



**POLICE ACCOUNTABILITY BOARD  
REGULAR MEETING AGENDA PACKET  
Wednesday, June 26, 2024  
6:30 P.M.**

**Board Members**

John Moore III (Chair)  
Kitty Calavita  
Brent Blackaby  
Alexander Mozes

Leah Wilson (Vice-Chair)  
Juliet Leftwich  
Joshua Cayetano

**MEETING LOCATION**

2020 Milvia Street, Suite 250  
Berkeley, CA 94704

Item	Description	Page
-	Health and Safety Protocols for In-Person Meetings of Berkeley Boards and Commissions	1
2	June 26, 2024 Regular Meeting Agenda	3
4	Minutes for the Regular Meeting of June 5, 2024	9
5.a.	Biography of Melanie E. Beasley, ODPA Administrative Analyst	15
5.b.	Biography of Chloe S. Park, ODPA Intern	17
5.c.	Memo from the Director of Police Accountability with the subject line "Recap of Symposium Attendance at George Mason University (Arlington, VA)" and relevant attachments	19
8.	List of Current PAB Subcommittees & Liasons	29
9.a.	Email from Dr. Carianna Arredondo with the subject line "Item 9a SCU/RDA Follow Up   Police Accountability Board" and respective attachments	32

<b>9.c.</b>	Memorandum from Chair Moore Titled “Use of Computer Voice Stresss Analyzer (CVSA)”	<b>40</b>
<b>Off Agenda Reports</b>		
<b>1</b>	Legislative Updates Relevant to the PAB’s Work	<b>44</b>
<b>2</b>	Memorandum from City Manager Dee Williams-Ridley to all Berkeley Commissions titled “2024 Update to the Local Hazard Mitigation Plan; Public Comment Process”	<b>49</b>
<b>Communications from the Public</b>		
	No communications to the PAB were received.	-

# **Health and Safety Protocols for In-Person Meetings of Berkeley Boards and Commissions February 2023**

The policy below applies to in-person meetings of Berkeley Boards and Commissioners held in accordance with the Government Code (Brown Act) after the end of the State-declared emergency on February 28, 2023.

**Issued By:** City Manager's Office

**Date:** February 14, 2023

---

## **I. Vaccination Status**

All attendees are encouraged to be fully up to date on their vaccinations, including any boosters for which they are eligible.

## **II. Health Status Precautions**

For members of the public who are feeling sick, including but not limited to cough, shortness of breath or difficulty breathing, fever or chills, muscle or body aches, vomiting or diarrhea, or new loss of taste or smell, it is recommended that they do not attend the meeting in-person as a public health precaution. In these cases, the public may submit comments in writing in lieu of attending in-person.

If an in-person attendee has been in close contact, as defined below, with a person who has tested positive for COVID-19 in the past five days, they are advised to wear a well-fitting mask (N95s, KN95s, KF94s are best), test for COVID-19 3-5 days from last exposure, and consider submitting comments in writing in lieu of attending in-person.

Close contact is defined as someone sharing the same indoor airspace, e.g., home, clinic waiting room, airplane, etc., for a cumulative total of 15 minutes or more over a 24-hour period within 2 days before symptoms of the infected person appear (or before a positive test for asymptomatic individuals); or having contact with COVID-19 droplets (e.g., being coughed on while not wearing recommended personal protective equipment).

A voluntary sign-in sheet will be available at the meeting entry for in-person attendees. This will assist with contact tracing in case of COVID-19 contact resulting from the meeting.

Members of City Commissions are encouraged to take a rapid COVID-19 test on the day of the meeting.

# **Health and Safety Protocols for In-Person Meetings of Berkeley Boards and Commissions February 2023**

### **III. Face Coverings/Mask**

Face coverings or masks that cover both the nose and mouth are encouraged for all commissioners, staff, and attendees at an in-person City Commission meeting. Face coverings will be provided by the City and available for attendees to use at the meeting. Members of Commissions, city staff, and the public are encouraged to wear a mask at all times, except when speaking publicly from the dais or at the public comment podium, although masking is encouraged even when speaking.

### **IV. Physical Distancing**

Currently, there are no physical distancing requirements in place by the State of California or the Local Health Officer for an indoor event similar to a Commission meeting.

Audience seating capacity will be at regular allowable levels per the Fire Code. Capacity limits will be posted at the meeting location. However, all attendees are requested to be respectful of the personal space of other attendees. An area of the public seating area will be designated as “distanced seating” to accommodate persons that need to distance for personal health reasons.

Distancing will be implemented for the dais as space allows.

### **V. Protocols for Teleconference Participation by Commissioners**

Upon the repeal of the state-declared emergency, all standard Brown Act requirements will be in effect for Commissioners participating remotely due to an approved ADA accommodation. For Commissioners participating remotely, the agenda must be posted at the remote location, the remote location must be accessible to the public, and the public must be able to participate and give public comment from the remote location.

- A Commissioner at a remote location will follow the same health and safety protocols as in-person meetings.
- A Commissioner at a remote location may impose reasonable capacity limits at their location.

### **VI. Hand Washing/Sanitizing**

Hand sanitizing stations are available at the meeting locations. The bathrooms have soap and water for handwashing.

### **VII. Air Flow/Circulation/Sanitizing**

Air filtration devices are used at all meeting locations. Window ventilation may be used if weather conditions allow.

Item 2: June 26, 2024 Regular Meeting Agenda



**POLICE ACCOUNTABILITY BOARD**  
REGULAR MEETING AGENDA  
**WEDNESDAY, JUNE 26, 2024**  
**6:30 P.M.**

Board Members

John Moore III (Chair)  
Kitty Calavita  
Brent Blackaby  
Alexander Mozes

Leah Wilson (Vice-Chair)  
Juliet Leftwich  
Joshua Cayetano

**MEETING LOCATION**

2020 Milvia Street, Suite 250  
Berkeley, CA 94704

**PUBLIC NOTICE**

To access the meeting remotely: Join from a PC, Mac, iPad, iPhone, or Android device using this URL: <https://us02web.zoom.us/j/82653396072>. If you do not wish for your name to appear on the screen, use the drop-down menu and click on “rename” to rename yourself to be anonymous. To request to speak, use the “raise hand” icon on the screen. To join by phone: Dial **1 669 900 6833** and enter Meeting ID **826 5339 6072**. If you wish to comment during the public comment portion of the agenda, press \*9 and wait to be recognized.

## LAND ACKNOWLEDGMENT

The City of Berkeley recognizes that the community we live in was built on the territory of xučyun (Huchiun (Hooch-yoon)), the ancestral and unceded land of the Chochenyo (Chochen-yo)-speaking Ohlone (Oh-low-nee) people, the ancestors and descendants of the sovereign Verona Band of Alameda County. This land was and continues to be of great importance to all of the Ohlone Tribes and descendants of the Verona Band. As we begin our meeting tonight, we acknowledge and honor the original inhabitants of Berkeley, the documented 5,000-year history of a vibrant community at the West Berkeley Shellmound, and the Ohlone people who continue to reside in the East Bay. We recognize that Berkeley's residents have and continue to benefit from the use and occupation of this unceded stolen land since the City of Berkeley's incorporation in 1878. As stewards of the laws regulating the City of Berkeley, it is not only vital that we recognize the history of this land, but also recognize that the Ohlone people are present members of Berkeley and other East Bay communities today.

### AGENDA

1. **CALL TO ORDER AND ROLL CALL** (2 MINUTES)
2. **APPROVAL OF AGENDA** (2 MINUTES)
3. **PUBLIC COMMENT** (TBD)

*Speakers are generally allotted up to three minutes, but may be allotted less time if there are many speakers. They may comment on any matter within the Board's jurisdiction at this time, except confidential personnel matters.*

4. **APPROVAL OF MINUTES** (5 MINUTES)
  - a. Minutes for the Regular Meeting of June 5, 2024
5. **ODPA STAFF REPORT** (10 MINUTES)

Announcements, updates, and other items including:

- a. Introduction to Melanie E. Beasley, ODPa Administrative Analyst
- b. Introduction to Chloe S. Park, ODPa Intern
- c. Update on the annual review of BPD Policy 300 "Use of Force"<sup>1</sup>
- d. Recap of the Center for Evidence-Based Crime Policy's (CEBCP) 2024 CEBCP Symposium "Hard Questions for Evidence-Based Crime Policy"

---

<sup>1</sup> BPD Policy 300 "Use of Force":

[https://berkeleyca.gov/sites/default/files/documents/RELEASE\\_20240301\\_T161429\\_Berkeley%20PD%20Policy%20Manual.pdf#page=57](https://berkeleyca.gov/sites/default/files/documents/RELEASE_20240301_T161429_Berkeley%20PD%20Policy%20Manual.pdf#page=57)

**6. CHAIR AND BOARD MEMBERS' REPORTS (10 MINUTES)**

Announcements, updates, and other items.

**7. CHIEF OF POLICE'S REPORT (10 MINUTES)**

Crime/cases of interest, community engagement/department events, staffing, training, and other items of interest.

**8. SUBCOMMITTEE REPORTS (10 MINUTES)**

Report of activities and meeting schedule for all subcommittees, possible appointment or reassignment of members to subcommittees, and additional discussion and action as warranted for the subcommittees listed on the PAB's Subcommittee List included in the agenda packet.

**9. NEW BUSINESS (45 MINUTES)**

- a. Continued discussion and action related to the interconnection between the Specialized Care Unit (SCU) and the BPD (ODPA) – (15 MINUTES)
- b. Discussion and action on the July 18th Community Forum at the Hope Center (ODPA) – (15 MINUTES)
  - i. Topics
  - ii. Reports
  - iii. Designated Speakers
  - iv. Other logistics
- c. Discussion and action on Chair Moore's proposal to the PAB to initiate a policy review on Computer Voice Stress Analysis (CVSA) technology and its use by the BPD (MOORE) – (15 MINUTES)

**10. PUBLIC COMMENT (TBD)**

*Speakers are generally allotted up to three minutes, but may be allotted less time if there are many speakers. They may comment on any matter within the Board's jurisdiction at this time, except confidential personnel matters.*

*---Continued on the following page---*

**11. CLOSED SESSION**

**CLOSED SESSION ITEMS**

Pursuant to the Court’s order in *Berkeley Police Association v. City of Berkeley, et al.*, Alameda County Superior Court Case No. 2002-057569, the Board will recess into closed session to discuss and act on the following matter(s):

a. Case Updates and Recommendations Regarding Complaints Received by the ODP:

- |      |              |       |              |
|------|--------------|-------|--------------|
| i.   | 2023-CI-0009 | viii. | 2024-CI-0004 |
| ii.  | 2023-CI-0012 | ix.   | 2024-CI-0005 |
| iii. | 2023-CI-0014 | x.    | 2024-CI-0006 |
| iv.  | 2023-CI-0016 | xi.   | 2024-CI-0009 |
| v.   | 2023-CI-0019 | xii.  | 2024-CI-0011 |
| vi.  | 2024-CI-0001 | xiii. | 2024-CI-0012 |
| vii. | 2024-CI-0003 |       |              |

**END OF CLOSED SESSION**

**12. ANNOUNCEMENT OF CLOSED SESSION ACTIONS (1 MINUTE)**

**13. ADJOURNMENT (1 MINUTE)**

**Off Agenda Reports**

1. Legislative Updates Relevant to the PAB’s Work
2. Memo from the City Manager to All City Commissions: "2024 Local Hazard Mitigation Plan Update: Public Comment Procedures"

### **Communications Disclaimer**

Communications to the Police Accountability Board, like all communications to Berkeley boards, commissions, or committees, are public records and will become part of the City's electronic records, which are accessible through the City's website. Please note: e-mail addresses, names, addresses, and other contact information are not required, but if included in any communication to a City board, commission, or committee, will become part of the public record. If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the Board Secretary. If you do not want your contact information included in the public record, do not include that information in your communication. Please contact the Board Secretary for further information.

#### Communication Access Information (A.R. 1.12)

To request a disability-related accommodation(s) to participate in the meeting, including auxiliary aids or services, please contact the Disability Services specialist at 981-6418 (V) or 981-6347 (TDD) at least three business days before the meeting date.

#### SB 343 Disclaimer

Any writings or documents provided to a majority of the Board regarding any item on this agenda will be made available for public inspection at the Office of the Director of Police Accountability, located at 1947 Center Street, 5th Floor, Berkeley, CA.

---

#### **Contact the Director of Police Accountability (Board Secretary) at:**

1947 Center Street, 5<sup>th</sup> Floor, Berkeley, CA 94704

TEL: 510-981-4950 TDD: 510-981-6903 FAX: 510-981-4955

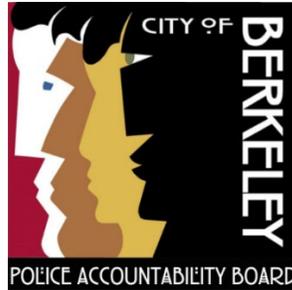
Website: <https://berkeleyca.gov/safety-health/police-accountability>

Email: [dpa@berkeleyca.gov](mailto:dpa@berkeleyca.gov)

#### **NOTICE OF TEMPORARY LOCATION**

Please note that the ODPa is currently operating from a temporary location at **2020 Milvia Street, Suite 250, Berkeley, CA**. For in-person visits, appointments are strongly encouraged and can be made by calling our main line. Mail can still be received at 1947 Center Street.

