Table of Contents

Note from the Mayor ............................................. 1
In Memoriam Dedication ...................................... 2
Overview .......................................................... 7
Vision Zero is Possible ......................................... 8
Core Principles .................................................. 10
Commitment to Equity ......................................... 11
National Trends .................................................. 14
Understanding Trends in San Francisco ..................... 16
Transformative Changes to Reduce Crashes ................ 18
High Injury Network Map ...................................... 22
Evolving Approach Timeline .................................. 24
Tools for Slowing Speeds and Safer Crossings ............ 26
Safe Streets Actions ............................................ 32
Safe People Actions ............................................ 36
Safe Vehicles Actions ......................................... 40
Data Systems Actions ......................................... 41
Measuring Progress ............................................ 42

The Vision Zero Pledge

The Vision Zero Action Strategy outlines the commitments and actions the City will take to eliminate traffic deaths. We will work together and in partnership with stakeholders to implement this strategy to eliminate all traffic deaths.
In 2014, San Francisco adopted Vision Zero—a bold plan to eliminate traffic deaths and reduce severe injuries. At the core of Vision Zero is a simple and powerful philosophy: all traffic deaths are unacceptable. And they are preventable. Too many people have died on our streets, and too many families struggle with the loss of loved ones or the challenges of lifelong severe injuries.

This ambitious goal is the right goal, and it has given our city the urgency and focus to commit resources to save lives. But we know we need more. This Action Strategy outlines what we need to get us to zero.

Across the United States, cities continue to struggle to reduce traffic deaths. Cities have seen an increasing dependence on cars for travel and more vehicle miles traveled on our streets. With this has come an increase in traffic deaths across major cities, including Vision Zero peer cities like Portland, New York City, and Philadelphia. Nationally, as well as locally, significant cultural shifts around traffic safety will be needed to get to zero.

Our approach has evolved significantly since 2014 and we have learned a lot. This strategy is built on those lessons. We launched a Quick-Build Program in 2019, delivering projects at one-tenth of the cost of our traditional capital projects and a fifth of the time. We’re proactively taking a network-level approach to key safety treatments. We’re also looking carefully at the role of bias and racial disparities in enforcement and seeking proven alternatives like speed cameras. We’re using targeted marketing and culturally competent outreach to focus on the most dangerous driving behaviors. And we’re bringing forward innovative approaches, such as the neighborhood-wide speed limit reduction in the Tenderloin.

We are committed to slowing vehicle speeds and creating safer crossings. But we know we need significant shifts in policies and resources to achieve our goals. We need to urgently work to change speed limits in the city, and we need state authority to use speed cameras. We need to convince more San Franciscans to shift their travel modes by making transit and other modes of travel safe, convenient, and reliable. We also need to create housing options closer to jobs and schools so people don’t have to drive to work. We need a major culture change around traffic safety.

Vision Zero is the right goal and we are dedicated to reaching it. We know that there is much more to do. We will continue working urgently towards zero traffic deaths. We understand what it takes and are committed as a city to saving lives on our streets.

Sincerely,

London Breed
Mayor of San Francisco
In Memoriam

Even one is too many.

Each traffic-related death represents a life cut short, loved ones devasted, and a tragic loss to our community since Vision Zero was adopted in 2014. Many more people survive severe traffic injuries, but their lives are irreparably damaged. This action strategy is dedicated to the people who lost their lives while traveling on San Francisco streets.
Every year in San Francisco, about 30 people lose their lives and over 500 more are severely injured while traveling on city streets. These deaths and injuries are unacceptable and preventable, and San Francisco is committed to stopping further loss of life.

The City and County of San Francisco adopted Vision Zero, a policy that commits us to ending traffic fatalities, in 2014. Vision Zero San Francisco commits city agencies to build better and safer streets, educate the public on traffic safety, enforce traffic laws, and adopt policy changes that save lives. This Safe Systems approach centers human life and coordinates across city departments to implement a suite of actions prioritizing street safety addressing Safe Streets, Safe People, Safe Vehicle, and Data Systems.
The strategy was developed by the City and County of San Francisco, co-chaired by the San Francisco Municipal Transportation Agency (SFMTA) and the Department of Public Health, with leadership from the Mayor’s Office, the Board of Supervisors, and in coordination with local community groups, advocacy organizations, and residents. Vision Zero is a multi-disciplinary approach that requires interagency coordination from the more than 10 agencies that adopted this commitment.

