

**ELIMINATING TRAFFIC DEATHS IN OUR CITY** 

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### VISION ZERO SF IS A ROAD SAFETY POLICY TO MAKE OUR TRANSPORTATION SYSTEM SAFE FOR EVERYONE.

By creating Vision Zero SF, we are committing to working together to prioritize street safety and eliminate traffic deaths in San Francisco.

Traffic fatalities are tragic and preventable, and we are taking action. Zero traffic deaths is indeed ambitious, but zero is the right goal to have.

By working to protect our most vulnerable road users, we will build a safer transportation system and create a culture where our residents, workers and visitors prioritize traffic safety to ensure mistakes that happen on our streets do not result in serious injuries or death.

The Vision Zero SF initiative is spearheaded by a city Vision Zero task force which is chaired by the San Francisco Municipal Transportation Agency and the San Francisco Department of Public Health. Task force meetings are open to the public and attended by city agency representatives and members of the city's Vision Zero Coalition. The meeting aims to improve accountability and transparency, as well as provide a forum for the public to receive updates and provide feedback.

This strategy was developed by the City and County of San Francisco and the Vision Zero Coalition, working together with local communities.











# MESSAGE FROM MAYOR ED LEE



Our philosophy and approach is simple: no loss of life on our streets is acceptable.

Dear fellow San Franciscans,

Three years ago, we adopted Vision Zero as a city policy, committing to eliminate all traffic deaths in our city by 2024.

Our philosophy and approach is simple: no loss of life on our streets is acceptable.

Since we adopted Vision Zero in 2014, we have upgraded our streets with safety and engineering improvements, launched enforcement programs and embarked on education campaigns aimed at addressing the top causes of crashes on our roadways. We have also expanded our data analysis capabilities to ensure we can continue to develop and implement data-driven solutions.

In the past three years, we have implemented more than 40 miles of safety improvements, including 1,600 separate installments on San Francisco streets annually. Some 42,000 citations have been issued to drivers for the five most-dangerous traffic infractions — running red lights, running stop signs, violating pedestrian right-of-ways, speeding and failure to yield while turning. The city has launched an anti-speeding campaign and initiated a pedestrian safety program called Safe Streets SF.

While we are seeing progress, there is still more we can do. As this Action Strategy highlights, we will continue to build safer streets, protect our most vulnerable people, change attitudes and behavior about street safety, and improve engagement with low-income and communities of color.

The Action Strategy identifies critical actions that can save lives. In this document, we outline how departments such as the San Francisco Municipal Transportation Agency, San Francisco Public Works, the Department of Public Health, the San Francisco Police Department and others will better focus our resources, increase interagency coordination and explore new partnerships with our state and federal peers.

The residents of San Francisco should be able to move around the city easily and safely. Through Vision Zero, we will work together to make San Francisco a better place to live.

Sincerely,

Edwin M. Lee, Mayor

#### **Our Two-Year Commitment**

The Vision Zero Two-Year Action Strategy outlines the initiatives city departments will take to advance our Vision Zero goal. This document frames how we think about Vision Zero, focusing on the three outcomes San Francisco needs to eliminate traffic deaths:







**Safe Streets** 

Safe People

Safe Vehicles

This strategy is based on the experience and knowledge the city has gained since adopting its Vision Zero policy in 2014. We've been faced with some recurring, real-world challenges when implementing various initiatives in support of Vision Zero. These challenges are motivating us find the solutions to do more, faster so we can eliminate traffic deaths in our city.

CHALLENGES WE FACE	OVERCOMING THE CHALLENGES
Communities of concern and seniors are at a higher risk of severe and fatal traffic collisions.	Implement or expand projects and programs focused on increasing safety for these communities.
Project opposition can result in fewer or delayed safety improvements.	Use best practices in community outreach to increase public engagement, particularly in low-income communities, communities of color and other vulnerable populations.
A culture that prioritizes speed over safety.	Build awareness for the need to create safer streets, the role of vehicle speed, and that we all play an important role.
A growing population and booming economy, with more people walking and biking.	Conduct analyses to identify factors that predict where serious and fatal injuries will occur to inform future planning efforts.
Many features of vehicles protect the people driving, but not people walking and bicycling, who are at greater risk of serious injury and death in traffic collisions.	Bring increased focus to opportunities for improving vehicle safety, using the city vehicle fleet as a model for driver performance tracking technology and vehicle design.

