

# DISASTER AND FIRE SAFETY COMMISSION

## REGULAR MEETING

February 28, 2024

7:00 PM

Fire Department Division of Training Classroom – 997 Cedar Street

Mayor's Appointee- Andy Katz

District 1 – Michael Wilson  
District 2 – Weldon Bradstreet  
District 3 – Todd Darling  
District 4 – Robert Kinosian

District 5 – Shirley Dean  
District 6 – Greg Murphy  
District 7 – Harrison Raine  
District 8 – Theo Gordon

### AGENDA

#### Preliminary Matters

Call to Order

Approval of the Agenda

Public Comment on Non-Agenda Matters

1. Chairperson's Report
2. Fire Department Staff Report\*

**REGULAR AGENDA MATTERS** *All Regular agenda Matters are for discussion and possible action.*

3. **Action:** Minutes of January 24, 2024  
**Recommendation:** Approve the draft minutes of the January 24, 2024 regular meeting.  
**Written Material:** Draft Minutes

4. **Action:** Chair & Vice-chair Elections (Staff)  
**Recommendation:**  
**Written Material:**  
**Presentation:**
5. **Discussion:** FY24/25 Budget Proposal (Staff)  
**Recommendation:** Solicit Input from The Commission  
**Written Material:** Budget Proposal  
**Presentation:** Chief Sprague
6. **Discussion:** Street Trauma Prevention  
Implementing Vision Zero (Wilson)  
**Recommendation:** Recommendation to Form a Working Group to Explore a Recommendation for Council to Implement a Street Trauma Prevention Program  
**Written Material:** Street Trauma Prevention PDF, Slides
7. **Discussion:** Berkeley Traffic Planning (Darling)  
**Recommendation:**  
**Written Material:**  
**Presentation:**

**THESE ITEMS SHOULD APPEAR AS THE LAST TWO AGENDA ITEMS - Weldon**

8. **Work Group Reports**

Receive reporting on recent activities by the following work groups:

- Plan & Budget Oversight
- Home Hardening
- Wildland Urban Interface
- Safe Passages
- Community Outreach

**Written Materials:**  
**Presentation:**

9. Future Agenda Items and Next Steps

- 

**Adjournment**

*This meeting will be conducted in accordance with the Brown Act, Government Code Section 54953. Any member of the public may attend this meeting. Questions regarding this matter may be addressed to Keith May, [kmay@berkeleyca.gov](mailto:kmay@berkeleyca.gov) 510-981-5508.*

*Communications to Berkeley boards, commissions or committees are public record 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 secretary of the relevant board, commission, or committee. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the secretary to the relevant board, commission, or committee for further information.*

*Any writings or documents provided to a majority of the commission regarding any item on this agenda will be made available for public inspection at Berkeley Fire Department located at 2100 Martin Luther King Jr. Way Berkeley, CA.*

**COMMUNICATION ACCESS INFORMATION:**

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~~~~~  
 I hereby certify that the agenda for this regular/special meeting of the Berkeley City's Disaster and Fire Safety Commission was posted at the front of the Division of Training, 997 Cedar Street, as well as on the City's website, three days prior to the scheduled Commission meeting.

SECRETARY SIGNATURE



## DFSC Staff Report

February 28, 2024

### 1. Measure FF Monthly Report

a. Budget Overview –

b. Quarter 1 (July, August, September) report due in November

Quarter 2 (October, November, December) report due in February

Quarter 3 (January, February, March) report due in May

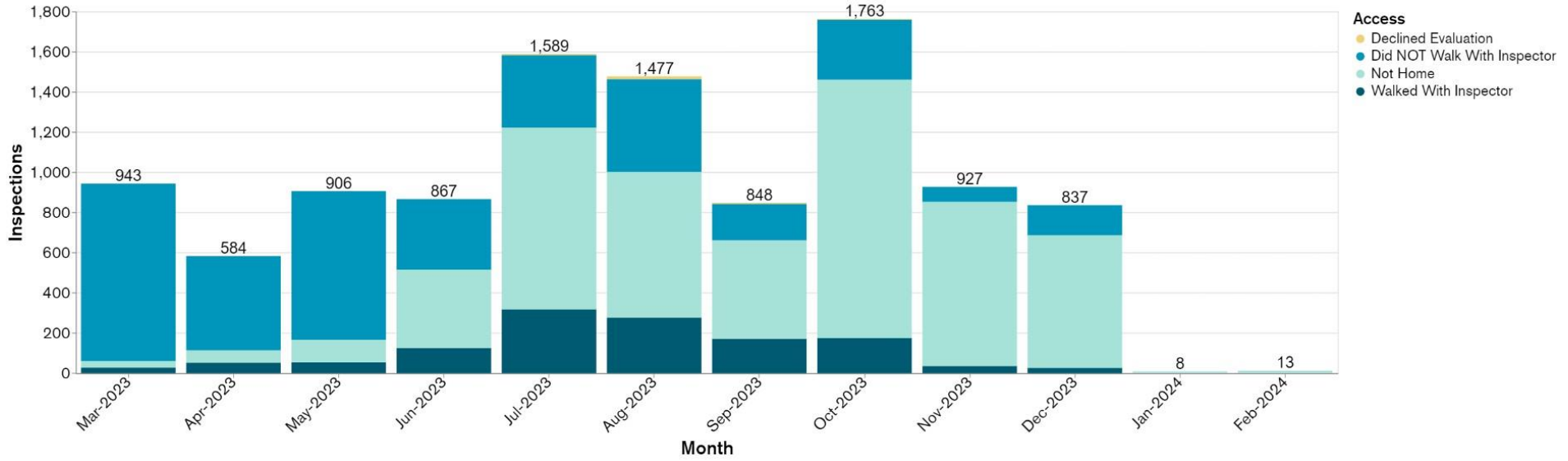
Quarter 4 (April, May, June) End of Year Report due in October

i. Program Review

- **WUI Interns** – The Interns provide Berkeley Fire Department with a trained, mobile and mission-specific workforce that is principally assigned to monitor vegetative hazardous fuel on or near structures, collect data, and identify reduction activities
  - **Updates:** During the off (inspection) season the interns are engaged in a variety of work coordinated by Inspector Allard. On January 16<sup>th</sup> they performed a big vegetation cleanup for a 92 year-old resident.
- **Wildfire Prevention / Mitigation – Vegetation Management Inspections –**
  - Updates:** Defensible Space Inspections
- **DSI Reports**