Since 2014, Vision Zero SF has published an Action Strategy that lays out the strategic actions for city departments and agencies to reach the city’s Vision Zero goal. This fourth version of the Action Strategy reflects a need for a paradigm shift—outlining the substantial changes needed in policy, politics, and resources to get to zero.

Building on lessons learned and best practices since 2014, this citywide plan lays out the highest impact strategies to get closer to zero traffic deaths. Through this strategy, we have increased the commitment to Quick-Build projects significantly—by more than 200% since 2019. Since committing to five Quick-Builds in 2019, the City is now committing to applying the Quick-Build toolkit on the entire High Injury Network by 2024—about 20 projects per year. We have also committed to making safety improvements network-wide, ensuring safer crossings using proven tools like continental crosswalks, longer crossing times, daylighting, and leading pedestrian intervals to give pedestrians the head start. Through Quick-Build projects and corridor-wide safety improvements, every street on the High Injury Network will be improved with safety measures by 2024.

Even with significant investment in major street redesign, we know engineering is just one piece of the roadmap to zero. Without additional authority and tools, we will not be able to reach Vision Zero by 2024. We need state authority to use speed cameras and to work urgently to reduce speed limits in the City. We need to achieve complementary city goals such as shifting to more sustainable trips and increasing affordable housing. We need additional funding and political support for transformative projects and programs. This plan outlines the monumental shifts needed to get to zero.

Vision Zero is the right goal and we have much more work to do to achieve it. We will continue working urgently towards zero traffic deaths. We know what it takes and are committed as a city to save lives on our streets.
Globally, Vision Zero is Possible

Traffic deaths are an international public health crisis: globally over 1.3 million people are killed every year and traffic death is the leading cause of premature mortality for people under 30.¹

Even in the face of rising traffic fatalities, several cities across the globe have proven that Vision Zero is possible. These cities have shown that Vision Zero can be achieved, but only with significant investment and monumental changes in policies. Lessons from these cities also show that getting to zero requires a long-term investment and commitment.

¹ https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries

Edmonton, Canada

POPULATION: 930,000

ACHIEVEMENT: 63% fatality reduction in 2020 from 2015 levels

STRATEGY HIGHLIGHTS:
- Increased public participation through crowdsourcing, surveying, and town halls
- Speed limit reductions in residential and areas with high pedestrian volumes
- Mobile and fixed speed detection system*

Oslo, Norway

POPULATION: 700,000

ACHIEVEMENT: Zero bicyclist and pedestrian deaths in 2019

STRATEGY HIGHLIGHTS:
- Car-free areas in the community business district*
- Downtown congestion pricing*
- Shifting traffic safety culture emphasizing that any traffic fatality is unacceptable

Fortaleza, Brazil

POPULATION: 2.5 million

ACHIEVEMENT: 48% reduction in fatalities in 2019 from 2014 levels

STRATEGY HIGHLIGHTS:
- Lowering speed limits wherever possible
- General purpose travel lanes converted to bike lanes and transit-only lanes
- Car-free pedestrian plazas*

* Represents strategies that SF does not currently have authority to do, or needs additional funding and political support to achieve—more information on these strategies on page 19: “Improvements to get us to Zero”
Core Principles
Vision Zero SF is guided by the core principles that traffic deaths are preventable, and that traffic safety interventions can reduce the likelihood that a collision results in death. The program uses a data-driven approach with a focus on strategies and actions that are proven to reduce instances of vehicle speeding—the most critical factor in predicting a traffic fatality.

Preventing Loss of Life and Reducing Severe Injury
Safety and the preservation of human life is our highest priority. Vision Zero uses a public health framework, which aims to improve the population’s health. With this foundation, Vision Zero establishes that traffic deaths can be prevented and are unacceptable.

Centering Equity
Vision Zero SF prioritizes traffic safety investments in the neighborhoods and communities that are most disproportionately impacted by traffic deaths and severe injuries. Safety projects and programs should not exacerbate existing inequities, including through interactions with law enforcement and issues of racial profiling.

Slowing Speeds
Speed is a fundamental predictor of crash survival, and as people age, their vulnerability to severe and fatal injury increases. Vision Zero prioritizes speed management and speed reduction to design for speeds that protect human life.

Designing Safe Streets
Human error is inevitable and unpredictable. Vision Zero prioritizes the design of the transportation system to anticipate error so its consequence is not severe injury or death.