City residents supported Vision Zero through passage of the 2014Transportation and Road Improvement Bond that included support for street safety improvements. This funding was a stepping stone for key Vision Zero initiatives. With new actions identified in the 2017-2018 Action Strategy, the city will continue to leverage existing funding sources to advance Vision Zero.

The initiatives city departments have committed to in this Two-Year Action Strategy can be found on pages 10 - 13.



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"Vision Zero is about saving lives and protecting the most vulnerable people in our communities, such as the elderly and people with disabilities."

-Yvette Fang, San Francisco resident and disability community advocate

# **Action Strategy Highlights**

We have a list of ambitious, data-driven initiatives that will focus our efforts to eliminate traffic deaths in San Francisco. In the next two years we will strive to accomplish an ambitious agenda that addresses street safety comprehensively.

#### **SAFE STREETS**

- Implement at least 13 miles of treatments prioritized by the high-injury network and communities of concern
- Reduce delivery timelines for safety improvements
- Launch comprehensive analysis for bicycle collisions and evidence-based solutions

#### SAFE PEOPLE

- Introduce automated speed enforcement legislation to encourage people to drive at a safe speed and investigate other policy initiatives to support safer people
- Initiate two high-visibility education & enforcement campaigns to reduce significant dangerous behaviors such as: DUI and distracted driving
- Administer driver safety training to all new city employees

#### SAFE VEHICLES

- Issue public-facing report of telematics data of city-operated vehicles and use data to improve the safety, efficiency, and reliability of city vehicles
- Routinely update list of proven safety features and collision avoidance technologies, using industry reports and studies including costs, specific safety benefits, conflicts/challenges and other key factors, and make recommendations for new city vehicles

# **Core Principles**



#### **Prevention**

Traffic deaths are preventable and unacceptable.



#### **Saving Lives**

Safety and the preservation of human life is our highest priority.



#### **Equity**

Our transportation system should be safe for all road users, for all modes of transportation, in all communities and for people of all incomes, races and ethnicities, ages and abilities.



#### **Safe Streets**

Human error is inevitable and unpredictable; we should design the transportation system to anticipate error so the consequence is not severe injury or death. Transportation and land use development policies, standards, programs and design decisions should prioritize preserving lives.



#### Safe People and Safe Vehicles

Safe human behaviors, education about and enforcement of safety rules, and vehicle technologies are essential contributors to a safe system.



#### Speed

People are inherently vulnerable and speed is a fundamental predictor of crash survival. The transportation system should be designed for speeds that protect human life.

# UNDERSTANDING THE DATA

# **High Injury Network**

30 people are killed in traffic crashes each year in San Francisco and 500 more are severely injured.

Collecting information, measuring results and evaluating traffic and safety data are crucial to understanding and developing our Vision Zero initiative.

An integral part of our Vision Zero effort is knowing where severe and fatal crashes are happening in San Francisco.

70% of San Francisco's severe and fatal traffic injuries occur on just 12% of our streets.

The "High Injury Network" (HIN) helps prioritize city efforts and funds, and ensures Vision Zero initiatives support the people and places most in need.

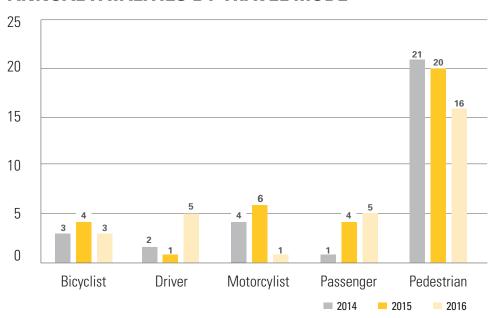


#### **Data Points**

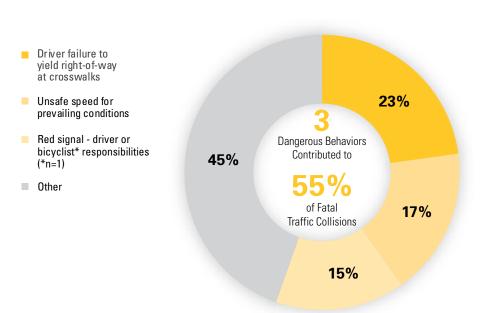
The city uses TransBASESF.org, an online database to inform strategies that reduce injuries and save lives. This database integrates police and Medical Examiner Office data and data on social and environmental factors.