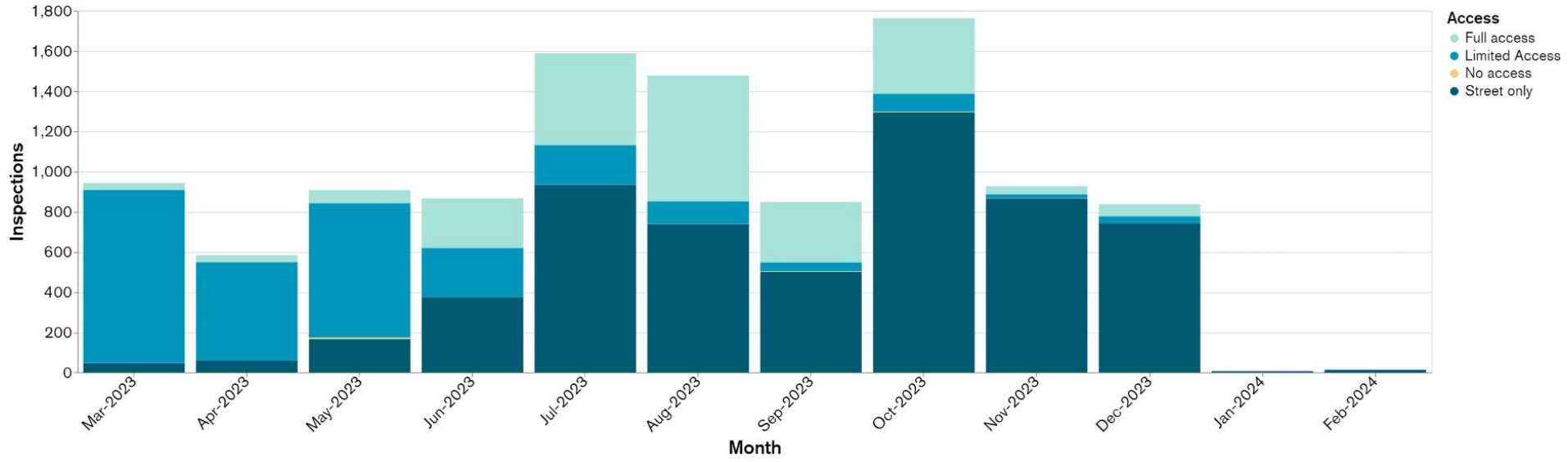
Public

Resident Engagement Over Time



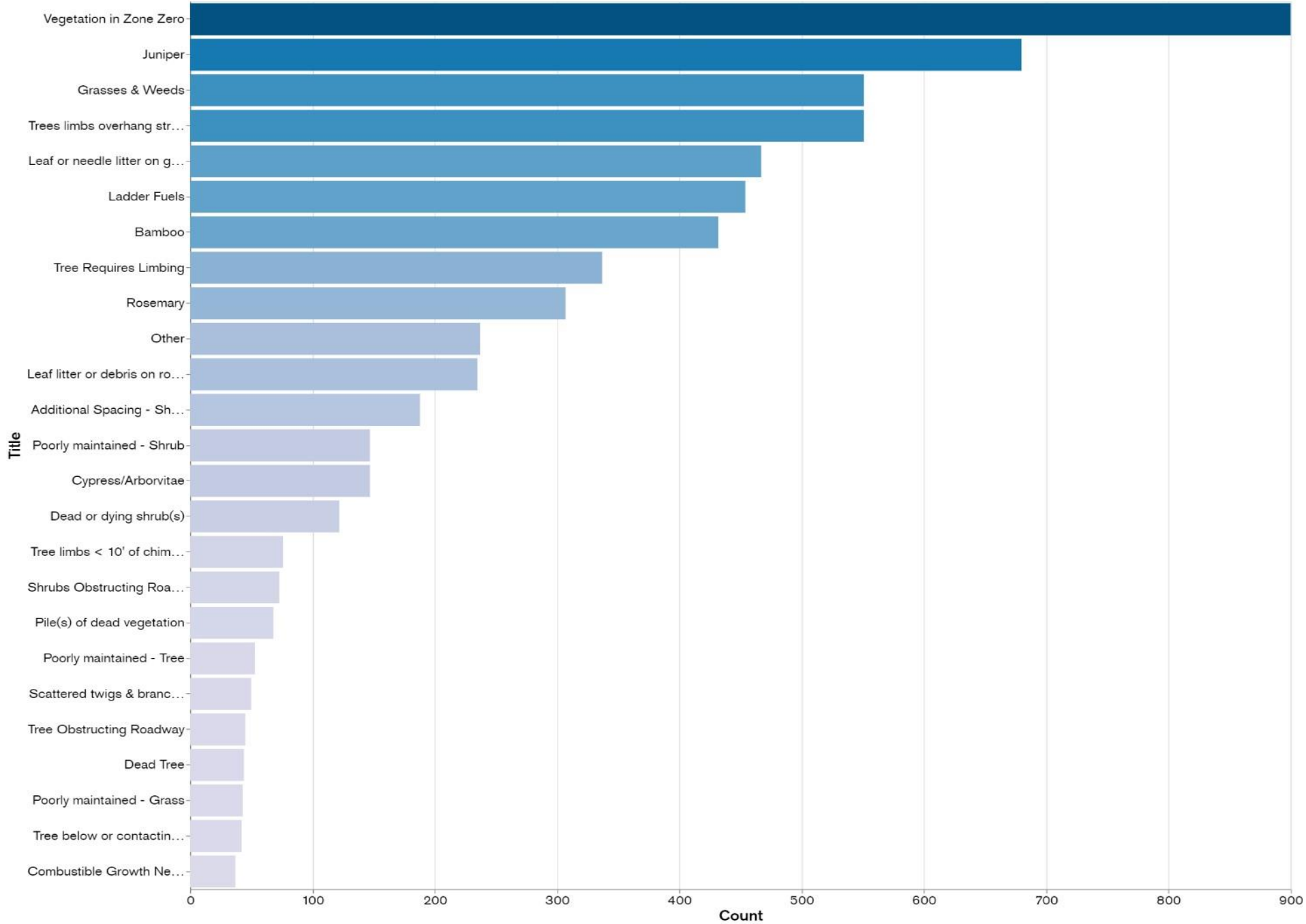
Public

Inspection Access Over Time



Public

### Top 25 Unresolved DS Items



| • Defensible Space Inspections                                                         |                   |          |
|----------------------------------------------------------------------------------------|-------------------|----------|
|                                                                                        | January 1-31 2024 | 2024 YTD |
| <b>Defensible space inspections<br/>(Properties inspected 1<sup>st</sup><br/>time)</b> | 8                 | 8        |
| <b>Properties Re-Inspected (1<sup>st</sup><br/>time)</b>                               | 0                 | 0        |
| <b>Total Inspections</b>                                                               | 8                 | 8        |
| <b>Violations Identified</b>                                                           | 0                 | 0        |
| <b>Violations Corrected</b>                                                            | 40                | 40       |

- **Safe Passage** - The Fire Department has contracted with a vendor to help the City of Berkeley meet requirements outlined in SB 99, AB 747, and AB 1409, provide City with professional services in the areas of traffic and evacuation modeling and planning, given various evacuation and/or emergency response scenarios as determined by the City.
  - **Update:** Staff is also working closely with KLD, who is the contracted for the Evacuation Time Study to help with the new State evacuation planning requirements for SB99, AB747, and AB1409.



- ii. Implementation & Metrics
    - **Outdoor Warning System** – Working through the last permit on City owned property. Live Oak is slated to be installed in late March/early April. The vendor is still working with UC Berkeley on the system for Strawberry Canyon.
2. Measure GG Monthly Report
  - a. Budget Overview – No new update
  - b. Quarter 1 (July, August, September) report due in November  
Quarter 2 (October, November, December) **report due in February**  
Quarter 3 (January, February, March) report due in May  
Quarter 4 (April, May, June) End of Year Report due in October
3. Fire Facilities Master Plan (FMP): Berkeley Fire Department stations are undersized, in poor condition and in need of remodels or replacement. The Department initiated a long-term replacement planning process to better understand infrastructure needs. This process will provide the City leaders of today and tomorrow with actionable information ahead of future infrastructure bond measures. *(Measure FF has funded the study only)*
  - a. Update: **No new update**
4. Department Activities
  - a. **Safe Surrender** – The Safe Surrender Baby Law was created in January 2001 and signed into law in 2006. The law was aimed at decreasing the number of newborn infants that were abandoned. On January 26<sup>th</sup>, Fire Station #5 received a direct phone call from a resident who wanted to safe surrender her six-week-old infant. The baby was healthy and was transported to Children’s Hospital per protocol.
  - b. **Local Hazard Mitigation Plan:** Staff is continuing to develop the 2024 plan and the team is finalizing the hazard analysis and actions for the mitigation strategy. The team is also developing associated community outreach videos and tools. The original timeline built in an extra time cushion for the State and Federal review processes. Our local review processes (with the community, DFSC, the Planning Commission, and the City Council) remain the same and will start at a later date than first anticipated.

5. Grants

- a. **SAFER Grant Planning:** We were not successful in this grant cycle but have retained the services of a grant writer and will be resubmitting in the next cycle.
  - i. No new updates.
  
- b. **CalFIRE Risk Reduction Grant:** has prepared submitted a 1 million dollar grant request to CalFIRE that would fund an expansion of the pilot Resident Assistance Program (RAP). This program will help low income or otherwise disadvantaged residents create defensible space. This is our second year applying.

6. Call Volume Report

| <b>Fire Department Report by California Incident Type</b>                                                                   |     |  |
|-----------------------------------------------------------------------------------------------------------------------------|-----|--|
| <b>January 2024</b>                                                                                                         |     |  |
| <b>Fires – including Encampment Fires</b> (structures, mobile properties, vegetation, rubbish, equipment, cooking, chimney, | 44  |  |
| <b>Encampment Fires</b> (structures, warming/cooking, debris)                                                               | 42  |  |
| <b>Explosion</b> - no fire (overpressure ruptures, explosions)                                                              | 0   |  |
| <b>Rescue &amp; EMS</b> (medical assist, vehicle accident                                                                   | 881 |  |
| <b>Hazardous Condition</b> - no fire (combustible spills/leaks, chemical release, radioactive                               | 53  |  |

|                                                                                                                                   |              |  |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------|--|
| condition, electrical wiring problem, biological hazard, potential accident w/ building/aircraft/vehicles)                        |              |  |
| <b>Service Calls</b> (person in distress, water issue, smoke/odor problem, animal issue, public assist, cover assignment/standby) | 113          |  |
| <b>Good Intent</b> (canceled en-route, wrong location, nothing found, steam mistaken for smoke)                                   | 142          |  |
| <b>False Alarm Calls</b> (malicious, malfunction, unintentional, biohazard scare)                                                 | 201          |  |
| <b>Severe WX</b> (lightening, wind storms)                                                                                        | 0            |  |
| <b>Special Incidents</b> (citizen complaints)                                                                                     | 9            |  |
| <b>TOTAL</b>                                                                                                                      | <b>1,439</b> |  |
| <b>Apparatus Count</b>                                                                                                            |              |  |
|                                                                                                                                   | <b>3,306</b> |  |

**DFSC Action Tracker**

| Date of DFSC Action | Description                                                                                                                                                                                                               | Status                                                                                                                                                                              |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12/6/2023           | That the Berkeley City Council pass a resolution to support the Fire Department in using Measure FF funds to conduct one-time eucalyptus understory clean-ups on select, participating private properties within the City | Entered into the Agenda program. Projected 2/27/24 Council Agenda                                                                                                                   |
| 10/25/2023          | Provide a recommendation to City Council on the development of a plan that includes a feasibility study and identification of funding sources for constructing an emergency secondary access road on Panoramic Hill       | The Fire Department and Public Works Department is collaborating on a Companion Report to submit to Council on moving forward with a feasibility study for the Panoramic Hill area. |

# DISASTER AND FIRE SAFETY COMMISSION

## REGULAR MEETING

January 24, 2024

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Mayor's Appointee- Andy Katz

District 1 – Michael Wilson  
District 2 – Weldon Bradstreet  
District 3 – Vacant  
District 4 – Robert Kinosian

District 5 – Shirley Dean  
District 6 – Greg Murphy  
District 7 – Harrison Raine  
District 8 – Theo Gordon

### AGENDA

#### Preliminary Matters

##### Call to Order

*Meeting called to order at 7:00pm  
Present: Murphy, Kinosian, Wilson, Raine, Gordon  
Katz arrived 7:13pm  
Dean LOA,  
Weldon Absent*

##### Approval of the Agenda

*Discussion – Katz pointed out that he had a LOA for last month's meeting and was hoping that a mechanism was in place to capture that info.*

*Agenda approved as amended by Acclamation*

##### Public Comment on Non-Agenda Matters

*1 public speakers.*

1. Chairperson's Report – No Chair Report
2. Fire Department Staff Report\*

**REGULAR AGENDA MATTERS** *All Regular agenda Matters are for discussion and possible action.*

- 3. Action:** Minutes of December 6, 2023

**Recommendation:** Approve the draft minutes of the December 6, 2023 regular meeting.

**Written Material:** December 6, 2023 Draft Minutes

**Presentation:**

*Motion to approve: Gordon*  
*Second: Katz*  
*Approved by acclamation*
- 4. Discussion:** **New Commissioner Work Plan**

**Recommendation:** Invite new Commissioners to volunteer for Work Groups

**Written Material:** Copy of Current Work Plan

**Presentation:** New Commissioners volunteered for various work groups. Katz added to Wildland-urban Interface; Wilson added to Safe Passages; Raine added to Community Outreach as lead.

**THESE ITEMS SHOULD APPEAR AS THE LAST TWO AGENDA ITEMS - Weldon**

**5. Work Group Reports**

Receive reporting on recent activities by the following work groups:

- Plan & Budget Oversight
- Home Hardening – Murphy = plan is to ask staff what help can the DFSC assist.
- Wildland Urban Interface – Raine = met with BFD discuss violations. What improvements can be made with re-inspections. Berkeley Fire Safe Council start earlier in the year if possible. Focus on the high risk areas. Lots of privacy issues with inspections. Look at building carrots in home

inspections to get the work done by incentives. Looked at the Marin model.

- Safe Passages – Murphy = Waiting for KLD analysis to be completed. No end date as of yet.
- Community Outreach

6. Future Agenda Items and Next Steps

- Work Group on Wilson item

**Adjournment**

*Motion to Adjourn: Gordon*

*Second: Wilson*

*By acclamation at 7:57pm:*

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SECRETARY SIGNATURE

FY25 Salary & Benefits		
Row Labels	Sum of # Positions	Total
<b>Admin</b>	<b>5</b>	<b>\$1,062,205</b>
Administrative Assistant	2	\$318,498
AMA	1	\$207,354
Comms Specialist/PIO	1	\$208,581
Principal Prg Mgr	1	\$327,773
<b>Dispatch</b>	<b>1</b>	<b>\$291,330</b>
CQI Nurse	1	\$291,330
<b>EMS</b>	<b>16</b>	<b>\$3,128,476</b>
EMT	10	\$1,282,494
Firefighter	4	\$1,069,757
Captain	1	\$336,387
Assisatnt Fire Chief	1	\$439,838
<b>WUI</b>	<b>5</b>	<b>\$1,465,794</b>
OSIII	1	\$146,874
Sworn Fire Inspector	3	\$879,676
Assisatnt Fire Chief	1	\$439,244
<b>Grand Total</b>	<b>27</b>	<b>\$5,947,805</b>

FY25 Overtime	
Division & Job Classification	Total
<b>Dispatch</b>	<b>50,317</b>
Dispatcher Training	50,317
<b>Operations</b>	<b>186,260</b>
HazMat Training	124,173
Technical Rescue Training	62,087
<b>Grand Total</b>	<b>236,577</b>

<b>Total Projected Revenue</b>	<b>\$9,900,000</b>
<b>Total Projected Expenditure</b>	<b>\$9,901,507</b>
<b>Delta</b>	<b>-\$1,507</b>

