

Memo

To: Board of Managers
From: Michael Younes, Director of Municipal Operations
CC: Shana Davis-Cook, Village Manager
John M. Fitzgerald, Chief of Police
Date: 12/14/2012
Re: Update on Village Streetlight Upgrades – *Executive Summary*

Background and Timeline of Board/Committee Action

Over the course of three (3) years, the Village Board, Public Works Committee and staff have been working to improve street lighting along Village rights-of-way. There have been numerous updates provided to the community and opportunities for public comment including:

- Six (6) – Public Works Committee (PWC) meetings.
- Five (5) – meetings of the Board of Mangers where the PWC, staff made presentations to the Board on the status of improving Village street lighting.
- Seven (7) – articles included in the *Crier* updating Village residents and requesting comments on dark spots.
- Four (4) – Surveys of Village streetlights and dark spot locations by the Village Police Department and a photometric survey firm.

The Village's tree contractor has also recently cleared tree branches away from existing streetlights in an effort to increase light dispersion.

Only fifteen (15) resident comments have been received reporting dark spots as a direct result of the above efforts.

The Village currently has a total of 287 streetlights installed on PEPCO power poles using high pressure sodium (HPS) bulbs.

Survey Results

During all four (4) streetlight surveys, conducted by a photometric survey firm and the Village's Police Department, three (3) common issues were observed:

1. Overall spacing between lights is too great;

2. Light output/color of many lights is lower than acceptable; and
3. Adequate light dispersion can be affected by the Village's tree canopy.

Existing Dark Spots

There are a total of ten (10) dark spots remaining in the Village identified as being critical by the Village's Police Department. A list of the remaining dark spots can be found on page 6 of the full memo.

Status Update on PEPCO LED Streetlights

Since March 2010, PEPCO has been exploring the possibility of using LED technology in streetlights. Just recently the Maryland Public Service Commission has granted PEPCO a tariff for the use of LED streetlights at the request of a petition filed by Montgomery County and the City of Gaithersburg. The tariff allows PEPCO to offer LED street lighting to its rate payers. PEPCO is currently in the process of finalizing fixture pricing and choosing which manufactures to purchase the lights. When available PEPCO will offer light styles similar to ones currently available including the traditional cobra-head and more decorative teardrop fixtures.

PEPCO anticipates selecting manufacturers by the end of calendar year 2012 and finalizing fixture prices by the end of the first quarter of 2013 (April 2013).

Pictures of LED Streetlights Dark Spots

Sample LED streetlights currently under review with PEPCO can be found on page 8 of the full memo.

Available Options

There are several options available for the Board's consideration.

1. Proceed with additional streetlight installations using currently available high pressure sodium (HPS) bulbs in the remaining dark spots. Currently estimated at \$9,055. When LED technology is available, begin the process to convert the Village's HPS bulbs to LEDs according to the Village's Capital Improvements Program, currently scheduled for FY16.
2. Proceed with option 1; however bring the Village-wide replacements forward to begin in FY14 (rather than FY16).
3. Temporarily suspend additional streetlight improvements until LED streetlights are available toward the end of the first quarter 2013 (April 2013). Once available, install LED streetlights in the remaining dark spots or along a couple sample blocks using a mix of the cobra-head and teardrop styled fixtures as "test" cases for the overall Village replacement program. Actively survey Village residents and review the observed light output of the new lights, before reporting back to the Board with a final recommendation on converting Village streetlights.

Ongoing Maintenance of Streetlights:

The Village currently pays PEPCO to maintain the streetlights on Village streets. Monthly maintenance costs vary greatly depending on the types of light and whether we elect to pay an “optional replacement cost”. Please refer to pages 10 – 11 of the full memo for a detailed breakdown of these costs. The potential for significant cost savings is available based on finalized fixture pricing from PEPCO.

Staff Recommendation

Based on the analysis, public comment and conversations with PEPCO, I recommend that the Village proceed with option number 3. As a public safety matter, I have discussed the options with Chief Fitzgerald and he is in agreement with this recommendation.

