

STREET LIGHTING POLICY and PROCEDURES



City of Panama City, Florida

Public Works Department

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Approved by City Commission

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Table of Contents

<u>Section</u>	<u>Subject</u>	<u>Page</u>
	Introduction	3
1	General Criteria for Streetlights	3
2	Specific Criteria for Streetlights	4
3	Standard Procedure for Requesting Installation of a Streetlight	5
4	Removal of Streetlights	6
5	Effective Date	6
Form A	Application Form	7
Form B	Petition Form	8

City of Panama City

STREETLIGHTING POLICY and PROCEDURES

The City of Panama City Commissioners recognize that properly placed and designed street lighting is desirable to illuminate City streets and sidewalks. As of the writing of this policy letter, the City of Panama City has 3863 streetlights on City right-of-ways and is responsible for maintenance of an additional 746 streetlights on Florida Department of Transportation roadways. The annual budget for streetlight operations is \$601,000. This cost does not include new streetlight installation or existing street light upgrading. On average, a residential streetlight costs the City \$95 per year to operate and maintain. Because providing street lighting is a significant budget expense, it is the policy of the City to minimize the use of streetlights and install them only where necessary to provide commonly accepted lighting levels necessary for public safety on City streets and sidewalks. Street lighting is not intended to provide security lighting for property outside of the right-of-way. This policy outlines the procedure for determining when, where, and how street lighting will be installed within Panama City.

Street lighting shall be installed according to this policy and the design criteria outlined below. Requests for street lights shall be directed in writing to the Public Works Director for review and approval if the request meets the criteria contained in this policy.

1. General Criteria for Streetlights

- a)** The general criteria for street lighting are 1) visibility, 2) safety, and 3) energy consumption and economics. All of these must be considered in designing lighting systems. It is recognized that visibility is the principal objective of any lighting system, while safety, energy consumption, and economics are conditional criteria that have no meaning until the decision is made to provide visibility through illumination.
- b)** The criterion of visibility describes how well the lighting system performs in revealing the roadway, objects within the roadway, and the surroundings of the roadway to the driver. Current practice assumes that visibility is related to the amount of light reaching a horizontal surface, typically assumed to be the roadway surface, and the uniformity of light on the surface.
- c)** Safety as a design criterion for roadway lighting has both positive and negative aspects. From the positive point of view, improved visibility results in increased safety. The negative aspect involves the installation of fixed objects near the roadway. Drivers' ability to perform their driving task is a function of how well they recognize their surroundings and how well they react to these visual stimuli. In other words, drivers who can see better have the potential to perform better. Pedestrians and bicyclists are also provided with a safer travel environment. The negative aspects may degrade roadside safety by the physical existence of the lighting system. A streetlight and its support constitute a fixed object and, in order for the streetlight to accomplish its task, it must be placed reasonably close to the roadway. Some of the approaches that may be used to reduce the potential for negative safety effects are:

- Use the fewest number of poles possible; and/or
- Locate the poles where they are least likely to be struck.

d) The overall objective criterion of lighting should be to achieve good visibility while minimizing energy consumption to provide the proper illumination. The designer has essentially three means to accomplish this objective:

- Use of light sources exhibiting high efficiency, such as high pressure sodium vapor;
- Use minimum illumination needed; and
- Use lighting only where needed.

2. Specific Criteria for Streetlights

While the City's general criteria discussed above are important design considerations, specific criteria are needed to define the objectives in designing a street lighting system. The City of Panama City has adopted the following criteria establishing the quantity and quality of illumination based on environment, type of roadway, area, and other factors.

a) **Quantity of Illumination:** The quantity of illumination is an average illumination level established through practitioners' experiences and compromises. The quantities are a function of the roadway classification and the area which is served by the lighting system. The quantity of light is referred to as the average maintained horizontal illumination. In other words, the quantity of illumination is a mean value of all points within the area being lit. The term maintained, refers to the illumination value at some point in time after the system is installed. Maintained illumination takes into account reductions in luminous output due to factors such as lamp lumen depreciation and dirt accumulation. The lighting system begins at an initial illumination level and depreciates to some level less than the initial level. The term horizontal refers to the surface on which the illumination is measured (roadway surface). To simplify measurement in the field, the following minimum lighting levels (measured at any point in the street or on the sidewalk) are adopted.

Roadway Classification	Commercial (foot-candles)	Mixed Used (foot-candles)	Residential (foot-candles)
Arterial Street	1.2	0.9	0.6
Collector Street	0.8	0.6	0.4
Local Street	0.8	0.4	0.2

b) **Quality of Illumination:** The illumination concept of lighting design defines an average quantity of illumination over the pavement surface. This average quantity of illumination can be accomplished by producing a generally uniform level of illumination over the area. As drivers pass through areas of relatively high and low

illumination levels, their eyes must adapt. The uniformity of illumination is considered a qualitative means of defining street lighting. The term used to quantitatively describe uniformity is the uniformity ratio. One method to describe this ratio uses the maximum level to minimum level ratio in which the maximum illumination is divided by the lowest illumination point encountered within the roadway being lit. For example, a street with a maximum illumination level of 2.0 foot-candles and a minimum point of 0.5 foot-candles would have a uniformity ratio of 4 to 1. Panama City adopts the following maximum-to-minimum ratios:

