MEMORANDUM

TO: Mayor and City Council Members

FROM: Kimberly A. McNeeley, M. Ed., CPRP, Director
Austin Parks and Recreation Department

THROUGH: Stephanie Hayden-Howard, Assistant City Manager

DATE: October 20, 2022

SUBJECT: Staff Response to Parks Security Lighting Program (Ordinance No. 20190910-001)

This memo serves as a response to Austin City Ordinance No. 20190910-001, Policy Direction from Mayor Pro-Tem Garza, which authorized $115,000 in recurring annual funding to the Parks and Recreation Department (Department) for the installation of security lighting in parks. This report provides an overview of the Department's security lighting program, outlines the implementation and lighting installations to date and highlights equity considerations in the project prioritization process.

In September 2019, during the FY20 budget approval process, the Department received the following direction: "Funding in the amount of $115,000 is included in the FY20 budget to install safety lighting in parks, and staff estimates show that lighting installation in all parks with need will be completed by the end of FY22. Given the equity focus of this issue and the needs emphasized by community members and by the Hispanic/Latino Quality of Life Commission, additional consideration should be given to the feasibility of completing installation in parks in underserved areas ahead of the current goal for completion in FY22, which may require consideration of how to reallocate resources within the Parks and Recreation Department in order to complete installation as quickly as possible."

Program Overview

The Department's security lighting program addresses safety priorities at parks throughout the City through the installation of LED lighting. The program also promotes recreational use of parks later in the evening until the city-wide park curfew of 10:00 PM. The increased use deters undesirable behaviors and crime, which encourages further, safe use. City Council first appropriated the $115,000 in ongoing annual funding to the General Fund in FY17 and the program continues to operate at that level.

Prior to City Council allocating funding in the fall of 2016, the Department worked closely with Go Austin/Vamos Austin (GAVA) and community stakeholders from 78744 and 78745 zip codes to identify lighting needs in the parks of South and Southeast Austin. Department staff visited ten parks in these zip codes, listened to community leaders, and estimated the cost to improve lighting at the parks. GAVA advocated for lighting funds for the parks during the FY17 City Budget review. The one-time capital request was not funded, however through the group's advocacy, Council appropriated recurring funding for safety lighting in parks citywide. Additionally, Austin Parks Foundation provided supplemental

funding focused in 78744 and 78745 in 2017. The Department has utilized a variety of luminaires to achieve security lighting in parks. Below is a brief overview of the type of lights typically used.

Lighting Option Toolkit	
Program / Fixture Name	**Description**
Austin Energy (AE) Nightwatchman	Nightwatchman lights are installed on existing AE power poles with 120V secondary voltage. Some AE poles only have primary voltage, so a transformer or cable from a nearby transformer would need to be installed to bring the 120-volt service for the light. These adaptations could add several thousand dollars, so utilizing poles with existing secondary voltage is strongly recommended. These are Dark-Sky-compliant, 75 or 100-watt-equivalent, 1,500 – 2,000 lumen LED lights. AE pays for the monthly electric consumption. They are activated by a photo-cell, so they can't be programmed with hours of reduced lighting.
First Light Technology- Solar	In case an AE power pole is not an option, solar-powered lights are the next best choice. The concurrent rapid improvement of LED lamps, photovoltaic cells, and lithium batteries over the past few years has resulted in luminaires that are an excellent option for security lighting. First Light manufactures solar-powered, Dark-Sky-compliant, remotely-controlled/programmable luminaires with high-quality LED lamps that are installed on either 12' poles for "pedestrian-scale' or 20' poles for 'street-scale' lighting. The former provides 850 to 1,200 lumens and the latter 2,550 to 2,830 lumens. These poles and fixtures have to be installed by a contractor.
GreenTek Energy Systems - Solar	In some cases, the higher cost of the First Light product is not warranted. GreenTek offers solar-powered, remotely-controlled/programmable LED, 2,000 lumen lights that the Department could have installed by maintenance staff on existing poles, but they are lower quality and have a shorter life. The Department has not utilized them since FY17.
Gridshift Solutions - Solar	Gridshift Solutions offer a middle ground solar solution between GreenTek Energy Systems and First Light Technology. These Luminaires can be installed by Department maintenance staff and installed on a variety of poles. The light output is near 3000 lumens, similar to First Light Technology.
120V Contractor Installed	Contractor installed lighting is a preferable option if there is existing electrical service in good condition. However, contractor installed 120V lighting is often the most expensive and time-consuming option.

