

2024 Annual Military Equipment Report

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Ordinance Background and Objectives

On September 30, 2021, Assembly Bill 481 was approved by California Governor Gavin Newsom, requiring law enforcement agencies to obtain approval of the applicable governing body (Mayor and City Council), by adoption of a military equipment use policy prior to funding, acquisition, or use of military equipment as defined in AB 481. This bill required the same approval process for the continued use of military equipment that law enforcement agencies already possessed. In accordance with the assembly bill, the Berkeley Police Department authored Policy 709, Military Equipment Policy, which was approved by the City Council on July 26, 2022.

Furthermore, Assembly Bill 481 requires law enforcement agencies to submit to the governing body an annual report for each type of military equipment. State law requires that the Annual Report contain the following information:

- (1) A summary of how the military equipment was used and the purpose of its use.
- (2) A summary of any complaints or concerns received concerning the military equipment.
- (3) The results of any internal audits, any information about violations of the military equipment use policy, and any actions taken in response.
- (4) The total annual cost for each type of military equipment, including acquisition, personnel, training, transportation, maintenance, storage, upgrade, and other ongoing costs, and from what source funds will be provided for the military equipment in the calendar year following submission of the annual military equipment report.
- (5) The quantity possessed for each type of military equipment.
- (6) If the law enforcement agency intends to acquire additional military equipment in the next year, the quantity sought for each type of military equipment.

Equipment Inventory and Descriptions

Below is a list and Berkeley Police Department inventory and equipment levels of the reportable equipment as defined in AB 481:

- Patrol Rifle (96)
 - Associated .223 duty and training rounds (61,450)
- Less Lethal single 40MM launcher (20)
- Less Lethal Milkor LTL 40 MM multi-launcher (2)
 - Associated 40mm rounds (450)
- Less Lethal FN 303 Launcher (8)
 - Associated FN rounds (5,813)
 - Associated FN Pava rounds (150)
- Oleoresin capsicum (handheld OC spray) (182)
- Chlorobenzylidene Malononitrile and Oleoresin capsicum/ tear gas (300)
- Remington 700 Precision Rifle (6)
 - Associated .308 rounds (3,000)
- Light/sound distraction device (88)
- Long Range Acoustic Device (LRAD) (2)
- Barret Model 99 Precision Rifle (1)
 - Associated .50 rounds (54)
- Mobile Command Vehicle (1)
- ReconRobotics Recon Scout XT Robots (2)
- Andros Remotec HD-1 Hazardous Duty Robot (1)

The following are product descriptions of the military equipment the Berkeley Police Department possesses:

Patrol Rifle

The “M4” was developed and produced for the United States government by Colt Firearms and is based on the original Armalite Rifle (AR) patent purchased by Colt in 1959. Although Colt owns the trademarked name “M4,” several other manufacturers offer similar firearms under various model names. The M4 and its variants fire 5.56×45 mm NATO (and .223 Remington) ammunition and are gas -operated, magazine -fed firearms with barrel lengths ranging from 11.5” to 16”.

The current BPD rifle ammunition is the .223 Remington—a rimless, bottlenecked cartridge developed in 1957 by Remington Arms and Fairchild Industries. One of the most popular cartridges, the .223 Remington is used by a wide range of semi-automatic and manual -action rifles, as well as handguns. While the military uses the similar 5.56×45 mm NATO cartridge, BPD employs the more common civilian .223 Remington for all training and duty purposes.

Penn Arms 40MM Single Launcher & Milkor LTL Multi-Launcher

The 40 mm impact projectile was developed as an alternative to the 12-gauge bean bag round and other less focused less -lethal options. Early 12-gauge bean bag round designs had unpredictable flight patterns and could cause significant unintended injuries. The 40 mm foam baton round was created as a direct -fire projectile intended to minimize such risks. The Berkeley Police Department currently uses the CTS 4557 foam baton projectile and the Penn Arms L-140 single -shot launcher.

FN 303

Developed in 2003 by Fabrique Nationale de Herstal as a less -lethal option, the FN 303 is based on a concept from Monterey Bay Corporation. The development team included designers and researchers from two paintball -related companies. The FN 303 uses compressed air to propel a .68-caliber projectile, similar to those used in manufactured paintball guns.