- 6:1 for arterial streets
- 12:1 for collector and local streets

c) In new subdivisions, the developer shall be responsible for installing streetlights at the developer's expense. Lighting designs shall be provided as part of the development order submittal and shall be dedicated to the City for operation and maintenance as part of the final plat approval process.

d) In previously developed areas, the City will fund all costs associated with new streetlights approved under this policy and installed within the City's right-of-ways.

e) In non-residential areas, the City Engineer shall review all requests for new streetlights and determine compliance with the above criteria.

f) In residential areas, the following rules of thumb shall be applied to requests for new street lighting in lieu of performing a detailed design and shall be deemed in compliance with the above criteria.

- Light size shall be 8800 lumens and fixture type shall match fixtures used in the surrounding neighborhood, e.g., cobra head fixtures, acorn fixtures, etc.
- Distance between lights shall be 250-300 feet.
- A light shall be installed at each intersection, dead ends, and cul-de-sacs.
- A light shall be installed at changes in roadway direction such as sharp curves.
- Lights shall be installed on existing utility poles where possible.
- Any new poles required shall be installed within the right-of-way, as far as practical from the paved street surface and not obstructing pedestrian traffic.
- All wiring shall be underground in subdivisions having underground utilities.

g) If more than three new lights are installed under a single request, the City Manager shall review and approve or deny the request.

h) If more than ten new lights are installed under a single request, the City Commission shall review and approve or deny the request.

3. Standard Procedure for Requesting Installation of a Streetlight

a) If you own property on a public street and you believe your street lighting does not meet the criteria shown in Sections 2 and 3 of this policy, you may call the Panama

City Public Works Department at (850) 872-3015 to request a "Streetlight Request" form. In addition to your name, address, and house number, the form requests that you identify the specific location where the desired streetlight is to be located.

- b)** The completed form should be mailed, emailed, or hand delivered to the Panama City Public Works Department to be processed.
- c)** Once the Public Works Department receives the form, a representative will visit the site to verify the location is acceptable. Whether it is acceptable or not, you will receive notification via letter from the Public Works Department. If the location meets the policy criteria, you will be provided with a map and a petition form and you must petition all owners of property within 125 feet in either direction along the street from the proposed location of the new streetlight. More than fifty percent of the property owners petitioned must concur with your request. This petition will be returned to the Panama City Public Works Department once all the signatures have been obtained.
- d)** Streetlight requests that have successfully completed this process and do not require higher level approval as stipulated above in Sections 2.g) or 2.h), will be forwarded to the Panama City Public Works Maintenance Division which will submit a request to Gulf Power Company for installation of the streetlight, subject to funding availability. If funds are not currently available, the approved request will be held for inclusion in the next budget cycle. Once submitted, installation of the streetlight may take anywhere from four to eight weeks, depending on the schedule of the Gulf Power Company contractor performing the installation.

4. Removal of Streetlights

A petition to remove a streetlight may be accepted if the following conditions are met:

- a)** The streetlight must have been in place for a minimum of six months.
- b)** City Police and Public Works staffs must support the removal of streetlight.
- c)** The new petition must include the same affected area as the original petition and must be supported by more than fifty percent of those petitioned. If the petition fails, the location shall not be reconsidered for a period of one year from the date the removal request was initiated.
- d)** If a streetlight is removed, a request to reinstall it will not be considered for a period of two years following the date it was removed.

5. Effective Date

This streetlight policy and procedures shall be effective on the date approved by the City Commission and shall apply to all streetlight applications initiated after the effective date.

FORM A

STREETLIGHT REQUEST FORM

Contact Name _____

Today's Date _____

Neighborhood _____

Day Phone _____

Local Address _____

Locations where streetlights are requested? _____

Please return the completed application form to:

**City of Panama City
Public Works Department
P.O. Box 1880
Panama City, FL 32402**

Phone: 850-872-3015

Fax: 850-872-3077

E-Mail: PublicWorks@pcgov.org

For Official Use Only

Project Number _____ **Date Application Received :** _____

Date of Public Works Analysis Completed: _____

Date Signed Petitions Received: _____

Date Request Presented to City Manager/City Commission (if applicable) _____

Request: **Approved** **Disapproved**

Date Applicant Notified of Final Determination: _____

Date of Request submitted to Gulf Power: _____

Date Streetlight Installation Completed: _____

FORM B

CITY OF PANAMA CITY STREET LIGHT PROJECT PETITION FORM

We, the undersigned, as owners of properties in the affected area, hereby acknowledge that we have been notified of the request to install new streetlights, as shown on the attached map

Please list all addresses in the petition area. One signature per dwelling.

By signing "Yes" below, dwelling owners acknowledge they have seen the map showing the proposed location of the streetlights and if adjustments must be made to the location at a later date, they consent to having the streetlight placed in front of their property, if necessary.

