



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** David Tindall

**SUBJECT: LESS-THAN-LETHAL USES  
OF FORCE OPTIONS REPORT**

**DATE:** January 29, 2021

Approved

Date

01/29/21

## **RECOMMENDATION**

Accept a report on emerging less-than-lethal use of force options that could potentially reduce the need for the Police Department to rely upon the use of a baton, projectiles, or firearms.

## **OUTCOME**

The City Council and community is informed of available less-than-lethal use of force options and on the Police Department's approach to using such options.

## **BACKGROUND**

With the approval of Mayor Liccardo's 2020-2021 Budget Message on June 16, 2020, the City Council directed the Administration, as part of the Police Reforms Work Plan, to explore and then report back on emerging less-than-lethal use of force options that could potentially reduce the need for police to rely upon the use of a baton, projectiles, or firearms. This report responds to the City Council's direction.

Dating back to January 2019, the Police Department (Department) has been proactive in identifying and evaluating potential less-than-lethal use of force options. Major efforts in this area over the past two years have included the following:

- In January 2019, the Department's Training Unit began the process to upgrade the current Taser X26p to the technologically superior Taser 7. After field testing of the new device, the Department worked with Finance Department-Purchasing to bring forward a purchase order for procurement of the Taser 7. The City Council executed this purchase order at its December 1, 2020 meeting.

- In summer 2019, the Training Unit submitted an RFI to Purchasing to review all available less-than-lethal “handheld devices that can immobilize a subject without causing pain or injury.” The RFI was opened for bid on July 15, 2019, and resulted in two respondents: the Bola WRAP, a device that discharges a tether to restrain a subject, and the FN303, a shoulder fired less lethal launcher that is capable of firing a variety of projectiles. The Department evaluated both devices, as is discussed further in the Analysis section of this report.
- In May 2020, the Training Unit began examining a new pepper spray product. At the time, pepper spray was the Department’s least used use of force option at due to its significant drawbacks, including the cross contamination of the officer. In order to mitigate those drawbacks, the Training Unit evaluated and recommended the adoption of the Pepper Gel, which is more potent, has an increased effective range, and does not aerosolize, reducing cross contamination concerns.
- The Training Unit is in early discussions and research on the effectiveness of polycarbonate shields for standard patrol field use in situations involving single unarmed subjects in crisis. If the Training Unit determines that the shield is a viable tool with sufficiently wide application, they will begin an RFI process.

In addition to the evaluation of specific technologies described above, the Department has also continued to review evolving best practices for the full range of less-than-lethal use of force options. A February 2020 report by the Police Executive Research Forum (PERF) titled [Refining the Role of Less-Lethal Technologies \(link\)](#) has been especially useful in evaluating current best practices (this report is included as Attachment A). On February 12, 2020, Chief Garcia asked the Training Unit to review the report to determine if the Department could benefit from the implementation of any of the policies, techniques, or tools contained within the report. The PERF report validated the de-escalation training that the Training Unit was already in the process of developing, which was provided to all sworn personnel from September 2020-January 2021. The study also aided the Department in reprioritizing projects, including the replacement of pepper spray with pepper gel, as mentioned above.

This report addresses the current role of less-than-lethal use of force technologies and best practices. The information in this report is based on the Department’s proactive evaluation of the less-than-lethal use of force options and the PERF report.

## **ANALYSIS**

To ensure a complete review of this topic, the Department has prepared a matrix with a comprehensive list of less-than-lethal use of force options (see Attachment B). The matrix lists the less-than-lethal use of force options available to the Department and divides them into three groups: options the Department currently deploys, options the Department is considering

deploying, and options the Department has decided not to deploy. A description is provided for each option, along with an analysis of its usefulness.

This report goes into greater detail on several notable options listed in the matrix. It discusses new devices recently adopted by the Department (the Taser 7 and Pepper Gel) and devices recently evaluated as part of the less-than-lethal uses of force options RFI (the Bola Wrap and FN303 projectile launcher). Finally, it provides an overview of conclusions from the PERF report and a discussion of the importance of training.

## **Taser 7**

The Department currently deploys the Axon Taser Conducted Electrical Weapon (CEW), which is assigned to every sworn officer, to be used as a less-than-lethal weapon, when required. These rugged CEWs incapacitate threatening subjects via an electrical charge that specifically targets the motor nerves which control movement. The use of a Taser has proven to be an effective medium range tool to incapacitate armed and combative subjects. It is the only less-than-lethal tool that causes involuntary incapacitation. This is significant because every other tool relies on pain as the motivator for compliance; if a subject is not feeling pain as a result of intoxication or mental illness, they can continue to resist despite repeated applications of other use of force options. The Taser, on the other hand, can incapacitate an individual regardless of whether they feel pain, providing a less-than-lethal option in situations where other less-than-lethal options are not viable. The use of the Taser is a key component in the Department's de-escalation strategy.

