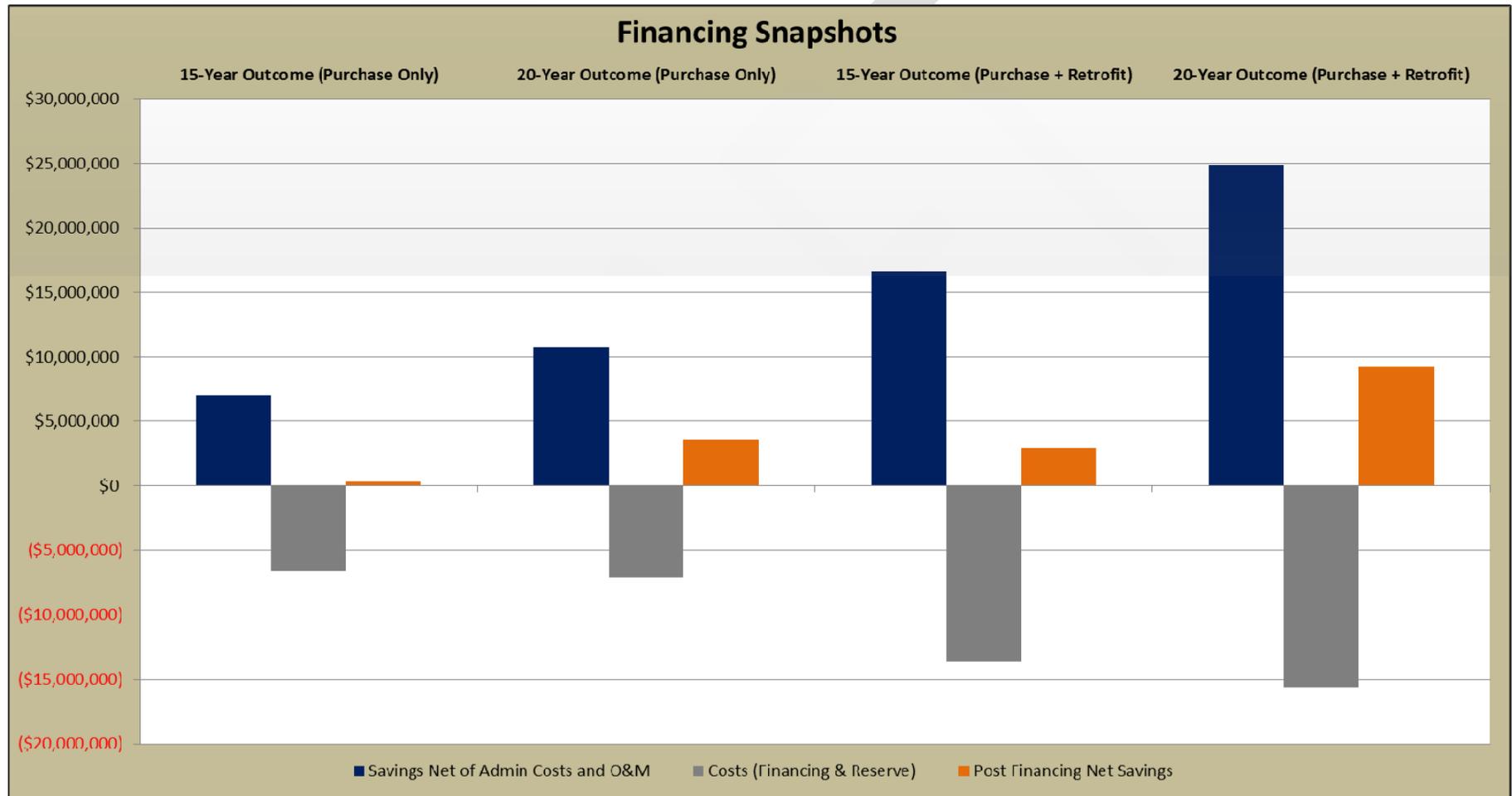
Cash Flow Model Assumptions

City of Moreno Valley LS-1 Streetlight System Valuation			Assumptions	
Poles Available for Purchase:	9,411		Total Poles Transferred	9,411
	RCNLD	\$3,803,091	City-owned Lamps for retrofit	0
	Ad Hoc Replacements	\$540,131	Cost Per Pole	
	Additional Asset Components	\$78,176	LED Retrofit Cost per Pole (one time)	\$451.60
	Tax Neutral Subtotal	\$4,421,398	O&M HPS/LPS (per pole - just in time install)	\$3.12
	Tax/Other Adjustments	\$246,363	O&M LED only (per pole per month)	\$1.10
	Transition Cost (\$30/pole)	\$282,330	Financial Model Assumptions	
	Acquisition Price	\$4,950,091	Lease Interest Rate (taxable)	4.65%
Poles Available for Retrofit:	9,411		O&M Inflation/Escalation Rate	3.00%
	Gross Retrofit Cost	\$4,250,000	Admin Fee Inflation/ Escalation Rate	3.00%
	Costs of Issuance	\$80,000	Annual Escalation Rate for Energy Costs	4.00%
	SCE Incentives (received in Year 2)	(\$997,385)	Average Useful Life	15 yrs
	Total Amount Financed	\$8,282,706	Relamp Reserve Earnings Rate	1.30%
			LED Efficiency	60.00%

*Streetlight count subject to final reconciliation with SCE

- RCNLD – Replacement Cost New, Less Depreciation

Taxable Financing Snapshot





Economic Results Using Taxable Financing

Based on SCE Rates as of October 2016 & SCE Express and Custom Incentives Solution

Year	Purchase Only				Purchase and Retrofit				
	Savings	Financing Payments	Net Savings	Cumulative Net Savings	Savings	Financing Payments ⁽¹⁾	Relamp Reserve ⁽²⁾	Net Savings	Cumulative Net Savings
1	282,617	-	282,617	282,617	721,634	-	-	721,634	721,634
2	339,663	(473,214)	(133,551)	149,066	859,098	(779,208)	-	79,890	801,524