Before a decision on the type of lighting is made, the Department meets with community stakeholders to listen to feedback and performs a lighting assessment by walking the site at night to record existing light levels. The amount of light and degree of uniformity needed varies depending on the amount of activity in the park. While an average of 0.1 foot-candles (or 1 lux) and lack of uniformity are acceptable for a low-activity parking lot or path, an ADA-accessible parking location will require an average of 0.5 foot-candles (or 5 lux) and 4:1 uniformity (average to minimum ratio). Overall, the Department aims to use the minimum amount of light needed for each location and activity in order to preserve dark night skies and protect nocturnal wildlife.

Progress to Date

In the program's first six years, 171 lights have been installed in 22 zip codes across all Council Districts and in 53 total parks. A full list of security lighting locations is provided below and can be viewed in the interactive web map.

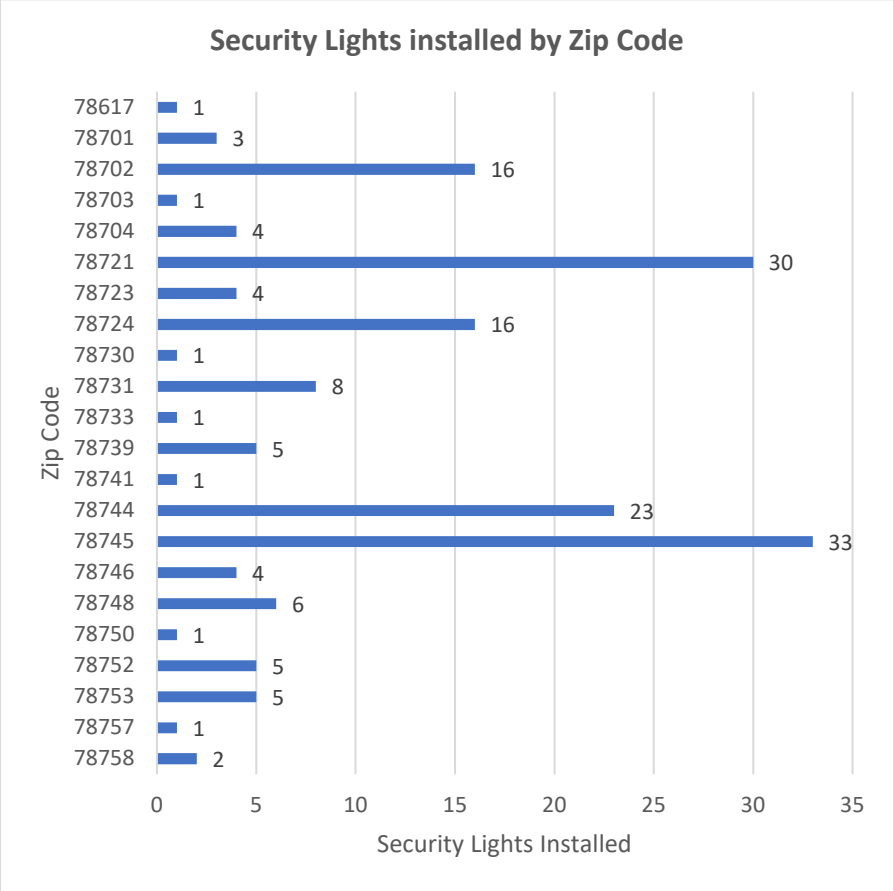
Park Solar Security Lighting Installations								
Park	**Zip Code**	**Council District**	**FY 2017 & FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Total Installed**
Agave Neighborhood Park	78724	1					**2**	**2**
Armadillo Neighborhood Park	78745	2			**7**			**7**
Bartholomew District Park	78723	4	**1**			**2**		**3**
Boggy Creek Greenbelt (Poquito Creek Pocket Park)	78702	1					**1**	**1**
Brownie Neighborhood Park	78753	4	**1**					**1**
Bull Creek District Park	78731	10	**1**		**2**			**3**
Buttermilk Branch Greenbelt	78752	4		**4**			**1**	**5**
Cherry Creek Neighborhood Park	78748	5				**1**		**1**
Circle C Ranch on Slaughter Creek	78739	8	**5**					**5**
Commons Ford Ranch Metropolitan Park	78733	10	**1**					**1**
Covert Park at Mount Bonnell	78731	10	**3**					**3**
Cunningham School Park	78745	5	**2**	**1**				**3**
Davis/White Northeast Neighborhood Park	78724	1	**1**				**5**	**6**
Dove Springs District Park	78744	2	**1**	**3**				**4**
Earl J. Pomerleau Pocket Park	78723	4	**1**					**1**
Edward Rendon Sr. Metropolitan Park at Festival Beach	78702	3			**5**	**2**		**7**
Emma Long Metropolitan Park	78730	10			**1**			**1**
Evergreen Cemetery	78721	1				**15**		**15**
Georgian Acres Neighborhood Park	78753	4	**2**					**2**
Givens District Park	78721	1				**11**		**11**
Govalle Neighborhood Park	78721	3	**2**					**2**
Heron Hollow Pocket Park	78758	4	**2**					**2**
Houston School Park	78744	2		**3**				**3**
James A. Garrison District Park	78745	5	**4**	**2**	**2**			**8**
Joslin Neighborhood Park	78745	5	**4**	**2**				**6**
Kendra Page Neighborhood Park	78744	2	**1**	**3**				**4**
Longview Neighborhood Park	78745	5				**1**		**1**
Lower Bull Creek Greenbelt	78731	10	**2**					**2**
Mary Moore Searight Metropolitan Park	78748	5			**3**		**1**	**4**
Metz Neighborhood Park	78702	3	**1**				**2**	**3**
Michael Butler Shores at Town Lake Metro Park	78704	9			**1**		**2**	**3**
Montopolis Practice Fields	78741	3	**1**					**1**
North Oaks Neighborhood Park	78753	1					**2**	**2**
Northwest Recreation Center	78757	7					**1**	**1**
Odom School Park	78745	2		**2**				**2**
Onion Creek Metropolitan Park	78744	2			**2**			**2**
Onion Creek Soccer Complex	78744	2	**4**					**4**
Parque Zaragoza Neighborhood Park	78702	3	**2**				**3**	**5**
Pastor Edward Clarence Craig Jr. Neighborhood Park	78744	2			**3**			**3**
Piney Bend Neighborhood Park	78745	5	**1**					**1**
Ponciana Neighborhood Park	78744	2	**1**	**2**				**3**
Reed Neighborhood Park	78703	10	**1**					**1**
Shoal Beach at Town Lake Metropolitan Park	78701	9	**2**					**2**
Silk Oak Neighborhood Park	78748	5				**1**		**1**
Springdale Neighborhood Park	78721	1				**2**		**2**
St. Elmo School Park	78745	3	**2**	**3**				**5**
Stoney Ridge Neighborhood Park	78617	2	**1**					**1**
Tanglewood Neighborhood Park	78750	6	**1**					**1**
Tom Lasseter-South Lamar Neighborhood Park	78704	5	**1**					**1**
Waller Creek Greenbelt (Symphony Square)	78701	9	**1**					**1**
Walnut Creek Sports Park (near Austin Tennis Center)	78724	1					**1**	**1**
Walter E. Long Metropolitan Park	78724	1			**3**	**4**		**7**
Zilker Metropolitan Park - Playground and Lou Neff	78746	8			**4**			**4**
Totals			**53**	**25**	**33**	**39**	**21**	**171**