The current model used by the Department, the X26p, is approaching the end of its 5-year lifecycle. In January 2019, to ensure continued deployment of Tasers as a less-than-lethal use of force option, the Department began the process of upgrading to the Taser 7. The Training Unit acquired 50 Taser 7s for field testing and evaluation. In May 2020, officers working in selected districts were trained on and issued the new Taser 7. The officers were directed to complete a "use survey" when the devices were deployed in the field. The results have been positive; the Department believes the device will have a higher success rate than the current model, which will reduce the escalation of force that occurs with a Taser failure. On December 1, 2020, the City Council executed a contract for procurement of the Taser 7.

The Taser 7's increased effectiveness is made possible by a variety of new features, including the following:

- It has a two-shot capability. The old X26p could only be loaded with a single fixed distance (25 foot) cartridge that resulted in reduced reliability at close range. The Taser 7 can be loaded with a short distance cartridge and a long-distance cartridge. The Taser 7 will allow the officer to have the ability to toggle between the two cartridges, in order to use the one most appropriate for the contact distance. Additionally, the officer can deploy the unused cartridge in cases of a failure on the first shot. The Taser 7 will automatically determine which probes have connected and direct the energy to those for greater effectiveness.

The field test group has already reported positive results with this feature, including one deployment against a violent male who was in crisis and threatening officers with improvised weapons. The male was successfully taken into custody with one deployment of the Taser 7 at a distance in excess of the previous capabilities of the X26p. No other force was needed to take him into custody, and he did not suffer any significant injuries.

- The Taser 7 has a targeting laser for both the top and bottom dart. Lasers automatically compensate for distance allowing greater accuracy. The X26p had only one targeting laser that did not adjust for distance.
- The Taser 7 darts have been upgraded to fly straighter and with increased impact force to decrease failure against thick clothing.
- The Taser 7 wire unspools from the dart, instead of the cartridge, preventing the suspect from pulling out the darts by grabbing the wire or rolling, a failure point of the X26p.

The Taser 7 also offers increased functionality to allow for the collection of information on usage. It has the capability to automatically turn on the Axon Body Worn Camera when the safety is disengaged and send a cellular alert to a district supervisor when the Taser has been activated. It also collects the following information for upload to Evidence.com:

- Officer name and badge number;
- Time and date of every device activation;
- Number of trigger pulls and duration of each cycle;
- Every activation and deactivation of the safety;
- Whether each probe made a complete connection, never connected, or had an intermittent connection; and
- How much energy was delivered per pulse, per second.

Given its increased effectiveness and capability for data collection and transparency, the Department believes the Taser 7 will be a valuable tool for resolving conflicts with less-than-lethal force.

## **Pepper Gel**

Pepper spray has a great deal of appeal as a less-than-lethal use of force tool due to its extremely low likelihood of causing injury. When used appropriately, it causes only temporary pain and discomfort. It can be effective on confrontational subjects who are responsive to pain. Unfortunately, the previously issued aerosol pepper spray had drawbacks that limited its

desirability in actual field use. First, the aerosolized nature of the spray required proximity to the suspect within 8-10 feet. That proximity exposed the officer to attack by the suspect and limited the officer's ability to respond to that attack. The Department's current de-escalation strategy focuses on utilizing distance and barriers to create a reactionary gap; that strategy is undermined when an officer must approach a suspect to deploy the pepper spray. Second, the aerosolized nature of the propellant created a cone of spray, causing a high probability of cross contamination with the deploying officers. Third, the potency of the spray often was not enough to cause pain compliance in persons who were under the influence of alcohol and/or narcotics and persons with significant mental illness.

To address these drawbacks, the Training Unit evaluated and recommended the adoption of the Pepper Gel, which has an increased effective range, does not aerosolize (thus reducing cross contamination), and is more potent. The Department is currently in the process of exchanging the fielded inventory of Pepper Spray with Pepper Gel. Given its improved effectiveness, the Department anticipates officers will develop higher confidence in Pepper Gel and increase its use, thus resulting in decreased use of the Taser and body weapons. (Body weapon refers to impact strikes utilizing hands, knees, elbows, and feet when objectively reasonable.)

### **Less-Than-Lethal Uses of Force Options RFI Results**

The 2019 RFI on all available less-than-lethal handheld immobilization devices resulted in two respondents: the Bola WRAP and the FN303 projectile launcher. Both device manufacturers were invited to the Training Unit to demonstrate their devices. Both were evaluated by the Training Unit staff. The FN303, a shoulder fired less lethal launcher that is capable of firing a variety of projectiles, was determined to not provide any significant improvement over the Department's current inventory of less-than-lethal munitions, had significant increased training and maintenance costs, and required an infrastructure support system of bulk CO2 cannister refill stations.