Here are just a few stories driven by the data.

#### **ANNUAL FATALITIES BY TRAVEL MODE**



# **TOP BEHAVIORS CONTRIBUTING TO FATAL COLLISIONS**, 2014–2016





Pedestrian fatalities decreased from 20 in 2015 to 16 in 2016 (a 20% decrease)



#### **Distracted Driving**

Nationwide, approximately 80% of vehicle crashes involve some sort of inattention



#### **Speed Matters**

Speed is a top collision factor, when a person is hit by a vehicle traveling 20 mph there is a 90% chance of survival while if a person is hit by a vehicle traveling 40 mph, the survival rate drops to 20%

# COMING TOGETHER TO ACHIEVE ZERO

# **Equity**

Equity is not only a social and moral issue, but also a traffic safety issue. Traffic fatalities are disproportionately represented in San Francisco among different road users and groups of people.

While only 33% of San Francisco's streets are in low-income neighborhoods and communities of color, 47% of the city's High Injury Network are in these Communities of Concern.

Vision Zero is an opportunity to create a safe transportation system that is safe for all people.

Our initiatives must be developed and implemented through the lens of equity to achieve equitable outcomes. This means advancing actions that prioritize our most vulnerable populations and are sensitive to community context.

43%

In 2016, 43% of San Francisco's traffic fatalities involved people over 65 years old

#### PROACTIVE COMMUNITY ENGAGEMENT

More comprehensive and proactive community engagement is critical to increase awareness of Vision Zero as a shared, citywide goal.

In our efforts to eliminate traffic fatalities, we need to improve how we engage our neighbors and increase participation from communities historically under-represented in public processes.

This will help ensure that Vision Zero initiatives are sensitive to community context, protect those most impacted by severe and fatal collisions and gain the support needed to implement comprehensive, high-quality safety projects and programs.

63%

In 2016, 27% of trips were made on foot or bike, and yet 63% of fatalities are people walking and bicycling.

# **Community Outreach**

# Our focus on more proactive community engagement and ensuring equity includes these commitments:



Public quarterly meetings with the Vision Zero Task Force where staff provide updates on projects and programs, stakeholders share their work and feedback, and the group identifies opportunities to advance Vision Zero.



Allocate adequate time and financial resources needed to partner with or engage vulnerable groups.



Engage in participatory, action-oriented research with neighborhood groups including those working with seniors, youth and people with disabilities.



Public quarterly meetings where staff update SF County Transportation Authority commissioners on Vision Zero efforts and request support pertaining to policy and funding.



Identify and work with vulnerable populations on issues that overlap with their ongoing priorities.



Engage community leaders to participate in Vision Zero efforts.



Identify and execute ways to better involve underrepresented communities in Vision Zero initiatives.



Conduct outreach through existing events that historically under-represented communities attend.



Maintain a comprehensive website to provide information on various projects to offer greater transparency and accountability.



# Our Vision Zero **Action Strategy**

The action items outlined in the following pages are designed to protect the millions of people moving around San Francisco every day. They were developed by San Francisco's city agencies and the Vision Zero Coalition, a group of community stakeholders.

No matter how people get around, San Francisco's transportation network needs to protect them at every turn.

#### **Safe Streets**

Vision Zero involves planning, designing and building streets that increase safety and reduce fatal crashes. Safety must be built into our transportation network and included in new projects and programs.

Using the High-Injury Network, we know which streets and intersections are in the most need of safety improvements. Our goal is to implement treatments on this entire network by 2024.

While prioritizing high-quality improvements on the High-Injury Network will be the most targeted way to reach our goal of zero traffic fatalities, we will also continue to proactively install safety treatments on streets that are not on the high-injury network.