Chlorobenzylidene Malononitrile (CS) & (OC)

Chlorobenzylidene malononitrile, commonly known as CS, is one of the most widely used tear gases. It can be delivered as a liquid, gas, or solid and is designed to produce temporary discomfort by being vaporized or otherwise dispersed in the air. Law enforcement agencies rely on CS to manage combative suspects, control crowds, and handle barricaded subjects without resorting to higher levels of force. CS can be deployed via aerosol (the most common method), fogging, pyrotechnics, or blast expulsion; however, all methods are influenced by environmental factors such as wind, rain, temperature, and proximity. Under standard conditions, CS forms a white crystalline substance with low vapor pressure and poor water solubility.

Remington 700 Precision Rifle

The Remington 700 is a series of bolt -action rifles designed in 1962 by Remington Arms Company. The “700” designation refers to multiple models with varying parts, barrel lengths, stocks, and other components. The Precision Rifle model has long been used by law enforcement and remains an industry standard. The Berkeley Police Department employs a custom Remington 700 action chambered in the common .308-caliber round, featuring a 20-inch barrel, an Accuracy International chassis/stock, a Nightforce 3-15× magnified optic, and a bipod.

Light/Sound Distraction Device

Also known as diversionary, noise/flash, or light/sound devices, Light/Sound Distraction Devices have been available for about 40 years. They serve as safe and effective tools for law

enforcement during challenging tactical incidents. When activated, these devices produce loud noise, heat, and intense light to create an effective diversion.

Long Range Acoustic Device (LRAD)

The LRAD is a high -intensity, directional acoustical array that provides long -range, crystal -clear communication. Essentially, it functions as a powerful loudspeaker.

Barrett Model 99 Precision Rifle

The Barrett Model 99 is a single shot, bolt action .50caliber rifle introduced in 1999. It is intended for emergency situations where there is a high potential for violence.

ReconRobotics Recon Scout XT Robots (Throw Bot)

The Recon Scout XT robot is intended to safely provide police officers valuable information during high-risk, rapidly evolving situations via real-time audio and video footage. It can be operated a distance away, creating space between the officer and potential danger, thus decreasing the likelihood of injury to those involved in the event, or even a violent encounter between police officers and a dangerous subject. This asset furthers our commitment to the sanctity of life by offering time and distance in critical incidents.

Andros Remotec HD-1 Hazardous Duty Robot

The Remotec HD-1 robot is used as a means to approach hazardous situations where a potentially lethal threat such as an explosive device exists. The Remotec HD-1 robot allows for the examination and manipulation of an object or potential explosive device without unnecessarily putting a bomb technician's life at risk.

Mobile Command Vehicle (MCV)

This vehicle is used as a mobile command post for any large-scale events or as a communications center in the event the communications center in the Public Safety Building is inoperable. Some examples of large-scale events include Solano Stroll, Juneteenth, 4th of July, Cal Berkeley football games, critical incidents or natural disasters. In 2024, the MCV was utilized as a command post during the Cal Berkeley football games that took place in Berkeley.

2024 Equipment Uses

The equipment documented in this report provide the Berkeley Police Department with options that assist in critical incidents and bring dangerous situations to a safe resolution. While the Berkeley Police Department possesses the equipment listed above, officers de-escalated almost all the situations that might have otherwise warranted the use of it. The use of military equipment is governed by Berkeley Police Department Policies and local, state, and federal laws. The use of the military equipment is restricted to only officers who have been trained in the use of the specific equipment.

The Berkeley Police Department responded to 61,666 calls for service responded to in 2024. Only one of the 61,666 incidents resulted in the use of less lethal tools. The table below lists all nine AB481-eligible equipment use incidents (plus seven uses of the Mobile Command Vehicle for Cal football games) Each row represents an incident in which a specific piece of equipment was used. These statistics illustrate the extremely rare instances that less lethal munitions and other military equipment are used in relation to overall contacts.

It should be noted BPD does not possess any drones, and reporting on the use of a drone in a mutual assistance capacity in Berkeley is the responsibility of the agency that provided the assistance. The Berkeley Police Department is not required to report on the mutual assistance drone usages to prevent double reporting, but are included here in the spirit of transparency. Drone uses are also reported in the annual Surveillance Technology Report.