Promoting Traffic Safety Culture
Vision Zero aims to engage people to first acknowledge that traffic deaths are a preventable problem, and then empower people to promote traffic safety through individual actions and behaviors. Vision Zero is committed to providing information and outreach in the most widely spoken non-English languages to be inclusive and empowering to communities often left behind.

Equity Focus
Equity is a core principle of Vision Zero. The 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, languages, ages, abilities, and housing status. Years of structural and institutional racism have resulted in disproportionate health impacts on Black, Indigenous, and people of color (BIPOC). When looking at severe and fatal traffic injuries, we also know that there are several layers of intersecting inequities to address, as described on the next pages.
Defining Inequities

Inequities in severe and fatal injuries are avoidable disparities in injury outcomes that result from unjust and unfair differences in social, economic, environmental, and political conditions.

Vulnerable populations: Communities experiencing or at-risk for severe or fatal traffic injuries include older adults, youth, homeless or marginally housed residents, low-income people, people of color, non-English speaking people, immigrants, and people with disabilities. There is also intersectionality between many of these communities.

Seniors account for approximately 25% of pedestrian deaths but only 15% of the city’s population. (2020)

People with mobility, hearing, and visual disabilities represent 6% of trauma center admissions involving transportation injury.

People experiencing homelessness and marginally housed residents represent less than 1% of the city’s population, but were killed in 20% of fatal crashes in 2020.

People of color are overrepresented in traffic fatalities when compared to the citywide population.

Vulnerable road users: Pedestrians, cyclists, and motorcyclists are more likely to experience severe or fatal injuries when they are involved in a traffic collision due in part to current transportation system design and historic prioritization of motor vehicle speed and mobility over safety.

People walking, biking, and motorcycling are disproportionately impacted. In 2020, people walking represent 40% of all traffic fatalities; people riding a motorcycle represent 23% of all fatalities.

Geographic inequities: San Francisco’s Vision Zero High Injury Network is disproportionately concentrated in low-income communities and communities of color.

“Communities of Concern,” areas with high concentrations of low income residents, immigrants, and non-English speaking residents and seniors, are where half of all severe and fatal crashes occur.

Bias and unintended consequences:

Vision Zero projects and programs should not exacerbate existing inequities in implementation or result in any unintended consequences, including interactions with law enforcement and issues of racial profiling, bias, and deportation.

People of color are disproportionately stopped for traffic stops in SF. Vision Zero SF is working to identify alternatives to and reduce harm from enforcement. This includes focusing on high visibility enforcement, which is proven in SF to reduce disparities, and using automated tools like speed cameras to reduce interactions with law enforcement.

Advancing Equity

Vision Zero initiatives must be developed and implemented with an equity lens to achieve just outcomes and save lives. This means advancing actions that prioritize our most vulnerable populations and are sensitive to community context. To advance equity for vulnerable populations and road users, the City will prioritize safety improvements where vulnerable users travel and in Communities of Concern, and will strengthen community engagement to build trust and foster traffic safety champions.

This strategy commits to:

- Deepening community engagement with community leaders and local stakeholders to ensure that strategic actions reduce injury inequities and do not exacerbate existing inequities.
- Prioritizing and monitoring improvements on the High Injury Network, in Communities of Concern, and where there are concentrations of severe/fatal injuries to seniors and people with disabilities and other vulnerable populations to address historic differences in resource allocation.
- Ensuring Vision Zero strategic actions consider and address equity impacts on vulnerable populations, including the impact of fines and fees on low-income residents.
- Implementing data-driven, culturally competent, multilingual education, engagement, and enforcement campaigns targeted in impacted areas.
- Developing and institutionalizing an injury surveillance system to ensure that injury crash data is accurate, publicly available, and includes an analysis of vulnerable populations.
Across the United States, cities are seeing continued challenges in getting to zero traffic deaths—especially with an increasing dependence on cars for travel and an increase in vehicle miles travelled by cars on our streets.\(^2\) With that has come an increase in traffic fatalities across major cities, including Vision Zero peers like Portland, New York, and Philadelphia. Nationally, as well as locally, significant cultural shifts around traffic safety will be needed to get to zero.

In 2020, 30 people lost their lives to traffic crashes in San Francisco. Even one death on our streets is too many; these deaths are preventable and unacceptable.