3	357,180	(473,214)	(116,034)	33,032	895,044	(779,208)	-	115,835	917,359
4	375,516	(473,214)	(97,697)	(64,665)	932,475	(779,208)	-	153,267	1,070,626
5	394,707	(473,214)	(78,506)	(143,171)	971,452	(779,208)	-	192,244	1,262,870
6	414,791	(473,214)	(58,422)	(201,594)	1,012,039	(779,208)	-	232,831	1,495,700
7	435,807	(473,214)	(37,406)	(239,000)	1,054,301	(779,208)	-	275,093	1,770,793
8	457,797	(473,214)	(15,417)	(254,417)	1,098,307	(779,208)	-	319,099	2,089,891
9	480,802	(473,214)	7,589	(246,828)	1,144,128	(779,208)	(395,583)	(30,664)	2,059,228
10	504,869	(473,214)	31,656	(215,173)	1,191,839	(779,208)	(395,583)	17,047	2,076,275
11	530,044	(473,214)	56,830	(158,343)	1,241,516	(779,208)	(395,583)	66,725	2,142,999
12	556,374	(473,214)	83,161	(75,182)	1,293,241	(779,208)	(395,583)	118,449	2,261,449
13	583,912	(473,214)	110,699	35,517	1,347,097	(779,208)	(395,583)	172,305	2,433,754
14	612,710	(473,214)	139,497	175,014	1,403,170	(779,208)	(395,583)	228,379	2,662,132
15	642,823	(473,214)	169,610	344,623	1,461,553	(779,208)	(395,583)	286,761	2,948,893
16	674,309	(473,214)	201,096	545,719	1,522,338	(779,208)	(395,583)	347,546	3,296,440
17	707,228	-	707,228	1,252,947	1,585,624	-	(395,583)	1,190,041	4,486,480
18	741,641	-	741,641	1,994,588	1,651,514	-	(395,583)	1,255,930	5,742,411
19	777,615	-	777,615	2,772,203	1,720,113	-	-	1,720,113	7,462,524
20	815,217	-	815,217	3,587,420	1,791,532	-	-	1,791,532	9,254,056
15 Year Total:	6,969,613	(6,624,990)	344,623		16,626,894	(10,908,916)	(2,769,084)	2,948,893	
20 Year Total:	10,685,623	(7,098,203)	3,587,420		24,898,015	(11,688,124)	(3,955,835)	9,254,056	

