SUBJECT: WEHO SMART CITY PUBLIC SAFETY PILOT (CAMERAS + SENSORS) – COMPLETION AND PROJECT EVALUATION

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STATEMENT ON THE SUBJECT:
The City Council will receive and file an evaluation of the three programs of the WeHo Smart City Public Safety Pilot (Cameras + Sensors). Based on these findings, Council will consider expansion of the City’s existing Automated License Plate Recognition (ALPR) camera system. This expanded ALPR system will provide enhanced public safety benefits throughout the City. In addition, sidewalk-facing cameras are recommended for future exploration.

RECOMMENDATIONS:
1) Receive and file an evaluation of the three programs of the WeHo Smart City Public Safety Pilot (Cameras + Sensors);
2) Direct the Public Safety Department to develop and release a Request for Proposals for expansion of the City’s existing ALPR camera system.
3) Direct staff to explore a sidewalk-facing security camera program and return with recommendations for implementation.

BACKGROUND / ANALYSIS:
Recent Project History

On February 20, 2018, City Council authorized development of three programs for the WeHo Smart City Public Safety Pilot (Cameras + Sensors) that included: 1) installation of security cameras with smart city features at key intersections along Santa Monica Boulevard; 2) exploration of a video system sharing program with commercial businesses in West Hollywood; and 3) development of a residential public safety camera rebate program. As a combined effort, these three programs would create a city-wide security
network for greater safety and security for the City and its citizens. (For additional project history, please see ATTACHMENT A.)

This report provides the evaluation of these three programs and recommended next steps.

1. **Installation of Security Cameras with Smart City Features at Key Intersections along Santa Monica Boulevard**

   On February 21, 2018, the City released a Request for Proposals (RFP) for security cameras with smart city features at key intersections along Santa Monica Boulevard. This RFP solicited up to four teams to implement and demonstrate security and smart city solutions that can enhance public safety in the City. Working in collaboration with the City and the Los Angeles County Sheriff's Department (LASD), these teams would demonstrate how video, audio, motion, or other camera and/or sensor technology can be an effective tool in addressing public safety.

   Responses to the RFP were due on March 24, 2018. The City received and reviewed four proposals and three vendors were selected to participate in the pilot project. The vendors designed and implemented a demonstration project for deployment over fifteen months. The selected vendors included Verizon, Konica Minolta, and Boulder Al. The five pilot intersections and the corresponding teams include:

   - **Verizon**
     Santa Monica Blvd. / La Cienega Blvd.

   - **Konica Minolta**
     Santa Monica Blvd. / Fairfax Ave.
     Santa Monica Blvd. / La Brea Ave.

   - **Boulder Al**
     Santa Monica Blvd. / Robertson Blvd.
     Santa Monica Blvd. / San Vicente Blvd.

   All five installations were completed by September 30, 2019. In addition to public safety features, the cameras also provided metrics that measured volume and direction of pedestrian, bicycle, and vehicle traffic, with some including platforms to address pedestrian safety at the intersections.

   The pilot end date was extended from July 2019 to December 2019 to provide staff additional time to evaluate the program with feedback from key LASD staff. The vendors have indicated that they are not interested in extending the program and will deinstall prior to the new year.
Evaluation of the Pilot Project

Pilot projects are a tool to learn about unknown variables in the process of implementing new technologies or ideas, prior to rolling out a full-scale program. As security cameras in the public right-of-way are a new technology for the City, staff sought to explore several different variables in its evaluation of the technology. A summary of the evaluation and lessons learned follows.

Ease of installation and maintenance
Staff encountered several barriers at project launch. Firstly, this project required a unique Agreement for Services, which asks for more data and technology protections than a standard City contract. Therefore, all contract changes on the vendor’s side were more difficult to execute, though ultimately successful for all three vendors.

Additionally, once contracts were in place, several variables impacted the time to launch the technology. As each vendor was testing a different technology, it required a significant amount of staff time from the Innovation, Information Technology, and Engineering Divisions. Staff should keep this in mind for future camera programs.

Staff learned valuable insights regarding maintenance of the cameras and video platforms. One of the biggest lessons was the impact of power outages on the cameras. Over the pilot period, the City experienced many power outages, particularly at the Santa Monica Blvd and La Cienega Blvd intersection. This caused City equipment and vendor equipment to become faulty and in several instances the need for replacement. During these periods, cameras were non-operational, and no video footage was recorded. Any future camera program should include a robust maintenance plan and understanding of this limitation.

Quality and reliability of video feed
Quality and reliability of video feed varied between vendors. Without high enough quality footage, finding detailed information, such as license plate numbers, is difficult. High quality footage will be necessary in any future camera program.