FY25 Non-Personnel	
Division & Project	Total
<b>Administration</b>	<b>\$60,340</b>
Real Estate	\$50,000
Coverage & Deployment Analysis/Reporting	\$10,340
<b>EMS</b>	<b>\$277,036</b>
BLS Ambulances	\$128,160
Medical Specialist Team (MST)	\$32,075
Contracts, Consumables, Props	\$100,000
Vehicle Maintenance/Replacement (AC - EMS)	\$16,801
<b>Operations</b>	<b>\$33,602</b>
Vehicle Maintenance/Replacement (BCs)	\$33,602
<b>Paramedic Tax</b>	<b>\$737,718</b>
Cover Paramedic Tax Budget Defecit	\$737,718
<b>WUI</b>	<b>\$1,861,520</b>
Outdoor Alerting System	\$45,703
Safe Passages Program	\$300,000
Tablet Command	\$35,100
Vegetation Management Program	\$1,100,000
Public Education/Marketing	\$103,400
Vehicle Purch & Maintenance (Insp)	\$15,516
Vehicle Maintenance/Replacement (AC - WUI)	\$16,801
CWPP On-Going Consulting	\$20,000
Fire Modeling, Specialist Services	\$225,000
<b>All Divisions</b>	<b>\$1,025,000</b>
Design/Build HQ & Deployment	\$125,000
HQ/Deployment Lease/Operations	\$900,000
<b>Training &amp; Recruitment</b>	<b>\$100,000</b>
Contracts, Consumables, Props	\$100,000
<b>Grand Total</b>	<b>\$4,095,215</b>



## FY2024 Measure GG

### Mid-Year Report

Program	Original Budget	Actuals		Mid-Year Total	% Budget Available	Available Budget
		Q1 July-Sept. 2023	Q2 Oct.-Dec. 2023			
Disaster Prep	\$ 1,131,367	\$ 136,847	\$ 143,756	\$ 280,603	75%	\$ 850,764
FRALS	\$ 407,159	\$ 14,246	\$ 53,776	\$ 68,022	83%	\$ 339,137
Minimum Staffing	\$ 2,947,346	\$ -	\$ 371,735	\$ 371,735	87%	\$ 2,575,611
Radio Interoperability	\$ 822,945	\$ 258,300	\$ 241,208	\$ 499,508	39%	\$ 323,437
Training	\$ 299,818	\$ 66,761	\$ 95,662	\$ 162,423	46%	\$ 137,395
Community Outreach - HHCS	\$ 289,672	\$ 53,867	\$ 64,762	\$ 118,629	59%	\$ 171,043
<b>Totals</b>	<b>\$ 5,898,307</b>	<b>\$ 530,021</b>	<b>\$ 970,899</b>	<b>\$ 1,500,920</b>	<b>75%</b>	<b>\$ 4,397,387</b>

**FY24 Year-To-Date Quarter Measure FF**  
July to December 2023

PROGRAM/VENDOR	AMOUNT	FY24 BUDGET	% USED	NOTES
<b>Administration</b>	<b>249,163</b>	<b>644,235</b>	<b>38.68%</b>	
SALARIES & BENEFITS	226,539			Salary & Benefits
CONFERENCE EXPENSES	-			Conference expenses
INTERIOR MOTIONS	1,939			Name Plates
SMARTSHEETS	3,990			Software
STATION AUTOMATION	16,695			Software
<b>Dispatch</b>	<b>117,458</b>	<b>304,172</b>	<b>38.62%</b>	
SALARIES & BENEFITS	117,458			Salary & Benefits
<b>EMS</b>	<b>1,545,697</b>	<b>2,169,583</b>	<b>71.24%</b>	
ALLSTAR FIRE EQUIPMENT	2,254			Equipment
BETTER SOURCE INC	3,051			Task Chairs
CONFERENCE EXPENSES	1,711			Conference expenses
INT SVC - VEHICLE REPLACEMENTS	54,720			Vehicle Replacement Fund
INT SVC - VEHICLE FUEL/MAINT	2,770			Vehicle Fuel and Maintenance
PYRAMID FILMS CORP	1,081			CPR Cards and Training Courses
SALARIES & BENEFITS	1,434,190			Salary & Benefits
SCHOOL OUTFITTERS	12,156			Equipment
SERFLING, ETHAN	6,019			Station Furniture
TECHNIMOUNT SYSTEMS	1,660			Equipment
WELLS FARGO BANK N.A.	6,757			Equipment
ZOLL MEDICAL CORP HEADQUATER	19,328			Monitors for new ambulances
<b>Operations</b>	<b>336,119</b>	<b>1,910,385</b>	<b>17.59%</b>	
AMS.NET	22,910			Equipment
ATLAS PHONES	509			Equipment
B&H PHOTO	62			Misc. Office Supplies
CENTRAL VALLEY AUTOMOTIVE	40,762			Vehicle
CITYGATE ASSOCIATES, LLC	9,706			Standards of Coverage
CONFERENCE EXPENSES	1,526			Conference expenses
DUTON WOODWORKING / LE SHOPPE	4,859			Station Furniture
COOKE AND ASSOCIATES, INC	27,753			Background Investigations
INTERIOR MOTIONS	158			Name Plates
ELS ARCHITECTURE & URBAN DESIGN	1,625			9th and Gilman property
GANNEY SCIENCE	20,586			Project Management & SME Operations Admin, Dispatch, EMS, WUI
L.N. CURTIS & SONS	404			Tech Rescue Equipment
SALARIES & BENEFITS	57,671			Salaries and Benefits
SIEGEL & STRAIN ARCHITECTS	40,150			Fire Facilities Master Planning Process
SWIFTHAWK CONSULTING	105,746			Project Management
VARI SALES CORPORATION	422			Equipment
WELLS FARGO BANK N.A.	1,270			Equipment
<b>Paramedics Tax</b>		<b>0</b>		
.				No expenses yet
<b>Training</b>	<b>16,029</b>	<b>254,527</b>	<b>6.30%</b>	
MINUTEMAN PRESS	421			Printing
MUNICIPAL EMERGENCY SVCS	5,941			Equipment
UNITED SITE SERVICES	2,661			Training Supplies
WELLS FARGO BANK N.A.	7,006			Equipment
<b>WUI/FP</b>	<b>1,489,983</b>	<b>3,338,002</b>	<b>44.64%</b>	
AMBIANCE CREATIVE	21,550			Event Mgmt 1923 Fire Ready Event
BAY AREA COMMUNICATION ACCESS	909			Interpreting Svcs 1923 Fire Ready Event
BLAISDELL'S BUSINESS PRODUCTS	494			Misc. Office Supplies
DEPT. OF FORESTRY & FIRE PROTECTION	525			Training certificate
EAST BAY BLUE PRINT & SUPPLY	558			Signage 1923 Fire Ready Event
EVENT MAGIC, INC.	3,575			Supplies for 1923 Fire Ready Event
FORSTER & KROEGER LANDSCAPE MAINT.	9,566			Curbside Chipping Svcs
GALPIN MOTORS	50,305			Vehicle
GELFAND, SCOTT	1,000			Fire Ready Fest Coordinator
GENASYS INC	501,352			Outdoor Alerting System
INT SVC - CITY PKG PERMITS	22,000			Parking Permits
KLD ENGINEERING, P.C.	166,237			Wildfire ETE Study
MAILING SYSTEMS, INC	19,729			Mailing for 1923 Fire Ready Event
MINUTEMAN PRESS	691			Materials/Printing
PROTIVITY	323			Temporary Staffing
SALARIES & BENEFITS	611,451			Salary & Benefits
Transfer Station Chipper Day Program	13,068			Chipper Day Program
UAG CLOVIS INC	42,480			Vehicle
VERIZON WIRELESS (AIRTIME)	2,851			Phone Service for Ambulances
WELLS FARGO BANK N.A.	9,575			Equipment
WRA, INC	11,744			Consultant Pilot Prog Veg reduction Activities
<b>Grand Total</b>	<b>3,754,449</b>	<b>8,620,904</b>	<b>43.55%</b>	

# Street Trauma Prevention: Implementing Vision Zero at the Berkeley Fire Department

Prepared by Mike Wilson  
Commissioner  
Disaster and Fire Safety Commission  
February 28, 2024



At Fulton and Bancroft, Berkeley firefighters extricated a critically injured cyclist from under a vehicle, Feb 2, 2016.<sup>1</sup> Photo: David Yee for *Berkeleyside*

## SUMMARY

This paper points to the substantial toll of traffic-related street trauma in the City of Berkeley and recommends that the Berkeley Fire Department (Department) expand its traditional response mission to include a “street trauma prevention” component. This recommendation builds on the successes of the Department’s fire prevention activities in preventing fire-related injuries and deaths and applies it to the problem of street trauma. Applying a prevention approach to the problem of street trauma could substantially reduce its impacts on the public as well as on Department operations and the long-term mental health of firefighters. If adopted, the recommendation would allow the Department to be a more effective partner in reducing injury and death resulting from street trauma.

**The fire service understands prevention: in Berkeley, an average of two persons are injured each year in fires.**

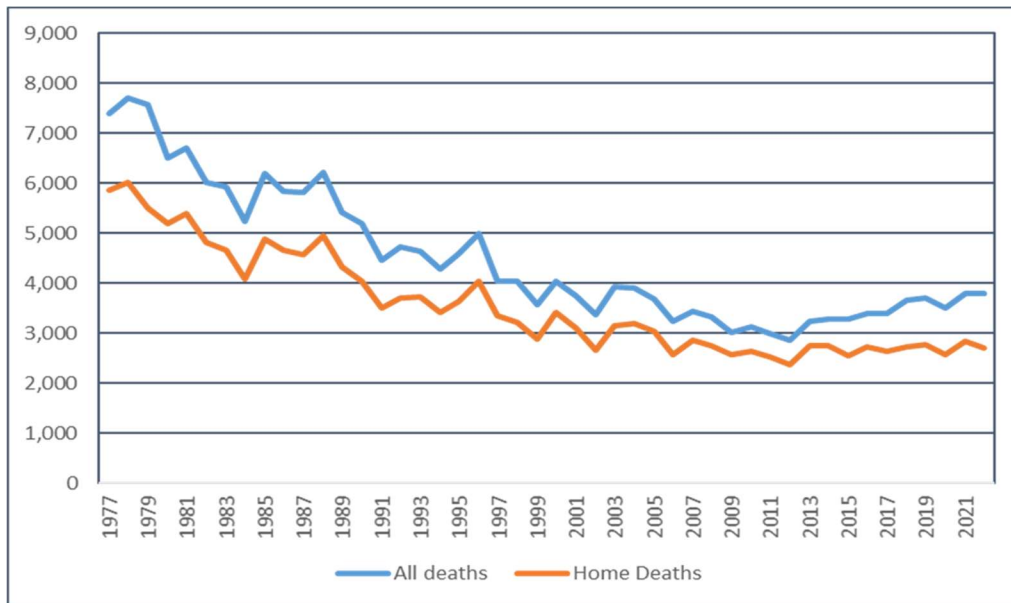
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<sup>1</sup> Emily Raguso (Dec 9, 2016). Unstoppable: Berkeley cyclist’s miraculous recovery after crash that nearly killed her. *Berkeleyside*. (<https://www.berkeleyside.org/2016/12/09/unstoppable-berkeley-cyclists-miraculous-recovery-after-crash-that-nearly-killed-her>). Accessed Jan 17, 2024.

Data since 2010 shows that the Department’s Fire Prevention Bureau has reduced fire-related injuries to an average of two per year.<sup>2</sup> This success has resulted in large part from decades of national advancements in fire prevention, prompted in 1973 by the report of the National Commission on Fire Prevention and Control, which found that “95 cents of every dollar spent on the fire services is used to extinguish fires; only about 5 cents is spent on efforts...to prevent fires from starting,” and concluded that “much more energy and funds need to be devoted to fire prevention, which could yield huge payoffs in lives and property saved.”<sup>3</sup>

The commission’s recommendations spurred a steady stream of advancements in fire protection codes that required the use of passive and active fire protection systems, including design specifications for buildings, fire resistant building materials, exit systems, fire sprinkler and smoke control systems, smoke and heat alarm systems, and fire suppression systems. Altogether, these changes reduced civilian fire deaths by 60% between 1979 and 2012, resulting in 5,000 fewer deaths per year by 2012 (Figure 1).<sup>4</sup>

Figure 1. All U.S. civilian fire deaths and home fire deaths, 1977-2022.