Item 4: Minutes for the Regular Meeting of June 5, 2024



**POLICE ACCOUNTABILITY BOARD**  
REGULAR MEETING AGENDA  
**WEDNESDAY, JUNE 5, 2024**  
**6:30 P.M.**

Board Members

John Moore III (Chair)  
Kitty Calavita  
Brent Blackaby  
Alexander Mozes

Leah Wilson (Vice-Chair)  
Juliet Leftwich  
Joshua Cayetano

**MEETING LOCATION**

2020 Milvia Street, Suite 250  
Berkeley, CA 94704

MINUTES

**1. CALL TO ORDER AND ROLL CALL at 6:34 PM (2 MINUTES)**

**Present:** Board Member Leah Wilson (Vice-Chair)<sup>1</sup>  
Board Member Calavita  
Board Member Juliet Leftwich  
Board Member Brent Blackaby  
Board Member Joshua Cayetano  
Board Member Alexander Mozes

**Absent:** Board Member John Moore (Chair)<sup>2</sup>

**ODPA Staff:** Hansel Aguilar, Director of Police Accountability  
Jose Murillo, Policy Analyst  
Jayson Wechter, Investigator  
Keegan Horton, Investigator

**BPD Staff:** Chief Louis

---

<sup>1</sup> Vice-Chair Wilson was initially recorded as absent, as she was not present during the roll call. However, she joined the meeting immediately thereafter, and the record was subsequently amended.

<sup>2</sup> Chair Moore was granted a leave of absence by Councilmember Bartlett. The leave of absence is attached hereto.

**CAO Staff:** Lt. Montgomery  
DCA Stephen Hylas  
**CMO Staff:** Dr. Carianna Arredondo, Assistant to the City Manager  
Rex Brown, DEI Officer  
Scott Gilman, Interim HHCS Director

## 2. APPROVAL OF AGENDA (2 MINUTES)

### **Motion to approve the agenda.**

Moved/Second (Calavita/Blackaby) Motion carried.

Ayes: Blackaby, Calavita, Cayetano, Leftwich, Mozes, and Wilson.

Noes: None. Abstain: None. Absent: Moore

## 3. PUBLIC COMMENT (TBD)

2 Physical Present Speaker(s)

0 Virtually Present Speaker(s)

## 4. APPROVAL OF MINUTES (5 MINUTES)

a. Minutes for the Regular Meeting of May 22, 2024

### **Motion to approve the meeting minutes for the Regular Meeting of May 22, 2024**

Moved/Second (Leftwich/Calavita) Motion carried.

Ayes: Blackaby, Calavita, Cayetano, Leftwich, Mozes, and Wilson.

Noes: None. Abstain: None. Absent: Moore

## 5. ODPa STAFF REPORT (10 MINUTES)

ODPA staff provides the Board with updates. Director Aguilar reports the budget proposal submission to the City Council and the Downtown Task Force report to the City Attorney's office. He clarifies his quoted remarks in a San Francisco article about police use of a computer voice stress analyzer (CVSA)<sup>3</sup>. Investigator Jayson Wechter briefs the Board on a sheriff oversight webinar<sup>4</sup>. DEI Officer Brown reminds the PAB of the city's

---

<sup>3</sup> Article: <https://www.sfchronicle.com/california/article/law-enforcement-technology-investigations-18756947.php>

<sup>4</sup> Article: <https://www.davisvanguard.org/2024/06/california-coalition-for-sheriff-oversight-drives-statewide-movement-for-accountability-and-justice/>

Juneteenth festival on June 16th<sup>5</sup>. ODPa staff confirms arrangements for the PAB's participation in the festival.

#### **6. CHAIR AND BOARD MEMBERS' REPORTS (10 MINUTES)**

Board Member Cayetano comments on the location of PAB meetings, addressing concerns about public accessibility.

#### **7. CHIEF OF POLICE'S REPORT (10 MINUTES)**

Chief Louis provides updates on staffing, training, and cases of interest. She responds to an inquiry regarding the legitimacy of CVSA, emphasizing its use solely as a supplementary tool rather than a conclusive one. Chief Louis also addresses an inquiry about BPD's involvement in a UC police action on May 16th<sup>6</sup>, clarifying the process of mutual aid requests.

#### **8. SUBCOMMITTEE REPORTS (10 MINUTES)**

Subcommittees report on their activities.

#### **9. NEW BUSINESS (50 MINUTES)**

- a. Discussion and action relating the interconnection between the Specialized Care Unit (SCU) and the BPD (Calavita) – (10 MINUTES)

No actions were taken. Dr. Arredondo and Interim HHCS Director Gilman answered questions about the SCU and its working relationship with the BPD. Vice-Chair Wilson cites the Berkeley City Auditor's report<sup>7</sup> for data on the types of service calls received by the BPD (e.g. mental health).

- b. Section 125(19)(e) - (h) Training with DPA Aguilar: Option to contest the Chief of Police's determination to the Director of Police Accountability (ODPA) – (15 MINUTES)

---

<sup>5</sup> Berkeley Juneteenth Festival Information: <https://berkeleyjuneteenth.org/>

<sup>6</sup> For additional information, please refer to the following articles:

Berkeleyside: <https://www.berkeleyside.org/2024/05/16/arrests-mass-police-presence-reported-anna-head-hall-pro-palestine-occupation> ; The Berkeley Scanner: <https://www.berkeleyscanner.com/2024/05/17/uc-berkeley-crime/uc-berkeley-protest-house-police-raid/> ; The Daily Californian: [https://www.dailycal.org/news/campus/12-arrested-following-police-raid-at-barricaded-anna-head-complex/article\\_3b3239ec-1480-11ef-b11d-731cad5568c7.html](https://www.dailycal.org/news/campus/12-arrested-following-police-raid-at-barricaded-anna-head-complex/article_3b3239ec-1480-11ef-b11d-731cad5568c7.html)

<sup>7</sup> 2021 Berkeley City Auditor's Report "Data Analysis of Berkeley's Police Response":

<https://berkeleyca.gov/sites/default/files/2022-01/Data-Analysis-Berkeley-Police-Response.pdf>

No actions were taken. The Board expresses interest in revisiting the topic at a future meeting in order to consider adopting a review process proposal.

- c. Discussion and action concerning the status of pending policy reviews undertaken by the PAB (ODPA) - (15 MINUTES)

No actions were taken.

- d. Overview of the Berkeley Police Accountability Webpage (ODPA) - (10 MINUTES)

No actions were taken. Policy Analyst Murillo provides an overview of the Berkeley Police Accountability Webpage.

#### 10. PUBLIC COMMENT (TBD)

1 Physical Present Speaker(s)

0 Virtually Present Speaker(s)

#### 11. CLOSED SESSION

##### CLOSED SESSION ITEMS

Pursuant to the Court's order in *Berkeley Police Association v. City of Berkeley, et al.*, Alameda County Superior Court Case No. 2002-057569, the Board will recess into closed session to discuss and act on the following matter(s):

- a. Case Updates and Recommendations Regarding Complaints Received by the ODPAs:

#### **Motion to accept ODPAs staff recommendations in ODPAs Case Number 2023-CI-0017 with amendments to the report.**

Moved/Second (Mozes/Wilson) Motion carried.

Ayes: Blackaby, Calavita, Cayetano, Leftwich, Mozes, and Wilson.

Noes: None. Abstain: None. Absent: Moore

##### END OF CLOSED SESSION

**12. ANNOUNCEMENT OF CLOSED SESSION ACTIONS (1 MINUTE)**

Vice-Chair Wilson announces the closed session actions.

**13. ADJOURNMENT (1 MINUTE)**

**Motion to adjourn.** Moved/Second (Wilson/Blackaby) The meeting was adjourned at 9:16 PM by unanimous consent.

---

Minutes Approved on: \_\_\_\_\_

Hansel Aguilar, Commission Secretary: \_\_\_\_\_

DRAFT

Item 5.a.: Biography of Melanie E. Beasley, ODPA Administrative Analyst

## Melanie E. Beasley, ODPa Administrative Analyst

---



Melanie began her career with the City of Berkeley just over 18 years ago as an Office Specialist II in the Land Use Planning Division, and made a lateral move to the Toxics Management Division four years later. In July 2015, she was promoted to support first one, then both Deputy City Managers as an Administrative Assistant (AADCM).

Having worked as the AADCM for the past nine years afforded Melanie a wealth of knowledge and skills for which she is extremely grateful. Her initial job scope had expanded in ways that she could not have imagined, and that expansion helped to prepare her for her new role as Administrative Analyst in the ODPa.

Melanie earned her BA in Business Management from Saint Mary's College of California and her Master's degree in Organizational Leadership from Indiana Wesleyan University, placing great emphasis on servant leadership. She is a published author of academic and professional works, writer, editor, and public speaker.

Outside of work, Melanie relishes being with family and friends, horseback riding, reading, cooking, learning new technology, strength training, heavy-bag (boxing) workouts, drinking gourmet coffee, taking leisurely walks, light hiking, being a passionate praise and worship leader, and being dog-mom to her beloved Yorkie, Oliver-Asher.

Item 5.b.: Biography of Chloe S. Park, ODPA Intern

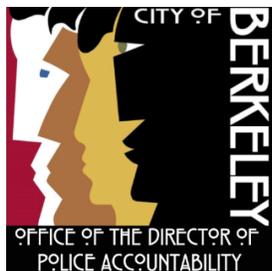
## Chloe S. Park, ODPa Intern

---



Chloe (she/her) is a rising junior studying Urban Studies and Data Science at UC Berkeley. Having grown up in the Albany-Berkeley area her whole life, Chloe is passionate about the Bay Area and its urban spaces. However, along with urbanism often comes a heap of social issues—including discrimination, housing crises, and policing—that have severely impacted the Bay Area’s vulnerable communities. As a result of her close proximity to these issues, Chloe is striving to learn about the complexities of urban issues specifically in the realm of policing, as well as discover the ways that policy and data analysis can address them.

Item 5.c.: Memo from the Director of Police Accountability with the subject line “Recap of Symposium Attendance at George Mason University (Arlington, VA)” and relevant attachments



## MEMORANDUM

**To:** Honorable Members of the Police Accountability Board  
**From:** Hansel A. Aguilar, Director of Police Accountability *(Signature)*  
**Date:** June 20, 2024  
**Subject:** Recap of Symposium Attendance at George Mason University (Arlington, VA)

---

This memorandum aims to present the PAB with an overview of the recent symposium attended by Board Member (BM) Alex Mozes and me at George Mason University in Arlington, VA, and to provide a status update on related activities.

### **Background:**

From June 18-21st, 2024, BM Mozes and I visited the Washington D.C. Metro area. The primary purpose of this training related trip was to attend the George Mason University - Center for Evidence-Based Crime Policy (CEBCP) 2024 Symposium. This symposium focused on critical issues in crime policy and policing, featuring a range of expert-led discussions and networking opportunities.

### **Symposium Summary:**

The symposium included several key sessions, as detailed below:

- 8:45 AM - 10:00 AM:
  - Effective Approaches in Reducing Victimization Harm: Covered topics like second responder programs for domestic violence and identity theft victimization.
  - Mental Health and the Criminal Justice System: Discussed co-responder models and the impact of policing on health.
- 10:15 AM - 11:30 AM:

- Alternatives to Traditional Criminal Justice Systems: Explored the feasibility and effectiveness of alternative justice systems.
- Community-Based Crime Prevention: Examined evidence and strategies for community-led crime prevention.
- 11:45 AM - 1:15 PM:
  - CEBCP Awards Luncheon: Recognized contributions to evidence-based policing, including inductions into the Evidence-Based Policing Hall of Fame.
- 1:30 PM - 2:45 PM:
  - Stop-Question-and-Frisk in Policing: Moderated discussion on the role of this practice in modern policing.
  - Reducing Disparity in the Justice System: Strategies to address racial disparities in incarceration.
- 3:00 PM - 4:15 PM:
  - Developing Capacity for Evidence-Based Crime Policy: Discussed organizational needs for implementing evidence-based practices.
  - Recruitment and Retention of Police Officers: Focused on challenges and strategies for maintaining a robust police workforce.

**Networking and Additional Activities:**

Outside of the symposium, Board Member Mozes and I had the opportunity to network with colleagues from various civilian oversight bodies across the country. Specifically, we met with the inaugural chair of the Fairfax County Police Civilian Review Panel, Adrian Steel and the current chair of the Washington, D.C. Police Complaints Board, Paul Ashton. These interactions provided valuable insights and potential collaborations that can enhance our work at the ODP.

Additionally, we visited the National Museum of African American History and Culture and the United States Capitol Building. These visits enriched our understanding of the broader historical and political contexts within which our work in police accountability takes place.

**Conclusion:**

The symposium was an invaluable opportunity to gain insights into current best practices and emerging trends in evidence-based policing. The knowledge and connections acquired will significantly benefit our ongoing efforts to enhance civilian oversight and promote accountability within the Berkeley Police Department.