Vendors with a user-friendly platform to access the video feed provided more reliable information. The ease with which staff could look up and create cases, corresponded to the ease of solving crimes and address public records requests. Although one vendor tested a proprietary video feed platform, staff preferred working with Genetec's BriefCam platform and recommend any project going forward include a license for this software.

Security access controls
During this pilot project, only LASD and Innovation Division staff had access to the video feeds. Innovation Division staff responded to public records requests on behalf of the City. Although staff did not have to access video footage frequently,
each time required a significant amount of staff time. The City does not currently have the staff capacity to manage public records requests for future camera program. In the future, any camera program should identify the LASD as the responsible party for managing public records requests. City Hall staff should not have access to the video feed at all. LASD has privacy controls and security mechanisms in place that limit access to video feed for investigative personnel only.

*Introduction of new public safety features in the Public Right-of-Way*

Overall, response to installing the cameras in the public right of way was positive. Members of the community and the Public Safety Commission applauded the City’s efforts to use technology to improve crime-solving and ultimately improve quality of life. The additional smart city features were a bonus on top of this effort.

The ability to count pedestrians, vehicles, bicycles, and measure speeds between intersections is a beneficial tool for the City. Any future camera program should capitalize on smart city features that can provide high-quality metrics and analytics. Typically, these features can be added for minimum to reasonable additional cost.

*Effectiveness in fighting crime and increasing public safety*

The number and severity of incidents during the fifteen-month pilot period was low. The City received requests for video footage for only five incidents over the period: three were car crashes; one was a request from a ride share driver whose passengers brawled outside their vehicle; and one was an unspecified request.

Each incident provided valuable information about how a future program could be effective in solving crime and increasing public safety. By utilizing camera technologies in the public right-of-way, the City provides LASD with better tools for solving crimes.

However, most incidents in the City occur not within the intersection, but along the sidewalk right-of-way. A large percentage of crime in West Hollywood is vehicle burglaries, which happen at the midblock and sidewalk level. The intersection cameras were not effective in identifying vehicle burglars. The LASD have recommended a preference for future security camera programs to focus cameras on the sidewalks, not intersections. This is valuable information for determining the course of a future camera program.

*Long-term projected cost for project expansion*

For evaluation purposes, staff requested quotes from the three vendors for a hypothetical expansion of their proposed installation across 14 intersections in the City that corresponded to intersection recommended by the Public Safety Commission to Council in September 2016.

The estimates for expansion and maintenance of a smart camera and sensor program at the intersections ranged from $250K (basic configuration with not fully
developed platform) to $2.1M (preferred configuration with robust video retrieval and smart city metrics dashboard). This included hardware, software, installation and support costs for the cameras alone.

Additionally, City development of fiber infrastructure is critical to the expansion of the program. Any camera system will require access to City-owned fiber. Though available now along Santa Monica Blvd, the development of fiber along other corridors like Sunset Blvd, and in the Design District, will need to be complete before a camera program can reach its full potential. The City expects its fiber expansion to be complete along commercial these commercial corridors in 2022. These costs, along with additional network support services, should also be factored when considering future camera projects.

**Recommended Next Steps**

Based on the lessons learned from this pilot, staff does not recommend moving forward with cameras and sensors at street intersections as evaluated in this pilot as these configurations did not generate enough public benefit to warrant the cost of expansion. Stiff will work with the intersection camera vendors to remove cameras from the five intersections by the contract termination date of December 31, 2019.

Nevertheless, staff recommends expanding the City's existing Advanced License Plate Reader (ALPR) camera system. In addition, staff recommends further exploration of sidewalk-facing cameras.

**ALPR Camera Expansion**

ALPR cameras are the LASD’s best technological tool in solving crimes in West Hollywood as many criminals flee via vehicle. Even a partial read of a license plate can return a positive ID using the existing ALPR system, making the cameras incredibly effective. The City currently has ALPR cameras at one intersection, Santa Monica and La Brea. To effectively fight crime, ALPR cameras should be placed around the perimeter of the City, as well as at major intersections and entry/exit points. The LASD has identified 4 new critical locations where ALPR cameras can help solve crimes in West Hollywood.