**An average of 694 persons are injured in street trauma each year in Berkeley.**

There is now a need to direct similar prevention efforts toward traffic-related trauma in Berkeley, which during the period 2017 to 2022 resulted in injuries to 490 motorists, 103 cyclists and 101

<sup>2</sup> FireCARES. Berkeley Fire Department (<https://firecares.nfors.org/departments/74866/berkeley-fire-department?page=1>).

<sup>3</sup> National Commission on Fire Prevention and Control (May 4, 1973). America Burning. (<https://www.usfa.fema.gov/blog/america-burning-50th-anniversary/>) p. 7

<sup>4</sup> Hall, S. (November 2023). Fire loss in the United States during 2022. Quincy, MA: National Fire Protection Association. <https://injuryfacts.nsc.org/home-and-community/safety-topics/fire-related-fatalities-and-injuries/>

pedestrians on average each year (Figure 2), including an annual average of five fatalities (Figure 3).<sup>5</sup>

Figure 2. Annual average collisions causing injuries to vehicle occupants, cyclists and pedestrians, 2017—2022, Berkeley, CA.

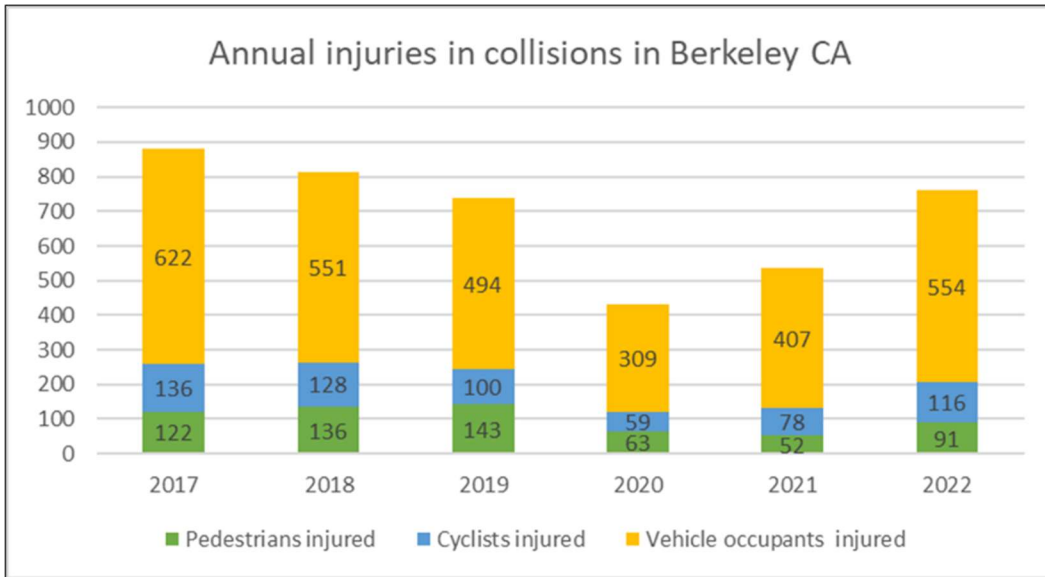
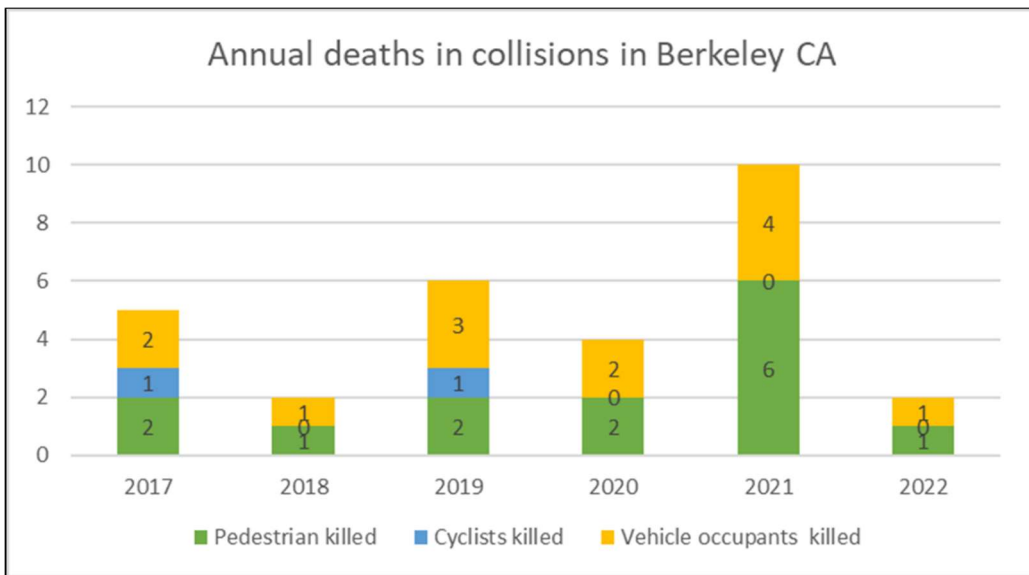


Figure 3. Annual average collisions causing fatal injuries to vehicle occupants, cyclists and pedestrians, 2017—2022, Berkeley, CA.

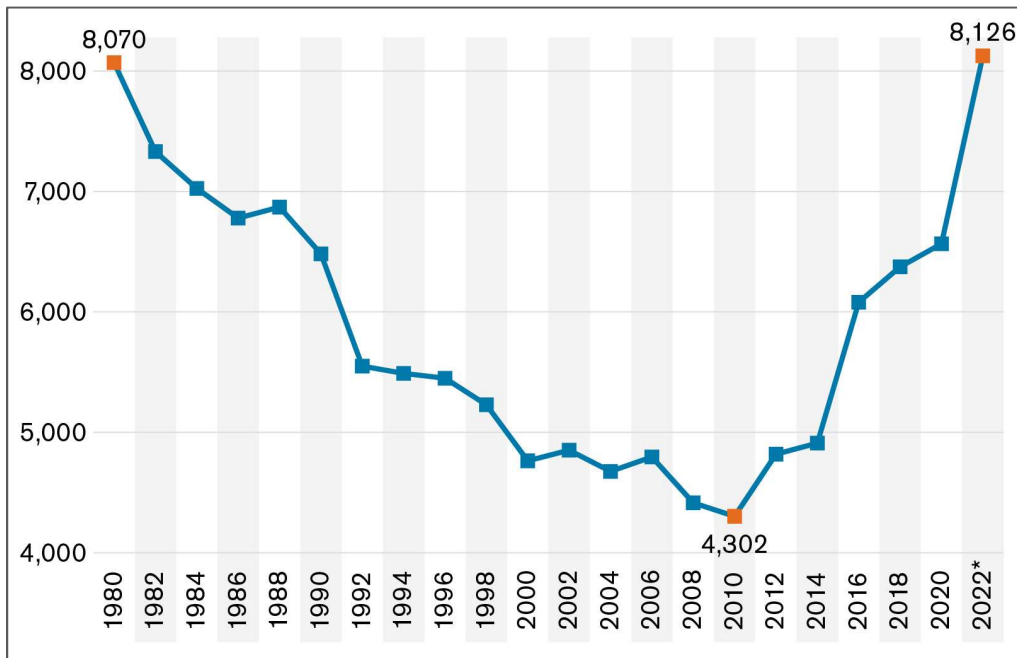


<sup>5</sup> Collision data from the Collisions Stats tab of the Berkeley Police Transparency Portal - Traffic Safety website: (<https://bpd-transparency-initiative-berkeleypd.hub.arcgis.com/pages/traffic-safety>). Death & severe injury collision data from the UC Berkeley SafeTREC Transportation Injury Management System (TIMS) Query & Map (<https://tims.berkeley.edu/tools/query/index.php?clear=true>). All data accessed 5/18/2023 – 5/20/2023 and prepared by Tom Lent.

## **Severe and fatal collisions disproportionately affect pedestrians and cyclists.**

Following a 40% decline over the 21 years between 1988 and 2009, national trends show a 77% increase in pedestrian fatalities from traffic collisions over the 11 year period from 2010 to 2021, with preliminary data showing a spike in 2022 that would bring the total increase during this period to 89% (Figure 4).<sup>6</sup> All other traffic fatalities increased 25% during the period 2010 to 2021.<sup>7</sup> This striking increase in pedestrian deaths is attributed to multiple causes, the most familiar being a U.S. transportation system that is “designed to move cars quickly, not to move people safely.”<sup>8</sup>

Figure 4. U.S. pedestrian fatalities resulting from traffic collision, 1980—2022.



\*Projected based on data for the first six months of 2022.

In Berkeley, residents report that they walk or bike for 40% of trips made in the city, but pedestrians and bicyclists suffer 60% of severe and fatal collisions.<sup>9</sup> Drivers operating at unsafe speeds and failing to yield at crosswalks are the two most common violations contributing to severe and fatal collisions in Berkeley, amounting to 33% of such incidents over the period 2011-

<sup>6</sup> Governor’s Highway Safety Association (June 2023). Pedestrian Traffic Fatalities by State—2022 Preliminary Data, January-December. ([Pedestrian Traffic Fatalities by State: 2022 Preliminary Data | GHSA](https://www.ghsa.org/press-releases/pedestrian-traffic-fatalities-by-state-2022-preliminary-data)). (p. 11).

<sup>7</sup> Governor’s Highway Safety Association (June 2023). *Ibid.* (p. 5).

<sup>8</sup> Emily Badger and Alicia Parlapiano (Nov 27, 2022). The Exceptionally American Problem of Rising Roadway Deaths. The New York Times (<https://www.nytimes.com/2022/11/27/upshot/road-deaths-pedestrians-cyclists.html>). See also: Amanda Holpuch (June 27, 2022). U.S. Pedestrian Deaths Are at Highest Level in 41 Years, Report Says. The New York Times (<https://www.nytimes.com/2023/06/27/us/pedestrian-deaths-2022.html>). Simon Romero (Feb 14, 2022) Pedestrian Deaths Spike in U.S. as Reckless Driving Surges. The New York Times (<https://www.nytimes.com/2022/02/14/us/pedestrian-deaths-pandemic.html?action=click&module=RelatedLinks&pgtype=Article>).

<sup>9</sup> City of Berkeley, Vision Zero Annual Report (June 2022). ([https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report\\_0.pdf](https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report_0.pdf)). (p. 13).

2020.<sup>10</sup> Perhaps not surprisingly, while 71% of Berkeley residents report being interested in relying on bicycles for daily use, most are too concerned about safety to act on this choice.<sup>11</sup>

A subset of injuries that result from street trauma cause immense suffering and financial hardship for those affected, and they require extensive Department and medical resources. On the current trajectory, traffic-related street trauma, and the demand for the Department's EMS services that accompany it, is expected to increase alongside increases in housing density. The Department already reports that the growing number of EMS calls is taxing its resources and personnel.