### National Trends: Fatalities are Increasing

Across the United States, cities are seeing continued challenges in getting to zero traffic deaths—especially with an increasing dependence on cars for travel and an increase in vehicle miles travelled by cars on our streets.\(^2\) With that has come an increase in traffic fatalities across major cities, including Vision Zero peers like Portland, New York, and Philadelphia. Nationally, as well as locally, significant cultural shifts around traffic safety will be needed to get to zero.


### Trends in San Francisco

In 2020, 30 people lost their lives to traffic crashes in San Francisco. Even one death on our streets is too many; these deaths are preventable and unacceptable.

#### SAN FRANCISCO TRAFFIC DEATHS, 2010-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Killed while walking</th>
<th>Killed while biking</th>
<th>Killed in vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>13</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>2011</td>
<td>17</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>2012</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>2013</td>
<td>21</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2014</td>
<td>20</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2015</td>
<td>16</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2016</td>
<td>15</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>2017</td>
<td>11</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2018</td>
<td>16</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2019</td>
<td>12</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>2020</td>
<td>12</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

**NOTE:** 2010-2012 deaths sourced from California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS) data, restricting to San Francisco City Streets Jurisdiction, including streets that intersect with freeways i.e., fatalities occurring at freeway ramps in the City Jurisdiction. 2013 traffic deaths from SFPD. 2014-2020 traffic deaths reported using the Vision Zero Traffic Fatality Protocol based on data from the Office of the Medical Examiner and SFPD; includes deaths involving above-ground light rail vehicles not routinely reported in SWITRS. Also note that “People Killed in Vehicles” includes external passengers, as well as riders of micromobility devices and skateboards not propelled by a second vehicle.

### TRAFFIC FATALITIES PER ONE MILLION RESIDENTS

<table>
<thead>
<tr>
<th>City</th>
<th>Traffic Fatalities Per One Million Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver</td>
<td>83.7</td>
</tr>
<tr>
<td>Washington DC</td>
<td>51.9</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>47.8</td>
</tr>
<tr>
<td>Chicago</td>
<td>44.5</td>
</tr>
<tr>
<td>San José</td>
<td>42.5</td>
</tr>
<tr>
<td>Portland</td>
<td>32.4</td>
</tr>
<tr>
<td>San Francisco</td>
<td>26.0</td>
</tr>
<tr>
<td>New York City</td>
<td>18.8</td>
</tr>
<tr>
<td>Seattle</td>
<td>16.6</td>
</tr>
<tr>
<td>Boston</td>
<td>14.6</td>
</tr>
</tbody>
</table>

**Note:** National average is 38.

Understanding the Trends in San Francisco

The City regularly monitors and analyzes crash data to inform targeted strategies to reduce crashes and save lives.

CRASH TRENDS ARE CHANGING

Understanding the data trends helps the City to identify the most effective strategies. 2020 fatality and injury data suggest that trends are changing in the types of road users most impacted. Given the changes in travel patterns associated with the global pandemic, 2020 crash data may be anomalous.

- **Pedestrian fatalities are decreasing** from 17 in 2019 to 12 in 2020
- **Motorcycle fatalities are increasing** from 1 in 2019 to 7 in 2020
- **Single vehicle crashes are increasing** from 2 in 2019 to 7 in 2020
- **People experiencing homelessness are especially vulnerable** fatal crashes involving people experiencing homelessness are increasing—from 1 in 2019 to 6 in 2020
- **Hit and run crashes are increasing** from 4 in 2019 to 7 in 2020
- **Severe injuries have declined**: overall severe injuries have declined in 2019 and 2020

SEVERE AND FATAL INJURY CRASHES BY PRIMARY COLLISION FACTOR, 2014-2020

<table>
<thead>
<tr>
<th>Collision Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive Speed</td>
<td>19%</td>
</tr>
<tr>
<td>Failure to Yield</td>
<td>15%</td>
</tr>
<tr>
<td>Red Signal</td>
<td>9%</td>
</tr>
<tr>
<td>Unsafe Turn</td>
<td>6%</td>
</tr>
<tr>
<td>Stop Sign</td>
<td>3%</td>
</tr>
<tr>
<td>All Other Causes</td>
<td>48%</td>
</tr>
</tbody>
</table>

**Speed Matters**

Speed is a leading factor in fatal and severe crashes.

When a person is hit by a vehicle traveling **20 mph** there is a **90%** chance of survival. If a person is hit by a vehicle traveling at **40 mph**, the survival rate drops to **40%**.
Getting to Zero—Transformative Changes to Reduce Crashes

Achieving zero traffic fatalities will require political will and public support for ambitious and transformative policies. These major policy changes can significantly reduce crashes in San Francisco.