#	<u>Equipment Used</u>	<u>Summary of Deployment</u>	<u>Beat</u>
1.	Recon Scout Robot	Officers responded to a felony domestic violence call at a residence where the suspect initially refused to come outside. The Recon Scout robot was used to visually clear the house prior to officer entry. The subject was detained without incident.	10
2.	Light/Sound Distraction Device, LRAD, Drone, Hazardous Duty Robot, Recon Scout Robot	The Special Response Team responded to a suspect who had threatened to kill himself and others. SRT used an LRAD to call him out, and threw light/sound distraction devices in the yard. A drone provided overhead surveillance. The hazardous duty robot and Recon Scout robot were used to visually clear the house prior to officer entry. The subject complied and was detained without incident.	Outside of Berkeley

3.	Light/Sound Distraction Device	Officers responded to a call about a man who had been shot and was bleeding. The suspect was last seen in a tent. Attempts at contact and requests to exit were unsuccessful, and a light/sound distraction device was deployed. The subject emerged, complied, and was detained without incident.	13
4.	40MM Launcher, FN 303 Launcher	Officers responded to reports of a shirtless man on Telegraph Avenue with chest wounds, carrying a sickle and a wooden stick. Both the 40MM and FN 303 launchers were used, and the subject complied and was detained without incident.	5
5.	Light/Sound Distraction Device	The Special Response Team responded to arrest a suspect connected to a shooting. Officers spotted him walking down the street and used a light/sound distraction device to distract him. The subject complied and was detained without incident.	Outside of Berkeley
6.	Drone	Officers responded to a violent armed robbery involving multiple suspects. A drone provided overhead surveillance. All subjects complied and were detained without incident.	5
7.	LRAD, Light/Sound Distraction Device, Drone	Officers responded to a barricaded suspect situation in which the individual refused to exit an RV. Officers gave voice commands through the LRAD, and used light/sound distraction devices. A drone provided overhead surveillance. The subject complied and was detained without incident.	Outside of Berkeley
8.	Light/Sound Distraction Device, Drone	SRT served a high-risk warrant for shooting suspects. Officers used multiple light/sound distraction devices. A drone provided overhead surveillance. The subject complied and was detained without incident.	9
9.	Drone	Officers responded to an attempted catalytic converter theft. When neighbors intervened, one of the suspects produced a handgun,	1

		threatening the residents. One suspect was apprehended immediately, while another fled into the wooded area of Wildcat Canyon. A drone was deployed to assist in the search for the suspect, who was then detained without further incident.	
10.	Drone	During an SRT operation in Antioch related to a shooting incident during a vehicle theft interruption, a drone provided overhead surveillance. The subject complied and was detained without incident.	Outside of Berkeley
11.	Drone, Recon Scout Robot	While conducting a high-risk warrant service in a burglary case, a drone provided overhead surveillance. The Recon Scout robot was used to visually clear the house prior to officer entry. The subject complied and was detained without incident.	3
12.	LRAD, Light/Sound Distraction Device	Officers conducted a warrant service operation involving a suspect connected to multiple gunshots in Berkeley. Officers gave voice commands through the LRAD, and used light/sound distraction devices. The subject complied and was detained without incident.	Outside of Berkeley
13.	Mobile Command Vehicle	The MCV was utilized as a command post during the 7 Cal Berkeley football games that took place in Berkeley.	7

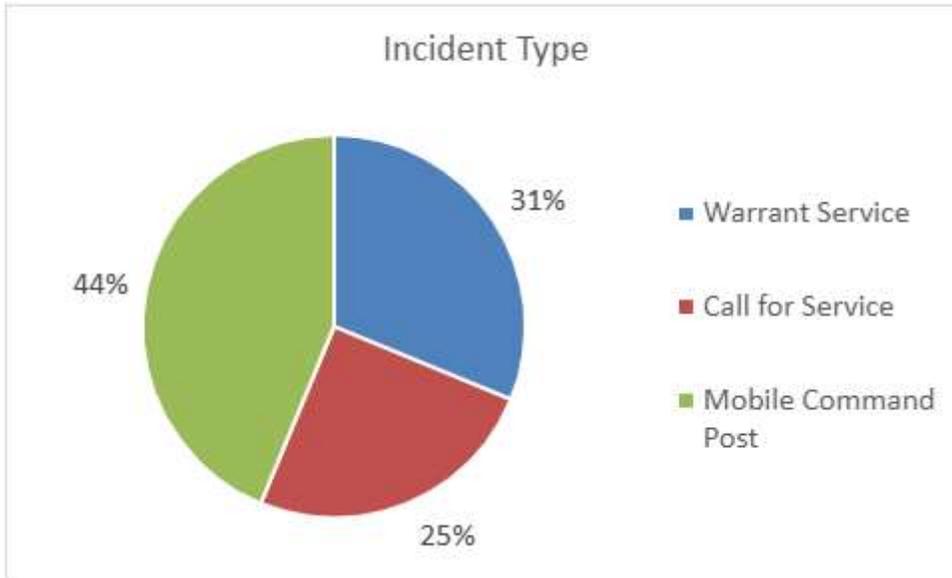
An internal audit was conducted in order to gather and confirm data for this report. No violations of equipment use were identified, and no complaints regarding the above-listed equipment were submitted to the department.