### **Responding to critically injured persons also takes a toll on emergency responders.**

California Senate Bill 542 (Stern) created a rebuttable presumption that post-traumatic stress injuries among firefighters and peace officers are work-related and thus compensable under workers' compensation. The bill, signed by Governor Newsom in 2019, noted that "trauma-related injuries can become overwhelming and manifest in post-traumatic stress, which may result in substance use disorders and even, tragically, suicide." The bill reports that "the fire service is four times more likely to experience a suicide than a work-related death in the line of duty in any year."<sup>12</sup> Reducing the frequency of exposure to critically injured persons is an effective response to this occupational hazard for responders.

### **The Department has an important role to play in preventing street trauma, while also ensuring an effective response to it.**

Research continues to show that street trauma is largely *preventable* through hardened, engineered traffic controls, which reduce vehicle speeds and separate vehicles from cyclists and pedestrians.<sup>13,14,15</sup> There is concern, however, that such protections could affect Department response times to critical emergency medical incidents, as well as response times and access by fire equipment to structural fires. Travel time from the scene of an emergency to the hospital by the Department's paramedic ambulances could also be affected. These concerns warrant careful evaluation because the survival of a subset of persons who call 911 can hinge on the speed of fire response and subsequent transport to the hospital.

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<sup>10</sup> City of Berkeley, Vision Zero Annual Report (June 2022). *ibid* (p. 14).

<sup>11</sup> Berkeley City Manager Dee Williams-Ridley (June 29, 2022). Consent Calendar on Vision Zero Annual Report, 2021-2022. Environmental Sustainability and Climate Impacts ([https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report\\_0.pdf](https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report_0.pdf)). (p. 3).

<sup>12</sup> Senate Bill No. 542. Chapter 390, Stern. Workers' Compensation. ([https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201920200SB542](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB542)). See subsection (1)(e).

<sup>13</sup> Marshall W, Ferenchak N (2019). Why cities with high bicycling rates are safer for all road users. *J. of Transport and Health* 13:285-301. (<https://www.sciencedirect.com/science/article/abs/pii/S2214140518301488?via%3Dihub>). Accessed January 28, 2024.

<sup>14</sup> Aaron Short (May 29, 2019) Separated bike lanes means safer streets, study says. *Streetsblog*. (<https://usa.streetsblog.org/2019/05/29/protect-yourself-separated-bike-lanes-means-safer-streets-study-says>). Accessed January 28, 2024.

<sup>15</sup> City of Cambridge, MA, Environmental and Transportation Planning Division (October 2023). *Bicycling in Cambridge. Data Report 2023*. ([https://www.cambridgema.gov/-/media/Files/CDD/Transportation/Bike/bikereports/20231023bicyclingincambridgedatareport\\_final.pdf](https://www.cambridgema.gov/-/media/Files/CDD/Transportation/Bike/bikereports/20231023bicyclingincambridgedatareport_final.pdf)). Accessed January 28, 2024.

**Improving the design of streets substantially reduces street trauma.**

In a 2019 study of street trauma in twelve major metropolitan areas between 2000 and 2012, investigators analyzed 17,000 fatalities and 77,000 severe injuries and found that areas with the most extensive networks of separated bike lanes experienced 44% fewer deaths and 50% fewer serious injuries compared to cities where such infrastructure was lacking. The benefits were felt among vehicle occupants as well as cyclists and pedestrians because separated bike lanes also reduced the speed of traffic. Crashes that killed vehicle occupants, cyclists, and pedestrians dropped 61% in Seattle, 49% in San Francisco, 40% in Denver and 38% in Chicago as these cities added more protected and separated bike lanes as part of their Vision Zero plans.<sup>16</sup>

**Implementing a street trauma prevention program will require a mission change within the Department.**

Integrating a street trauma prevention function into the fire department’s mission will require a structural change within the Department. A new Division or sub-division will likely need to be established with sufficient staff and resources allocated to support the Department’s capacity to perform analysis, interdepartmental coordination, program design, and implementation.

The Berkeley Fire Department is a progressive department that is well-positioned to offer the citizens of Berkeley a new vision of the fire service that calls attention to the importance of both rapid response and effective prevention. To be successful, this will require the Berkeley Fire Department to adopt street trauma prevention as a core element of its public safety mission, just as the fire service adopted a prevention function within its fire suppression mission for more than 50 years, with remarkable success.

**The Disaster and Fire Safety Commission can support the Department in building a street trauma prevention program.**

In consultation with a representative of the Transportation and Infrastructure Commission, the Disaster and Fire Safety Commission will:

- (1) Establish a Vision Zero work group that will adopt this brief as an overarching framework; and,
- (2) Draft a recommendation to Council requesting additional resources for the Department to establish a street trauma prevention program. This program would be responsible for coordinating with other City departments and commissions to integrate the Department’s perspectives on both response and prevention into the City’s traffic safety projects related to Vision Zero and other policies.

\* \* \* \* \*

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<sup>16</sup> Marshall W, Ferenchak N (2019), *op cit*. See Table 1, p. 288, and Results section 4.2.2, p. 294.





Photo: David Yee for Berkeleyside, 12/09/2016

## Street Trauma Prevention: Implementing Vision Zero at the Berkeley Fire Department

Prepared by Mike Wilson  
Commissioner  
Disaster and Fire Safety Commission  
February 28, 2024



Megan Schwarzman with Oliver Wilson, age 11 months, January 2016.



Photo: Mike Wilson

Transported to Highland Hospital Level 1 Trauma Center.

- 5 pelvic fractures
- 24 rib fractures
- 1 skull fracture
- 1 clavicle fracture
- R side Pneumothorax
- L side Hemopneumothorax
- Lacerated liver
- Multiple abrasions
- Severe internal bleeding



Photo: Wikipedia



Photo: Mike Wilson

## Highland Hospital ICU after 8 days and multiple surgeries

“After the crash, time was precious. The trauma surgeon later told her, had it taken five minutes more to get to Highland, she wouldn’t have lived.”

Emily Raguso, *Berkeleyside* (Dec 9, 2016) Unstoppable: Berkeley cyclist’s miraculous recovery after crash that nearly killed her.



Fire Station 2, March 22, 2016

Photo: Mike Wilson

Most of Engine 2, Truck 2, Medic 2, Medic 5, Battalion 2

They saved Meg's life on Feb 2, 2016.



Photo: Mike Wilson

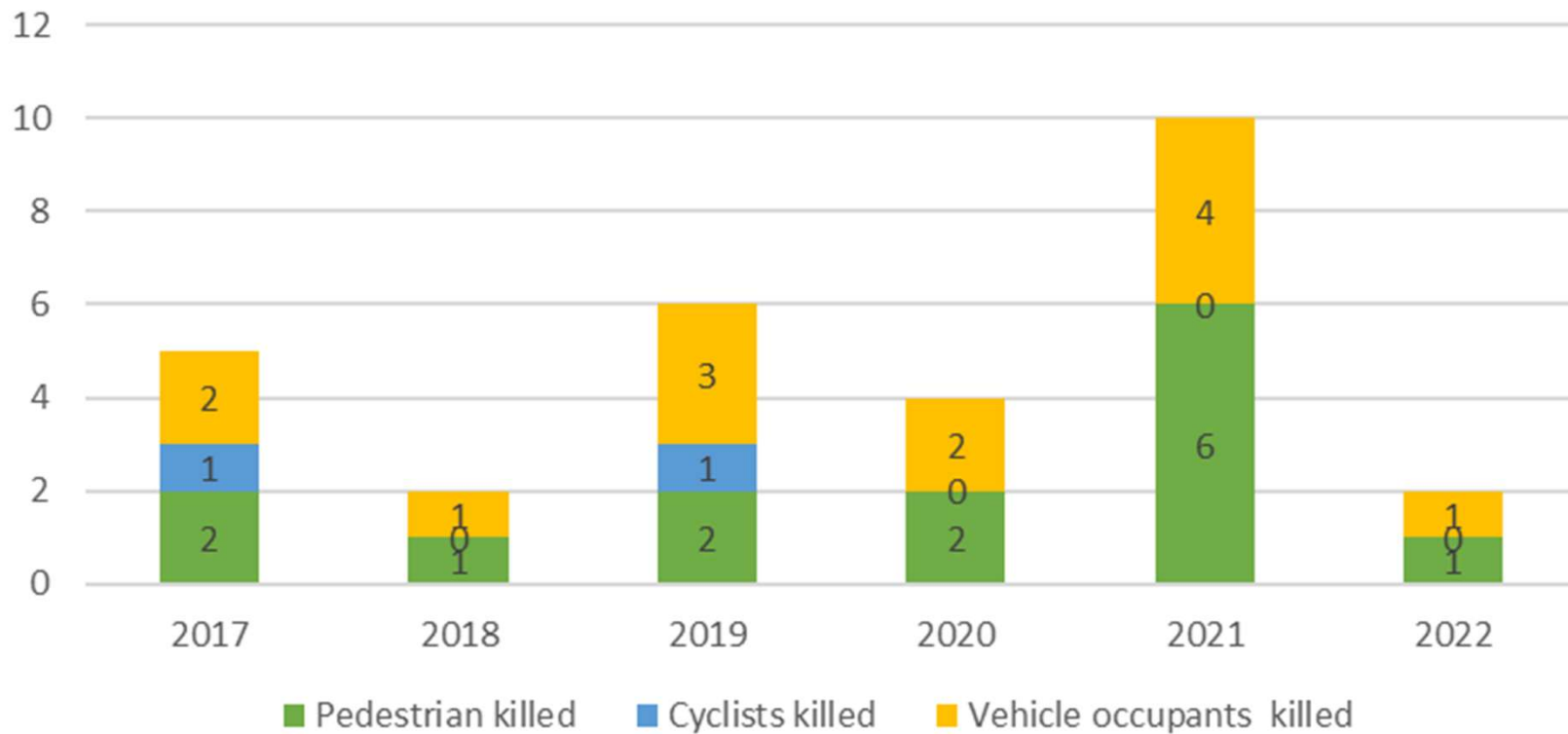
A Celebratory Dinner at Station 2, March 22, 2016



Photos: Mike Wilson

Berkeley Fire Department and Highland Hospital saved this family. Our recovery continues.