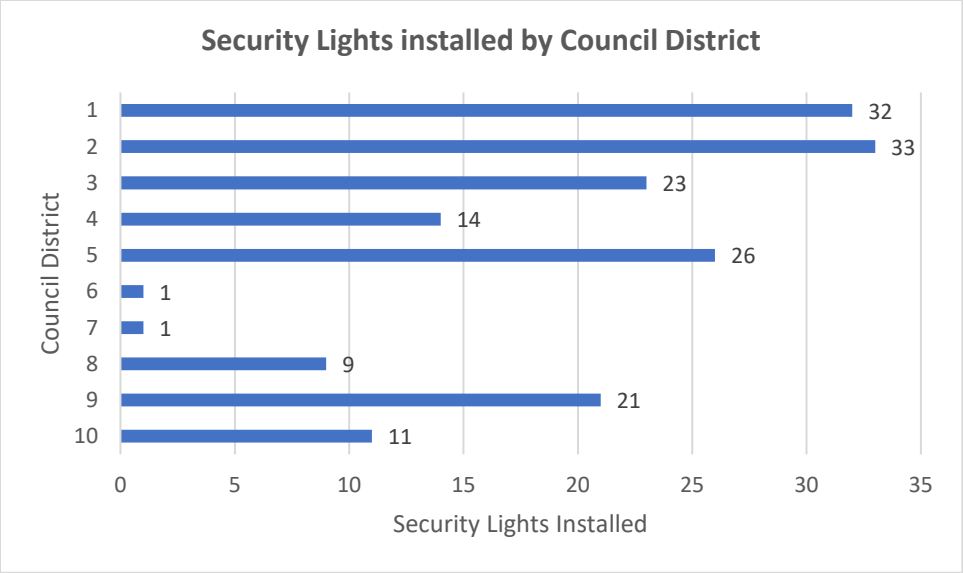
In response to the direction received from Council in 2019, the Department developed a security lighting prioritization matrix, which is updated annually. Specifically, the Department prioritizes security lighting