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<thead>
<tr>
<th>Intersection</th>
<th>Implementation</th>
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<tbody>
<tr>
<td>Santa Monica / La Brea</td>
<td>Already installed</td>
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<tr>
<td>Santa Monica / San Vicente</td>
<td>FY21</td>
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<tr>
<td>Santa Monica / Fairfax</td>
<td>FY21</td>
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The LASD has an Advance Surveillance and Protection (ASAP) Unit which manages all ALPR cameras. ASAP's goals are to expand intelligence gathering capabilities, to prevent crime, and to collect evidence. The Detective Bureau can
check cameras by date, time, and location to search vehicles that match a specific description. Since ALPR is County wide and is compatible with neighboring police agencies, vehicles can be seen at multiple locations which can provide a variety of photos for the Detective Bureau to view.

ASAP also manages all the hardware and data storage for the system, which is substantial. Only a small number of County employees have access to the system, and proper justification for access is required for every search. The system is regularly audited to ensure proper use.

Previous cost estimates have come in at about $175,000 per intersection for ALPR purchase, installation, and alignment. In addition, $25,000 is estimated for construction costs related to lateral connections for conduit and fiber, for a total of $200,000 per intersection. Therefore, installation of these 4 new intersections is estimated at approximately $800,000. This is a conservative estimate and costs could come in lower.

To execute this project, staff recommends the following next steps:

- City Council should direct the Public Safety Department to release a Request for Proposals for ALPR cameras at the 4 new locations. The costs for the ALPR expansion should be included in the FY21 budget for Council consideration.
  - California Civil Code 1798.90.55 requires that City have a public comment period at a public meeting before implementing the program. This City Council meeting will be used to satisfy this requirement.
- Protocols for public records, security access, privacy and storage retention policies shall mimic those already in place by LASD for the existing ALPR cameras.
  - California Civil Code 1798.90.55 requires that the City post policies and procedures about how the ALPR cameras will be used. Staff will post the LASD policy publicly on the City’s website.

*Explore Sidewalk-facing Cameras*

Mid-block and sidewalk facing cameras can serve as a mechanism to prevent crime, apprehend suspects and increase public safety in the City. With vehicle burglaries ranking as one of the most prolific crime types in West Hollywood, LASD finds itself hampered to prosecute criminals without video evidence. For example, sidewalk-facing cameras may help tackle the growing vehicle burglary problem in the City.

Cities such as Beverly Hills, Los Angeles, Glendale, Pasadena, and San Diego all have installed sidewalk-facing security cameras to varying extents. If Council wants to pursue a sidewalk-facing security camera program, staff will explore how
programs in similar cities have been developed and will return to Council with recommendations on how a program can be implemented in West Hollywood.

In addition, the Engineering Division will be conducting a pilot program in the coming months to retrofit street lights with energy efficient smart LED lights and smart nodes designed to monitor traffic and provide vehicle and pedestrian counts as well as weather data. The pilot program will provide an opportunity to explore whether these smart nodes could provide additional resources for the Sheriff’s Department as needed.

2. Video Sharing Pilot Program for Local West Hollywood Businesses

West Hollywood’s private sector is a critical resource in addressing public safety, which is why Council authorized staff to develop a pilot program to encourage private commercial security camera owners to share their video surveillance data with LASD. The goal of this pilot project was to make obtaining video data easier and faster for LASD, helping reduce the amount of time necessary to gain information, and ultimately solve crimes.

Evaluation of the Pilot Project

Staff originally intended to develop a Memorandum of Understanding (MOU) that could be used by LASD and private businesses, clearly outline the terms for how and why LASD could request access of recorded data in the case of an incident. However, upon deeper discussions with LASD, it became clear that a program like this is not needed in West Hollywood.

If an incident occurs within range of a private business, LASD surveys the site for security cameras, asks the property and/or business owner for security footage, and almost always receives that footage in a timely manner. The West Hollywood business community is already engaged in a community-wide effort to increase public safety using their own security cameras.

The Innovation Division launched an online survey in April 2019 to understand how many business owners have security cameras, particularly those facing the public right of way. Staff used a variety of tools to encourage participation in the survey, including outreach to the Chamber of Commerce, the Sunset Strip Business Association, and the Design District BID and email.

Staff received 107 responses to the survey. Most businesses rely on digital and cloud-based security footage, and about half can access their video feed remotely. This indicates that the West Hollywood businesses with security cameras have newer model cameras, which likely means better-quality video footage. Cameras are geographically distributed evenly throughout the City.

However, of the 107 responses, only about half (56%) have security cameras.
Moreover, only one-third of those businesses have cameras facing the public right of way. This data further supports the need for midblock and sidewalk facing cameras.

**Recommended Next Steps**

Therefore, staff does not recommend moving forward with a video sharing program with businesses but instead focus on efforts to develop the midblock and sidewalk facing camera program as discussed in the previous section of this staff report.