The Bola WRAP, a device that discharges a tether to restrain a subject, did appear to show some promise in a sterile and static environment, where the subject was either standing still with their hands near their sides or walking at a very slow pace using a short stride. Further analysis showed the device had several significant failure points that would be problematic in a real-world dynamic event. The Bola WRAP will not work if the subject is standing within 4-8 feet of any object, when the subject's hands and arms are up and away from the sides, and when the subject's feet are separated or moving.

The Los Angeles Police Department (LAPD) has also field tested the Bola WRAP. In a conversation with a LAPD Use of Force/Range instructor, the Department learned that LAPD had very limited success with the Bola WRAP devices and reinforced our analysis of its shortcomings. As a result, the Training Unit decided to prioritize its limited resources toward devices and training that had a higher probability of success, including the Pepper Gel and Taser 7 discussed above, and Department-wide de-escalation training discussed below. A field-test could be revisited if performance improvements are made or it is re-prioritized by the Department.

## **PERF Report**

The PERF report had two primary goals:

- 1) PERF examined state of the art less-than-lethal use of force weapons and tools currently available to police departments. The report aimed at determining what tools are out there, how they are being used, and how effective are they.
- 2) PERF sought to imagine new technologies that could make a difference in helping officers safely and effectively defuse critical encounters that continue to challenge the profession. The study focused on incidents in which a person was in a mental health crisis or had a condition that caused them to behave erratically or dangerously; was unarmed or armed with a weapon other than a firearm; and was a potential threat to themselves or others.

In discussing less-than-lethal use of force tools, PERF focused on persons who **did not have** a firearm, as police generally have fewer options for resolving incidents in which a threatening person is brandishing a firearm. If no firearm is present, police can attempt to “slow the situation down” and resolve it without using lethal force.

It is important to note that many of the new and emerging less-than-lethal use of force technologies have limitations. For example, various devices cannot be used, or are often ineffective, if the subject is moving, is in a crowd, or is not within close proximity to the officer. Devices that must be used at close range tend to be problematic, as keeping a safe distance from a subject is one of the key tactics used while attempting to de-escalate an incident.

PERF symposium participants stated new less-than-lethal use of force tools should have the following key features:

- Tools should support officers’ use of distance, cover, and time to protect themselves and the public, while buying time to use their communication skills and develop a rapport and trust with the subject. Less-lethal tools should **not** require that officers significantly close the distance between themselves and a subject in order for the tool to be effective; keeping a safe distance between officers and the subject is often an essential tactic.
- Ideally, tools should function well whether the subject is in a crowd or is alone.
- Tools should be effective when the subject is stationary or moving.
- Tools should work in different weather conditions, including precipitation, wind, and extreme temperatures.
- Police agencies must be sensitive to appearances (i.e., how less-than-lethal uses of force tools are viewed by the public). This can be difficult, as a tool or tactic may appear more aggressive, while it may actually be the best option for minimizing injury while obtaining

compliance. Less-lethal tools should complement an agency's de-escalation strategies, tactics, and training. PERF warned against an over-reliance on technology, at the expense of solid tactics, effective communications, and teamwork.

In terms of training, PERF identified two key areas that agencies should focus on:

- Teaching and reinforcing decision-making skills that help an officer determine the best tool to use to effectively resolve each individual critical incident, and
- Teaching technical proficiency in less-lethal tools.

Also of note, the PERF report identifies Pepper Gel as a potentially useful tool, which is consistent the Department's decision to adopt it.

## **Training**

As noted in the PERF study, use of less-than-lethal uses of force technology is not a replacement for de-escalation strategies, tactics, and training. The Department has been at the forefront of de-escalation training and policy implementation. In September 2015, Chief Garcia established a Use of Force Committee to review the Department's use of force policies in response to the City Council's direction that the Department respond to several use of force policy recommendations in the Independent Police Auditor's 2014 Year End Report. The Committee included Department supervisory and command staff, the Independent Police Auditor, and a representative from the City Attorney's Office. One item the Committee worked on was a policy regarding de-escalation tactics for officers to use in situations where force might be necessary. In August 2016, a Tactical Conduct Policy (Policy L2602.5) was adopted which required officers to evaluate the following: the level of urgency to respond with force; the actual threat posed by the suspect; the availability and use of cover, concealment, and distance to create time for de-escalation; and the use of crisis intervention team trained officers.

Following the adoption of that policy, the Department began integrating the de-escalation concepts into all force and tactics training. The Department took steps to recalibrate officers to think about their actions preceding a use of force. Senate Bill 230 has mandated the de-escalation policies and changes made by the Department for all California agencies beginning January 1, 2021.