Board Action

At this time there is no action required if the Board wishes to proceed based on the staff’s recommendation.

If the Board wishes to proceed with option #1, staff requests authorization to engage PEPCO and proceed with the installation/modification of the ten (10) remaining dark spots. At an estimated cost of \$9,055.

Attachments

Full Memorandum – Update on Village Streetlight Upgrades
Map of Remaining Dark Spot Locations
Image of Internal LEDs within Streetlights
CIP Expenditure Detail Sheet

Memo

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Background

In the 2006 and 2009 Chevy Chase Village resident surveys, respondents overwhelmingly supported upgrading the street lighting throughout the Village. In response, the Village Board, Public Works Committee and staff have been working over the past three (3) years to improve street lighting along Village rights-of-way.

The Village currently has a total of 287 streetlights that are installed on PEPCO power poles using high pressure sodium (HPS) bulbs ranging from 70 to 150 watts. Many of the existing streetlights are spaced at intervals that create wide dark spots along Village streets and rights-of-way or are elevated into the canopies of the trees.

The height of each street light is driven by the following factors:

1. Minimum height for trucks to pass: The minimum height for trucks to safely pass under is 22 feet.
2. Location of the streetlight power lines: Depending on #3 below, the streetlight arm will be located eighteen (18) inches below the electrical feed wire.



3. Wire spacing requirements: Because PEPCO poles are used by other utility companies (Comcast, Verizon, etc.), there are specific separation requirements that must be observed. For example, non-electrical wires must be separated from each other by twelve (12) inches, and electrical wires must be separated from non-electrical equipment/wires by eighteen (18) inches.

Timeline of Board/Committee Action

January 2008 – The Energy Policy Act of 2005 becomes effective, which prohibits the manufacturing and importing of mercury vapor bulbs, due to the high levels of mercury needed for the manufacturing process. When the Act was passed all of the streetlights in the Village used mercury vapor bulbs. Once PEPCO’s supplies of the old bulbs ran out they would be replaced with high pressure sodium (HPS) bulbs per the new act.

February 2009 – March 2010 – The Board of Managers authorized a photometric (light dispersion) survey to be conducted to determine baseline conditions and to provide alternative street lighting configurations. During this period, a subset of the Public Works Committee (PWC) worked with the survey firm to review and discuss proposed options. The survey identified a total of twenty-three (23) critical “dark spots” and determined that the existing street lighting did not meet Illuminating Engineering Society (IES) recommended criteria. The survey cited several factors which contributed to the sub-par lighting, such as light pole spacing and lamp lumen depreciation of the old mercury vapor bulbs.

The survey also outlined several options for increasing the lighting dispersion throughout Village rights-of-way, including closer pole spacing, higher bulb wattages, and the use of light bulb technology that would not have a rapid light depreciation. At the beginning of the survey, light-emitting diode (LED) streetlight technology was being introduced in the industry and study information was not yet available.

March 2010 – PEPCO begins its LED streetlight pilot program in the Town of Somerset and at National Harbor in Prince George County. Also and at the Village’s request, PEPCO installed (at no cost) two (2) sample streetlight fixtures using an induction bulb across from the Village Hall to aid the PWC’s streetlight review and to gather resident feedback.

April 2010 - An article is included in the April issue of the *Crier* advertising the two (2) sample streetlights and soliciting resident feedback on the samples.

May 2010 – The PWC met to review the results of the photometric survey, to discuss PEPCO’s LED pilot program and what interim steps could be taken to improve Village

street lighting. An additional three (3) streetlight fixtures using high pressure sodium (HPS) bulbs were installed by PEPCO (at no cost) across from the Village Hall to further aid the PWC's streetlight review and to gather resident feedback.

June 2010 – An article is included in the June issue of the *Crier* advertising the five (5) sample streetlights and soliciting resident feedback on the additional samples.