⁽¹⁾ Financing, net of incentives

⁽²⁾ Includes earnings on reserves

Variables that Impact Economic Outcomes

As additional specifics about the City and Program are confirmed, the economic outcome will be impacted by the following variables:

- Financing Interest Rate
- Knockdowns
 - Rate of Knockdowns
 - Recovery Factor
- Tariff Escalation Rate
- Energy Efficiency / Efficacy Assumption
- Additional upgrades for already-owned lamps

Taxable Financing Facilitates Smart City Opportunities



Potential Benefits of Smart City Applications

- Opportunities from commercial carrier contracts
 - Carrier Small Cells
 - Smart Grid Offload
 - License & Access Fees
 - Digital Signage/Advertising
 - Wi-Fi
 - Delivery Service Subscriptions

- Enhanced City connectivity
 - EMS – Emergency Response System
 - VoIP – City owned cell service
 - Advanced analytics and business intelligence
 - Energy management
 - Network efficiencies



Report to City Council

TO: Mayor and City Council

FROM: Ahmad R. Ansari, P.E., Public Works Director/City Engineer

AGENDA DATE: July 12, 2016

TITLE: ACQUISITION OF SOUTHERN CALIFORNIA EDISON STREET LIGHTS

RECOMMENDED ACTION

1. Discuss the possible acquisition of SCE street lights and provide direction for staff to enter into discussions with SCE on the Purchase and Sale Agreement and to identify potential financing options.

As street lights are installed within the City, they are currently dedicated to the utility provider. The utility provider owns the lights and is responsible for operations and maintenance, risk management, knock-down replacements, and energizing the street lights.

The two utility providers, Southern California Edison (SCE) and Moreno Valley Utility charge the City a monthly tariff to maintain and illuminate approximately 11,500 street lights. The City levies a parcel charge and/or parcel tax on the annual property tax bills which funds the street lighting program. Street light service to the Edgemont community is provided by an independent special district (see attached map) which levies parcel charges to pay for the street lights within its boundaries; street lights in this area are not included within the City's street lighting program.

As utility costs have increased over the years, parcel charge revenue received to support the street light program has not kept pace, creating a funding shortfall. The fiscal year (FY) 2015/16 projected shortfall is estimated at \$401,944 and based on past practices of SCE continuing to increase its monthly tariff, are anticipated to grow to an estimated annual shortfall of \$1,837,142 by FY 2035/2036. Unless new revenue sources or cost savings measures can be identified, the General Fund will have a liability to meet the funding shortfall. Since FY 2010/11, the General Fund has been funding such shortfalls.

Over the years, the City has explored a number of alternatives to reduce expenditures

to include removing street lights, turning off street lights, and converting the street lights from high pressure sodium vapor (HPSV) to energy efficient LED lighting. Not only did none of these options provide enough of a cost savings to warrant implementation, but expenses of converting street lights to energy efficient lighting would be borne by the City and the utility provider. Additionally, due to the tariffs charged by the utility provider, the City would not benefit from the cost savings in energy usage.