## Annual deaths in collisions in Berkeley CA

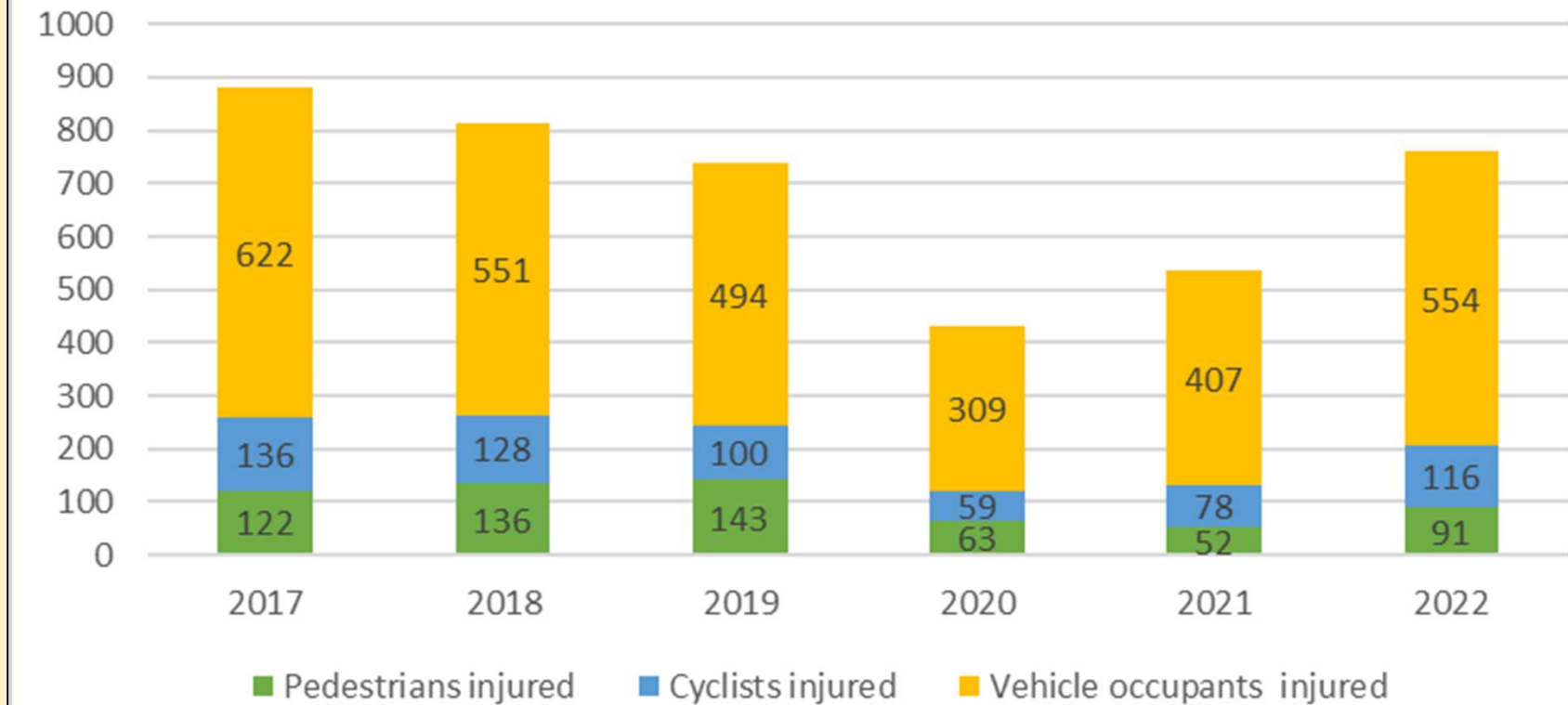


Annual average of 5 collisions causing fatal injuries to vehicle occupants, cyclists and pedestrians, 2017-2022.

Source: UC Berkeley SafeTREC Transportation Injury Management System (TIMS)  
Query & Map <https://tims.berkeley.edu/tools/query/index.php?clear=true>



## Annual injuries in collisions in Berkeley CA



Annual average of 694 collisions involving injuries to vehicle occupants, cyclists and pedestrians, 2017-2022.

Source: Collisions Stats tab of the Berkeley Police Transparency Portal - Traffic Safety website: (<https://bpd-transparency-initiative-berkeleypd.hub.arcgis.com/pages/traffic-safety>).



Photo: Mike Wilson



Photo: Mike Wilson

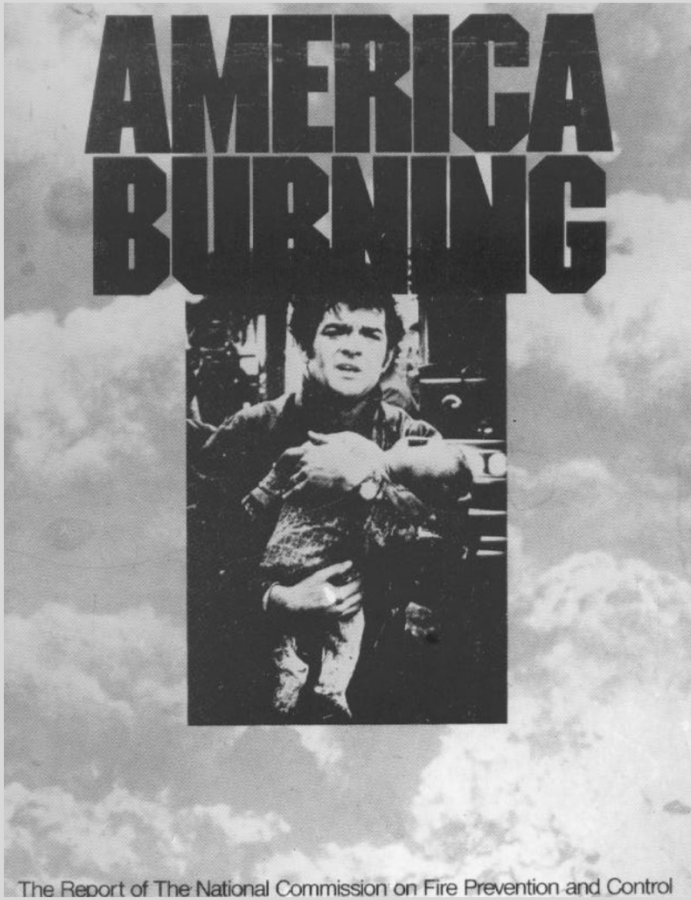
## Average Annual Injuries in Berkeley

Vehicle occupants, cyclists  
and pedestrians in collisions:  
694 per year, 2017-2022

Persons in structure fires:  
2 per year, 2010-2022

Fire data: <https://firecares.nfors.org/departments/74866/berkeley-fire-department?page=1>

Collision data: <https://bpd-transparency-initiative-berkeleypd.hub.arcgis.com/pages/traffic-safety>



## **America Burning: 50 Years of Fire Safety and Prevention (1973)**

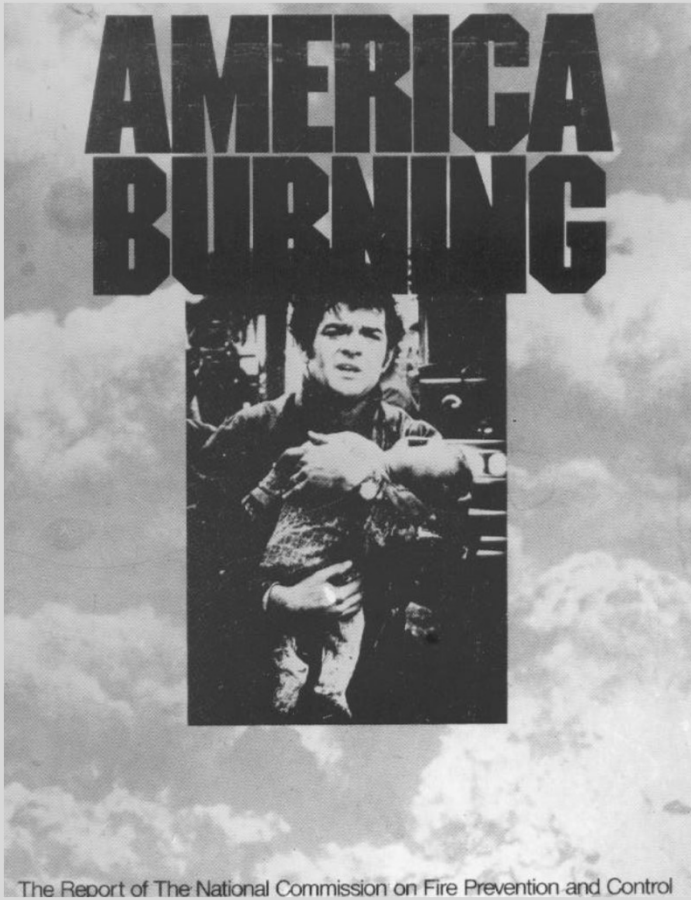
Launched the U.S. Fire Administration and National Fire Academy under the Federal Fire Prevention and Control Act of 1974

May 4, 2023 marked the 50th anniversary of the release of *America Burning*, the National Commission on Fire Prevention and Control's comprehensive study of fire safety and prevention.

“Currently, about 95 cents of every dollar spent on the fire services is used to extinguish fires; only about 5 cents is spent on efforts...to prevent fires from starting. Much more energy and funds need to be devoted to fire prevention, which could yield huge payoffs in lives and property saved.”

“Clearly, fire safety lags behind other considerations, such as aesthetics and economy, in the design of buildings.”

America Burning, Prevention Needs Priority. pp. 7 & 71  
<https://www.usfa.fema.gov/blog/america-burning-50th-anniversary/>



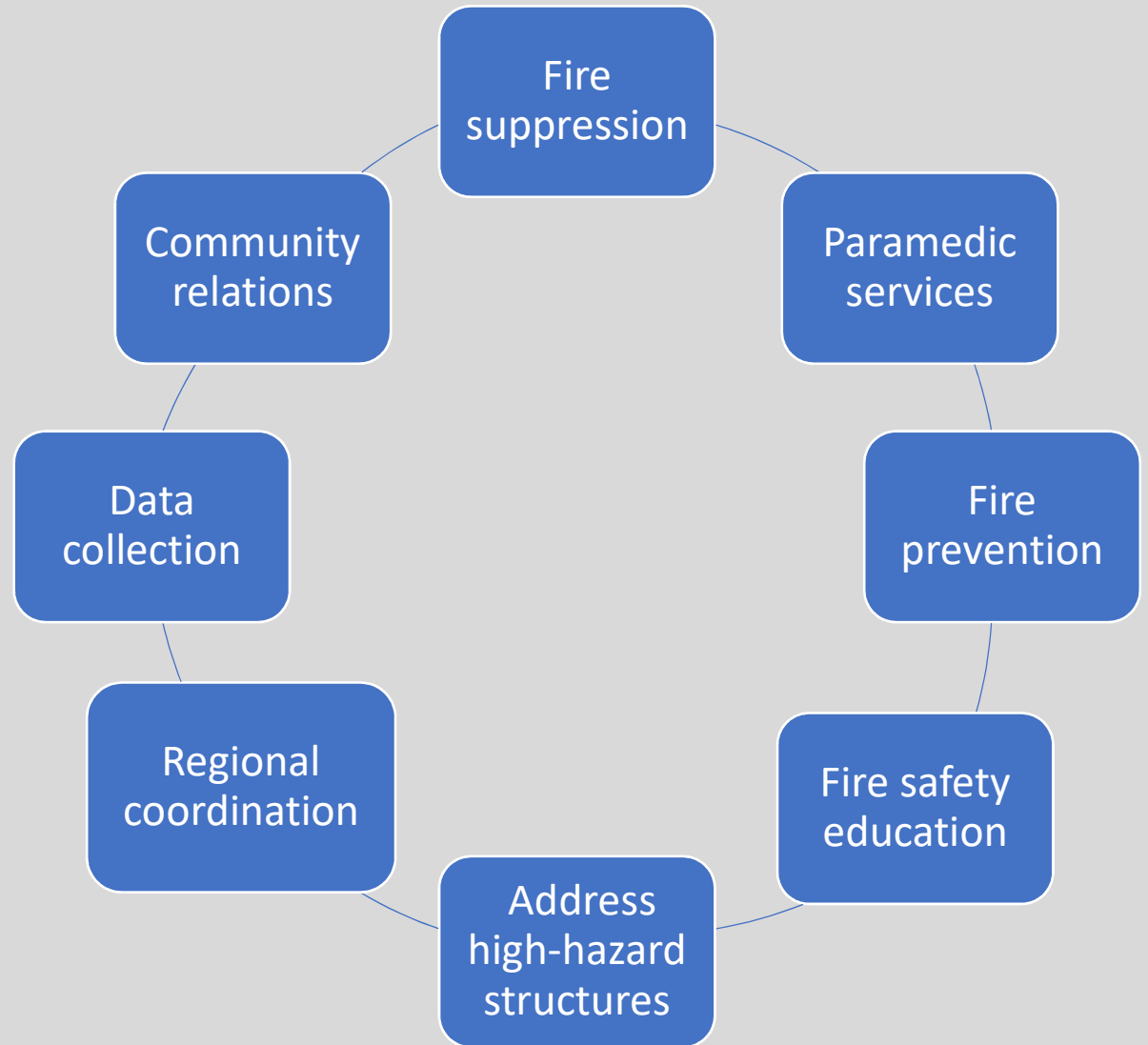
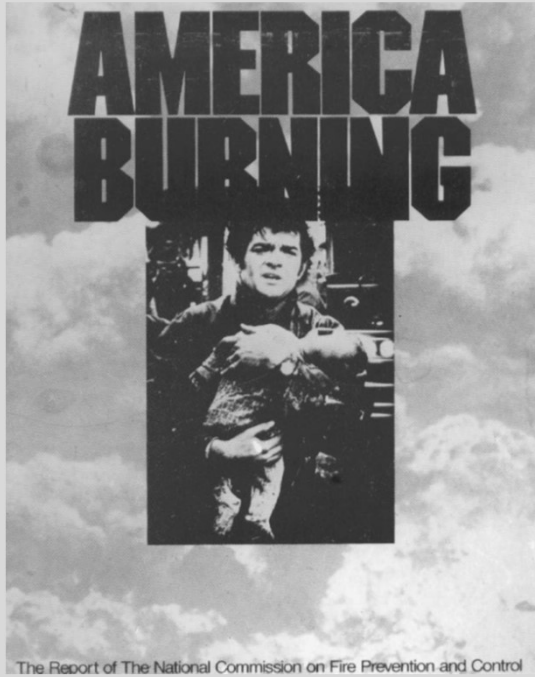
## **America Burning: 50 Years of Fire Safety and Prevention (1973)**