**Attachments:**

Symposium Agenda: <https://cebcp.org/wp-content/uploads/2024/06/Website-Agenda.pdf>

*The Center for Evidence-Based Crime Policy (CEBCP) presents the 2024 CEBCP Symposium*

**“Hard Questions for Evidence-Based Crime Policy”**

***FULL AGENDA BOOKLET WILL BE PROVIDED AT THE SYMPOSIUM***

**THURSDAY, JUNE 20<sup>TH</sup> GMU MASON SQUARE (ARLINGTON) CAMPUS**

**7:30AM – throughout the day**

Check in for registered guests

VAN METRE HALL, 1<sup>st</sup> Floor

**8:45AM – 10:00AM**

- (I) What are effective approaches in reducing victimization harm? HAZEL HALL 221
- (II) What do we know about mental health and the criminal justice system? HAZEL HALL 225

**10:15AM – 11:30AM**

- (I) Are alternatives to traditional criminal justice systems feasible or effective? AUDITORIUM
- (II) Is there good evidence for community-based crime prevention? HAZEL HALL 221
- (III) What strategies and policies can be used to intervene with persons at high-risk for gun violence and mass shootings? HAZEL HALL 225

**11:45AM – 1:15PM**

CEBCP 2024 AWARDS LUNCHEON

BANQUET HALL (NEXT TO REGISTRATION)

**1:30PM – 2:45PM**

- (I) Is there a place for Stop-Question-and-Frisk in policing and crime control? AUDITORIUM
- (II) Can evidence-based policies reduce disparity in the criminal justice system? HAZEL HALL 221
- (III) When can popular juvenile justice strategies work to reduce risk or recidivism? HAZEL HALL 225

**3:00PM – 4:15PM**

- (I) What is needed to develop the capacity for organizations to implement evidence-based crime policy? AUDITORIUM
- (II) What do we know about recruitment and retention of police officers? HAZEL HALL 225

**4:15PM ADJOURN**

**“AUDITORIUM” and “BANQUET HALL” are on opposite sides of the registration desk.**

**“HAZEL HALL” rooms are up the stairway (next to the café) and to the right (same building access)**

**Instructions for guest wi-fi access are on the back of this booklet.**



# CEBCP 2024 SYMPOSIUM DETAILED AGENDA

8:45AM – 10:00AM

CONCURRENT PANELS

## (I) WHAT ARE EFFECTIVE APPROACHES IN REDUCING VICTIMIZATION HARM?

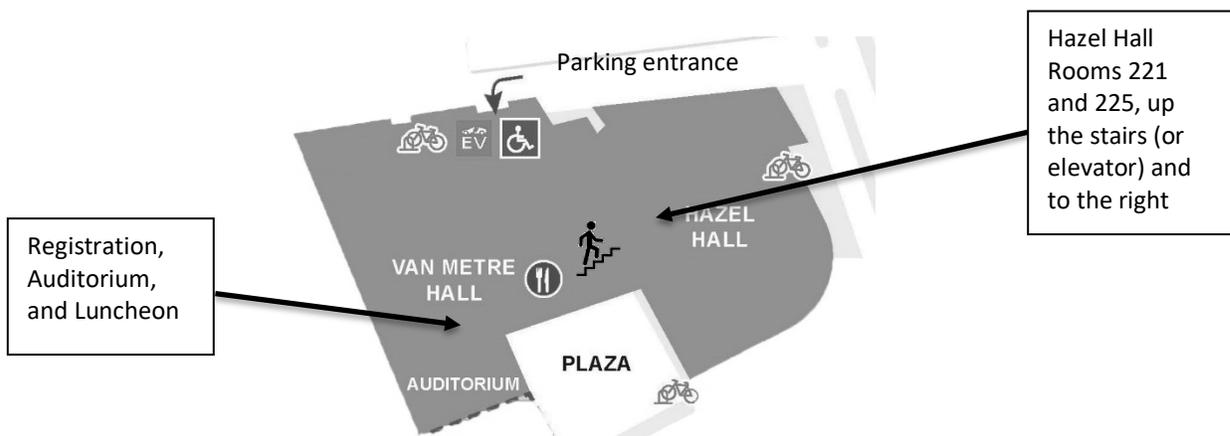
HAZEL HALL 221

- **Identifying and Responding to Children Trafficked for Labor in the U.S.**  
AMY FARRELL, Professor and Director, School of Criminology and Criminal Justice, Northeastern University.
- **Second Responder Programs for Domestic Violence Can Reduce Victim Harms.**  
TARA RICHARDS, Professor of School of Criminology and Criminal Justice and Co-Director of the Victimology and Victim Studies Research Lab, University of Nebraska, Omaha.
- **Understanding Patterns of Identity Theft Victimization.**  
JIN R. LEE, Assistant Professor of Criminology, Law and Society and Senior Fellow of the Center for Evidence-Based Crime Policy, George Mason University.
- **Chaired by:** KRISTINA ROSE, Director, Office for Victims of Crime (OJP/USDOJ).

## (II) WHAT DO WE KNOW ABOUT MENTAL HEALTH AND THE CRIMINAL JUSTICE SYSTEM?

HAZEL HALL 225

- **Exposure to Policing as a Social Determinant of Health.**  
AMANDA GELLER, Associate Professor of Criminology, Law and Society, University of California, Irvine.
- **The Status of Co-Responder Programs in Law Enforcement.**  
CLAIR V. UDING, Associate Professor of Criminal Justice and Sociology, University of Wyoming.
- **Exploring the Effects of a Clinician-Dispatch Co-Responder Model in Triageing Mental Health Calls.**  
SUE-MING YANG, Associate Professor of Criminology, Law & Society and Senior Fellow, Center for Evidence-Based Crime Policy, George Mason University.
- **Chaired by:** HOWARD HALL, ret. Chief, Roanoke County Police Department and member of the Evidence-Based Policing Hall of Fame



**(I) ARE ALTERNATIVES TO TRADITIONAL CRIMINAL JUSTICE SYSTEMS FEASIBLE OR EFFECTIVE? (*MODERATED DISCUSSION AND DEBATE*)** **AUDITORIUM**

- **NANCY LA VIGNE**, Director, National Institute of Justice (OJP/USDOJ).
- **S. REBECCA NEUSTETER**, Executive Director, University of Chicago Health Lab.
- **KEVIN HALL**, Assistant Chief, Tucson (AZ) Police Department.
- **JERRY RATCLIFFE** (moderator), Professor of Criminology, Temple University, and host of the *Reducing Crime* podcast.

**(II) IS THERE GOOD EVIDENCE FOR COMMUNITY-BASED CRIME PREVENTION?** **HAZEL HALL 221**

- ***Understanding and Applying What Works in Crime and Violence Reduction.***  
THOMAS ABT, Associate Research Professor of Criminology and Criminal Justice and Director, Center for Study and Practice of Violence Reduction, University of Maryland.
- ***Empowering Community Organizations to Become Co-Producers of Public Safety.***  
ALEJANDRO GIMÉNEZ SANTANA, Assistant Professor of Practice of Criminal Justice and Co-Executive Director, Newark Public Safety Collaborative, Rutgers University.
- ***Community-Led Partnerships for Meaningful Crime Prevention and Social Justice.***  
CHARLOTTE GILL, Associate Professor of Criminology, Law & Society and Deputy Director, Center for Evidence-Based Crime Policy, George Mason University.
- ***Chaired by:*** MICHAEL GREEN, Visiting Professor, Rochester Institute of Technology and Research Faculty, Justice & Security Strategies.

**(III) WHAT STRATEGIES AND POLICIES CAN BE USED TO INTERVENE WITH PERSONS AT HIGH-RISK FOR GUN VIOLENCE AND MASS SHOOTINGS?** **HAZEL HALL 225**

- ***“Behavioral” Threat Assessment.***  
JAMES SILVER, Associate Professor of the Practice in Criminal Justice, Boston University.
- ***Considering Extreme Risk Protection Orders as a Mass Shooting Prevention Strategy.***  
SHANNON FRATTAROLI, Professor of Health Policy and Management, Johns Hopkins University.
- ***Firearm and Weapon Relinquishment Among Domestic Violence Protection Order Respondents.***  
ALICE ELLYSON, Assistant Professor of Pediatrics, School of Medicine, University of Washington.
- ***Chaired By:*** CHRISTOPHER KOPER, Professor of Criminology, Law, and Society and Principal Fellow of the Center for Evidence-Based Crime Policy, George Mason University.

**THE 2024 CEBCP AWARDS LUNCHEON BEGINS PROMPTLY AT 11:45AM. PLEASE MAKE YOUR WAY IMMEDIATELY AFTER THESE PANELS TO THE BANQUET HALL (NEXT TO THE REGISTRATION DESK) TO SECURE A SEAT!**

**THE 2024 CENTER FOR EVIDENCE-BASED CRIME POLICY  
AWARDS CEREMONY AND LUNCHEON  
11:45AM – 1:15PM**

**WELCOME TO GEORGE MASON UNIVERSITY**

*David Weisburd, Executive Director, Center for Evidence-Based Crime Policy  
James Willis, Chair, Criminology, Law and Society, George Mason University  
Cynthia Lum, Director, Center for Evidence-Based Crime Policy*

**EVIDENCE-BASED POLICING HALL OF FAME INDUCTIONS**

*Presented by James Burch, President, National Policing Institute*

SHON BARNES, Chief, Madison (WI) Police Department  
JONAS BAUGHMAN, Captain, Kansas City (MO) Police Department  
THOMAS CARR, Executive Director, Washington/Baltimore HIDTA  
DAVID COWAN, Detective Superintendent, Victoria (Australia) Police Service  
KEVIN HALL, Assistant Chief, Tucson (AZ) Police Department  
SCOTT MOURTGOS, Deputy Chief, Salt Lake City (UT) Police Department  
CHRISTIAN PETERSON, Police Data Research Manager, Portland (OR) Police Bureau  
KEVIN THOMAS, Executive Director, Data, Analytics and Technology, Philadelphia (PA)  
Police Department

*The Evidence-Based Policing Hall of Fame recognizes innovative law enforcement practitioners who have been central to implementing a high-quality research program in their agency and are relentless champions of institutionalizing evidence-based practices.*

**DISTINGUISHED ACHIEVEMENT AWARD IN EVIDENCE-BASED CRIME POLICY**

*Presented by David Weisburd, Executive Director of the CEBCP and  
Laurie Robinson, Professor Emeritus, George Mason University and former Assistant Attorney  
General of the United States*

ANTHONY A. BRAGA, Professor of Criminology, University of Pennsylvania  
JERRY LEE, President, SpotQ and The Jerry Lee Foundation

*The Distinguished Achievement Award in Evidence-Based Crime Policy recognizes outstanding achievements and contributions by individuals in academia, practice, or the policy arena who are committed to a leadership role in advancing the use of scientific research evidence in decisions about crime and justice policies.*

**(I) IS THERE A PLACE FOR STOP-QUESTION-AND-FRISK IN POLICING AND CRIME CONTROL? (MODERATED DISCUSSION AND DEBATE)**

AUDITORIUM

- **DAVID WEISBURD**, Distinguished Professor, Criminology, Law & Society and Executive Director, Center for Evidence-Based Crime Policy, George Mason University.
- **ANTHONY BRAGA**, The Jerry Lee Professor of Criminology and Director, Crime and Justice Policy Lab, University of Pennsylvania.
- **DANIEL WEBSTER**, Bloomberg Professor of American Health and Distinguished Scholar, Center for Gun Violence Solutions, Johns Hopkins University.
- **JERRY RATCLIFFE**, Professor of Criminal Justice, Temple University & Host, *Reducing Crime Podcast*.
- **DANIEL NAGIN** (moderator), Professor of Public Policy and Statistics, Carnegie Mellon University and Max Planck Law Fellow.

**(II) CAN EVIDENCE-BASED POLICIES REDUCE DISPARITY IN THE JUSTICE SYSTEM?**

HAZEL HALL 221

- ***Rethinking Equity in Justice and Strategies for Reducing Imprisonment Disparity.***  
THADDEUS JOHNSON, Assistant Professor of Criminal Justice & Criminology, Georgia State University and Senior Fellow, Council on Criminal Justice.
- ***Shrinking the Footprint to Reduce Racial Disparity in Incarceration.***  
BRUCE WESTERN, Professor of Sociology and Social Justice and Director of the Justice Lab, Columbia University.
- ***Driving Change in Racial Disparities through Traffic Stop Data Dashboards.***  
TRAVIS CARTER, Assistant Professor of Criminology, University of South Florida (with Scott Wolfe).
- ***Chaired by:*** MICHAEL JACOBSON, Director, CUNY Institute for State and Local Governance, CUNY Graduate Center.

**(III) WHEN CAN POPULAR JUVENILE JUSTICE STRATEGIES WORK TO REDUCE RISK OR RECIDIVISM?**

HAZEL HALL 225

- ***Scaling up Effective Juvenile Delinquency Programs by Focusing on Change Levers.***  
DAVID B. WILSON, Distinguished University Professor of Criminology, Law & Society and Senior Fellow, Center for Evidence-Based Crime Policy, George Mason University.
- ***What Does the Research Say about Police in Schools?***  
BENJAMIN FISHER, Associate Professor of Civil Society & Community Studies, University of Wisconsin, Madison.
- ***Evidence-Based Approaches to Reducing School Crime and Student Misbehavior.***  
ALLISON PAYNE, Professor and Chair, Department of Sociology and Criminology, Villanova University.
- ***Chaired by:*** LIZ RYAN, Administrator, Office of Juvenile Justice and Delinquency Prevention (OJP/USDOJ).



***Grab a snack and fuel up for the exciting final panels of the day (next page)! One is on the hottest topic of the year (can you guess?). The second is the core question that underpins all of what we discussed today (know what it is?). Turn the page for the answers!***

**(I) WHAT IS NEEDED TO DEVELOP CAPACITY FOR ORGANIZATIONS TO IMPLEMENT EVIDENCE-BASED CRIME POLICY? (MODERATED DISCUSSION)**

**AUDITORIUM**

- **SHON BARNES**, Chief of the City of Madison (WI) Police Department.
- **DAVID COWAN**, Detective Superintendent, Victoria Police Service (Australia).
- **JAMIE ROUSH**, Chief Executive Officer and Co-Founder, CRH Analysis Consulting, Inc.
- **TAMARA HEROLD** (moderator), Senior Advisor, National Institute of Justice (OJP/USDOJ)

**(II) WHAT DO WE KNOW ABOUT RECRUITMENT AND RETENTION OF POLICE OFFICERS?**

**HAZEL HALL 225**

- ***Who Applies to Police Agencies and Who Gets Hired?***  
BEIDI DONG, Associate Professor of Criminology, Law & Society and Senior Fellow, Center for Evidence-Based Crime Policy, George Mason University (with Cynthia Lum).
- ***Who Stays and for How Long?***  
ROBERT WORDEN, Director, John Finn Institute & Professor of Criminal Justice, University at Albany, SUNY.
- ***How Police Agencies Can Use a Systems Approach to Optimize Police Staffing and Meet Performance Objectives.***  
JEREMY WILSON, Professor of Criminal Justice and Director, Police Staffing Observatory, Michigan State University.
- ***Chair of Panel:*** JAMES BURCH, President, National Policing Institute.