In response to local agencies' concerns over their ability to control street lighting costs, SCE offered a process by which cities could purchase the SCE street lights. The City of Moreno Valley requested and received a confidential sales price, as well as a copy of SCE's standard Purchase and Sale Agreement which includes a No-Fee Light Pole License Agreement for Wireless Attachment. The License Agreement allows SCE a perpetual easement on the street lights for its wireless equipment. The offer excludes those street lights whose monthly utility bill is paid by other agencies (e.g. HOAs, Edgemont Community Services District) and any street lights with SCE's distribution facilities on them. The City must purchase all of the eligible lights or none of them. SCE has given the City until October 27, 2016 to enter into the Purchase and Sale Agreement. Otherwise, the offer to acquire the street lights is no longer available.

If the City elects to purchase the SCE street lights, it will become responsible for all ownership responsibilities for the lights to include, but not limited to: operations and maintenance, risk management, knock-down replacements, and customer service. With City ownership of the street lights, the monthly tariff payable to SCE will be lower and will continue to cover the cost of transmitting the energy to the street lights and the cost of the energy.

The savings in the reduced tariff may be used to pay for street light ownership costs and to finance acquisition of the SCE street lights. By owning the street lights, the City could realize a potential cumulative cost savings of up to \$3,600,000 over a twenty year period. Additionally, should the City elect to implement an energy efficient lighting system, it could realize an additional potential cumulative cost savings of up to \$4,400,000, or a total of \$8,000,000 in savings over a twenty year period when compared to the projected funding shortfall of the current, SCE ownership scenario.

Additional detail will be provided during staff's presentation of the attached PowerPoint presentation.

CITY COUNCIL GOALS

Revenue Diversification and Preservation. Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

Community Image, Neighborhood Pride and Cleanliness. Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

ATTACHMENTS

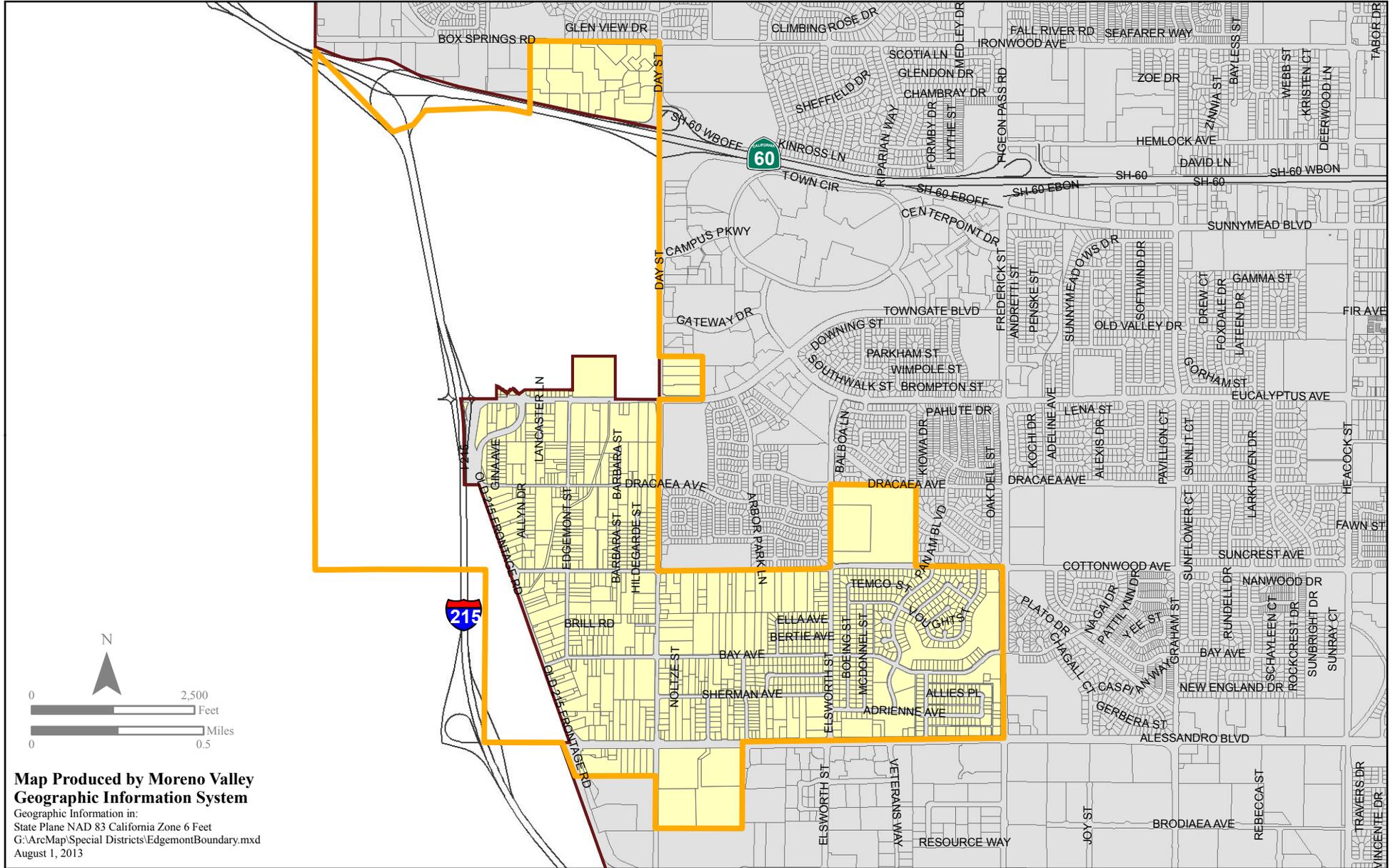
- 1. Edgemont CSD Map
- 2. Street Light Update Power Point 071216