June 2010 – The PWC met to continue its discussion of options for replacing or upgrading Village streetlights.

July 2010 – The PWC presented its report to the Board advising that the Committee had researched and invited public comment (less than 5 responses were received) on the sample streetlights installed across from the Village Hall. After assessing the sample lights and the cost of converting the existing mercury vapor bulbs to induction bulbs, the PWC recommended postponing the overall replacement of all Village streetlights pending PEPCO's launch of LED lights and recommended that the Village contact PEPCO to install its high pressure sodium (HPS) light bulbs at no cost to the Village.

Once PEPCO replaced the existing mercury vapor bulbs with high pressure sodium (HPS) bulbs, the Committee recommended a reassessment of remaining "dark spots" throughout the community to determine where new fixtures should be installed. *The Board unanimously approved the PWC's recommendation.*

September 2010 – Staff presents an update report to the Board regarding the status of all current and proposed capital projects including the progress made thus far on investigating the possibility of streetlight replacements and PEPCO's conversion to high pressure sodium (HPS) bulbs.

December 2010 –The Village Police Department conducts a follow-up survey of the existing street lighting in the Village after PEPCO completes its conversion to high pressure sodium bulbs. Based on the survey results the number of dark spots has not decreased.

February 2011 – An article is included in the February issue of the *Crier* requesting additional resident feedback on dark or malfunctioning streetlights. One response was received.

February 2011 – Following several meetings of the PWC about streetlights and other topics, the Committee presented a report to the Board recommending that the Board approve funds to install further lighting to illuminate fourteen (14) of the worst "dark

spots” estimated at a cost of \$28,000. The Board directed staff to include the expenditure on the draft Capital Improvements Plan (CIP) for FY 2012.

April 2011 - *The Board of Managers approves the FY 2012 budget that includes \$30,000 for interim streetlight improvements to address “dark spots”.*

Summer 2011 – Village staff works with PEPCO to inventory all Village streetlights to ensure all are working at peak output. During this period multiple street lights were replaced (at no cost) due to malfunctioning components.

November 2011 – At my request, a second street light survey was conducted by the Village Police Department and following PEPCO’s repairs of malfunctioning streetlights, under the direction of newly hired Chief of Police John Fitzgerald. Unfortunately, the survey identified numerous “dark spots” mainly due to low canopy, poorly spaced lights and inadequate light dispersion.

December 2011 – Chief Fitzgerald and I meet with PEPCO streetlight engineers to review the list of “dark spots” and to request cost estimates to install new lights and to determine the best wattage for the new lights to provide maximum light dispersion.

February 2012 - Staff recommends to the Board that a two (2) phase approach be taken over FY12 and FY13. In FY12, address the highest priority “dark spots”, re-survey to further analyze the remaining “dark spots” and determine if further vulnerabilities appear. In FY13, address the remaining “dark spots”, while waiting for LED technology to become available. *The Board unanimously approved the staff’s recommendation.*

May 2012 – PEPCO completes design and engineering work for the additional streetlights and begins installation.

June 2012 – An article is included in the June issue of the *Crier* providing a status update on the installation of the new streetlights and requesting additional resident feedback on dark or malfunctioning streetlights. PEPCO completes streetlights installations in mid-June. New streetlights were installed in the following locations:

- Grafton Street and Magnolia Parkway (Boxwood Area): *Two new lights on existing poles*
- Across from All Saints Church on Oliver Street
- Across from 3909 Oliver Street
- Across from 3915 Oliver Street
- In front of 3922 Oliver Street
- Across from 3931 Oliver Street

- In front of 6320 Broad Branch Road
- In front of 102 Summerfield Road
- Between 108 and 110 Summerfield Road
- Laurel Parkway behind Public Works Yard
- East Irving Street between Connecticut Avenue and 4 East Irving Street
- Intersection of Grafton Street and Cedar Parkway
- Magnolia Parkway and West Kirke Street intersection

July 2012 – Another article is included in the July issue of the *Crier* stating that PEPCO had completed installation of the additional street lights and, once again, requesting additional resident feedback on the new lights, remaining dark spots and malfunctioning lights.