*The Center for Evidence-Based Crime Policy at George Mason University would like to thank you for your support and participation in our events. We especially appreciate all of the presenters and special guests who make our events extra successful. Thank you!!*

*The Center's work and free events are made possible through the team effort of CEBCP leadership, graduate assistants, and staff members, as well as the contributions of the College of Humanities and Social Sciences at George Mason University and donors like you. Our heartfelt thanks to Naida Kuruvilla, University Catering, the Mason Square (Arlington) Campus Events Management Office, and University Facilities.*

Item 8: List of Current PAB Subcommittees & Liasons



**SUBCOMMITTEES LIST**

<b>Subcommittee</b>	<b>Board Members</b>	<b>Chair</b>	<b>BPD Reps</b>
<b>Regulations</b> Formed 7-7-21 Renewed 6-7-2023	Calavita Leftwich  <u>Public members:</u> Kitt Saginor	N/A	Lt. Dan Montgomery
<b>Fair &amp; Impartial Policing Implementation</b> Formed 8-4-21 Renewed 6-7-2023	Calavita Wilson  <u>Public members:</u> George Lippman	Calavita	Sgt. Peter Lee
<b>Surveillance Technology Policy</b> Formed 6-7-2023	Calavita Moore	N/A	N/A
<b>Policy and Practices relating to the Downtown Task Force and Bike Unit Allegations</b> Formed 11-15-22	Calavita Moore	Calavita	N/A
<b>Body-Worn Camera Policy</b> Formed 03-15-23	Leftwich Cayetano	Leftwich	N/A
<b>Conflict of Interest</b> Formed 03-29-23	Leftwich Wilson	Leftwich	N/A
<b>Unnamed – Policy Complaint 2023-PR-0003</b> Formed June 21, 2023	Wilson [Vacant]	Wilson	N/A

**Updated on 06/18/2024**

<b>Policy Reviews</b> Formed 11-08-2023 Scope Expanded 03-02-2024 Formally "Lexipol Review"	Leftwich Cayetano Mozes  <u>Public members:</u> Kitt Saginor	Leftwich	N/A
<b>Budget &amp; Metrics</b> Formed 11-08-2023 Scope Expanded 03-02-2024	Wilson Blackaby	N/A	N/A
<b>Outreach &amp; Engagement</b> Formed 11-08-2023 Scope Expanded 03-02-2024 Formally "Commendations"	Moore Blackaby	N/A	N/A
<b>Off-Duty Conduct</b>	Cayetano Leftwich	N/A	Lt. Rittenhouse
<b>Operations &amp; Processes</b> Formed 03-02-2024	Wilson Mozes	TBD	TBD

**LIAISON LIST<sup>1</sup>**

Liaison Name	Assignment
Cayetano	Represent the PAB in the EIS Request for Proposal Process

**POLICY COMPLAINTS ASSIGNED TO INDIVIDUAL BOARD MEMBERS<sup>2</sup>**

Policy Review Number	Assigned Board Member
2023-PR-0006	Chair Moore

<sup>1</sup> Liaison list does not include topics that were originally assigned to a Board Member but later assigned to a subcommittee.

<sup>2</sup> This list does not include policy complaints that were originally assigned to an individual Board Member but later assigned to a subcommittee.

Item 9.a. Email from Dr. Carianna Arredondo with the subject line “Item 9a SCU/RDA Follow Up | Police Accountability Board” and respective attachments

**From:** Arredondo, Carianna  
**Sent:** Tuesday, June 18, 2024 8:31:00 PM  
**To:** Aguilar, Hansel  
**Cc:** Cardwell, Anne; Gilman, Scott; Hawn, Katie  
**Subject:** Item 9a SCU/RDA Follow Up | Police Accountability Board

Good afternoon Hansel,

I am reaching out to share with you to disburse to the Police Accountability Board Members a memo (attached) that is being shared with the Mental Health Commission. This memo provides an overview of the current status of the Specialized Care Unit, current processes, and RDA's work on the SCU Evaluation. Please find linked below additional resources:

- **RDA Reports on the SCU**
  - [Attachment 01\\_Berkeley-SCU\\_Current-State-Report\\_FINAL\\_0.pdf \(berkeleyca.gov\)](#)
  - [Berkeley-HHCSD\\_SCU\\_Crisis-Response-Models-Report\\_20210903-FINAL \(berkeleyca.gov\)](#)
  - [Attachment 03\\_Berkeley-MH-SCU\\_Final-Recommendations\\_FINAL\\_0.pdf \(berkeleyca.gov\)](#)
  - [Attachment 04\\_SCU Steering Committee\\_Recs Analysis\\_Mar22\\_0.pdf \(berkeleyca.gov\)](#)
- **RDA Contract on Evaluation**
  - [EXPENDITURE Contract - # 32300144 - Date Executed: 4/10/2023 - Resource Development Associates - RDA Evaluations for Specialized Care Unit and Community Crisis Response \(cityofberkeley.info\)](#)
- **SCU Landing Page**
  - [Crisis Services | City of Berkeley \(berkeleyca.gov\)](#)

I also wanted to address the question around the role of the SCU Steering Committee and inviting them to be in dialogue with the PAB. The Specialized Care Unit Steering Committee was formed in 2021 and consists of representatives from Bonita House, Berkeley Community Safety Coalition, Consider the Homeless, the Berkeley Mental Health Commission, as well as City staff from HHCS, including the Berkeley Mental Health Division, and the Berkeley Fire Department. The Steering Committee was established by and continues to be facilitated by HHCS. The role of the SCU Steering Committee is to provide feedback and guidance of the process to create the SCU, including to provide strategic input on Resource Development Associates' (RDA) work plan to design the program for Berkeley as well as support with community and provider/agency engagement activities, including outreach.

Although this committee is not governed by the Brown Act, the City provides monthly updates about the Specialized Care Unit for the Mental Health Commission and Reimagining Public Safety bi-annual presentations to the City Council and community. Given this context, it may be

helpful to connect with HHCS (cc'ed) around specific questions regarding the SCU to coordinate next steps!

With appreciation and respect,  
Cari

--

Carianna Arredondo, EdD  
Assistant to the City Manager - Reimagining Public Safety  
City of Berkeley  
2180 Milvia St, 5<sup>th</sup> Floor | Berkeley, CA 94704

**CONFIDENTIALITY NOTICE:** *This message, including any attachments, is intended solely for the use of the intended recipient(s) and may contain confidential information. If you are not the intended recipient or an authorized agent thereof, you are hereby notified that any dissemination, disclosure, or copying of this message, or any attachment, is strictly prohibited. If you have received this message in error, please immediately notify the sender by reply email and delete the message from your files.*



Health Housing and  
Community Services Department  
Office of the Director

## MEMORANDUM

**To:** Mental Health Commission  
**From:** Katherine “Katie” Hawn, Special Projects Coordinator  
**Date:** 6/18/2024  
**Subject:** Specialized Care Unit Update Report

### Specialized Care Unit Update Report (May 14 to June 17, 2024)

Please find the attached report on Specialized Care Unit (SCU) services from May 14 to June 17, 2024. This report contains multiple updates including:

- Responses to questions from the Mental Health Commission
- SCU program update including services provided
- Written response to Ms. Monica Jones regarding SCU complaint process (Attachment 1)

### Information Requested by Mental Health Commission

Responses to these questions include input from Bonita House SCU staff.

- 1) Protocol for calls that result in 5150 or criminal detention;

If it is deemed necessary, the Specialized Care Unit will conduct a crisis assessment, which can include a 5150/5585 assessment if a client is experiencing a crisis. If the SCU writes a 5150 hold, and the client is cooperative, the team is able to provide transport to a hospital, and sometimes calls Falck for 5150 transports.

If a client is an immediate danger to themselves or others, and is threatening immediate harm, the SCU may need to call 911 to enforce the psychiatric hold, and require Falck to assist with transport.

The SCU does not criminally detain clients. There are rare situations where the SCU may call 911 when there is an immediate safety concern that cannot be de-escalated by the SCU team.

- 2) Complaint process by residents against staff, police, or other residences.
  - a. See Attachment 1.

*A Vibrant and Healthy Berkeley for All*

### SCU General Program Updates

The Specialized Care Unit currently operates 24 hours per day on Sundays through Wednesdays. The SCU operates from 6am to 4pm on Thursdays through Saturdays. The SCU can be reached by calling (510) 948-0075. Additional program updates are below:

- A) SCU continues to recruit, hire, and train staff to fully ramp up to the 24 hour, 7 days per week model. Bonita House expects to have the SCU program operating at full capacity this summer.
- B) Bonita House continues to refine their data collection procedures to assist the City with grant reporting, as well as answer questions about the services the team provides.
  - a. As of June 13, the SCU has received over 900 calls for service. Most calls the SCU receives are from community members (i.e. bystanders), followed by friends and family calling on behalf of a client.
  - b. About half of the calls received by the SCU are categorized as “urgent” and “immediate response required”. The other half of calls include calls that do not require a response (i.e. can be resolved over the phone), are a delayed response, or are a proactive response from an on-viewing unit on scene.
  - c. The SCU has written less than twenty-five 5150/5585 psychiatric holds. Additional services provided include transportation, de-escalation and conflict resolution, as well as crisis and safety planning.
  - d. The SCU has provided services to both stably housed and unhoused clients. The team continues to refine its processes for collecting demographic data, which can be difficult in crisis settings. As this data becomes available, it will be shared in future reports.

### SCU Evaluation Plan

The City of Berkeley is working closely with Resource Development Associates (RDA) to finalize a plan for the SCU program evaluation. This program evaluation aims to assess the implementation, preliminary impacts, and lessons learned from the first year of the Specialized Care Unit (SCU) pilot program.

The evaluation will explore overall strengths and areas for improvement based on program implementation and client outcomes to understand the opportunities and needs related to pilot expansion and sustainability. The evaluation offers transparency and accountability to city stakeholders, while providing an opportunity for the City of Berkeley to understand how its investments promote access to specialized, behavioral health crisis services for city constituents.

RDA evaluators will collect and analyze primary and secondary data to support the City of Berkeley to evaluate the first year of the pilot program. The three primary objectives guiding the evaluation include:

1. Quality Improvement: Identify opportunities for the SCU to improve services and adapt implementation.
2. Assessing Results: Assess the degree to which the SCU is achieving goals and making a positive impact in the community.
3. Sustainability Planning: Provide recommendations to inform the City's strategic planning for future crisis services, including SCU expansion and sustainability.

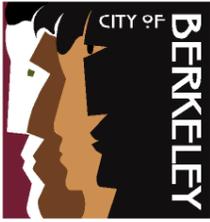
The evaluation is structured around a series of questions designed to meet these three core evaluation objectives. Data collection, analysis, and reporting for the evaluation are all planned to respond to these questions. The RDA team will work with the City of Berkeley, Bonita House, and other key stakeholders to gather data to inform the evaluation. Data collection will begin in fall 2024 and RDA plans to use data from November 2023 through October 2024. The team will also look at data from September and October 2023, but recognizes that the SCU was ramping up services during this time. RDA plans to utilize the following data sources:

- Grant Reports Review for Crisis Care Mobile Units grant reporting
- Raw Program Data (Bonita House data systems)
- Key Informant Interview
- Focus Groups

RDA will be collecting data through October 2024 and intends to have the initial results of the evaluation in the beginning of 2025. The goal is to present the SCU evaluation before the end of the SCU pilot period to inform future SCU operations.

Questions about the SCU evaluation or about the SCU program can be directed to [HHCS@berkeleyca.gov](mailto:HHCS@berkeleyca.gov).

## Attachment 1



Office of the Director  
Health, Housing, and  
Community Services

June 11, 2024

Dear Ms. Jones,

This letter is in response to a request from the Mental Health Commission sent on May 6, 2024 regarding the complaint process for Berkeley's Specialized Care Unit (SCU).

Community members who would like to file a complaint about services received from the SCU can use the grievance process facilitated by Berkeley Mental Health (BMH). The process starts with completing the Berkeley Mental Health Suggestion/Complaint/Grievance Form, which is located on the City of Berkeley's website at this link: <https://berkeleyca.gov/safety-health/mental-health/accessing-mental-health-services>. The form is also included as Attachment 1. Forms can be submitted via email, mailed, or dropped off with the Compliance Unit. Forms are also available at all Berkeley Mental Health Clinics. If individuals are not able to fill out this form but are able to articulate the content of their concerns, BMH can take these communications as grievances and will submit them for processing.

Once the Mental Health Division receives a complaint, the Compliance Unit will send an acknowledgement of receipt, and start their investigation. Once the investigation is complete, BMH will report the outcome in writing to the person who filed the grievance within 60 days of receipt of the original grievance. If the client is not satisfied with the outcome of the grievance investigation, they can appeal the outcome through Alameda County, and then the State of California, if necessary.

If a client would like to file a complaint about an interaction with the Berkeley Police Department (BPD), they can file a complaint directly with the BPD and/or the Police Accountability Board. Instructions for each are below:

- Community members who would like to file a complaint directly with the Police Department can follow the instructions listed on the City's website here: <https://berkeleyca.gov/safety-health/police/make-commendation-or-complaint>. BPD will conduct appropriate follow up and investigation.
- Community members who would like to file a complaint with the Police Accountability Board about an interaction with an officer can follow the process listed on the City's website here: <https://berkeleyca.gov/safety-health/police-accountability/file-complaint-against-berkeley-police-officer>. The Police Accountability Board will conduct appropriate follow up.

If community members have program-wide questions about the SCU and their work in Berkeley, please reach out to [HHCS@berkeleyca.gov](mailto:HHCS@berkeleyca.gov).