SAFE STREETS: TWO-YEAR ACTION ITEMS	PARTICIPATING AGENCIES
<ul> <li>1. Coordinate planning and design of infrastructure upgrades and other public and private capital investments to redesign corridors and intersections with high-quality, evidence-based treatments through processes that employ the community outreach commitments, promotes equity and is sensitive to community context</li> <li>Implement at least 13 miles of treatments prioritized by the High-Injury Network each year</li> <li>Implement treatments programmatically citywide</li> <li>Complete HIN gap analysis so Capital Improvement Program supports reaching annual targets</li> </ul>	Municipal Transportation Agency, Public Works, Recreation & Parks, International Airport
<ul> <li>2. Reduce delivery timelines for safety improvements</li> <li>Implement near-term treatments in advance of larger capital projects</li> <li>Improve coordination opportunities (e.g. technological tools) and identify, solve for and report on delay factors</li> </ul>	Municipal Transportation Agency, Public Works, Recreation & Parks, International Airport, County Transportation Authority
3. Launch comprehensive analysis for bicycle collisions and evidence-based solutions	Municipal Transportation Agency, Public Health
<b>4.</b> Implement electronic citations (e-citations) and electronic stops (e-stops) and analyze data to identify design solutions to make the streets safer	Police Department, Municipal Transportation Agency
5. Evaluate innovative designs for implementation to create safer streets in San Francisco	Municipal Transportation Agency
<b>6.</b> Further integrate Vision Zero and Transit First policy goals into transportation and land use planning policy and code such as the transportation demand management ordinance to reduce need for driving and vehicle miles traveled to reduce opportunity of collisions involving vehicles	Planning, Municipal Transportation Agency, County Transportation Authority
<b>7.</b> Work with local, state and federal partners in the development of design standards for safer streets and participate in discussions regarding methodology for setting speed limits	Municipal Transportation Agency
8. Conduct predictive modeling to understand environmental and socio-demographic factors that predict where injuries occur to inform future development and transportation projects	Public Health, Municipal Transportation Agency, Planning
<b>9.</b> Develop vehicle speed monitoring system to capture speed data collected citywide, including on the high injury network, for monitoring and evaluation and establish baseline for monitoring	Public Health, Municipal Transportation Agency, Planning, County Transportation Authority
<b>10.</b> Implement the evaluation plan to determine efficacy and needed refinements of select VZ projects and programs	Public Health, Municipal Transportation Agency, Police Department, Controller's Office



One in every five (18%) severe and fatal injuries was the result of a hit-and-run crash

# **Safe People**

No matter how you get around town, we all have a responsibility to each other and ourselves to make safe decisions. Research regarding cultural norms and attitudes about traffic safety and more effective ways to normalize safe behavior will continue to be integral to advance Vision Zero.

SAFE PEOPLE: TWO-YEAR ACTION ITEMS	PARTICIPATING AGENCIES
1. Introduce automated speed enforcement legislation to encourage people to drive at a safe speed and investigate other policy initiatives to support safer people	Municipal Transportation Agency, Public Health, County Transportation Authority
<ul> <li>2. Safe Routes Programming</li> <li>Safe Routes to School: Identify opportunities to build coalition of engaged parents and guardians</li> <li>Safe Streets for Seniors: Identify opportunities to build coalition of engaged seniors</li> <li>Safe Routes for People with Disabilities: Initiate a program that engages the disability community in identifying safety concerns, solutions and practices</li> </ul>	Public Health
<ul> <li>3. Initiate two high-visibility education and enforcement campaigns to reduce significant dangerous behaviors, such as:</li> <li>Driving Under the Influence</li> <li>Distracted Driving (Calls/Text/Apps)</li> </ul>	Municipal Transportation Agency, Police Department, Public Health
4. Administer driver safety training to all new city employees	City Administrator's Office
<ul> <li>5. Enforce top collision factors (known as Focus on the Five) applying best practices, including community engagement with those who have been historically marginalized:</li> <li>Complete analysis for top collision factors to inform enforcement approach</li> <li>Establish baseline percentage of citations/warnings issued for traffic violations by race/ethnicity for ongoing monitoring</li> </ul>	Police Department, Municipal Transportation Agency, Controller's Office
<b>6.</b> Implement electronic citations (e-citations) and e-stops, and analyze data to identify solutions and/or inform existing programs like the red light camera program and prospective programs such as automated speed enforcement	Police Department, Municipal Transportation Agency
7. Initiate research into best-practices for a campaign to address unsafe left-turns	Municipal Transportation Agency
<ul> <li>8. Advance in-school transportation safety education to institutionalize safe behaviors</li> <li>Initiate the in-school bicycle education plan and elementary school bicycle education program</li> <li>Expand the middle school bicycle education program</li> <li>Develop a plan for in-school multi-modal education</li> </ul>	Municipal Transportation Agency, Public Health, Unified School District
<b>9.</b> Establish coordinated city agency response to help victims of severe and fatal traffic crashes and their families	Police Department, Public Health, District Attorney's Office
<b>10.</b> Increase engagement of the San Francisco Bay Area Families for Safe Streets group which includes survivors and family members of those seriously injured or killed in traffic crashes	Public Health, Municipal Transportation Agency
<b>11.</b> Identify diversion programs that allow for non-financial consequences of enforcement efforts such as speeding	Municipal Transportation Agency
<ul> <li>12. Assess and implement new technologies and data sources to improve data collection for monitoring, analysis, and evaluation on an ongoing basis</li> <li>Initiate process to transition SFPD Collision Report Data into Crime Data Warehouse</li> </ul>	Public Health, Municipal Transportation Agency, Police Department, Controller's Office
<b>13.</b> Institutionalize the comprehensive surveillance system linking SFPD and Zuckerberg San Francisco General hospital injury data for a more complete assessment of injuries, and share allowable data to inform targeted prevention efforts including routine monitoring and analysis of severe injuries	Public Health, Municipal Transportation Agency, Police Department
<b>14.</b> Maintain a comprehensive website to provide information on the projects, programs and progress of Vision Zero SF	Municipal Transportation Agency, Public Health