**3. Residential Public Safety Camera Rebate Pilot Program**

The third part of this community-wide effort to use technology to improve public safety included an exploration of a residential video camera rebate pilot project. Staff studied similar programs in other cities to identify the best pilot project for West Hollywood. Due to the complexity and high cost of commercial-grade security cameras, cities rarely provide rebates to private commercial businesses. Therefore, staff recommended targeting residential properties which would allow for the distribution of many more public safety video cameras.

**Evaluation of the Pilot Project**

Staff explored working directly with several security camera companies to gauge their interest in partnerships for a rebate program. Staff reached out to Nest, Kastle Systems, and Ring. Ring was the only company that expressed interest in a partnership with the City for this type of pilot. Ring is a local, Santa Monica based company, that frequently partners with cities to provide matching subsidy rebates.

Under staff's recommended approach, the City offered a $50 subsidy to residents, with a matching $50 discount provided by Ring, resulting in a $100 savings toward the purchase of one (1) Ring Home Security product per household from an approved list of items. On July 16, 2018, City Council authorized staff to finalize and enter into a partnership Agreement with Ring to begin a pilot project to use security camera technology to improve public safety in residential areas. The Agreement was executed in November 2018.

The Innovation Division, with support from the Community and Legislative Affairs Division and the Public Safety Department, kicked off the pilot with a distribution event at Plummer Park on January 24, 2019. Outreach for the event included:

- Citywide press release,
- Social media posts,
- Direct contact with Eastside Neighborhood Watch Groups, and
- Public Safety Commission outreach.

Despite the amount of outreach, attendance at the kickoff event was low.
Immediately following the event, registration for the program was made available online, and outreach has been performed through Neighborhood Watch captains, at the Helen Albert Certified Farmers’ Market, and announcements from the City Manager at the February 19, 2019 City Council meeting.

Initially, staff recommended focusing on Eastside Neighborhood Watch areas. On March 18, 2019 City Council authorized staff to expand eligibility for the WeHo Smart City Ring Rebate Pilot Program from only households in Eastside Neighborhood Watch areas to all households in West Hollywood.

Before expanding to all households in West Hollywood, only 15 of 200 available rebates had been claimed. Feedback from residents within Eastside Neighborhood Watch areas indicated many residents either have Ring already or live in multi-family residences with existing security systems. Staff heard from residents in other parts of the City, including Public Safety Commissioners, the West Hollywood West Residents Association, and many other individuals, expressing interest in expanding the program to include all addresses citywide. Additionally, Ring has shared experiences from many other cities in Southern California, indicating a citywide expansion would be the best way to successfully deliver all the rebates to residents.

City Council authorized an expansion to all residents in West Hollywood. Despite the expansion to the whole City, at the expiration of Ring’s contract on May 24, 2019, 39 rebates remained. Although the City distributed 80% of available rebates, Ring only registered 61 purchases from the rebate program. This indicates that while there was interest in claiming a rebate, when it came time to purchase a product from Ring, most residents did not choose to do so.

Recommended Next Steps

Feedback on the program has been exceptionally positive, with residents from across the City pleased that there was a program to lower the cost of these safety devices. However, given low turnout, staff does not recommend an expansion or continuation of this program. In addition, the contract with Ring has expired and may not be interested in partnering further due to the low participation.

Feedback from October 14, 2019 Public Safety Commission Meeting

Staff presented the recommendations in this report to the Public Safety Commission at its October 14, 2019 meeting. The Commission was supportive of the recommendations and requested that staff consult with the Commission on the location of sidewalk-facing cameras prior to installation in order to ensure that the cameras are placed in areas with the most need, based on data and reports from the LASD. In addition to this request, the Commissioners provided comments on the following items:

- A Commissioner commented that more rental residents may have participated in
the Ring program, but many property owners do not authorize installation of cameras on their property.

- A Commission inquired if high-speed fiber was better for camera installations than Wi-Fi or 5G cellular technology. Staff confirmed that high-speed fiber is better for security cameras as Wi-Fi and cellular technology may not provide enough bandwidth for required video resolution. 5G technology is still being developed so it is difficult to predict whether this can provide enough bandwidth in the future.
- A Commissioner inquired if it is time to reconsider cameras in residential areas. Another Commissioner noted that this item had already been explored by the Commission and the consensus was not to recommended residential areas.
- A Commission inquired if additional LASD support would be required to handle public record requests. Staff confirmed that it may require additional LASD resources in order support additional public records requests associated with an expanded security camera program since only LASD would have access to the video footage.
- Several Commissioners commented that they would like to receive more frequent reporting of data from these camera pilot projects.
- A Commissioner commented that the City of Palm Springs has a similar security video program that may provide insights to the project team as they further develop a camera program.
- A Commissioner commented that sidewalk facing cameras may provide additional security support during major events like Pride and Halloween Carnaval.
- A Commissioner commented that they were concerned that this project had taken so long to get off the ground and that now a new pilot is being explored, years after the Commission had provided their initial recommendation for security cameras at 14 intersections. Staff explained the lessons learned from this pilot and the money saved from not installing a full network, as initially recommended, which would have resulted in very little public safety benefit.