Sincerely,

Katherine Hawn  
City of Berkeley, Health, Housing & Community Services  
Special Projects Coordinator

Cc: Scott Gilman, Interim Director, Health, Housing, and Community Services  
Attachment 1: Berkeley Mental Health Suggestion/Complaint/Grievance Form



## Berkeley Mental Health Suggestion/Complaint/Grievance Form

(Your services will NOT be adversely affected in any way by completing this form)

Today's Date: \_\_\_\_\_

**Please check all that apply. This is a:**

- Suggestion
- Complaint/Grievance
- Request for change of provider (My provider is: \_\_\_\_\_)
- Request for access to my medical records (copying fee may apply)
- Appeal hearing (attach complaint response letter)

*Please Print.* Be specific by giving names, dates and times whenever possible. You may attach additional pages if necessary.

- 1. What is your suggestion/complaint/grievance request?**
  
- 2. For complaints/appeals only: If you have already done something to attempt to resolve your complaint, what have you done and what were the results?**
  
- 3. What would you like to see happen?**
  
- 4. If you would like to be contacted regarding this matter complete the information below:**

Name: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Email: \_\_\_\_\_

Completed form can be E-mailed, mailed or dropped off at the address below, please put to the attention of the Compliance Unit.

Item 9.c. Memorandum from Chair Moore Titled “Use of Computer Voice Stress Analyzer (CVSA)”



## MEMORANDUM

Date: June 20, 2024  
To: Honorable Members of the Police Accountability Board  
From: John “Chip” Moore, Chair of the Police Accountability Board  
Subject: Use of Computer Voice Stress Analyzer (CVSA)

---

This memorandum aims to provide the Police Accountability Board (PAB) with further context and details about the Berkeley Police Department's use of Computer Voice Stress Analyzers (CVSA). The CVSA, created by the National Institute of Truth Verification<sup>1</sup>, is a tool designed for detecting deception in voice responses. It operates by analyzing and presenting responses in real-time using advanced computer technology. The underlying principle involves identifying physiological microtremors associated with muscles in the voice mechanism<sup>2</sup>.

### **Background:**

On May 9, 2024, an investigative reporter with The San Francisco Chronicle contacted the Office of the Director of Police Accountability (ODPA) for comments regarding the Berkeley Police Department's use of CVSA to interview prospective job candidates. The questions posed were as follows:

- Were you aware Berkeley PD was using CVSA?
- Were you aware of the lack of scientific evidence behind the CVSA?
- What is your response? Do you find this concerning? Do you think the department should stop using CVSA or continue to use it?

---

<sup>1</sup> National Institute of Truth Verification: <https://www.cvsa1.com/ourcompany.htm>

<sup>2</sup> Report: <https://www.ojp.gov/ncjrs/virtual-library/abstracts/test-computer-voice-stress-analyzer-cvsa-theory-operation>

Director Aguilar provided a statement to The San Francisco Chronicle on May 17, 2024 (Attachment 1), and the article was published on June 4, 2024<sup>3</sup>. The article argued that CVSAs lack scientific evidence to support their effectiveness.

At the June 5, 2024 PAB Regular Meeting<sup>4</sup>, the Board discussed the use of CVSA with Chief Louis. Chief Louis informed the PAB that the department has used CVSA for 25 years as a supplemental tool during pre-employment background investigations. While not required by the California Commission on Peace Officer Standards and Training (POST), many agencies use CVSA in this capacity. She also noted that although BPD policies do not prohibit the use of CVSA for criminal investigations, the department has not used it for such purposes in many years.

After receiving the information provided by Chief Louis, the PAB expressed its intention to revisit the topic at a future meeting.

**Relevant Policies:**

CVSAs are addressed in four different policies within the BPD manual. Three of those instances relate to background check investigations. BPD Policy 807<sup>5</sup>, "Computer Voice Stress Examinations," provides guidelines for using CVSA as an investigative tool. BPD Policy 341.2.3<sup>6</sup> offers guidance on using CVSA for background screening of volunteer applicants. BPD Policy 601, "Sexual Assault Investigations," section 601.6<sup>7</sup>, "Victim Interviews," prohibits the use of CVSA for victim interviews, as mandated by 34

---

<sup>3</sup> Article: <https://www.sfchronicle.com/california/article/law-enforcement-technology-investigations-18756947.php>

<sup>4</sup> 2024-06-05 PAB Regular Meeting Recording: <https://youtu.be/PSwTkE7dLDg?si=Y4moBrpAsQ565w6l&t=1476>

<sup>5</sup> BPD Policy 807: [https://berkeleyca.gov/sites/default/files/documents/RELEASE\\_20240301\\_T161429\\_Berkeley%20PD%20Policy%20Manual.pdf#Page=685](https://berkeleyca.gov/sites/default/files/documents/RELEASE_20240301_T161429_Berkeley%20PD%20Policy%20Manual.pdf#Page=685)

<sup>6</sup> BPD Policy 341.2.3: [https://berkeleyca.gov/sites/default/files/documents/RELEASE\\_20240301\\_T161429\\_Berkeley%20PD%20Policy%20Manual.pdf#Page=274](https://berkeleyca.gov/sites/default/files/documents/RELEASE_20240301_T161429_Berkeley%20PD%20Policy%20Manual.pdf#Page=274)

<sup>7</sup> BPD Policy 601.6.: [https://berkeleyca.gov/sites/default/files/documents/RELEASE\\_20240301\\_T161429\\_Berkeley%20PD%20Policy%20Manual.pdf#Page=530](https://berkeleyca.gov/sites/default/files/documents/RELEASE_20240301_T161429_Berkeley%20PD%20Policy%20Manual.pdf#Page=530)

USC § 10451<sup>8</sup> and Penal Code § 637.4<sup>9</sup>. Additionally, BPD Policy 1000.4<sup>10</sup> references the use of CVSA in the selection process when permitted by Labor Code § 432.2<sup>11</sup>.

### **Proposal Details:**

#### *1. Delegation of Investigative Research*

To further explore CVSA technology and its uses within law enforcement, a literature review will be conducted.

#### *2. Scope of Policy Research*

The research scope is to include a review of legal frameworks surrounding the use of CVSA technology, the operational impacts, ethical considerations, and equity impacts.

#### *3. Policy Review*

A comprehensive policy review will be conducted to evaluate current guidelines and identify best practices for the use of CVSA technologies within law enforcement.

### **Recommendation for the PAB:**

The PAB should approve the proposal and delegate to me the initial investigation or research of CVSA technology, with the understanding that I will report back to the PAB with my findings and any potential policy recommendations for the PAB's consideration.

### **Alternative Recommendation:**

The PAB may consider the following alternative recommendation:

- Refer the matter to the ODPa or a subcommittee to investigate CVSA technology; or
- Reject the proposal.

---

<sup>8</sup> 34 U.S.C. 10451 – Polygraph Testing Prohibition: <https://www.govinfo.gov/app/details/USCODE-2022-title34/USCODE-2022-title34-subtitle1-chap101-subchapXIX-sec10451/summary>

<sup>9</sup> Penal Code § 637.4:

[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=PEN&sectionNum=637.4](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PEN&sectionNum=637.4).

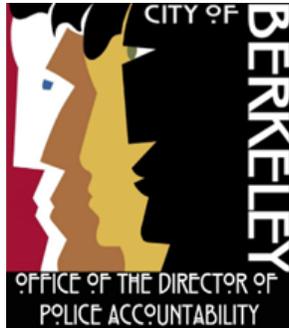
<sup>10</sup> BPD Policy 1000.4:

[https://berkeleyca.gov/sites/default/files/documents/RELEASE\\_20240301\\_T161429\\_Berkeley%20PD%20Policy%20Manual.pdf#Page=751](https://berkeleyca.gov/sites/default/files/documents/RELEASE_20240301_T161429_Berkeley%20PD%20Policy%20Manual.pdf#Page=751)

<sup>11</sup> Labor Code § 432.2:

[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=LAB&sectionNum=432.2](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=LAB&sectionNum=432.2).

## Off Agenda Report 1: Legislative Updates Relevant to the PAB's Work



## MEMORANDUM

**Date:** June 20, 2024  
**To:** Honorable Members of the Police Accountability Board  
**From:** Hansel Aguilar, Director of Police Accountability *HA*  
Keegan Horton, ODPa Investigator *KH*  
Jose Murillo, ODPa Policy Analyst *JM*  
**Subject:** Legislative Updates

---

The purpose of this memorandum is to provide a legislative update to the PAB, enabling them to stay informed about changes in local, state, and federal law.

### **State Legislative Updates**<sup>1</sup>

The ODPa has identified the following state legislation as relevant to the work of the PAB:

- **AB-2020 “Survivors of Human Trafficking Support Act.”** This bill would require a county that has an interagency sexual assault response team to establish a survivor review board.  
Status: From committee: Do pass and re-refer to Com. on APPR with recommendation: To Consent Calendar. (Ayes 5. Noes 0.) (June 18). Re-referred to Com. on APPR.
- **AB-2042 “Police canines: standards and training.”** Would require the Commission on Peace Officer Standards and Training to develop standards and training guidelines for the use of canines by law enforcement.  
Status: Re-referred to Com. on PUB S.
- **AB 2541 “Peace officer training: wandering.”** Would require POST to develop guidelines addressing wandering associated with Alzheimer’s disease, autism, and dementia.  
Status: In Assembly. Ordered to Engrossing and Enrolling.

---

<sup>1</sup> <https://post.ca.gov/Status-of-Current-Legislation>

- **AB-2621 “Law Enforcement Training.”** This bill would require instruction to include identifying when a gun violence restraining order is appropriate to prevent a hate crime and the procedure for seeking a gun violence restraining order.  
Status: In committee: Referred to suspense file.
- **AB-3021 “Criminal Procedure: interrogations.”** This bill would require a peace officer, prosecuting attorney, or investigator for the prosecution, prior to interviewing a family member of a person who has been killed or seriously injured by a peace officer, to clearly identify themselves, if the interview takes place in person, to show identification, and to state specified information.  
Status: From committee: Do pass and re-refer to Com. on APPR. (Ayes 4. Noes 1.) (June 18). Re-referred to Com. on APPR.
- **AB-3241 “Law Enforcement: police canines.”** Would require the Commission on Peace Officer Standards and Training to adopt uniform, minimum guidelines regarding the use of canines by law enforcement.  
Status: Re-referred to Com. on PUB S.

### **Lexipol Policy Update**

The following updates have been made to the BPD's Lexipol KMS system:

- **BPD Policies 346, 405, 415, 603, 700, 705, 802, 807, 1000, 1002, 1010, 1012, 1014, 1021, 1024, 1027, 1030, & 1031:** Updated references to changed office and bureau names and removal of gendered language.

### **City of Berkeley Council Meeting Update**

The following items being considered by the City Council are relevant to the PAB:

**Meeting:** June 25, 2024 City Council Regular Meeting

**Link to Agenda:** <https://berkeleyca.gov/sites/default/files/city-council-meetings/2024-06-25%20Agenda%20Packet%20-%20COUNCIL%20%28WEB%29.pdf>

### **Relevant Items on Consent Calendar:**

- Item 11. Amendments to Berkeley’s Municipal Code Chapter 2.24 to Establish Whistleblower Program Authority
  - From: Auditor
  - Recommendation: Adopt second reading of ordinance No. 7,922–N. S amending City Auditor’s Office (BMC Chapter 2.24) authority and scope of work to formally establishing the City Auditor’s authority to receive and refer reports of fraud, waste, or abuse as well as investigate those reports and any reports of retaliation against whistleblowers.
- Item 13. Contract: Live Free for Gun Violence Intervention and Prevention Program: Custom Notification and Street Outreach Services
  - From: City Manager

- Recommendation: Adopt a Resolution authorizing the City Manager to execute a contract and any amendments with Live Free USA (Contractor) to design, implement, and assess the Custom Notification and Street Outreach Services component of the City of Berkeley's Gun Violence Intervention and Prevention Program for a two-year pilot, in an amount not to exceed \$2,000,000 (\$1,000,000 per fiscal year).
- Item 33. Audit Recommendation Status - Berkeley Police: Improvements Needed to Manage Overtime and Security Work for Outside Entities (Reviewed by the Budget & Finance Committee)
  - From: City Manager
  - Recommendation: Policy Committee Recommendation: No final action taken. Item is automatically returning to the Council agenda pursuant to the time limit for items referred to policy committees.
- Item 40. Contract: Edgeworth Integration, LLC for Installation of Security Cameras at Council-Approved Intersections; and Authorizing Additional External Fixed Video Surveillance Cameras (Continued from June 14, 2024)
  - From: City Manager
  - Recommendation: 1. Adopt a Resolution authorizing the City Manager to execute a contract with Edgeworth Integration, LLC for purchase and installation of External Fixed Video Surveillance Cameras at fifteen council-approved locations, for an amount not to exceed \$850,000. 2. Adopt a Resolution authorizing the installation of additional External Fixed Video Surveillance Cameras under this contract scope should they be approved by City Council, included in the Surveillance Policy and funding appropriated.

Relevant Items on Action Calendar:

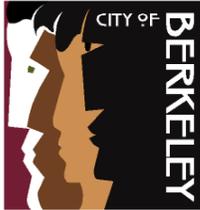
- Item 53. Fiscal Years 2025 & 2026 Biennial Budget Adoption
  - From: City Manager
  - Recommendation: Conduct a public hearing and upon conclusion: 1. Adopt the Fiscal Years 2025 & 2026 ("FY25 and FY26") Biennial Budget as contained in the City Manager's FY25 & FY26 Proposed Biennial Budget, and as amended by subsequent Council action. 2. Authorizing the City Manager to provide applicable advances to selected community agencies receiving City funds in FY25, as reflected in Attachment 2 to the report, and as amended by subsequent Council action.
- Item 54. FY 2025 Annual Appropriations Ordinance
  - From: City Manager
  - Recommendation: Adopt first reading of an Ordinance adopting the FY 2025 Annual Appropriations Ordinance (AAO) in the amount of \$776,943,545 (gross appropriations) and \$670,897,257 (net appropriations).