#### Safe Vehicles

#### There are three major components to vehicle safety:







**Evaluation** 

San Francisco is committed to each of these areas to sustain a safe fleet of city vehicles, which includes our buses, vans, utility trucks, passenger vehicles, and more.

Using strong policy and partnerships we are committed to promoting more safe vehicles on our streets. This means encouraging the auto industry to continue building safe vehicles not just for the people driving, but also for those who are most impacted by traffic crashes: people walking and biking.

SAFE VEHICLES: TWO-YEAR ACTION ITEMS	PARTICIPATING AGENCIES
<ul> <li>1. Issue public-facing report of telematics data of city-operated vehicles and use data to improve the safety, efficiency, and reliability of city vehicles, and to promote safe driving</li> <li>Develop and implement city fleet safety educational/informational campaign and establish baseline metrics measuring the impacts of the campaign, and aim to develop employee safe driving training</li> </ul>	City Administrator's Office, Municipal Transportation Agency
2. Encourage fleet managers (e.g. company vehicles, commuter shuttles, car rental, carshare) and transportation services (e.g. transportation network companies) operating in San Francisco to prioritize safety through good vehicle design (i.e. safety features) and other technologies such as driver performance tools/processes to improve collision avoidance and driver accountability.	Municipal Transportation Agency, International Airport
<b>3.</b> Routinely update list of proven safety features and collision avoidance technologies, using industry reports and studies including costs, specific safety benefits, conflicts/challenges and other key factors, and make recommendations for new city vehicles	City Administrator's Office, Municipal Transportation Agency
<b>4.</b> Launch comprehensive analysis for transit-related collisions and evidence-based solutions per integration of the SFMTA Agency-wide Safety Management Database transit-related collision data into TRANSBASESF.org	Municipal Transportation Agency, Public Health
<b>5.</b> Participate in and engage discussions with the DMV and other partners for advancement of autonomous vehicles, including safety components with respect to all road users, and integration into San Francisco's transportation system	Municipal Transportation Agency, County Transportation Authority



Large vehicles account for 4% of collisions but 17% of fatalities

# **Measuring Progress**

The annual reporting of fatal and severe\* traffic injuries will be the primary benchmark to track progress in reaching our Vision Zero goal and will be measured against the following statistics from 2013:

**Fatalities** 

**Fatalities affecting** seniors (age 65+)

**Fatalities occurring in Communities of Concern** 

The city will also track and report on the metrics below (baselines vary based on the most recent year that baseline data is available).