September 2012 – At my request, the Village arborist surveys all trees that surround streetlights to assess how to sensibly prune the trees to allow for adequate light dispersion, while maintaining a healthy canopy of trees. Over the course of late September and October, the Village tree maintenance contractor executes the prescribed pruning activities.

October 2012 – Following the additional streetlight installations and tree pruning activities, the Village Police Department conducts a third streetlight survey. They find that the additional lights and tree pruning have helped increase light dispersion in some areas while others remain dark due to pole spacing and poor light output.

October and November 2012 - Additional articles are included in the October and November issues of the *Crier* updating the Village of tree pruning activities and the overall status of the effort to improve the Village's street lighting and requesting additional resident feedback on the new lights, further remaining dark spots and malfunctioning lights.

Over the course of almost three (3) years, only fifteen (15) resident comments have been directly submitted to Village staff.

Survey Results

Based on the results of the photometric survey and three (3) streetlight surveys conducted by the Village Police Department and PWC, three (3) common issues are observed with the street lighting:

1. Overall spacing between lights is too great;
2. Light output/color of many lights is lower than acceptable;

3. Adequate light dispersion can be affected by Village's tree canopy.

Existing Dark Spots

A total of ten (10) additional dark spot locations remain based on the surveys. The locations and recommended fixes are as follows:

New Lights on Existing Poles:

- In front of 6 Quincy Street
- Between 10 and 24 Quincy Street

New Lights on New Poles:

- Between 127 and 129 Grafton Street
- Between 4111 and 4113 Oliver Street
- East Melrose Street between 16 East Melrose Street and Brookville Road

Increase Streetlight Wattage:

- Primrose Street between 28 Primrose Street and Brookville Road¹
- Intersection of Nevada Avenue and East Melrose Street¹
- Intersection of East Lenox Street and Brookville Road¹

Reconfigure an existing streetlight's arm or location:

- East Kirke Street between Connecticut Avenue and Brookville Road: *2 lights need to be re-oriented.*¹

In addition to the above locations, it has recently been brought to the Village office's attention that the south side of West Lenox Street (north side of the Village Hall/Post office) is very dark. This portion of West Lenox Street currently has streetlights installed on the opposite side of the street; however due to the dense tree canopy the lights do not illuminate the entire street. The Village staff is assessing other options for illuminating this area a part of the lighting plan for the rest of the Village Hall and will provide a subsequent report to the Board on this matter.

Status Update on PEPCO LED Streetlights

Since March 2010, PEPCO has been exploring the possibility of using light-emitting diode (LED) technology for street lighting. LED lights are far more energy efficient than other types of lighting and provide true white light. LED lights differ from traditional lights in that the latter is naturally refractive because the light emitted from the filament disperses in all directions.

¹ Consideration has been made to adding an additional streetlight in this location; however, due to technical issues such as not having an empty power pole available, this is not feasible.

Light from LEDs is directional because the light comes from a direct light source called a diode and must be manually reflected and then refracted.

In order to study the effectiveness, reliability, light dispersion, and aesthetics of LED street lighting, PEPCO had set up pilot programs. One of the pilot areas was in the Town of Somerset along Dorset Avenue (between Little Falls Parkway and Surrey Street). Upon completion, the Maryland Public Service Commission (PSC) must approve the LED streetlights and issue a tariff from which interested communities, including the Village, could purchase the lights from PEPCO.

The City of Gaithersburg and Montgomery County jointly filed a petition to the PSC citing that PEPCO was dragging its feet on the implementation of LED street lighting. Just last month I learned as a result of the petition and subsequent settlement, the PSC issued an energy usage and maintenance tariff for LED streetlights. Also, included in the new tariff is a standardized schedule of streetlight installation costs.