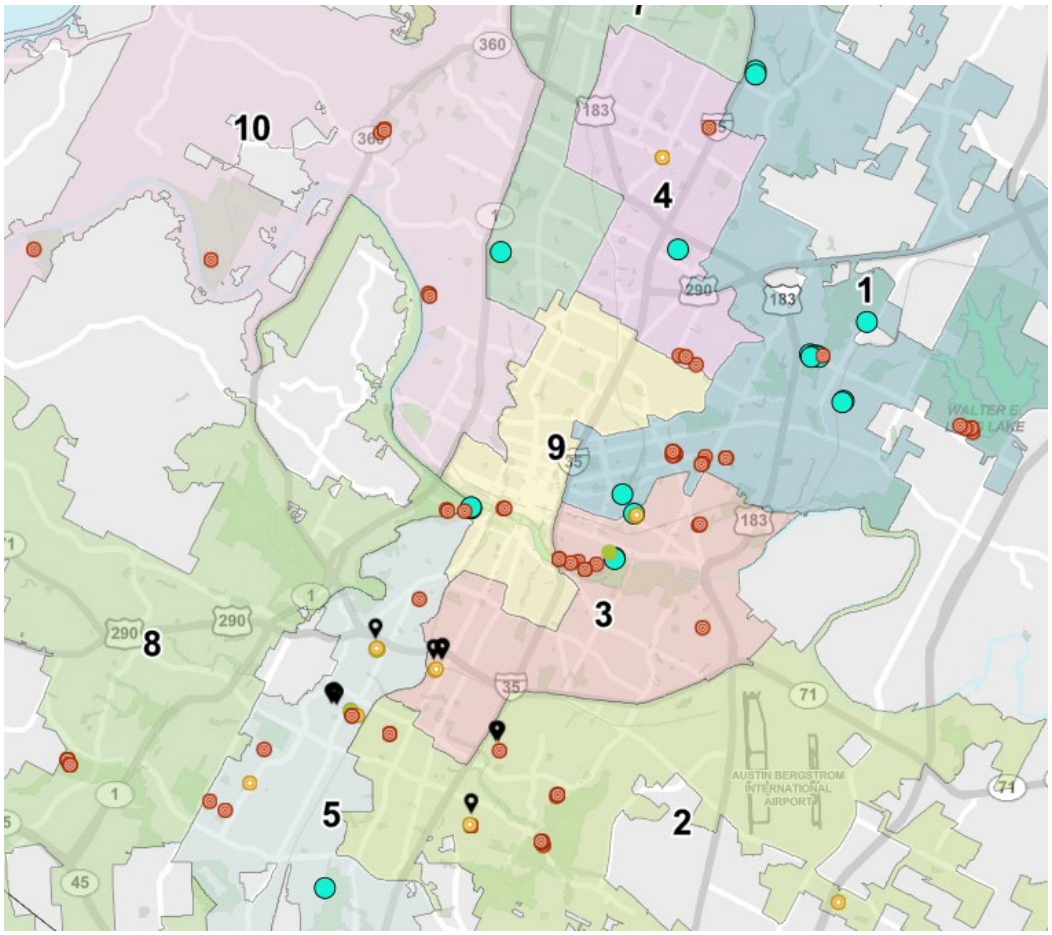
installation at locations suggested by the community and other stakeholders based on service area demographics, safety concerns, the potential for lighting to mitigate those concerns, and the potential for lighting to improve access to and the use of recreational amenities. The prioritization matrix uses the following neighborhood census data, equity indicators, and strategic measures to rank the potential impact of security lighting on parkland:

1. *Emphasis on historically underserved areas (number of people of color served, and income of service area)*
2. *Statistics for crime and 311 calls reporting camping, trash, noise, drug use, etc.*
3. *Advocacy/support by park neighbors and neighborhood association*
4. *Statistics for park activity and/or projections for park activity if lights were added to extend hours of use up to curfew*
5. *Population density (projected number of people and number of children served)*
6. *Cost and potential other funding sources (leveraging partnerships)*
7. *Existence of AE power poles in preferred location for Nightwatchman lights (less cost than solar light fixtures)*

Security Lights Installed with Parks and Recreation Department Operating Budget (Fiscal Years 2017-2022)







Following the installation of the FY22 security lights, over eighty percent of the lights have been installed in zip codes that are historically underserved. One-third of all installations have been in 78744 and 78745, the zip codes originally represented by GAVA.

Next Steps

The Department will continue to identify outstanding needs, evaluate site conditions, plan for installations as appropriate, and refine the equity prioritization matrix to guide top priorities. As existing solar infrastructure begins to age, the Department will replace batteries to ensure systems remain operational and will continue to collaborate with Austin Energy to find opportunities for Nightwatchman installations.

Should you have any questions about the security lighting program in parks, the prioritization matrix methodology, or specific light fixture installations, please contact my office at (512) 974-6717.

cc: Spencer Cronk, City Manager
Jacqueline Sargent, Austin Energy General Manager