Use Statistics

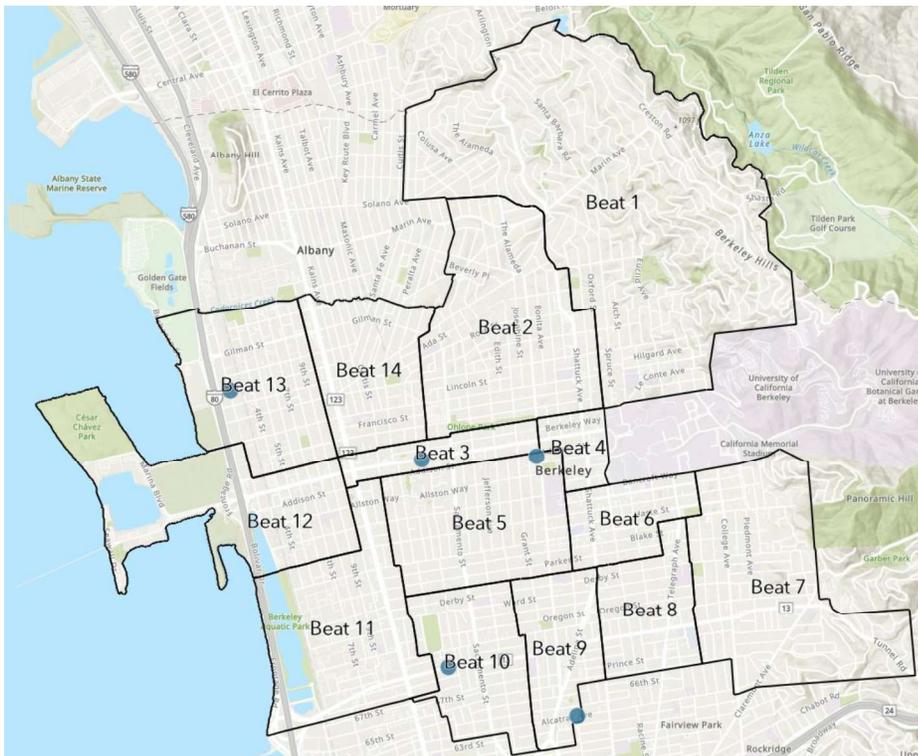
The table below displays the total number of uses for each specified piece of equipment in 2024.

Equipment	Uses
<i>Patrol Rifle</i>	0
<i>40MM Single Launcher</i>	1
<i>40MM LTL Multi-Launcher</i>	0
<i>FN 303 Launcher</i>	1
<i>FN Pava Impact Projectile</i>	0
<i>Chlorobenzylidene Malononitrile and Oleoresin Capsicum</i>	0
<i>Precision Rifle</i>	0
<i>Light/Sound Distraction Device</i>	6
<i>Long Range Acoustic Device</i>	3
<i>Barret Model 99</i>	0
<i>Mobile Command Vehicle</i>	7
<i>ReconRobotics Recon Scout XT Robots</i>	3
<i>Andros Remotec HD-1 Hazardous Duty Robot</i>	1
<i>Drone</i>	7

The chart below shows the breakdown of uses by incident type.



The map below shows the locations of the 5 equipment deployments by BPD in Berkeley (excluding the Mobile Command Post where the MCV is deployed near UC campus), with 4 deployments occurring in other Bay Area cities.



Fiscal Impact

Funding for all training and ongoing cost in military equipment are sourced from the Berkeley Police Department's existing budget. The only military equipment that was purchased in 2024 was .223 ammunition and .308 ammunition.