METRIC	BASELINE	2018 TARGET
Number of miles of safety treatments installed on the High Injury Network (HIN)	<b>2014</b> : 10.3 Miles on HIN	More than 13 miles of safety treatments installed on HIN annually
Percentage of safety treatment miles installed in Communities of Concern <sup>1</sup>	<b>2014</b> : 9.2 miles of safety treatments in Communities of Concern, 4.9 miles of which were on the HIN or 47% of HIN miles were in CoCs	Safety treatment miles implemented in Communities of Concern equal to or greater than the proportion of the HIN falling within those communities <sup>3,2</sup>
Percentage of citations issued for Focus on the Five violations citywide <sup>3</sup>	<b>2015</b> : Citywide: 35%	Citywide: 50%
Number of impressions <sup>4</sup> or people reached through Vision Zero outreach initiatives	<ul> <li>Digital Impressions: 4.1 million digital impressions (13k clicks)</li> <li>Radio: 10,000,000 impressions</li> <li>Shelters: 640,000 impressions</li> <li>In-person Outreach: 3,200 people reached</li> </ul>	Media: 50% increase in impressions In-Person: 5,000 a year
Number of people reached through Safe Routes to School Program	<ul> <li>2016: 16,700 people reached</li> <li>9,425 in English</li> <li>3,935 in Spanish</li> <li>3,350 in Chinese</li> </ul>	25,000 people per year in English, Spanish, Chinese and Filipino
Number of people reached through Safe Streets for Seniors Program	<b>2016</b> : 5,050 people reached including English, Spanish, and Chinese translation	7,000 people per year in English, Spanish, Chinese, Filipino, and Russian
Number of Vision Zero awareness outreach events with translation services available by language	<b>2016 (to date)</b> : 24 total events, 14 with Spanish or Cantonese translation	75% of all Vision Zero awareness outreach events will provide translation services
Percentage of community aware <sup>5</sup> of Vision Zero and its goals	<b>2016</b> : 11% Awareness (20% of those surveyed have heard about Vision Zero; of those, 54% know it's about eliminating fatalities)	18% Awareness
Number and value of grants awarded by DPH to support community-engagement and initiatives on the High Injury Network and in Communities of Concern	<b>FY 15–16</b> : 9 awards <b>FY 16–17</b> :13 awards	15 awards per year

<sup>&</sup>lt;sup>1</sup> Based on 2016 Metropolitan Transportation Commission boundaries

<sup>&</sup>lt;sup>2</sup> Proportion to be determined based on updated HIN to be released in Early 2017

<sup>&</sup>lt;sup>3</sup> Please note: As of January 2017, Focus on the Five Violations include Speeding, Failure to Yield to Pedestrians, Red Light Running, Stop Sign Running, and Failure to Yield While Turning. Violations prioritized for Vision Zero are being re-assessed based on an analysis of more recent and district-level collision data led by the Controller's Office in coordination with SFPD, and are subject to revision.

<sup>&</sup>lt;sup>4</sup>Impressions, broadly defined, are any interaction with a piece of content and an audience member.

<sup>&</sup>lt;sup>5</sup> Awareness in this instance is defined as knowing that Vision Zero is specifically about fatality reduction, not just traffic safety.

<sup>\*</sup>Tracking and reporting on severe injuries utilizing ZSFG hospital data beginning in 2017.

# Vision Zero Pledge

The Vision Zero Two-Year Action Strategy lays the foundation for the next two years and solidifies the city's long-term commitment to achieve zero traffic fatalities by 2024. San Francisco continually strives to provide a transportation system that prioritizes safe and excellent transportation choices for all of our residents, employees and visitors.

On behalf of the following city agencies, we commit to further institutionalizing Vision Zero for all city employees through agency resolution commitments, task force participation, and other opportunities to build awareness. We further commit to continue working together and in partnership with stakeholders to implement this Strategy and do what is needed to reach our goal of zero traffic fatalities in San Francisco.

Mayor

Mohammed Nuru

San Francisco Department of Public Works

Barbara Garcia

nan

San Francisco Department of Public Health

Tilly Chang

**San Francisco County Transportation Authority** 

San Francisco Planning Department

City Administrator's Office

San Francisco Public Utilities Commission

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San Francisco Rec & Parks

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Mayor's Office on Disability

Chief William Scott

San Francisco Police Department

Elaine Forbes

Port Commission of San Francisco

Myong Leigh (interim)

San Francisco Unified School District

Ben Rosenfield

City Controller

































www.visionzerosf.org