**Meeting:** June 19, 2024 Budget & Finance Committee Meeting

**Link to Agenda:** <https://berkeleyca.gov/sites/default/files/legislative-body-meeting-agendas/2024-06-19%20Agenda%20Packet%20-%20BUDGET.pdf>

- Item 2. FY25/26 Proposed Budget
  - From: City Manager
  - Recommendation: Discussion and Recommendations on the FY25/26 Proposed Budget including funding requests, Council budget referrals and budget balancing strategies.

Off Agenda Report 2: Memorandum from City Manager Dee Williams-Ridley to all Berkeley Commissions titled “2024 Update to the Local Hazard Mitigation Plan; Public Comment Process”



Office of the City Manager

May 31, 2024

To: Commission Secretaries

From: Dee Williams-Ridley, City Manager  C1783A8ACD2246A...

Subject: 2024 Update to the Local Hazard Mitigation Plan;  
Public Comment Process

The First Draft of the City’s 2024 Local Hazard Mitigation Plan (LHMP) update has been released on the City’s website ([www.BerkeleyCA.gov/Mitigation](http://www.BerkeleyCA.gov/Mitigation)). The document’s Executive Summary and Actions are attached to this letter.

As a Commission Secretary, please:

- Include the attached material as an Information Item in your next Commission meeting packet
- If your Commission wishes to provide feedback on the plan, please send comments to [mitigation@berkeleyca.gov](mailto:mitigation@berkeleyca.gov) by July 31.

Plan Content

The LHMP identifies natural hazards in Berkeley and outlines a five-year strategy to further protect Berkeley’s people, buildings, infrastructure, and environment from those hazards. The City began updating the LHMP in early 2023. This update effort will allow Berkeley to apply for federal mitigation grant programs and State funding, and is anticipated to be complete at the end of 2024.

The content of the LHMP is dictated by State and federal requirements and focuses on City actions to reduce risks. In an effort to make the LHMP more relevant and accessible to community members, staff created a new section called “Berkeley Household Risk Reduction” to offer clear steps people can take to mitigate risks in their own households. Staff also wants to acknowledge all the work community members do to contribute to collective risk reduction in Berkeley by taking these actions.

Commission Review

All City Commissions are welcome to review the First Draft Plan. Commissions interested in providing feedback must submit it to [mitigation@berkeleyca.gov](mailto:mitigation@berkeleyca.gov) by July

Page 2

May 31, 2024

Re: 2024 Update to the Local Hazard Mitigation Plan; Public Comment Process

31, 2024. Staff will review the feedback and incorporate appropriate edits into the Final Draft Plan.

Staff will present on the First Draft Plan at the Planning Commission's June 5 meeting and the Disaster and Fire Safety Commission's June 26 meeting.

### Community Review

The First Draft Plan has been posted for review and comment on the City website ([www.BerkeleyCA.gov/Mitigation](http://www.BerkeleyCA.gov/Mitigation)). Staff recognize that it is difficult to engage with long documents, such as the LHMP. In an effort to support community review of the materials, the website also has detailed videos about each hazard included in the LHMP. The videos describe each hazard, its impacts, actions the City is taking to reduce risk, and recommend actions that community members can take to reduce risk in their own lives.

Members of the public are invited to provide written feedback on the document until July 31, 2024.

Written feedback can be submitted:

- a) Via email to [mitigation@berkeleyca.gov](mailto:mitigation@berkeleyca.gov)
- b) Via postal mail to:  
Fire Department – Office of Emergency Services  
Attn: Mitigation Plan  
2100 Martin Luther King, Jr. Way, 2<sup>nd</sup> Floor  
Berkeley, CA 94704
- c) In-person during business hours to the Fire Department – Office of Emergency Services at the address above.
- d) In-person at Public Review Workshops:
  - a. Monday, June 3, 5:30 pm to 7:30 pm at the Central Library, in The Commons
  - b. Saturday, July 20, 10 am to 12pm at the Tarea Hall Pittman South Branch Library

Following the public review process for the First Draft Plan, staff will review community member feedback and will incorporate appropriate edits into the Final Draft Plan. Staff will concurrently develop an outline of edits made based on Commission and community feedback.

The Final Draft Plan will undergo review first by the State of California Office of Emergency Services, and then the Federal Emergency Management Agency (FEMA). Staff will make changes to the plan as required by these State and federal bodies.

### Adoption

In winter 2024 (est.), staff will post the Final Draft Plan, including any State and federal edits, to the City website. At that time, staff will present the Final Draft Plan to the

Page 3

May 31, 2024

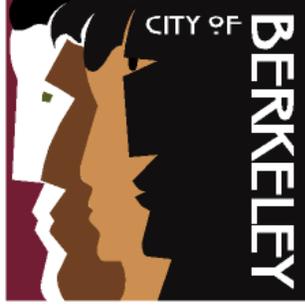
Re: 2024 Update to the Local Hazard Mitigation Plan; Public Comment Process

Disaster and Fire Safety Commission and the Planning Commission, requesting their recommendations to the Council on the plan. The Planning Commission meeting will also serve as the First Public Hearing for the plan. Staff anticipates bringing the Final Draft Plan to the City Council for review and adoption in December 2024.

Commission Secretaries will serve as their Commissions' point of contact for this project. Please contact Jamie Albrecht, Emergency Services Coordinator (<mailto:jalbrecht@berkeleyca.gov>x5514), with questions.

Attachment: 2024 Local Hazard Mitigation Plan: First Draft Executive Summary and Actions

cc: David Sprague, Fire Chief  
LaTanya Bellow, Deputy City Manager  
Anne Cardwell, Deputy City Manager  
Jenny Wong, City Auditor  
Farimah Brown, City Attorney  
Mark Numainville, City Clerk  
Matthai Chakko, Assistant to the City Manager



City of Berkeley

**2024**

# **Local Hazard Mitigation Plan**

DRAFT

May 24, 2024

# Executive Summary

Berkeley is a vibrant and unique community. But every aspect of the city – its economic prosperity, social and cultural diversity, and historic character – could be dramatically altered by a disaster. While we cannot prevent natural hazards, we can anticipate their many impacts and take steps to reduce those harms to our infrastructure, environment, and community. We can make sure that the Berkeley that emerges after a disaster continues to reflect our current values.

The federal Disaster Mitigation Act of 2000 (DMA 2000) calls for all communities to prepare mitigation plans every five years. City government and community members have been working together for years to address certain aspects of disaster risk – such as strengthening structures and managing vegetation to reduce fire risk. The 2004 Disaster Mitigation Plan formalized this process for the first time, ensuring that these activities continued to be explored and improved over time. The 2014 and 2019 Local Hazard Mitigation Plans continued this ongoing process to evaluate the risks that different hazards pose to Berkeley, and to engage the community in dialogue to identify the most important steps that the City, its partners, and residents should pursue to reduce these risks. Over many years, this constant focus on disasters has made the Berkeley community much safer.

The City adopted a plan that met the requirements of DMA 2000 on June 22, 2004, and an update in December 2014 and 2019. This is the first draft of the 2024 update to that plan, called the 2024 Local Hazard Mitigation Plan (2024 LHMP).

## ***Plan Purpose***

The 2024 LHMP serves four functions:

1. The 2024 LHMP documents our current understanding of the hazards present in Berkeley, along with our vulnerabilities to each hazard – the ways that the hazard could impact our buildings, infrastructure, community, and environment.
2. The document presents Berkeley City government’s Mitigation Strategy for the coming five years. The Mitigation Strategy reflects a wide variety of both funded and unfunded actions, each of which could reduce the Berkeley’s hazard vulnerabilities.
3. In addition to presenting a City-level mitigation strategy, the document outlines Actions that Berkeley community members can and do take at the household level to reduce their own vulnerabilities to hazards in Berkeley. While these household-level actions are not a requirement of the DMA 2000, including these details makes the plan’s risk assessment more immediately relevant to community members, also acknowledging the work they do to reduce our collective risk.
4. By fulfilling requirements of the DMA 2000, the 2024 LHMP ensures that Berkeley will remain eligible to apply for mitigation grant funding before disasters, and to receive federal mitigation funding and additional State recovery funding after disasters.

## **Plan Organization**

The 2024 LHMP has been structured to specifically address DMA 2000 requirements as well as recent updates to these requirements from the Federal Emergency Management Agency. The 2024 LHMP is organized as follows:

### *Element A: Planning Process*

This section of the 2024 LHMP describes the process used to develop the document, including how partners, stakeholders, and the community were engaged. It also addresses the City's approach to monitoring the 2024 LHMP over the five-year planning cycle.

### *Element B: Risk Assessment*

This section of the 2024 LHMP outlines the different hazards present in Berkeley. Analysis of each hazard includes a description, the locations in Berkeley with exposure to the hazard, previous occurrences, probability of the hazard occurring in the future, Berkeley's vulnerabilities, and the potential impacts. This section also now includes actions that individual community members and households can take to reduce their risks.

### *Element C: Mitigation Strategy*

The Mitigation Strategy section first documents the authorities, policies, programs, and resources that the City brings to bear in implementing mitigation actions. Second, this section outlines a comprehensive range of specific mitigation actions and projects designed to reduce Berkeley's hazard vulnerabilities. This section also describes how the 2024 LHMP is integrated with other City plans.

### *Element D: Plan Maintenance*

This section describes how public participation in the plan maintenance process will continue as well as the methods and schedule for keeping the plan current. It also provides a detailed description of how the 2024 LHMP will be integrated into other planning mechanisms.

### *Element E: Plan Update*

This section describes how changes in development and priorities have influenced updates to the 2024 LHMP. It also provides a detailed description of Berkeley's progress on the Mitigation Strategy adopted in the 2019 LHMP.

### *Element F: Plan Adoption*

This section will be used to document formal adoption of the Final Draft 2024 LHMP by the Berkeley City Council.

### *Element G: Community Education*

This section is new in the 2024 LHMP and is not a FEMA requirement. It includes information on what the City has done to make the risk assessment and mitigation strategy more applicable and accessible to community members. This section includes links to educational resources.

In the pages that follow, this Executive Summary describes highlights from Element B: *Risk Assessment* and Element C: *Mitigation Strategy*, as well as key updates that were made to the section since the 2019 version.

## Element B: Risk Assessment

Berkeley is exposed to a number of hazards that vary in their intensity and potential impacts. This mitigation plan addresses the following hazards: earthquake, wildland-urban interface (WUI) fire, extreme heat, poor air quality, high wind, rainfall-triggered landslide, tsunami, flood, sea level rise, utility interruption, hazardous materials release, and infectious disease. Each of these hazards can occur independently or in combination, and can also trigger secondary hazards.

Climate change was included as a separate hazard of concern in the previous versions of this plan. However, in this update, climate change has been integrated throughout the plan and into every hazard of concern. Climate change will continue to increase the likelihood and the severity of the hazards outlined in this place.

*Table 1. Summary of Hazard Analysis*

<b>Hazard</b>	<b>Likelihood</b>	<b>Severity of Impact</b>
<b>Earthquake</b>	Likely	Catastrophic
<b>Wildland-Urban Interface Fire</b>	Likely	Catastrophic
<b>Extreme Heat</b>	Likely	Moderate to Catastrophic
<b>Poor Air Quality</b>	Likely	Minor
<b>High Wind</b>	Likely	Minor
<b>Rainfall-Triggered Landslide</b>	Likely	Minor to Catastrophic
<b>Tsunami</b>	Possible	Minor to Catastrophic
<b>Floods</b>	Likely	Minor
<b>Sea Level Rise</b>	Likely	Minor to Major
<b>Utility Interruption</b>	Likely	Minor to Major
<b>Hazardous Materials Release</b>	Likely	Minor to Catastrophic
<b>Infectious Disease</b>	Likely	Minor to Catastrophic

## Earthquake

The United States Geological Survey states that there is a 72% probability of one or more M 6.7 or greater earthquakes from 2014 to 2043 in the San Francisco Bay Region. There is a 33% chance that a 6.7 or greater will occur on the Hayward fault system between 2014 and 2043.<sup>1</sup> This means that many Berkeley residents are likely to experience a severe earthquake in their lifetime.

A catastrophic earthquake on the Hayward Fault would cause severe and violent shaking and three types of ground failure in Berkeley. Surface fault rupture could occur in the Berkeley hills along the fault, damaging infrastructure and utilities that cross the fault. Landslides are expected in the Berkeley hills during the next major earthquake, particularly if the earthquake occurs during the rainy winter months. Landslide movement could range from a few inches to tens of feet. Ground surface displacements as small as a few inches are enough to break typical foundations. Liquefaction is very likely in the westernmost parts of the city and could occur in much of the Berkeley flats. Liquefaction can destroy pavement, dislodge foundations, and damage underground and aboveground infrastructure.

Shaking and ground failure are likely to create impacts that ignite post-earthquake fires. Firefighting efforts will be simultaneously challenged due to broken water mains and damage to electrical, transportation, and communication infrastructure.

In a 6.9 magnitude earthquake on the Hayward Fault, the City estimates that over 600 buildings in Berkeley will be completely destroyed and over 20,000 more will be damaged. One thousand to 4,000 families may need temporary shelter. Depending on the disaster scenario, one hundred people could be killed in Berkeley alone, and many more would be injured. Commercial buildings, utilities, and public roads will be disabled or destroyed. This plan estimates that building damage in Berkeley alone could exceed \$2 billion, out of a multi-billion-dollar regional loss, with losses to business activities and infrastructure adding to this figure.

Low-income housing units are expected to be damaged at a higher rate than other residences. Other types of housing, such as condominiums, may replace them when land owners rebuild. This could lead to profound demographic shifts in Berkeley.

## Wildland-Urban Interface Fire

Fire has always been a natural part of the California and East Bay wildland ecosystem. Fire has historically been a way to maintain forest health, to control invasive species, and to provide a rich habitat for wildlife. In Berkeley, densely-built homes and vegetation have been introduced to hillside areas that otherwise required burning to maintain ecological balance. For many years people have tried to prevent fire in forests and developed areas, disrupting this balance. As a result, catastrophic fires are now occurring throughout the Bay Area and the world.