The Berkeley Police Department conducts in-house training on all specialized equipment that the department possesses. This ensures officers are fully trained to utilize the tools in the department's possession to safeguard our community. The cost of in-house training is staff time. Some of the training on specialized equipment must be conducted externally. The fiscal cost on external training related to military equipment in 2024 included expenses from Special Response Team training (\$6,355.17), bomb technician training (\$2,854), and less lethal instructor training (\$1,950.96). Additionally, 11 police recruits attended the police academy where they received Patrol Rifle training. The total cost of the police academy for those 11 recruits was \$34,642.

M4/Patrol Rifle

Rifle prices, like other firearms, will range depending on current market demand and availability. While M4 rifles purchased several years ago cost between \$1,000 and \$1,200 each, current rifles cost between \$1,400 and \$1,600. It should be expected that these prices will fluctuate and likely increase over time.

Ammunition costs fluctuate with the costs of components (brass, primers, gunpowder, and bullets) and supply/demand. Current costs for .223 Remington range from \$0.50 to \$0.75 a round for training ammunition (55 grain) and \$1.25 to \$1.50 a round for duty ammunition (62 grain). 5,500 rounds of .223 ammunition were acquired in 2024 with a fiscal impact of \$27,676.60.

Every officer that is authorized to carry a rifle on duty must attend a minimum 16-hour CA POST approved rifle instruction course before being authorized to carry the rifle on duty. This course may be administered by Berkeley Police Firearm Instructors or by other POST approved agencies. Tuition for the CA POST approved class is dependent on the hosting agency. If conducted in-house the cost only includes the officer's hourly wage, range fee, and ammunition costs (all vary). Outside agencies charge between \$25 to \$500 depending on the range location and duration (some classes are 32-hours while POST only requires 16-hours.) Additionally, all officers who are issued a rifle receive specific 8-hour rifle training every two years by POST certified Berkeley Police Department Firearm Instructors.

Typical round count for such classes range between 800 rounds and 1200 rounds per student. Additionally, all officers issued a rifle receive specific 8-hour rifle training every two years by a BPD firearm instructor which constitutes an additional 500 or so rounds per officer.

Maintenance costs vary depending on use over time. Traditionally, various springs and pins need to be replaced every five years and may cost between \$3 and \$30 per rifle. Other parts such as the barrel and bolt need to be replaced around ten years and range between \$150 and \$300 per rifle.

Penn Arms 40MM Single Launcher

Penn Arms 40MM single launchers purchased by the department cost \$815.00 each. Ongoing cost for Penn Arms single launcher should be based on the projectiles used in training and on duty. This will fluctuate based on department trainings, projectile availability and events that unfold in the city and surrounding region.

Every officer authorized to deploy a less lethal launcher must pass a certification course administered by a Berkeley Police Department Firearms Instructor. The certification class consists of classroom, range qualification and scenario application if the venue allows. This class is largely handled in house; thus, the cost only includes staff time, range fees, and projectile costs, which all vary.

Maintenance costs vary depending on use. Generally, various springs and pins need to be replaced every 5 years which can cost \$3 to \$30.

Milkor LTL Multi-Launcher

Milkor LTL Multi-Launchers purchased by the department cost \$3,950.00 each. The ongoing cost for the Milkor LTL launcher should be based on the projectiles used in training and on duty. This will fluctuate based on department trainings, projectile availability and events that unfold in the city and surrounding region.

Every officer authorized to deploy a less lethal launcher must pass a certification course administered by a Berkeley Police Firearm Instructor. The certification class consists of classroom, range qualification and scenario application if the venue allows. This class is largely handled in house; thus, the cost only includes the officer's hourly wage, range fees, and projectile costs which all vary.

Maintenance costs vary depending on use. Generally, various springs and pins need to be replaced every 5 years which can cost \$3 to \$30.

FN 303 and FN Pava Impact Projectile

FN 303s purchased by the department cost \$800.00 each. Ongoing cost associated with the FN303 launcher should be based on the projectiles used in training and on duty. This will fluctuate based on department trainings, projectile availability and events that unfold in the city and surrounding region.

Every officer authorized to deploy a less lethal launcher must pass a certification course administered by a Berkeley Police Firearm Instructor. The certification class consists of classroom, range qualification and scenario application if the venue allows. This class is largely handled in house; thus, the cost only includes the officer's hourly wage, range fees, and projectile costs which all vary.