APPROVALS

Budget Officer Approval	<u>✓ Approved</u>	7/07/16 10:32 AM
City Attorney Approval	<u>✓ Approved</u>	7/07/16 9:56 AM
City Manager Approval	<u>✓ Approved</u>	7/07/16 10:43 AM

CITY OF MORENO VALLEY

EDGEMONT COMMUNITY SERVICES DISTRICT



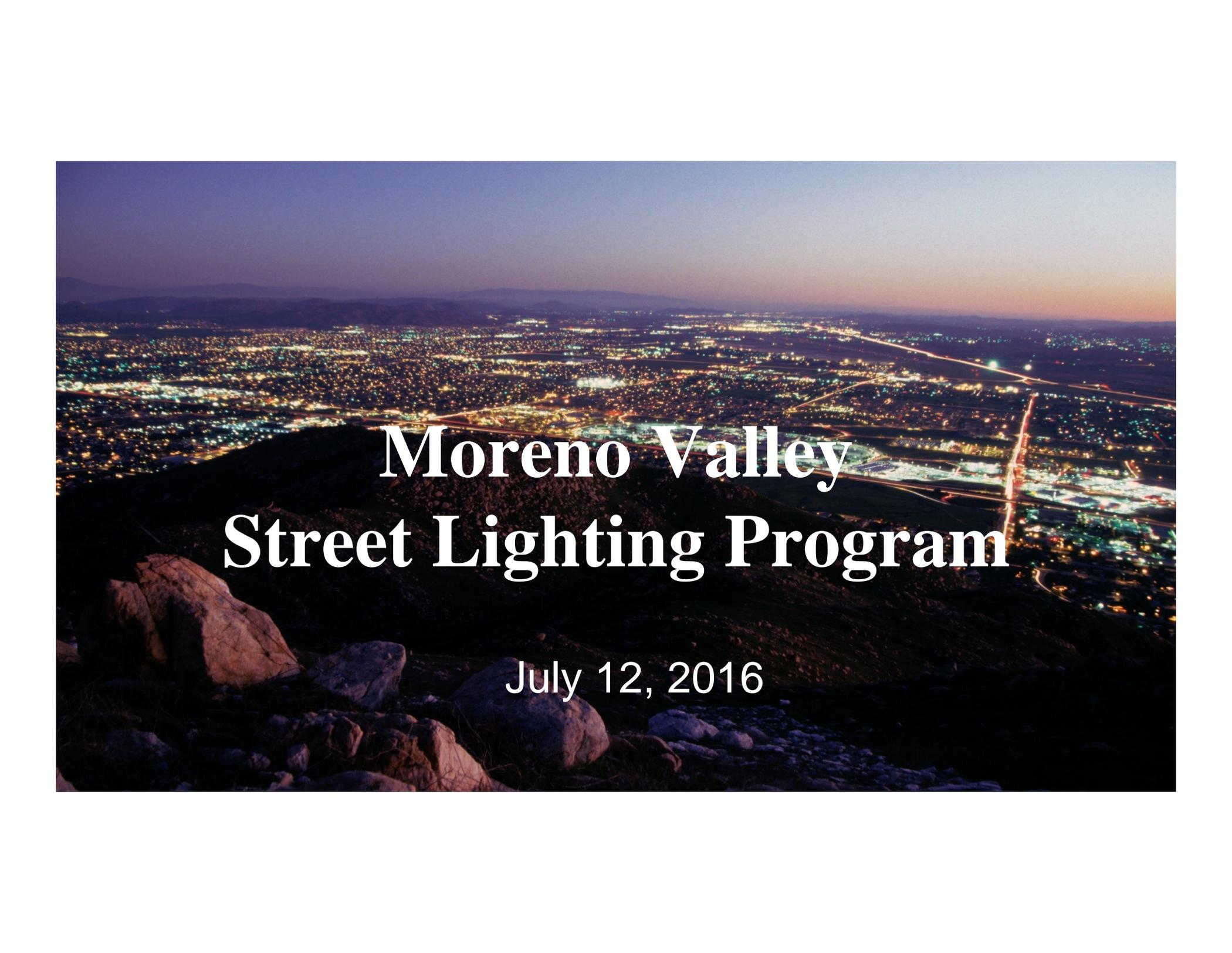
Map Produced by Moreno Valley Geographic Information System

Geographic Information in:
 State Plane NAD 83 California Zone 6 Feet
 G:\ArcMap\Special Districts\EdgemontBoundary.mxd
 August 1, 2013

- Edgemont Community Services District Boundary
- Edgemont Community Services District Parcels
- Parcels
- Moreno Valley

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.



An aerial night photograph of Moreno Valley, California, showing a dense network of streetlights illuminating the city. The lights are primarily yellow and white, with some blue and green accents. The city is viewed from an elevated position, with dark, rocky terrain in the foreground. The sky is a deep blue, and the overall scene is a vibrant display of urban lighting.