There are two primary types of wildfire: “wildland” fire and “wildland-urban interface” (WUI) fire. WUI fires, the primary concern in Berkeley, occur where the natural landscape and urban-built environment meet or intermix. It is especially difficult to control a fire in the wildland-urban interface, where homes and other infrastructure are close to and within wildland areas.

Increased structure density exacerbates wildland-urban interface fire risk. The rate of structure-to-structure ignitions increases when there are more structures per acre. More than two structures per acre is considered high density in the WUI; most areas of the Berkeley hills have at least 2 structures per acre.<sup>2</sup> Areas of the north Berkeley hills and around Panoramic Hill more than four structures per acre. The density of Berkeley's hills areas will be a critical factor in fire spread.

Minimal separation between structures also increase fire risk. Structures that are less than 25 feet apart are at extreme risk of directly spreading fire to one another, in a process called "structure-to-structure ignition." Fires in denser areas will have high rates of structure-to-structure ignition and high risk of losses. In Berkeley many structures are less than 25 feet apart, which places the community in the highest risk category.

Berkeley is vulnerable to a wind-driven fire starting along the city's eastern border. The fire risk facing the people and properties in the eastern hills is compounded by the area's mountainous topography, minimal access and egress routes, and location, overlaid upon the Hayward Fault. Berkeley's flatlands are also exposed to a fire that spreads west from the hills.

The extent and intensity of a WUI fire is closely tied to weather conditions and fuel moisture. Fires that ignite under periodic conditions of "Red Flag Warning" or "Extreme Fire Weather" may result in uncontrollable firestorms. During Extreme Fire Weather, when a fire builds to this magnitude and travels with such extreme speed and force, firefighters' primary focus often shifts from firefighting to supporting evacuations. This is because during this type of weather, some normally-available firefighting tools can be ineffective or even unusable – like planes and helicopters, which need to be grounded during high winds.

The Berkeley Hills have narrow, windy roads that make evacuation difficult, which is why the Berkeley Fire Department recommends that people leave the hills during Extreme Fire Weather. While the ignition risk is highest in the Berkeley Hills, a wind-driven fire under Extreme Fire Weather can blow through the Berkeley flats, all the way to the Bay.

## Extreme Heat

In Berkeley, an extreme heat day is a day above 88.3 degrees Fahrenheit (F). Climate models from the Cal-Adapt tool<sup>3</sup> from the California Energy Commission predict the average number of extreme heat days (above 88.3 degrees F) in Berkeley to continually increase by the end of the century. The specific number of extreme heat days expected in Berkeley depends on the level of greenhouse gases (GHGs) emitted from human activities into the atmosphere.

Extreme heat is a major public health concern with most impacts being on human health, especially on marginalized populations. Public health impacts associated with extreme heat events include premature death, cardiovascular stress and failure, and heat-related illnesses such as heat stroke, heat exhaustion, and kidney stones.<sup>4</sup> Studies have also found links between rising temperatures and a range of mental health issues including mental fatigue, aggression, and even higher rates of suicide.<sup>5</sup>

Berkeley has regularly experienced extreme heat events since 2017, which have included impacts such as heat-related deaths, power outages, and poor air quality.

## Poor Air Quality

Poor air quality is a growing concern in Berkeley and in California. According to the California Air Resources Board, 90% of Californians breathe unhealthy levels of outdoor air during some parts of the year. Poor air quality can irritate the eyes, nose, and throat, cause shortness of breath, aggravate asthma and other respiratory conditions, and affect the heart and cardiovascular system.

Poor air quality can last for a few hours or a few weeks, depending on its source. It can also be a chronic issue, for example in places near industry or highways. Southerland et al., published a study in 2021<sup>6</sup> on the harmful impacts of pollution in the Bay Area. According to these estimates, more than 2,500 people die and 5,200 children develop asthma every year due to traffic-related air pollution exposure in the Bay Area.

Everyone in Berkeley can be impacted by poor air quality – some neighborhoods experience moderate or unhealthy air quality on a regular basis due to proximity to various sources of pollutants like highways and industry, and there have also been several extreme examples of poor air quality that impacted the entire City due to nearby wildfires. The air quality can also change quickly due to weather conditions, such as rain or wind.

## High Wind

The National Weather Service (NWS) defines “high winds” as: sustained wind speeds of 40 miles per hour (mph) or greater lasting for one hour or longer, or wind gusts of 58 mph or greater for any duration.

In Berkeley, high wind events are typically associated with the seasons. In the winter, high winds come with weather systems and cold fronts, generally between November through March. In the summer, temperature and pressure differences between the Pacific Ocean and the interior valleys to Berkeley’s east create stronger afternoon and evening winds coming from the west.

Primarily in the fall, dry offshore foehn winds, known as the “Diablo Winds,” occur. Diablo Winds are associated with fire weather. Using data collected by observational instruments placed at the Lawrence Berkeley National Lab, we identified several days with sustained winds exceeding 25 miles per hour in Berkeley.

As temperatures increase worldwide due to climate change, changes in rising sea levels, humidity, and storminess are unavoidable as the physical processes are all interlinked. Given the prevalence of previous high-wind events, it is expected that each year will bring more.

High winds are dangerous to people, structures, and systems.

## Rainfall-Triggered Landslide

Berkeley has a number of deep-seated landslides in the hills that continuously move, with the rate of movement affected by rainfall and groundwater conditions. Significant localized areas of the Berkeley hills face risk from landslide, and a major slide could endanger lives and impact scores of properties, utilities and infrastructure.

## Tsunami

Tsunamis, though rare inside the San Francisco Bay, can occur from large offshore subduction style earthquakes around the Pacific Rim. Small, local tsunamis can also result from offshore strike-slip faults such as parts of the San Andreas Fault of the Peninsula and the Hayward Fault through San Pablo Bay. The March 2011 Japan earthquake generated a devastating tsunami, which reached the Bay Area and caused minor damage to docks and floats in the Berkeley Marina. A larger tsunami could impact much more of Berkeley's western shores. Berkeley's maritime community, which would be greatly impacted, includes low income individuals and households. Buildings, infrastructure, and roadways could be damaged, and debris and hazardous materials could cause post-tsunami fires. Deaths are possible if individuals choose not to evacuate hazardous areas, do not understand tsunami warnings, or are unable to evacuate.

## Floods

In Berkeley, three types of flooding typically occur: coastal flooding, creek flooding, and storm drain overflow. Creek flooding in Berkeley has the potential to affect an estimated 675 structures, mainly in the western, industrial area of the city. It is unlikely that floodwaters will reach higher than three feet, but damages to homes, businesses, and their contents could total over \$201 million. Storm drain overflow creates localized flooding in many known intersections in Berkeley. With few properties covered by flood insurance, these costs would be borne primarily by Berkeley residents and businesses.

## Sea Level Rise

Warmer temperatures associated with climate change are causing global sea levels to rise. Recent scientific studies have begun to evaluate the impact of the shallow groundwater rising in low-lying coastal areas (like Berkeley) combined with sea level rise. According to the San Francisco Estuary Institute and the Pathways Climate Institute<sup>7</sup>, as sea levels rise in San Francisco Bay, shallow groundwater underneath low-lying coastal communities will also rise. Sea level rise and rising groundwater can damage buildings, transportation infrastructure, sewer and water systems, natural resources and ecosystems. Sea level rise will have disproportionate impacts on disadvantaged communities in Berkeley. The areas most likely to experience flooding with increased sea level rise are in West Berkeley, which has a higher percentage of communities of color and low-income communities.

## Utility Interruption

Utility interruption is any loss of a public service including electrical service, telecommunications, wastewater and potable water, and natural gas.

Berkeley residents, visitors, businesses, institutions, and other partners rely on utilities for day-to-day life. Loss of utilities for prolonged period is particularly devastating for people with disabilities, people with access and functional needs, and people with low incomes that may not be able to purchase supplies and or relocate.

Utility interruption can be planned and include a warning, such as with PG&E Public Safety Power Shutoffs that proactively turn off electricity to mitigate wildfire risk, or come a secondary impact of the other natural hazards included in this plan. Utility interruption can also occur without a preceding natural hazard, for example maintenance and repair or accidental damage. The extent and severity of utility interruption depends on many factors, including cause, location, duration, and time of year. The probability of utility interruption is high, given the number of systems, aging infrastructure, and the variety of possible natural hazards.

## Hazardous Materials Release

The City has identified fifteen facilities in Berkeley with sufficiently large quantities of toxic chemicals to pose a high risk to the community. Hazardous materials also travel through Berkeley by truck and rail. Natural hazards identified in the plan could trigger the release of hazardous materials. Over the last 25 years, Berkeley has seen a more than 90 percent reduction in the number of facilities with extremely hazardous materials. The City carefully tracks hazardous materials within its borders, and works closely with companies using large amounts of potentially dangerous materials.

## Infectious Disease

Infectious diseases are illnesses caused by germs, such as bacteria, viruses, and fungi. They enter the body, multiply and cause an infection. Some infectious diseases are contagious, meaning they can spread from one person to another. The State of California has a list of over 95 communicable diseases that must be reported by healthcare providers or laboratories to local public health officials. All people in Berkeley are susceptible to infectious diseases. The populations at the highest risk for infectious diseases are the very young, the elderly, or individuals who are immunocompromised. Additionally, higher-poverty neighborhoods of color are at greater risk due to the effects of health and social inequalities.

Infectious diseases vary in their impact and severity. Recent outbreaks since 2019 include the COVID-19 pandemic and clusters of monkeypox virus. In most infectious disease outbreaks, the impact is limited, with the majority of illnesses treatable and the likelihood of fatalities low. Large-scale outbreaks like COVID-19 kill millions of people, completely alter daily life and social activities, threaten businesses and the global economy, strain existing health care facilities.

## **Access and Functional Needs**

This plan recognizes that many individuals that are still disproportionately vulnerable during disasters. People with access and functional needs are defined as community members who may have additional needs before, during and after an incident in functional areas, including but not limited to: maintaining independence, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities, live in institutionalized settings, are elderly, are children, are from diverse cultures, have limited English proficiency, or are non-English speaking, or are transportation disadvantaged. An individual with a disability is defined by the ADA as a person who had a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment. The ADA does not specifically name all of the impairments that are covered.

## **Underserved Communities and Marginalized Populations**

Disasters also disproportionately impact underserved communities and marginalized populations. For example, people of color and people with low incomes have been historically denied access to housing and resources, increasing their vulnerability to these shocks. The Mitigation Strategy in the 2024 LHMP identifies if or how each Action benefits underserved communities and socially vulnerable populations. The strategy prioritizes those actions that provide benefits to underserved communities and marginalized populations. Further, the 2024 LHMP includes a list of mitigation actions for individuals and households that are designed to be approachable and accessible to people in varying circumstances and with varying resources to draw from.

## **Summary of Changes to the Risk Assessment**

The 2024 LHMP contains numerous updates to facts, figures, and descriptions. The City has incorporated the newest-available hazard data and incorporated new hazards into the Plan. The City and its partners have provided additional descriptions, details, and definitions to explain the science of these hazards and their potential impacts.

Within the previous events section for each hazard, the City has added information about any instances of the hazard affecting Berkeley since 2019. Throughout the plan, the City has updated financial loss estimates for inflation.

In some hazard sections, Risk and Loss Estimates include analysis from the Government Finance Officers Association (GFOA). GFOA is a nonprofit association of more than 23,000 state and local government finance professionals and elected officials from across North America. The City of Berkeley has been assessing the potential impacts of extreme events, like natural disasters, on the City government's financial condition, particularly its reserve levels for the General Fund. The City engaged the GFOA to produce a recommendation to help it decide the appropriate reserve level for the general fund, given the risks from extreme events. A key part of GFOA's mission is to promote best practices in public finance, including reserve policies. The analysis by GFOA also shed light on the potential broader economic losses to the community from the risks posed by extreme events.

## **Hazards Described in the 2024 Plan**

For the first time, the plan identifies poor air quality, high wind, sea level rise, utility interruption, and infectious disease as hazards of concern. Significant changes and updates to the analysis of each hazard are described below:

### **Earthquake (Section B.2)**

- The Earthquake section has been pared down to improve readability.
- The descriptions of vulnerable building types have been updated and now include photos.
- The map of potentially vulnerable buildings in Berkeley has been updated.

### **Wildland-Urban Interface Fire (Section B.3)**

- This section has been updated to include the following:
  - Information about the Berkeley Overnight Camps and their fire risk.
  - Information about the 2017 Grizzly Fire.
  - A detailed description of fire weather, outlining Red Flag and Extreme Fire Weather days.
  - New data and narrative about wildfire risk in Berkeley from the National Institutes of Standards and Technology and East Bay Regional Parks.
- This section has been updated to include the following new maps that better contextualize the wildfire risk in Berkeley:
  - Fire Hazard Severity Zones in State Responsibility Area from Cal Fire
  - City of Berkeley Fire Zones 1, 2, and 3
  - Wildfire Hazard Map for Fire Prevention Planning which classifies the hazard from lowest to highest
  - Density of Structures in Berkeley Fire Zones 2 and 3
  - Wildfire Risk to Structures Map which combines the hazard classification with structure density to show the areas of higher wildfire risk to structures
  - Distance Between Structures in Berkeley Fire Zones 2 and 3
  - An updated map of the 1923 fire boundary

### **Extreme Heat Events (Section B.4)**

- This section has been updated to include the following:
  - Information and a map showing thermal belting, the phenomenon where the Berkeley hills has higher temperatures than the rest of the city.
  - Graphics about forecasting heat risk.
  - Extreme heat events since 2019 in Berkeley.
  - Data and a map of excess emergency rooms visits on extreme heat days by zip code have been included demonstrating higher rates for people in central, south, and west Berkeley.
  - A map of cooling center locations in Berkeley.
  - New data for potential impacts and losses from a study of the 2006 heat wave in California showing the excess statewide healthcare costs and premature deaths.