Additionally, in 2016, the Department increased the amount of Academy use of force training to 16 hours, which is 4 hours greater than the State mandate of 12 hours; the extra hours include lectures on de-escalation concepts, video case studies of de-escalation failures, and scenario role play. In fall 2019, the Department increased the Academy training hours focused on de-escalation by combining less-than-lethal use of force munitions training with Taser and force options simulator training that reinforces de-escalation tactics. In fall 2020, an additional 8-hour Academy training block was added which also focused on de-escalation. This training contains a lecture on de-escalation techniques, as well as a thorough understanding of the legislative intent of Assembly Bill 392 (AB 392). AB 392, which took effect January 1, 2020, modified

California Penal Code Section 196 - justifiable homicide by a peace officer - and Penal Code Section 835a - use of force by a peace officer. The law codified the Legislature's intent that peace officers exercise force judiciously and only when necessary in the defense of human life.

The class also involves four hours of role-playing scenarios requiring recruits to verbally de-escalate persons in crisis armed with weapons other than firearms. The scenarios must be resolved through verbal and tactical de-escalation principles without the use of force. Recent perishable skills training for in-service personnel include a 6-hour block of the same lecture and scenario-based exercises that the recruits are given. The 6-hour training block exceeds the State mandated 2 hours tactical communications requirement.

In December 2019, the Training Unit Lieutenant and Sergeant went to the PERF ICAT (Integrating Communications Assessment and Tactics) Instructor Course. The information presented in that course was adopted as the core of the Department's de-escalation training model. The focus is on the critical decision making that occurs preceding a violent contact with a suspect in crisis.

Next steps in de-escalation training will include:

- A two-hour refresher on bias based policing (2021-2022 training cycle);
- Writing (in process) and POST certifying a training course for reducing incidents of deadly force used on drivers of vehicles;
- Increasing training on physical control holds to make officers more effective in controlling combative suspects without weapons, to include a focus on a two-officer takedown technique, which will minimize the need for other more intrusive force options to take a combative suspect into custody;
- Examining ways to integrate de-escalation concepts in other traditionally non-related topics, including our state mandated Domestic Violence training; and,
- Conducting another 4-6 hour block of instruction on de-escalation in the 2021-2022 perishable skills training cycle.

## **CONCLUSION**

There is no single less-than-lethal use of force tool currently in use, or on the immediate horizon, that can consistently address the range of challenging encounters today's police officers face. Agencies must avoid the tendency to become over-reliant on technology, at the expense of strong communications, solid tactics, and sound decision-making. It is critically important for officers be trained to understand that less-than-lethal weapons are not in themselves a strategy for resolving critical incidents. At most, they are one possible element of a plan. As such, the Department needs to continue to hire diverse and educated officers who possess critical thinking



skills, so they can determine what tool or tactic will best resolve individual incidents with varying factors.

Furthermore, the Department needs to invest in additional training for its personnel. The Department needs to expand training beyond the minimum standards established by the California Police Officer Standards and Training (POST) for in-service officers. Current mandated training, while important to personnel, is not capable of addressing the ever-growing and ever-changing demands and community expectations placed on today's officers. Per the [\*National League of Cities City Official Guide to Policing in the 21<sup>st</sup> Century \(2016\) \(link\)\*](#), these training programs "should encompass the core values of the community policing philosophy, while also recognizing new trends and dramatic shifts in society, technology, crime, economics, and socio-political factors. Law enforcement officers should be oriented towards problem solving and de-escalation, and the practice should be guided by the numerous community policing resources available to them." The next steps discussed in the previous section will assist the Department in advancing towards that goal.

### **EVALUATION AND FOLLOW-UP**

The Police Department will continue to research best practices in less-than-lethal use of force technology and associated policies. The Training Unit will evaluate possible options and seek implementation of these technologies when they are available, and funding exists.

Also, as part of the Police Reforms efforts, a use of force review will be conducted in the coming months, led by a consultant overseen by the Independent Police Auditor in coordination with the Administration. As part of that process, use of force policies will be reviewed, the community will be engaged on any proposed findings and changes as well as provide feedback, and any recommendations will be brought forward to the City Council for consideration, as appropriate.

### **CLIMATE SMART SAN JOSE**

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

### **PUBLIC OUTREACH**

This memorandum will be posted on the City's Council Agenda website for the February 9, 2021 Council Meeting.

HONORABLE MAYOR AND CITY COUNCIL

January 29, 2021

**Subject: Less-Than-Lethal Uses of Force Options Report**

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**COORDINATION**

The City Attorney's Office and the City Manager's Budget Office were consulted and reviewed this report.

**COMMISSION RECOMMENDATION/INPUT**

No commission recommendation or input is associated with this action.

**CEQA**

Not a Project, File No. PP17-008, General Procedure and Policy Making resulting in no changes to the physical environment.



David Tindall  
Acting Chief of Police

For questions, please contact Todd Lonac, Police Lieutenant, at (408) 501-0960.

Attachments