CONFORMANCE WITH VISION 2020 AND THE GOALS OF THE WEST HOLLYWOOD GENERAL PLAN:
This item is consistent with the Primary Strategic Goal(s) (PSG) and/or Ongoing Strategic Program(s) (SOP) of:
- OSP-7: Collaborative Public Safety.
- PSG-1: Maintain the City’s Unique Urban Balance with Emphasis on Residential Neighborhood Livability.
- OSP-14: Enhance Technology and Access for the City and its Citizens.

In addition, this item is compliant with the following goal(s) of the West Hollywood General Plan:
- G-3: Provide excellent customer service, including utilization of emerging technologies.
- SN-7: Utilize law enforcement, fire protection and emergency medical services in a proactive and preventative way.
- SN-8: Provide public safety services in a manner that reflects and is sensitive to the characteristics and needs of the West Hollywood community.
This item is consistent with the core goals of the WeHoX Technology and Innovations Program including to:

- Enhance the City’s capacity to utilize new and emerging technologies and innovations for the benefit of its residents, visitors and local businesses.

**EVALUATION PROCESSES:**
The Innovation Division worked with the Public Safety Department and LASD to evaluate the pilot as described above in this report based on the following criteria:

- Ease of installation and maintenance;
- Long-term projected costs;
- Quality and reliability of video feed;
- Security access controls;
- Introduction of new public safety features in the Public Right-of-Way; and
- Effectiveness in fighting crime and increasing public safety.

**ENVIRONMENTAL SUSTAINABILITY AND HEALTH:**
Staff anticipates that the smart city technologies that provide data and metrics, such as measuring the volume and direction of pedestrian, bicycle, and vehicle traffic, can provide insights to support environmental and sustainability efforts as well as enhancing multi-modal movement throughout the city and pedestrian safety.

**COMMUNITY ENGAGEMENT:**
In addition to the stakeholder outreach and community engagement described above, the Public Safety Commission has discussed this item since June of 2015 and formed a sub-committee to study the issue in detail. The Public Safety Commission meets monthly and provides the community an opportunity to provide input on public safety related services. Staff will continue to work with the community and the Public Safety Commission to evaluate and make policy recommendations to the City Council regarding public safety resources.

Additionally, these pilot projects are part of Initiative 3.1 of the WeHo Smart City Strategic Plan. The Innovation Division performed extensive outreach in the development of the WeHo Smart City Strategic Plan where this initiative and many others were discussed. These touchpoints included:

- Over 30 one-on-one, group interviews, and workshops throughout the course of the development of the plan, with internal and community stakeholders. This process was an opportunity to learn about and build upon the City’s ongoing efforts and seek to integrate their benefits into other applications.
- On August 3, 2017, the Innovation Division hosted a WeHo Smart City Vision Setting Workshops with over 30 City Directors, Managers, and key personnel to review smart city case studies and help develop scenarios around designing a human-centered smart city in West Hollywood.
- On September 21, 2017, the Innovation Division hosted a WeHo Smart City Open House to educate over 40 members of the public and city staff about the smart city
technology being explored in the plan and opportunities for introduction of these technologies for a smart city hall.

- On November 9, 2017, the Innovation Division hosted the WeHo Smart City Fest, as part of Los Angeles County Economic Development Corporation’s InnovateLA, to explore West Hollywood’s Smart City Future, including a conversation on urban technology and design with special guests Frances Anderton, host of KCRW’s DNA, and Michael Mattmiller, Seattle’s Chief Technology Officer. Approximately 65 members of the public and staff attended.

Additionally, a project website is available at www.weho.org/smartcity that covers the planning processes, provides opportunity for learning about projects, and will serve as a dashboard for implementation and reporting.

**OFFICE OF PRIMARY RESPONSIBILITY:**
PUBLIC SAFETY DEPARTMENT / PUBLIC SAFETY - ADMINISTRATION

**FISCAL IMPACT:**
None at this time. Funding for the ALPR expansion will be requested as part of the FY21 budget once submissions for the Request for Proposals have been evaluated.

**ATTACHMENT:**
ATTACHMENT A: Additional Project History