In 1796, the city of New Orleans, then a Spanish province, passed an ordinance against the use of wood roofs.

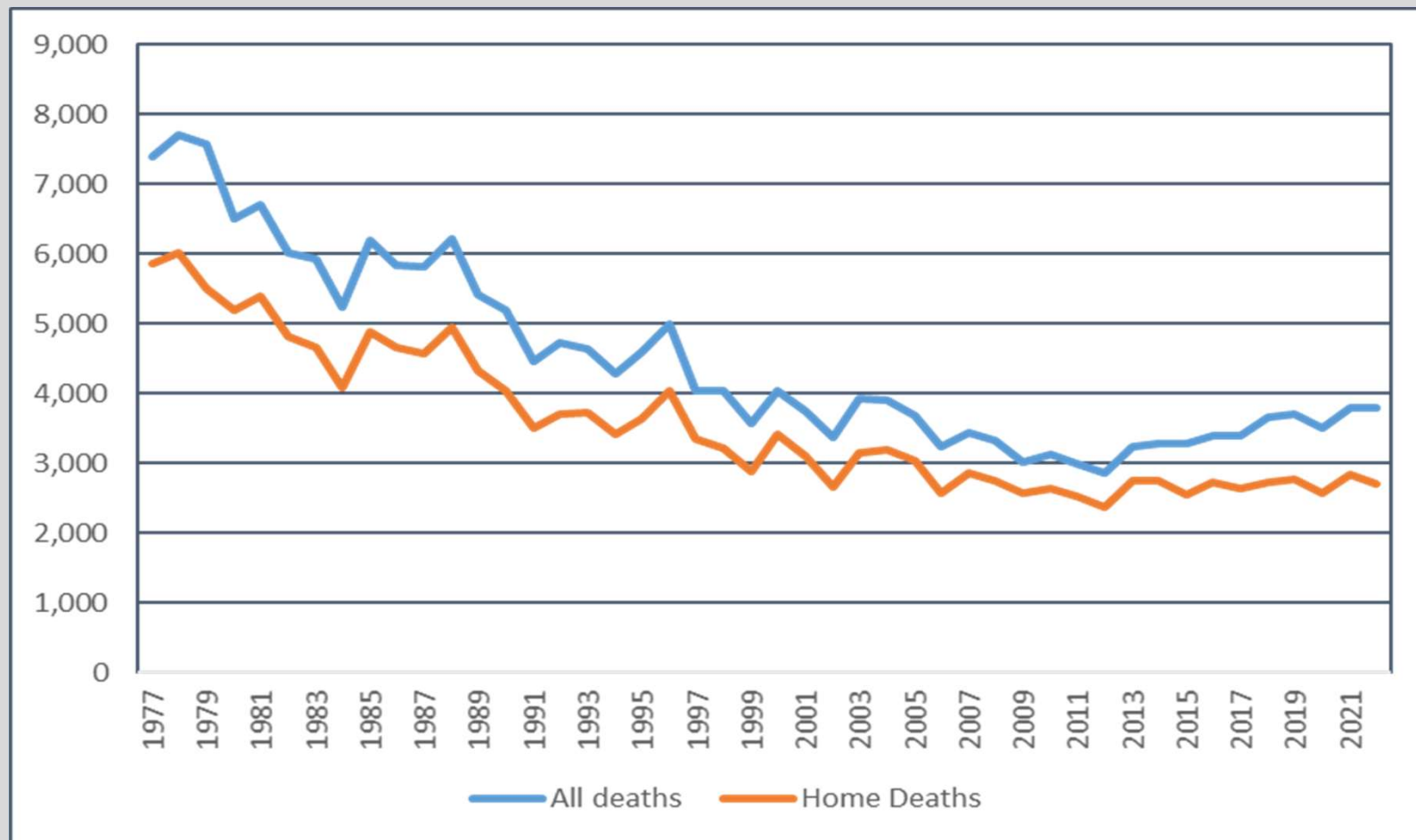
“The public interest justifies these intrusions on individual liberty.”

“The Commission recommends that all local governmental units in the United States have in force an adequate building code and fire prevention code or adopt whichever they lack.”

America Burning, Prevention Needs Priority. p. 79  
<https://www.usfa.fema.gov/blog/america-burning-50th-anniversary/>



Fire departments must build a comprehensive approach to fire safety.

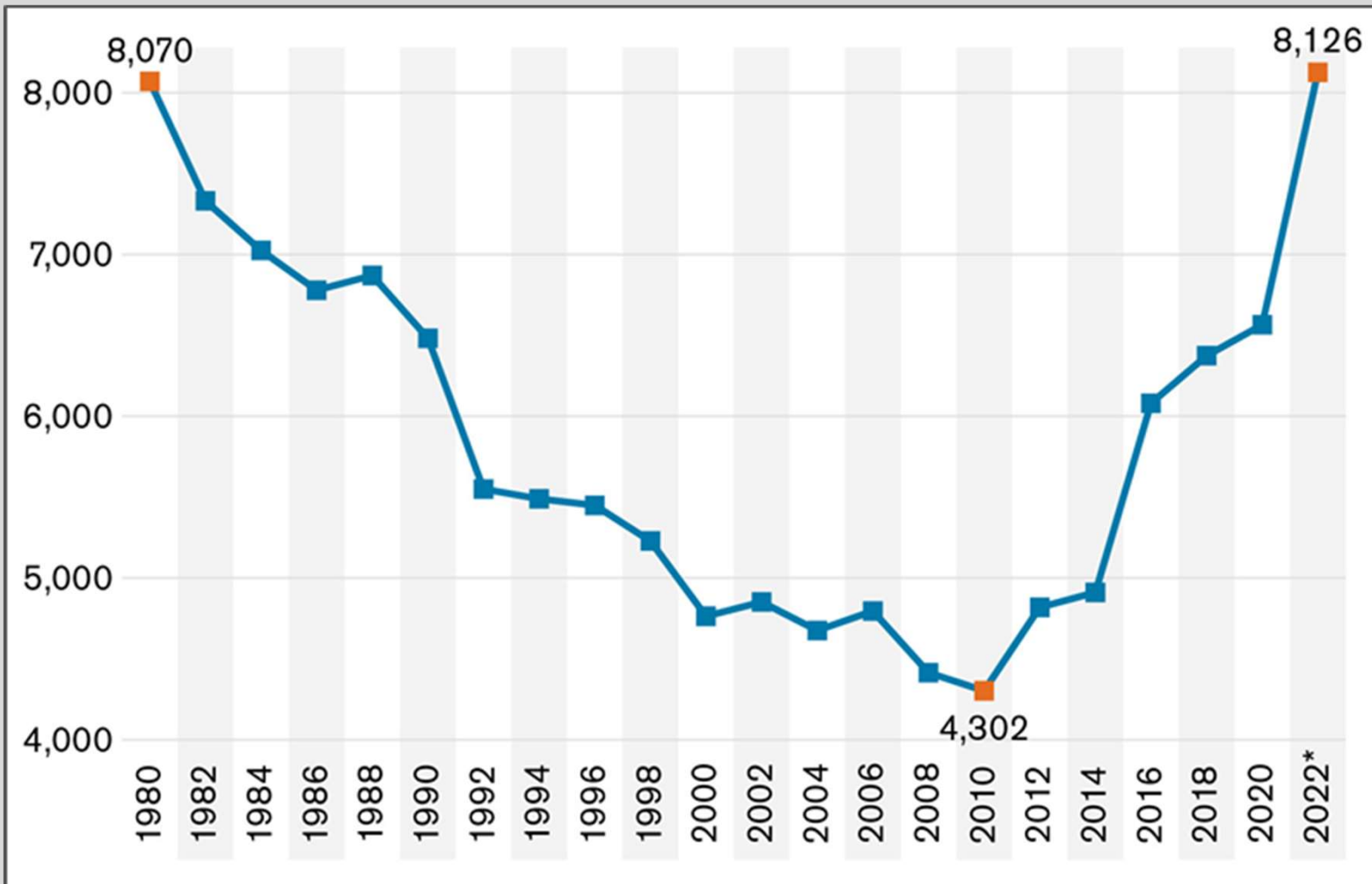


## All U.S. Civilian Fire Deaths and Home Fire Deaths, 1977-2022\*

~5,000 fewer deaths between 1979 and 2012 = 64% decline over 33 years.

\*2,451 deaths on 9/11/2001  
not included in "All deaths."

Hall, S. (November 2023). Fire loss in the United States during 2022. Quincy, MA: National Fire Protection Association. <https://injuryfacts.nsc.org/home-and-community/safety-topics/fire-related-fatalities-and-injuries/>



## U.S. Pedestrian Fatalities, 1980-2022

An 89% increase between 2010 and 2022, after a 40% reduction, 1980-2010

\*2022 is projected based on 6 months of data.

Governor's Highway Safety Association (2023). Pedestrian Traffic Fatalities by State—2022 Preliminary Data [Pedestrian Traffic Fatalities by State: 2022 Preliminary Data | GHSA](#).

## In Berkeley, Pedestrians and Bicyclists are Uniquely Vulnerable

- Severe and fatal collisions disproportionately affect pedestrians and bicyclists. Residents report that they walk or bike for 40% of trips, but pedestrians and bicyclists suffer 60% of severe and fatal collisions.
- Drivers operating at unsafe speeds and failing to yield at crosswalks are the two most common violations contributing to severe and fatal collisions, amounting to 33% of incidents over the period 2011-2020.
- While 71% of Berkeley residents report being interested in relying on bicycles for daily use, most are too concerned about safety to act on this choice.

City of Berkeley, Vision Zero Annual Report, June 2022. [https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report\\_0.pdf](https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report_0.pdf). (p. 13).

City of Berkeley, Vision Zero Annual Report, June 2022. *ibid* (p. 14).