Maintenance costs vary depending on use. Generally, O-rings need to be replaced every 3,000 rounds and cost \$30 per kit.

Chlorobenzylidene Malononitrile and Oleoresin Capsicum ("tear gas")

The cost for CS canisters ranges from \$20.00 to \$39.00 per unit. The cost for OC canisters ranges from \$36.00 to \$44.00 per unit. Training is conducted by a Police Officer Standard Training (POST) certified Berkeley Police chemical agent training officer. The cost of training is staff time.

Remington 700 Rifle

The initial cost to purchase this rifle with its associated components is approximately \$10,000 dollars each. Their average life span is 10-years at which time it will likely need to be replaced. Ongoing cost for all firearms should be based on the ammunition used in training and on duty and maintenance. This will fluctuate based on training.

The cost associated with training is the staff time, range fees, and cost of spent ammunition. Special Response Team (SRT) members train once a month and, on average, each member shoots approximately 50-rounds. Currently, there are only 4 members shooting at each training day. This equates to approximately 2,400 rounds of ammunition being fired per year. This does not include special training days or attendance to training schools/classes. A single box of 20-rounds costs approximately \$20 dollars or \$1 dollar per round. Authorized and trained Berkeley Police armorers service and provide regular maintenance of the rifles. The cost of maintenance is staff time. In 2024, BPD purchased 7,000 rounds at a cost of \$10,248.84.

Barrett Model 99 Rifle

The retail cost of the Barrett Model 99 Rifle is approximately \$12,500. The Department of Justice provided the Barrett Modell 99 Rifle to the Berkeley Police Department in 2007. The ongoing cost related to this rifle is the cost of ammunition and training.

The ammunition has a retail cost of approximately \$6 dollars per bullet; \$60 for a box of 10 and \$600 for a case of 10 boxes, plus shipping and handling. The cost associated with training is the staff time, range fees, and cost of spent ammunition.

Light/Sound Distraction Device

Diversionsary Devices cost approximately \$45 per unit. Purchases for these tools are made when inventory becomes low, based upon critical incident usage and Special Response Team trainings that incorporate live devices. In 2024, BPD expects to purchase 20 light/sound diversionsary devices.

Only trained and qualified personnel are permitted to deploy diversionsary devices. These trained Berkeley Police officers are typically members of the Berkeley Police Department Special Response Team who receive monthly training which includes training in the deployment of diversionsary devices. The cost of training is staff time.

Long Range Acoustic Device (LRADS)

The LRAD 450XL and the LRAD 100X were purchased in 2018. The total cost for both the LRADs, rechargeable battery packs and accessories was \$49,999. Training is conducted by Berkeley Police personnel who are trained in the use and procedures of the LRAD. The cost to train is staff time.

ReconRobotics Recon Scout XT

The initial cost for the Recon Scout XT robot was about \$12,500 per unit in 2010. There are no ongoing costs associated with the use of the Recon Scout XT robot. Being that it is battery operated, there is a nominal cost associated with charging the Recon Scout XT robot's batteries, and the batteries of the OCU (controller).

The Recon Scout XT robot is fairly simple to operate, thus there is no cost associated with training officers in its use. Generally, the Recon Scout XT robot is robust and does not need regular repair or service. The cost of training is staff time.

Andros Remotec HD-1 Hazardous Duty Robot

The Hazardous Duty Robot was purchased in 2008 for \$214,496. Being that it is battery operated, there is a nominal cost associated with charging the robot. Maintenance of the Hazardous Duty Robot is conducted by the Berkeley Police Bomb Technicians.

Berkeley Police Bomb Technicians are trained during regular bomb squad training sessions and maintain their skills through training scenarios. The cost of training and maintenance is limited to staff time.

Mobile Command Vehicle

The Mobile Command Vehicle was purchased in 2003 for \$230,800. The ongoing cost associated to the MCV is the cost of gasoline and maintenance of the vehicle. Both gasoline and maintenance are received at the City Corporation Yard. Training is conducted in-house, by the Berkeley Police personnel, who are trained in the operation of the vehicle. The training cost is staff time.

The expected useful lifespan of the MCV was 15 years and was eligible for replacement in 2018. A replacement fund for the MCV currently amounts to approximately \$368,000. The vehicle is still in functioning, but will need to be replaced in the near future.