In speaking with PEPCO's Manager of Special Projects, PEPCO is in the process of reviewing manufacturer pricing for the different types of LED fixtures that would be offered by PEPCO. PEPCO anticipates selecting manufacturers by the end of calendar year 2012. PEPCO should finalize fixture pricing and be able to take orders by the end of the first quarter of 2013 (April 2013). Because the technology is new to PEPCO and it is unknown how many of its streetlight users will opt to convert to LEDs, PEPCO will not stock the LED lights in its inventory early on. Any jurisdictions wishing to convert to LEDs would do so on a made-to-order basis.

In speaking with PEPCO staff members, earlier reliability and maintenance concerns have been addressed by the industry. All of the concerns centered around how repairs would be made if individual diodes stopped working. In early models of the lights, the actual LED components were sealed in the fixture and there was no way to replace individual diodes without taking the entire fixture apart. Now, fixtures allow for individual diodes to be replaced by simply removing the refractive glass shield and replacing the diodes like you would a traditional light bulb.

As of now, the City of Gaithersburg has not installed any LED fixtures within its boundaries. Montgomery County on the other hand has installed several LED streetlight fixtures of its own and has not experienced any major issues. The LED streetlights can be found, ironically, in front of PEPCO's Rockville offices on West Gude Drive and along portions of the Montrose Parkway. When the County installs new traffic lights they often install LED streetlights on those poles as well.

Pictures of LED Street lights

Below are pictures of LED streetlights currently being reviewed by PEPCO; they look very similar to the non-LED fixtures currently offered by PEPCO.



Traditional Cobra Heads



Teardrop Style



LED streetlight installed on Dorset Avenue in the Town of Somerset

Available Options

With the availability of LED streetlights approximately four (4) months away I have outlined three (3) options for the Board's consideration. Regardless of the option selected, there will still be a need for periodic maintenance and pruning of tree branches around Village streetlights. It is worth noting that regardless of which solution is chosen, there may still be places where Village rights-of-way may appear dark due to the width of the street or right-of-way, canopy from trees located on private property, or other factors. Secondary lighting from residents homes is important to fill these gaps.

1. **Proceed with additional streetlight installations (by PEPCO) using currently available high pressure sodium (HPS) bulbs for the ten remaining dark spot locations.** Now that PEPCO has standardized installation rates, total installation costs would be \$9,055 for the ten added lights.

When LED streetlights are available begin the process to convert the Village's high pressure sodium (HPS) streetlights to LED according to the Village Capital Improvements Plan (CIP) which currently budgets for replacements to begin in FY16 (July 2015 – June 2016) and be phased through FY19.

2. **Proceed with option 1; however, during the FY14 budget cycle adjust the CIP to move forward the Village-wide streetlight replacements to begin in FY14 (rather than FY16).**
3. **Temporarily suspend additional streetlight improvements until LED streetlights are available toward the end of the first quarter 2013 (April 2013). Once available, install LED streetlights in the remaining dark spots or along a couple sample blocks using a mix of the cobra-head and teardrop styled fixtures as "test" cases for the overall Village replacement program.** Prior to installing the new LED lights, staff will photograph the dark spots as they exist today. Staff will then take comparison photos after the LED lights are in place to evaluate the lumen output (brightness) and how the light is dispersed by the new fixtures.

After the new lights are installed, we will conduct a survey of Village residents via mailer to solicit feedback, since past efforts to passively through solicit feedback the Crier and website, have yielded sparse results.

After resident feedback and the staff's evaluations are received and reviewed, the estimated cost of installation along with a final recommendation will be submitted to the Board.

Estimated Costs

Based on current standardized installation rates from PEPCO, which I have increased by a factor of 2 (worst case scenario) to estimate the cost of the new LED streetlight fixtures, the conversion of all Village streetlights to LEDs would **cost an estimated \$307,090**. Currently, the CIP reflects an estimated cost of \$800,000 phased over 4 years; however, true cost estimates had previously been unavailable since the technology was still under PEPCO review.