Moreno Valley Street Lighting Program

July 12, 2016

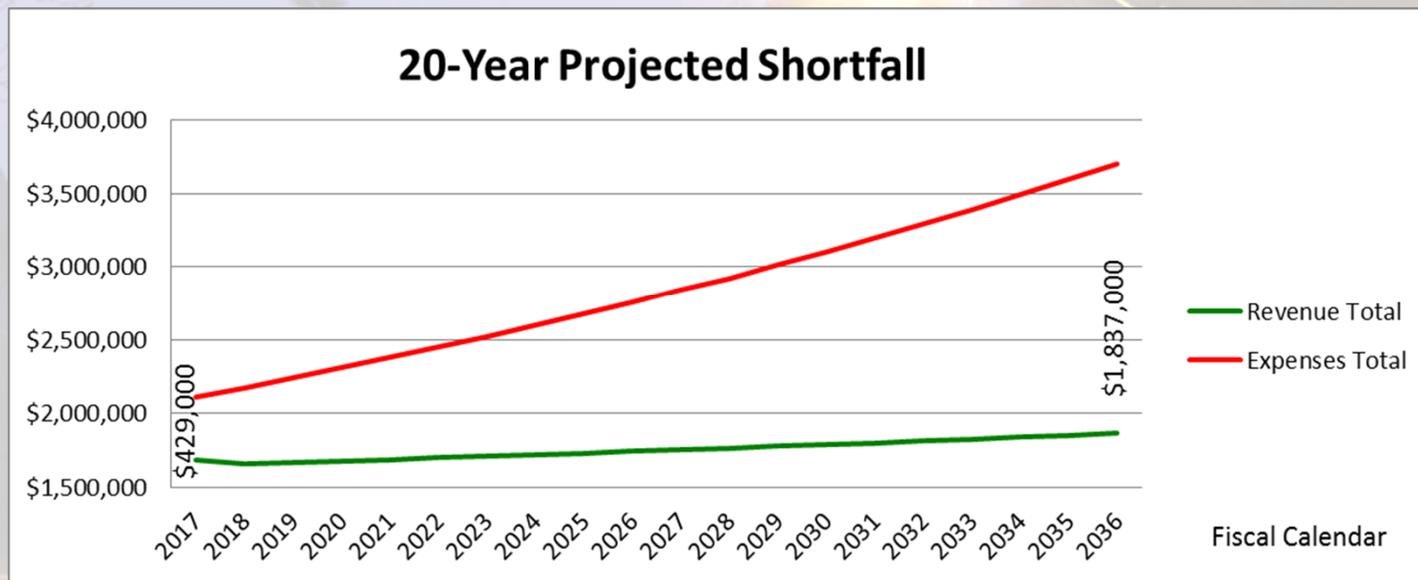
Street Light Inventory

- 11,500 Street Lights – Utility Owned
 - 87% SCE Owned (approx. 10,000)
 - 13% MVU Owned (approx. 1,500)
- Ownership Determined at Time of Installation
 - Utility Owned - (tariff = \$12.06/pole/month)
 - Utility provides operations & maintenance, liability, replacements & energizes street light
 - City Owned - (tariff = \$5.72/pole/month)
 - City provides operations & maintenance, liability, replacement costs; Utility energizes the street light

Program Costs

- Revenue - \$1.7 million (FY 15/16)
 - Parcel Charges – property tax bills
 - Other revenue – advanced energy fees, property tax
- Expenditures - \$2.1 million (FY 15/16)
- Revenue has not kept pace with expenditures
 - \$400,000 shortfall (FY 15/16)
- General Fund bridges the shortfall (since 2010/11)

Projected Revenue/Expenditures



*Assumes 5% annual increase in tariff

Options Considered to Reduce Expenditures

- **Remove Street Lights** (cost determined by SCE) (Nov. 2010)
- **Turn Off Street Lights** (Nov. 2010)
 - Portion of tariff still applies
- **Convert to LED** (\$400/street light) (Nov. 2010)
 - Utility provider benefits from energy savings
- **Modify SCE Tariff** (General Rate Case) (Oct. 2011-Apr. 2016)
- **Acquire Facilities** (Aug. 2012/Nov. 2015)
 - Lower tariff
 - Control operations and maintenance costs

Purchase Street Lights from SCE

- Small Window of Opportunity
 - SCE no longer offering program
- October 27, 2016 – deadline to enter into agreement
- Purchase and Sale Agreement
 - License Agreement – perpetual use of poles for SCE wireless communication equipment

Ownership Considerations

- Potential 20 year Cost Savings - \$3,600,000
- Control Operations & Maintenance Costs
- Energy Savings Opportunities – additional, up to \$4,400,000 (20-years)
- Increase Customer Care
- Emerging Technologies

Ownership Considerations

- Management of Operations & Maintenance
- Loss in Franchise Fees
- Increase in Risk Management
- License Agreement with SCE

Next Steps

- Discuss License Agreement with SCE
- Identify Recommended Financing
- California Public Utilities Commission
- Transition – up to 17 months



Questions