

CONSENT CALENDAR May 7, 2024

To: Honorable Mayor and Members of the City Council

From: Disaster and Fire Safety Commission

Submitted by: Weldon Bradstreet, Chairperson, Disaster and Fire Safety Commission

Subject: Support the Fire Department to Fund a Program Manager II Position

#### RECOMMENDATION

The Disaster and Fire Safety Commission (DFSC) supports the request by the Fire Department to fund a Program Manager II.

### SUMMARY

The Program Manager II position will be responsible for building a Street Trauma Prevention (STP) program in the Department. This program is necessary to meet the City's Vision Zero goal of eliminating severe and fatal traffic crashes by 2028.

The STP program is a new initiative within the Department to support the transportation and infrastructure projects of Vision Zero in order to steadily reduce the 694 injuries that occur on Berkeley streets each year, on average, among people walking, riding bikes and riding in vehicles, including an average of five fatalities.

This position will allow the Department to: (1) engage consistently and constructively in the City's Vision Zero planning and implementation processes; (2) collaborate with other City departments, as well as the Fire Marshal, to advance Vision Zero and other policies; and (3) build an evidence-based approach to balancing street trauma response and prevention.

The STP program will require sufficient staff and resources to support the Department's capacity to perform analysis, interdepartmental coordination, program design, and implementation. The Program Manager II position represents the first step in establishing and building this program. The STP Program Manager would also participate in department decision-making regarding department equipment and operations, to the extent that those decisions intersect with preventing, or responding to, street trauma and the City's Vision Zero policy. The STP Program Manager would report every six months, or as needed, to the DFSC regarding the activities of the STP Program.

# FISCAL IMPACTS OF RECOMMENDATION

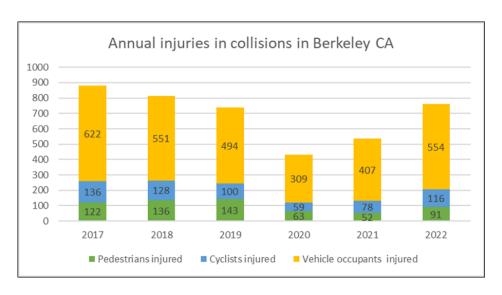
Sufficient funding will be needed to support a Program Manager II position for an initial period of five years. The Department and budget office will need to determine the total amount of funding required to meet this objective.

### **CURRENT SITUATION AND ITS EFFECTS**

An average of 694 persons are injured in street trauma each year in Berkeley, and five are killed

During the period 2017 to 2022, street trauma resulted in injuries to 490 people in vehicles, 103 people riding bikes, and 101 pedestrians on average each year (Figure 1), including an annual average of five fatalities (Figure 2). During this same period, there were no deaths and an average of two persons injured each year in fires in Berkeley, a testament to the effectiveness of the Department's decades of effort in fire prevention and response.

Figure 1. Annual average collisions causing injuries to vehicle occupants, cyclists and pedestrians, 2017—2022, Berkeley, CA.



<sup>&</sup>lt;sup>1</sup> Collision data from the Collisions Stats tab of the Berkeley Police Transparency Portal - Traffic Safety website: (<a href="https://bpd-transparency-initiative-berkeleypd.hub.arcgis.com/pages/traffic-safety">https://bpd-transparency-initiative-berkeleypd.hub.arcgis.com/pages/traffic-safety</a>). Death & severe injury collision data from the UC Berkeley SafeTREC Transportation Injury Management System (TIMS) Query & Map (<a href="https://tims.berkeley.edu/tools/query/index.php?clear=true">https://tims.berkeley.edu/tools/query/index.php?clear=true</a>). All data accessed 5/18/2023 – 5/20/2023 and prepared by Tom Lent.

Annual deaths in collisions in Berkeley CA

12
10
8
6
4
2
2
1
1
2
6
2
2
10
2017 2018 2019 2020 2021 2022

Pedestrian killed Cyclists killed Vehicle occupants killed

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

Severe and fatal collisions disproportionately affect people walking and biking.

Berkeley residents report that they walk or bike for 40% of trips made in the city, but people walking and biking suffer 61% of severe and fatal collisions.<sup>2</sup> Drivers operating at unsafe speeds and drivers 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 2011-2020.<sup>3</sup> 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>4</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.

<sup>&</sup>lt;sup>2</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). (p. 13).

<sup>&</sup>lt;sup>3</sup> City of Berkeley, Vision Zero Annual Report (June 2022). *ibid* (p. 14).

<sup>&</sup>lt;sup>4</sup> Berkeley City Manager Dee Williams-Ridley (June 29, 2022). Consent Calendar on Vision Zero Annual Report, 2021-2022. Environmental Sustainability and Climate Impacts (<a href="https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20ltem%2023%20Vision%20Zero%20Annual%20Report">https://berkeleyca.gov/sites/default/files/documents/2022-06-28%20ltem%2023%20Vision%20Zero%20Annual%20Report</a> 0.pdf). (p. 3).