If PEPCO's installation pricing proves to be reasonable, replacing all Village streetlights with LEDs in a single fiscal year would be feasible.

Ongoing Maintenance of Streetlights:

The Village currently pays PEPCO on a monthly basis for the maintenance of our streetlights, which is \$1,739.22 or an average of \$6.06 per light. The cost is a combination of three (3) charges per light:

1. A fixed charge;
2. An overhead & maintenance charge: used to cover PEPCO's labor and material cost of replacing bulbs and minor wiring or component fixes; and
3. An optional replacement charge: this charge would cover any situation where the actual fixture or arm required complete replacement. This charge is optional but if the Village opted-out and a streetlight needed to be replaced, because it was knocked down in a storm or was broken beyond repair, PEPCO would bill the Village for the equipment cost.

The Village can opt to forgo the optional replacement charge at any time, but can only opt-in to the optional replacement charge at the time the new fixtures is installed. Below is a breakdown of how the charges compare to what the Village is currently paying for maintenance.

Table 1: Utility Grade HPS Streetlight (Cobra-Head): *(Actual Maintenance Costs)*

Wattage of Fixture	Fixed Charge	O&M Charge	Optional Replacement Charge	Cost per light	Monthly Maintenance Cost
70 watts	\$3.99	\$1.70	Included in O&M Charge	\$5.69	
100 watts	\$4.47	\$1.70	Included in O&M Charge	\$6.17	
150 watts	\$4.64	\$1.70	Included in O&M Charge	\$6.34	
	Average Cost w/optional replacement charge			\$6.06	\$1,739.22

Table 2: Utility Grade LED Streetlight (Cobra-Head): *(For Reference Only)*

Wattage of Fixture	Fixed Charge	O&M Charge	Optional Replacement Charge	Cost per light	Est. Monthly Maintenance Cost
70 watts	\$0.35	\$0.72	\$4.82	\$5.89	
100 watts	\$0.35	\$0.72	\$5.21	\$6.28	
150 watts	\$0.35	\$0.72	\$5.76	\$6.83	
Average Cost w/optional replacement charge				\$6.33	\$1,816.71
Cost w/o optional replacement charge				\$1.07	\$307.09

Table 3: Decorative Grade LED Streetlight (Teardrop): *(For Reference Only)*

Wattage of Fixture	Fixed Charge	O&M Charge	Optional Replacement Charge	Cost per light	Est. Monthly Maintenance Cost
70 watts	\$0.35	\$0.72	\$7.28	\$8.35	
100 watts	\$0.35	\$0.72	\$7.35	\$8.42	
150 watts	\$0.35	\$0.72	\$8.03	\$9.10	
Average Cost w/optional replacement charge				\$8.62	\$2,473.94
Cost w/o optional replacement charge				\$1.07	\$307.09

At this time, the figures in tables no. 2 and 3 are for reference only to outline the potential monthly maintenance costs. Final maintenance costs will be determined once exact fixtures and wattages are chosen for Village streets.

Once fixtures pricing is finalized by PEPCO, a more informed discussion can be held to determine if the Village should opt-in for the optional replacement charge, as there is the potential for significant cost savings.

Staff Recommendation

Based on the analysis, public comment and conversations with PEPCO, I recommend that the Village proceed with option number 3. I have also spoken with Chief Fitzgerald and he supports this recommendation as well.

Chief Fitzgerald and I feel strongly that it would not be cost effective to install additional high pressure sodium (HPS) streetlights when a more efficient, better illuminating and true white light solution will be available in only four (4) months. By waiting to install the new LED lights in several configurations (styles and wattages) in the remaining dark spots or sample blocks, residents would be able to physically observe how these new lights will look

on Village streets rather than trying to determine a best case solution from another photometric survey/analysis.

Board Action

At this time there is no action required if the Board wishes to proceed based on the staff's recommendation.

