Situational Crime Prevention (SCP) Project and License Plate Recognition (LPR) Cameras

BJA FY 2022 Edward Byrne Memorial Justice Assistance Grant Program Local Solicitation - Category 1

Project Summary

The City of Port St. Lucie (PSL) is located on the Southeast Coast of Florida with a population of 217,523 (U.S. Census, est. 7/1/2021) spread over an area of about 120 square miles. PSL has grown by 32.2% since 2010, at a rate of about 2.9% annually and has a population density of 1,843 people per square mile. This growth has brought with it considerable challenges.

Port St. Lucie Police Department (PSLPD) is seeking to use the FY 2022 BJA Edward Byrne Justice Assistance Grant (JAG) Program – Local Solicitation of $21,609 for a dual purpose. First, to conduct a Situational Crime Prevention (SCP) research project to combat retail theft within the City of Port St. Lucie. PSLPD will partner with the Loss Prevention Research Council (LPRC) from Gainesville, FL over the 12-month grant period. Secondly, PSLPD will use a portion of the grant award to lease up to four (4) additional License Plate Recognition (LPR) cameras. These cameras will provide our agency with critical, indisputable video footage to investigate crimes, parking lot thefts, and vehicular crime to secure arrests.

PSLPD will use $12,920 of the award toward the activities of the Loss Prevention Research Council (LPRC) to deploy Closed Circuit TV (CCTV) platforms to collect data that will be used in reduction of retail theft in the City of Port St. Lucie. The LPRC was founded in 2000 by Dr. Read Hayes, a Research Scientist/Criminologist at the University of Florida. Since that founding, Dr. Hayes and his team have completed over 300 theft, fraud, and violence control projects with and for over 65 retail companies and law enforcement agencies. The LPRC includes 70 major retail chains and 90 solution/tech partners working together year-round in the field, in Virtual

Reality (VR), and in simulated labs with scientists to boost commerce while reducing theft, fraud, and violence via better processes and smart technologies.

PSLPD will identify two persistently higher crime activity parking areas. The LPRC and PSLPD teams will randomly select one of the parking lots to deploy two (2) Live-View mobile CCTV platforms, with the other area serving as a control location. PSLPD Crime and Intelligence Analyst will collect reported police calls for service and retailer/mall reported crime events which will be measured for six months before and six months after the CCTV treatments are employed to estimate protective effects. The unit of analysis for this study will be a store parking area.

CCTV is a key type of Situational Crime Prevention (SCP) strategy incorporating video, radar, and Light Detection and Radar (LiDAR) sensors that inject formal surveillance increasing perceived detection/sanction risk within a target area. CCTV protective efficacy has been found in multiple studies in different places and for differing use cases. Visible camera deployment was estimated to result in a statistically significant 16% reduction in crime events including 51% reduction in parking lot crimes. CCTV takes many forms and is deployed or dosed in varying ways to detect, deter, disrupt, and/or document possible offenders and their harmful behaviors. CCTV sensors range from tiny covert or disguised cameras to visible, survivable cameras, and public view monitors. Cameras are deployed on walls, poles, ceiling tiles, and on mobile platforms. Mobile platforms facilitate more situational adjustment to maximize deterrence and risk reduction in evolving environments. They can also be self-sustaining logistically using solar power and cellular connection to reduce dependence on those infrastructure needs.

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The dependent variables for this study will be reported and unreported observed violent, theft, or disorder offenses in both of the selected store parking lots via calls for service and store incident reporting, and store employee and shopper filed interview feedback interviews, prior to and after Live-View CCTV treatment.

PSLPD intends to use $8,689 of the grant funds to lease up to four (4) additional License Plate Recognition (LPR) cameras. Currently, the agency has nine (9) leased LPR cameras and one mobile LPR camera platform for the entire City. This will tremendously improve the number of vehicle tags reached. With access to a wider number of license plates, potentially tens of thousands a day, this will give PSLPD an extraordinary advantage in locating, investigating, and solving crime such as, detection of unregistered vehicles, recovery of stolen vehicles, and much more. In addition, leasing the LPR cameras is a more practical and efficient use of the grant funds since the cost to purchase an LPR camera outright runs about $40,000 to $50,000 per unit. These cameras will be placed in strategic locations, usually high-traffic areas, to pick up as many vehicle license plates as possible as they drive by. Once a vehicle drives by an LPR camera, it snaps a picture of the license plate number, and it is stored in a memory bank. PSLPD has a standard LPR subscription service which enables law enforcement agencies access to these memory banks of all the pictures taken from its LPR camera. PSLPD plans to have a monthly report in place to give the agency usage statistics such as, how many times a targeted license plate on a vehicle was captured with the LPR cameras, what the outcome was, etc.

Once the grant award is formally received, PSLPD plans to commence the SCP research project with LPRC. It will also start the purchasing process to obtain a one-year lease for the additional

LPR cameras. Once the purchasing process is complete, PSLPD will utilize the additional LPR cameras as soon as possible.