People struck by vehicles while walking or riding bikes are often seriously or critically injured. Providing emergency medical care for these patients, as well as for those injured while riding in vehicles, takes a toll on the mental health of firefighters and paramedics. 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." <sup>5</sup>

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." Reducing the frequency of exposure to critically injured persons is an effective response to this occupational hazard for responders.

## **BACKGROUND**

The fire service understands the power of prevention.

Data since 2010 shows that the Department's Fire Prevention Bureau has reduced fire-related injuries to an average of two per year.<sup>6</sup> This success has resulted in large part from decades of 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>7</sup>

The National 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 3).8

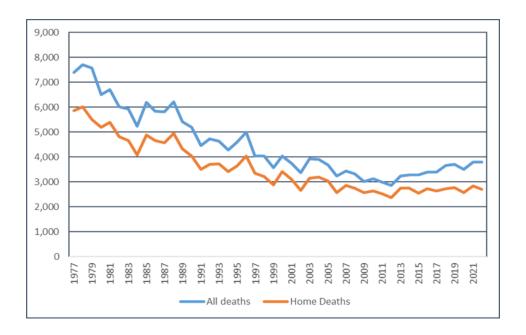
Figure 3. All U.S. civilian fire deaths and home fire deaths, 1977-2022.

<sup>&</sup>lt;sup>5</sup> Senate Bill No. 542. Chapter 390, Stern. Workers' Compensation. (https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\_id=201920200SB542). See subsection (1)(e).

<sup>&</sup>lt;sup>6</sup> FireCARES. Berkeley Fire Department (<u>https://firecares.nfors.org/departments/74866/berkeley-firedepartment?page=1)</u>.

<sup>&</sup>lt;sup>7</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>&</sup>lt;sup>8</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/



Street trauma is a serious public safety problem that is worsening nationally, particularly among pedestrians.

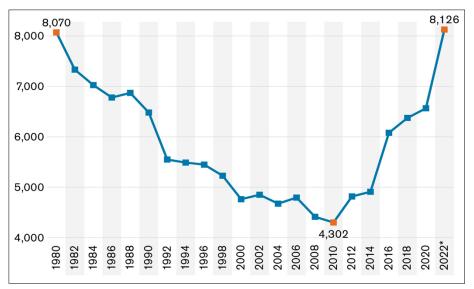
After a 40% decline over the 21 years between 1988 and 2009, national trends show a 77% increase in pedestrian fatalities from traffic collisions over the 11 year period from 2010 to 2021, with preliminary data showing a spike in 2022 that will bring the total increase during this period to 89% (Figure 4).<sup>9</sup> All other traffic fatalities increased 25% during the period 2010 to 2021.<sup>10</sup> This striking increase in pedestrian deaths is attributed to multiple causes, the most fundamental being a U.S. transportation system that is "designed to move cars quickly, not to move people safely." <sup>11</sup>

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

<sup>&</sup>lt;sup>9</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). (p. 11).

<sup>&</sup>lt;sup>10</sup> Governor's Highway Safety Association (June 2023). *Ibid*. (p. 5).

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



<sup>\*</sup>Projected based on data for the first six months of 2022.

**First Reading Vote:** Ayes – Katrz, Wilson, Bradstreet, Kinosian, Dean, Raine, Gordon; Noes – None; Abstain – Murphy

## **ENVIRONMENTAL SUSTAINABILITY**

There are no identifiable environmental effects, climate impacts, or sustainability opportunities associated with the subject of this report.

### RATIONALE FOR RECOMMENDATION

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

Research shows that street trauma can be reduced through hardened, engineered traffic controls. 12,13,14 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

<sup>&</sup>lt;sup>12</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.

<sup>(</sup>https://www.sciencedirect.com/science/article/abs/pii/S2214140518301488?via%3Dihub). Accessed January 28, 2024.

<sup>&</sup>lt;sup>13</sup> Aaron Short (May 29, 2019) Separated bike lanes means safer streets, study says. *Streetsblog*. (<a href="https://usa.streetsblog.org/2019/05/29/protect-yourself-separated-bike-lanes-means-safer-streets-study-says">https://usa.streetsblog.org/2019/05/29/protect-yourself-separated-bike-lanes-means-safer-streets-study-says</a>). Accessed January 28, 2024.

<sup>&</sup>lt;sup>14</sup> City of Cambridge, MA, Environmental and Transportation Planning Division (October 2023). *Bicycling in Cambridge. Data Report 2023*. (<a href="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</a>). Accessed January 28, 2024.

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.

Implementing a street trauma prevention (STP) program will require a mission change within the Department.

Building a street trauma prevention (STP) program is essential to meeting the City's stated goals of Vision Zero. It will require sufficient staff and resources to support the Department's ability 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, and of California, a new vision of the fire service that calls attention to the importance of both rapid response and effective prevention in the area of street trauma. To be successful, this will require the 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 over the last 50 years, with remarkable success.

A Program Manager II is needed to establish and build the STP program. The STP program will coordinate 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.

#### ALTERNATIVE ACTIONS CONSIDERED

No alternative actions. Relying on existing staff to establish and build the STP program is not sustainable, given existing workloads.

### **CITY MANAGER**

The City Manager refers this recommendation to the Budget Process.

#### **CONTACT PERSON**

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