If the Board wishes to proceed with option #1, staff requests authorization to engage PEPCO and proceed with the installation/modification of the ten (10) remaining dark spots. At an estimated cost of \$9,055.

Attachments

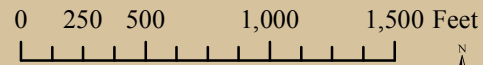
Map of Remaining Dark Spot Locations
Image of Internal LEDs within Streetlights
CIP Expenditure Detail Sheet



Legend

- Existing Streetlight Locations
- New Light on Existing Pole
- New Light on New Pole
- Increase Streetlight Wattage
- Reconfigure existing streetlight arm or location

Village-wide Streetlight "Dark Spot" Locations



Complied by: M. Younes 12/6/2012
 Source: Chevy Chase Village



Image of Internal LEDs within Streetlights



Traditional Cobra-Head



Teardrop Style

Project Detail Sheet

Village-Wide Streetlight Upgrade Project

Category	Infrastructure	Date Last Modified	January 18, 2012
Department	Public Works/Police	Funding Source	<i>SafeSpeed</i>
Zone Location	1, 2, 3, 4	Status	Planning Stage

EST. EXPENDITURE SCHEDULE (dollars in thousands)

Cost Element	Total	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design and Supervision	12	2	10	1	0	0	3	3	3	3
Land acquisition	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0
Construction	648	28	620	20	0	0	200	200	200	200
Other	0	0	0	0	0	0	0	0	0	0
Total	660	30	630	21	0	0	203	203	203	203

EST. FUNDING SCHEDULE (dollars in thousands)

<i>SafeSpeed</i> Revenues	660	30	630	21	0	0	203	203	203	203
Total	660	30	630	21	0	0	203	203	203	203

EST. OPERATING BUDGET IMPACT (dollars in thousands)

Labor/Maintenance			-30.25	0.25	0	0	-5	-10	-15
Materials/Equipment			0	0	0	0	0	0	0
Total			-30.25	0.25	0	0	-5	-10	-15

Description

This project will replace all 262 High Pressure Sodium streetlights owned by PEPCO with Light Emitting Diode (LED) streetlights. PEPCO is currently testing various types of LED in several locations in the region, based on the results from the study on the service reliability and light dispersion PEPCO will offer an approved LED streetlight. LED lights emit a white light and consume near 80% less electricity and have a near 60% longer lifespan. The project will enhance and upgrade the existing street lighting creating safer pedestrian and vehicular access throughout the Village. As a result of the increased pedestrian, vehicular and public safety this project is eligible for funding under the *SafeSpeed* program.

As an interim measure, in coordination with the Village Police Department additional streetlight would be installed using the high pressure sodium bulbs to alleviate dark-areas within the Village right-of-ways.

Estimated Schedule


The LED conversions are currently in a holding pattern as PEPCO is still testing and evaluating LED street lighting. If the LED streetlights are approved by PEPCO, they would be required to submit to the Maryland Public Service Commission (PSC) an application for a rate tariff for the new LED fixtures including a maintenance charge for approval. PEPCO had anticipated that a rate tariff application would be submitted by FY13 however, maintenance issues relating to the its pilot program of LED streetlights has forced PEPCO to extend the test period through FY14. It is now estimated that approval from PEPCO would be granted in late fiscal year 2014 and PSC approval would follow in fiscal year 2015.

Cost Change

There have been no cost changes.

Justification

This project would enhance and upgrade the existing street lighting creating safer pedestrian and vehicular access throughout the Village. As a result of the increased pedestrian, vehicular and public safety this project is eligible for funding under the *SafeSpeed* program. The project has also been recommended by the Public Works Committee and 2009 Resident Survey to be a priority. The use of LED streetlights will also reduce the Village's carbon footprint since the LED streetlights would use almost 80% less energy.

<p>Coordination Board of Managers Administration/Capital Contracts Department Police Department Public Works Committee PEPCO</p>	<p>Map</p> 
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