Berkeley City Manager Dee Williams-Ridley (June 29, 2022). Consent Calendar on Vision Zero Annual Report, 2021-2022. Environmental Sustainability and Climate Impacts [https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report\\_0.pdf](https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20Item%2023%20Vision%20Zero%20Annual%20Report_0.pdf). (p. 3).





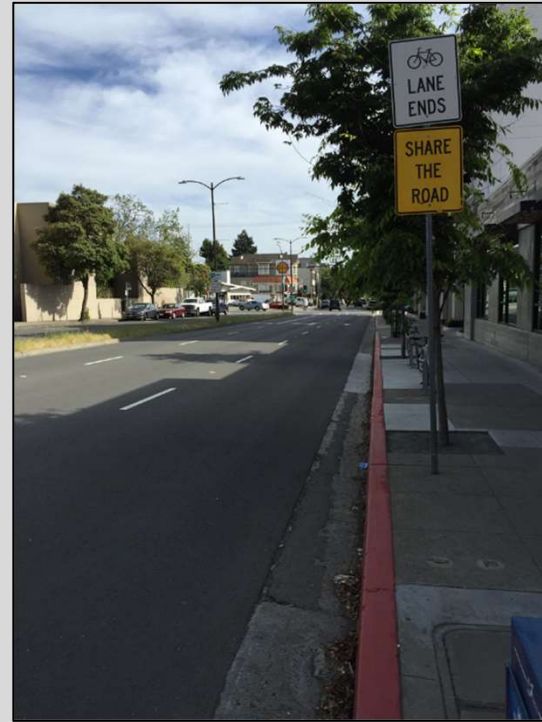
Berkeley must now apply the lessons of fire prevention to preventing street trauma.

Principle 1.  
Quick Response  
Times are  
Essential to  
Save Lives.



Photos: Mike Wilson

WM1



Principle 2.  
Trauma prevention  
is also essential.

Bancroft and Fulton  
where Meg was run  
over from behind.

Photos: Mike Wilson

**Slide 18**

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**WM1**

Wilson, Michael@DIR, 5/22/2023



Photo: Mike Wilson

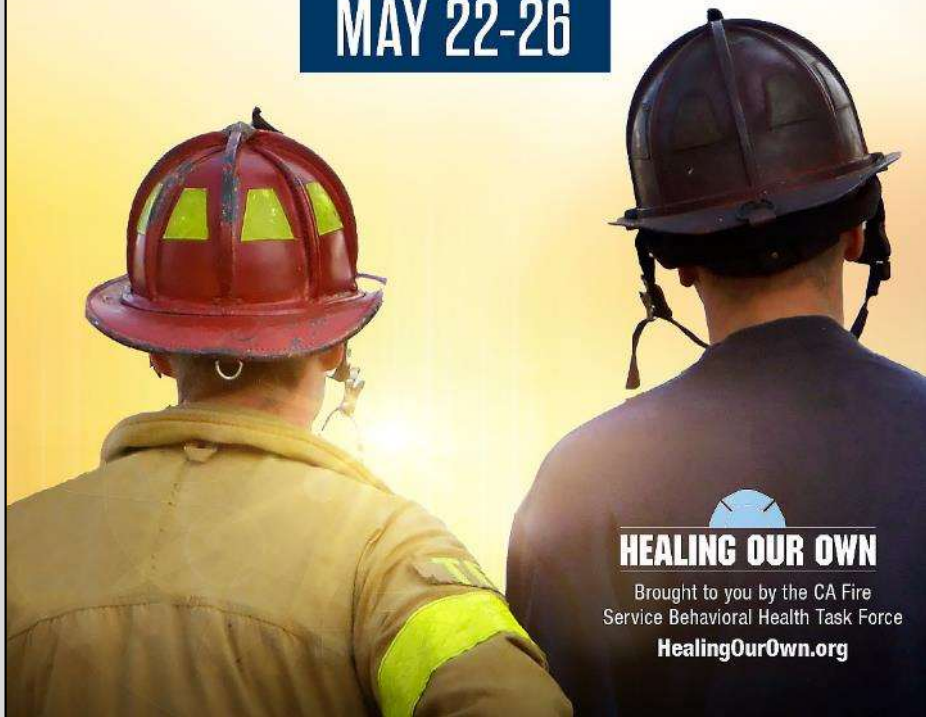


Photo: Mike Wilson

Designing safer streets for walkers and cyclists greatly reduces serious injuries and fatalities, including for vehicle occupants.

# STAND DOWN FOR SUICIDE PREVENTION & AWARENESS

MAY 22-26



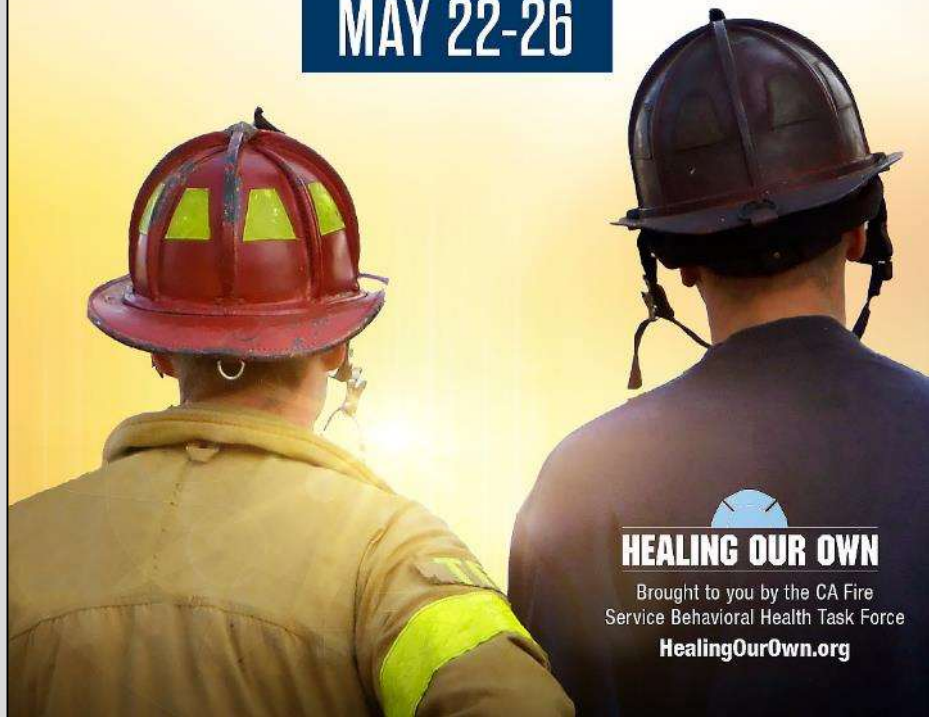
California Fire Service  
Behavioral Health Task  
Force: Fire Service Stand  
Down, May 22-26

Under SB 542 (Stern) CA  
created a rebuttable  
presumption that PTSD  
in firefighters and peace  
officers is a work-related  
injury and thus  
compensable under  
workers' compensation.

Safer streets that prevent severe injuries and fatalities  
are also essential for firefighter wellness.

# STAND DOWN FOR SUICIDE PREVENTION & AWARENESS

MAY 22-26



SB 542 (Stern) Oct 1, 2019:

*“Trauma-related injuries can become overwhelming and manifest in post-traumatic stress, which may result in substance use disorders and even, tragically, suicide.”*

*“The fire service is four times more likely to experience a suicide than a work-related death in the line of duty in any year.”*



Advocating for safer streets is squarely within the Fire Department's public safety mission and builds on decades of success in fire prevention.

# Berkeley Disaster and Fire Safety Commission

## WORK PLAN – FY 2023-2024

### Mission Statement

The Disaster and Fire Safety Commission serves as the public oversight body for Berkeley’s Measure GG and Measure FF funds, charged with reviewing the budget on a regular basis to ensure that the funds are spent in accordance with the intent of the voter approved measures, recommending the appropriate annual increase to the tax rate, and recommending new programs and policy positions requiring Measure GG and Measure FF funding. The ultimate goal of the Commission is to increase community safety, resilience, and education for community disaster preparedness. The Commission also reviews and makes recommendations on items referred by the City Council or other Commissions.

### Summary of FY 2023-2024 Work Plan Activities

<u>Name</u>	<u>Activities</u>	<u>Expected Outcomes</u>	<u>Commissioners</u>
<b>1. Plan &amp; Budget Oversight</b>  <i>BFD Staff</i> <b>Contact: D. Sprague/ K. May</b>	a) Review BFD materials on a quarterly basis b) Meet monthly as Finance ad hoc working group with FD to review monthly materials c) Track financial issues related to FF & GG with the City Council	a) Budget development plan b) Provide input of quarterly budget c) Provide annual budget recommendation City Council on FF & GG d) Provide recommendation to City Council on annual GG increases e) Provide City Council recommendation for midyear program corrections (ad hoc)	Rotating group of commissioners (based on availability) on a quarterly basis hosted by Chair / Chief
<b>2. Home hardening</b>  <i>BFD Staff</i> <b>Contact: D. Green</b>	a) Lead review of monthly inspection report b) Review sessions with Fire Marshal c) Listening sessions with Building Department	a) Provide recommendation to City Council on annual inspection program targets b) Provide recommendation to City Council on building code modifications for fire safety (ad hoc)	<ul style="list-style-type: none"> <li>• <a href="#">G. Murphy</a></li> <li>• <a href="#">W. Bradstreet</a></li> <li>• <a href="#">S. Dean</a></li> </ul>
<b>3. Wildland-urban interface</b> <i>BFD Staff</i> <b>Contact: D. Green</b>	a) Review vegetation management program b) Discuss grant applications and planned project allocations	a) Provide recommendation to City Council on vegetation management program b) Knowledge of grant funding distribution	<ul style="list-style-type: none"> <li>• <a href="#">T. Gordon</a></li> <li>• <a href="#">H. Raine</a></li> <li>• <a href="#">A. Katz</a></li> <li>• <a href="#">T. Darling</a></li> </ul>



<u>GOAL</u>	<u>Activities</u>	<u>Expected Outcomes</u>	<u>Commissioners</u>
<p>4. <b>Safe passages</b></p> <p><i>BFD Staff Contact: D. Green / S. Lana</i></p>	<p>a) Review previous safe passages program and its component parts (parking restrictions, red curb, notification alerts, evacuation planning)</p> <p>b) Meet with community members for intake</p> <p>c) Absorb CWPP report</p>	<p>a) Restart of Safe Passages Program</p> <p>b) Formation of team/committee to develop plan</p> <p>c) Provide recommendation to City Council on draft revised Safe Passages program</p>	<ul style="list-style-type: none"> <li>• <u>T. Gordon</u></li> <li>• M. Wilson</li> <li>• T. Darling</li> </ul>
<p>5. <b>Community Outreach</b></p> <p><i>BFD Staff Contact: S. Lana/ D. Dailey</i></p>	<p>a) Work with FD on educating the public on disaster and fire safety programs</p> <p>b) Coordinate / alert commission of potential outlets for information</p> <p>c) Follow / facilitate / support meetings with community groups</p> <p>d) Follow to conclusion external emergency speaker system</p> <p>e) Track Commission recommendations / status</p>	<p>a) Provide recommendation to City Council on mid-program changes to current communications plan</p> <p>b) Provide City Council recommendation into annual communications plan</p>	<ul style="list-style-type: none"> <li>• <u>H. Raine</u></li> <li>• G. Murphy</li> <li>• W. Bradstreet</li> </ul>