### **Poor Air Quality (Section B.5)**

- Poor air quality events are a newly-introduced hazard of concern for the 2024 LHMP.
- The poor air quality section describes the factors that contribute to poor air quality, how it is measured, and how it can concentrate in the Berkeley hills due to marine layer inversion. It also describes the chronic poor air quality issues from industry and transportation infrastructure in west and south Berkeley.

### **High Wind (Section B.6)**

- High wind events are a newly introduced hazards of concern for the 2024 LHMP.
- The high wind section describes what constitutes high wind and the seasonality of wind events in Berkeley. High wind events are very closely connected to fire weather. However, high wind in any season can damage trees, infrastructure, and utilities.

### **Rainfall-Triggered Landslide (Section B.7)**

- This section has been updated to include the following:
  - Landslide occurrences in Berkeley since 2019.
  - New maps of Berkeley using data from the California Landslide Inventory and Landslide Susceptibility Classes from the California Department of Conservation.

### **Tsunami (Section B.8)**

- This section has been updated to include the following:
  - A new map of the Tsunami Inundation Zone, which was updated to reflect new science and feedback from local jurisdictions.
  - Updated maps of the Berkeley Tsunami Evacuation Phases from the Tsunami Evacuation Playbooks. These Playbooks, developed by the California Geological Survey, California Governor’s Office of Emergency Services, and the National Ocean and Atmospheric Administration (NOAA), reflect more refined and detailed planning, in which forecasted tsunami amplitudes, storm surge, and tidal information can help guide which areas might be inundated in different scenarios, depending on the extent of the event. This analysis uses helps NOAA to better predict inundation areas during actual tsunami events. Local emergency managers can use this information to better target evacuation areas during actual tsunami events.
  - Information about the 2023 tsunami advisory for Berkeley as a result of the underwater volcano eruption near Tonga.
  - New data and maps that show the probability of a tsunami occurring in Berkeley, expressed in 100-year, 200-year, 475-year, and 975-year return periods.
  - New data about the people and structures that might be impacted by a tsunami in Berkeley.

### **Sea Level Rise (Section B.9)**

- Sea level rise is a newly introduced hazard of concern for the 2024 LHMP. It was listed in the 2019 LHMP as a related impact of climate change in that section, but did not have its own section.
- The section provides analysis of amounts of sea level rise anticipated under different projected carbon emissions scenarios, as well as maps of expected levels of inundation

from 2-ft, 4-ft, and 5.5-ft sea level rise scenarios using the Adapting to Rising Tides Bay Shoreline Flood Explorer.

- New studies about shallow groundwater rising and related maps are included.

### **Floods (Section B.10)**

- This section has been updated to include the following:
  - Newly-revised flood exposure map for Berkeley using data from the FEMA National Flood Insurance Program.
  - A map of Community Calls for Service to report storm drain back up during the January 2023 winter storms.
  - Information about the most recent flooding in December 2022 and January 2023, which resulted in a Federal Major Disaster Declaration for Alameda County.

### **Utility Interruption (Section B.11)**

- Utility interruption is a newly introduced hazard of concern for the 2024 LHMP. It was listed as secondary impact of several of the other hazards of concern in the 2019 LHMP. However, utility interruption can occur without a preceding hazard and can cause severe impacts, resulting in it receiving its own section in the 2024 update.
- This section describes the utility systems, who manages them, and what the impacts of interruptions (planned or not) can have on people and infrastructure.

### **Hazardous Materials Release (Section B.12)**

- The Hazardous Materials Release section contains updated figures on the number of sites with hazardous materials in Berkeley.

### **Infectious Disease (Section B.13)**

- Infectious disease is a newly introduced hazard of concern for the 2024 LHMP.
- This section describes infectious diseases, recent occurrences of outbreaks like the COVID-19 pandemic, and the potential impacts on people, daily life, and healthcare infrastructure.

## Element C: Mitigation Strategy

Through many years of diligent effort by City government and the community, Berkeley has developed many innovative initiatives to increase our disaster resilience. The authorities, policies, programs and resources that Berkeley will use to support execution of the 2024 LHMP Mitigation strategy include:

- The City has strengthened its ability to serve the community during and after disasters by seismically upgrading or replacing buildings that house critical City functions. In 2022, work was completed on the North Berkeley Senior Center. In 2021, work was completed on the Live Oak Community Center.
- The City has worked diligently to enhance public safety and reduce physical threats from earthquakes by requiring owners of soft story and unreinforced masonry buildings to retrofit their structures.
  - Berkeley was the first city in the nation to inventory the community’s soft-story buildings. As of July 2023, 277 buildings have completed their retrofit, 26 still need to be retrofitted, and 61 buildings were removed from the list.
- The City offers a comprehensive suite of programs to encourage the community to strengthen buildings to be more hazard-resistant.
  - In early 2017, the Building and Safety Division developed a new Retrofit Grants program with funding from a Hazard Mitigation Grant from the Federal Emergency Management Agency (FEMA) and the California Governor’s Office of Emergency Services (Cal OES). As of August 2023, 63 design grants and 75 construction grants have been disbursed.
  - Since July 2002, the City has distributed over \$12 million to homeowners through the Transfer Tax Rebate Program, which reduces the real estate transfer tax to building owners who perform seismic safety work.
  - The City participates in the Earthquake Brace + Bolt (EBB) program, a grant program administered by the California Earthquake Authority, providing grants of up to \$3,000 for seismic retrofits of owner-occupied residential buildings with 1-4 dwelling units.
- The City, working together with key partners, is using a comprehensive strategy to aggressively mitigate Berkeley’s wildland-urban interface (WUI) fire hazard. These approaches include:
  - Prevention through development regulations with strict building and fire code provisions, as well as more restrictive local amendments for new and renovated construction;
  - Enforcement programs including annual inspections with support from the YouthWorks internship program;
  - Providing home hardening and defensible space materials and instructions to low income residents in targeted high risk areas;
  - Natural resource protection through vegetation management programs;
  - Improvement of access and egress routes;
  - Coordinating regional wildfire mitigation strategies with key partners and stakeholders;

- Infrastructure maintenance and improvements to support first responders' efforts to reduce facilitate emergency evacuation and fire spread.
- The City is embarking on an update to the General Plan, including a new Environmental Justice and Safety Element. These processes and documents will build off the 2024 LHMP and Planning Process.
- The City's Office of Emergency Services encourages community readiness and participation in hazard mitigation strategies. Through the 2024 LHMP Planning Process, the City created new videos, guides, and outreach materials intended to support community members in understanding their risks and what actions they can take to reduce risks.

These programs, and many others, place Berkeley as a leader in disaster management. Long-term maintenance and improvements to these programs will support execution of the 2024 LHMP Mitigation strategy, and will help to protect the Berkeley community in our next disaster.

***Disaster Mitigation Goals***

Berkeley will focus on five goals to reduce and avoid long-term vulnerabilities to the hazards identified in *Element B: Risk Assessment*:

- A. Reduce the potential for loss of life, injury, and economic damage to Berkeley residents and businesses from earthquakes, wildfires, landslides, floods, tsunamis, climate change, extreme heat, poor air quality, infectious disease, sea level rise, wind, utility disruption and their secondary impacts.
- B. Increase City government's ability to serve the community during and after hazardous events by mitigating risk to key City functions.
- C. Protect and enhance quality of life in Berkeley.
- D. Connect with residents, community-based organizations, institutions, businesses, and essential lifeline systems in order to increase mitigation actions and disaster resilience in the community.
- E. Co-create mitigation plans, policies, and programs with Berkeley's underserved communities, elevating the voices of these community members and prioritizing their needs to prepare for and adapt to climate change and natural hazards.

***Overview of Actions***

This plan identifies and analyzes 33 mitigation actions to reduce the impacts from hazards described in *Element B: Risk Assessment*. This suite of actions addresses every natural hazard posing a threat to Berkeley, with an emphasis on new and existing buildings and infrastructure.

Tables 2, 3, and 4 below summarize all of the actions. The tables group actions by their priority level (see *Element C.5* for details on prioritization of actions), and identify the hazard(s) and each action addresses.

**Table 2. High-Priority Actions in mitigation strategy**

<b>Action</b>	<b>Hazards</b>
Continue appropriate seismic and fire safety analysis based on current and future use for all City-owned facilities and structures.	Multi-hazard
Strengthen or replace City buildings in the identified prioritized order as funding is available.	Multi-hazard
Reduce hazard vulnerabilities for non-City-owned buildings throughout Berkeley.	Multi-hazard
Implementation of the Retrofit Grants Program which helps Berkeley building owners increase safety and mitigate the risk of damage caused by earthquakes	Earthquake
Continued Implementation of the Soft Story Retrofit Program, which mandates seismic retrofit of soft story buildings with 5+ residential units.	Earthquake
Complete the ongoing program to retrofit all remaining non-complying Unreinforced Masonry (URM) buildings.	Earthquake
Monitor passage and implementation of mandatory seismic retrofit ordinances for concrete buildings in other jurisdictions to assess best practices.	Earthquake
Reduce fire risk in existing development through fire code updates and enforcement.	Wildland-Urban Interface Fire
Reduce fire risk in existing development through vegetation management.	Wildland-Urban Interface Fire
Manage and promote pedestrian evacuation routes in Fire Zones 2 and 3.	Earthquake Wildland-Urban Interface Fire
Improve responder access and community evacuation in Fire Zones 2 and 3 through roadway maintenance and appropriate parking restrictions.	Earthquake Wildland-Urban Interface Fire
Research, identify, and implement infrastructure improvements to facilitate emergency evacuation.	Wildland-Urban Interface Fire Tsunami
Reduce fire risk through utility undergrounding.	Earthquake Wildland-Urban Interface Fire High Winds

<b>Action</b>	<b>Hazards</b>
Work with EBMUD to ensure an adequate water supply during emergencies and disaster recovery.	Earthquake Wildland-Urban Interface Fire
Reduce Berkeley’s vulnerability to extreme heat events and associated hazards.	Extreme Heat Poor Air Quality
Mitigate hazards associated with natural gas usage, including disaster damage and energy service disruption, by minimizing need for energy use and moving toward use of electricity in lieu of natural gas.	Multi-hazard
Mitigate hazardous materials release in Berkeley through inspection and enforcement programs.	Multi-hazard
Maintain City participation in the National Flood Insurance Program.	Floods
Maintain City programs and projects to mitigate the impacts of infectious diseases in Berkeley.	Infectious Disease
Collect, analyze and share information with the Berkeley community about Berkeley hazards and associated risk reduction techniques.	Multi-hazard
Coordinate with and encourage mitigation actions of key City partners.	Multi-hazard
Coordinate regional wildfire mitigation strategies with key partners and stakeholders	Wildland-Urban Interface Fire
Advance equitable community resilience, with a focus on disadvantaged communities.	Multi-hazard

**Table 3. Medium-Priority Actions in mitigation strategy**

<b>Action</b>	<b>Hazards</b>
Mitigate wildfire risk to Berkeley’s overnight camps.	Wildland-Urban Interface Fire
Reduce Berkeley’s vulnerability to severe storms and associated hazards through proactive research and planning, zoning regulations, and improvements to stormwater drainage facilities.	Landslide Floods
Reduce Berkeley’s vulnerability to extreme heat events and associated hazards.	Extreme Heat Poor Air Quality
Implement energy assurance strategies at critical City facilities.	Multi-hazard
Implement existing City programs, plans, and projects designed to reduce emissions that contribute to poor air quality.	Poor Air Quality Extreme Heat
Mitigate the impacts of sea level rise in Berkeley.	Sea Level Rise Flood

**Table 4. Low-Priority Actions in mitigation strategy**

<b>Action</b>	<b>Hazards</b>
Mitigate climate change impacts by integrating climate change research and adaptation planning into City operations and services.	Multi-hazard
Collaborate with partners to increase the security of Berkeley’s water supply from climate change impacts.	Multi-hazard
Mitigate Berkeley’s tsunami hazard.	Tsunami
Give priority to project applications that would rebuild to current standards following disasters.	Multi-hazard

- 
- 1 Detweiler, Shane and Wein, A., 2018, The HayWired Earthquake Scenario – Earthquake Hazards: U.S. Geological Survey Scientific Investigations Report 2017-5013-A-H, p.4
  - 2 Maranghides, A., et al. (2022) WUI Structure/Parcel/Community Fire Hazard Mitigation Methodology. NIST Technical Note 2205. National Institute of Standards and Technology. Gaithersburg, MD. <https://doi.org/10.6028/NIST.TN.2205>
  - 3 <https://cal-adapt.org/about/>
  - 4 California Adaptation Planning Guide, July 2012.
  - 5 Seo, H. (2022, August 19). How heat waves take a toll on Mental Health. The New York Times. <https://www.nytimes.com/2022/08/19/well/mind/heat-mental-health.html>
  - 6 Southerland, et al., 2021. “Assessing the Distribution of Air Pollution Risks within Cities: A Neighborhood-Scale Analysis Leveraging High-Resolution Data Sets in the Bay Area, California.” Environmental Health Perspectives, Volume 129, Issue 3. doi: 10.1289/EHP7679
  - 7 May, C. L.; Mohan, A.; Plane, E.; Ramirez-Lopez, D.; Mak, M.; Luchinsky, L.; Hale, T.; Hill, K. 2022. Shallow Groundwater Response to Sea-Level Rise: Alameda, Marin, San Francisco, and San Mateo Counties. Pathways Climate Institute and San Francisco Estuary Institute. <https://www.sfei.org/documents/shallow-groundwater-response-sea-level-rise-alameda-marin-san-francisco-and-san-mateo>