- **Major Street Redesign**: Car-free zones, Quick-Build projects, protected bike lane network, and transit only lanes
- **Speed Safety Cameras**: Using speed cameras to enforce speed limits
- **Mode Shift and Pricing Tools**: Moving to active transportation modes, using tools like pricing
- **Advanced Vehicle Technologies**: Advance driver-assisted systems and smaller vehicles
- **Increased Housing Density**: Housing near jobs/services, especially affordable housing and services for unhoused populations

IMPROVEMENTS TO GET US TO ZERO

Globally, we’ve seen that Vision Zero is possible, but only with a significant shift in policies, politics, and resources. We need state laws to allow the City to use proven tools that can reduce crashes, prioritize additional funding, and garner political support for transformative projects and programs. And we need to achieve the transportation and housing goals that can help create a safer environment.

We need state law changed to allow SF to use proven tools for reducing crashes

- **Speed safety cameras**: Using speed safety cameras to enforce speed limits is proven to reduce fatalities in cities such as Portland and Washington D.C. SF needs state authority for this tool.
- **Congestion pricing**: Tools such as congestion pricing would support moving more trips to active transportation, especially in the downtown core. Pricing has proven benefits to reduce crashes, as seen in London. SF needs state authority for this tool.

We need to advance changes to federal law and regulations around the safety of vehicles and advanced vehicle technologies

- **Advanced vehicle technologies and vehicle design changes**: Emerging technologies, such as Advanced Driver Assist Systems (ADAS), are available in many vehicles to support safer driving. Autonomous Vehicles are also being tested on our streets today. However, tools used more extensively in other countries, such as speed governors and alcohol detection systems are proven tools to reduce crashes. Additionally, in the U.S., vehicle sizes are increasing, which increases the risk for a severe or fatal crash. Changing federal design requirements or adopting federal standards requiring new systems such as alcohol detection or speed governors would require significant political will.

Getting to Zero—

Transformative Changes to Reduce Crashes

Achieving zero traffic fatalities will require political will and public support for ambitious and transformative policies. These major policy changes can significantly reduce crashes in San Francisco.

- **Major Street Redesign**: Car-free zones, Quick-Build projects, protected bike lane network, and transit only lanes
- **Speed Safety Cameras**: Using speed cameras to enforce speed limits
- **Mode Shift and Pricing Tools**: Moving to active transportation modes, using tools like pricing
- **Advanced Vehicle Technologies**: Advance driver-assisted systems and smaller vehicles
- **Increased Housing Density**: Housing near jobs/services, especially affordable housing and services for unhoused populations

IMPROVEMENTS TO GET US TO ZERO

Globally, we’ve seen that Vision Zero is possible, but only with a significant shift in policies, politics, and resources. We need state laws to allow the City to use proven tools that can reduce crashes, prioritize additional funding, and garner political support for transformative projects and programs. And we need to achieve the transportation and housing goals that can help create a safer environment.

We need state law changed to allow SF to use proven tools for reducing crashes

- **Speed safety cameras**: Using speed safety cameras to enforce speed limits is proven to reduce fatalities in cities such as Portland and Washington D.C. SF needs state authority for this tool.
- **Congestion pricing**: Tools such as congestion pricing would support moving more trips to active transportation, especially in the downtown core. Pricing has proven benefits to reduce crashes, as seen in London. SF needs state authority for this tool.

We need to advance changes to federal law and regulations around the safety of vehicles and advanced vehicle technologies

- **Advanced vehicle technologies and vehicle design changes**: Emerging technologies, such as Advanced Driver Assist Systems (ADAS), are available in many vehicles to support safer driving. Autonomous Vehicles are also being tested on our streets today. However, tools used more extensively in other countries, such as speed governors and alcohol detection systems are proven tools to reduce crashes. Additionally, in the U.S., vehicle sizes are increasing, which increases the risk for a severe or fatal crash. Changing federal design requirements or adopting federal standards requiring new systems such as alcohol detection or speed governors would require significant political will.
We need additional local and regional funding and political support for transformative projects and programs

Major street redesign, including car-free zones, expansive Quick-Build projects, extensive protected bike lane networks and transit only lane networks

Major street redesign requires political will for addressing tradeoffs, such as extensive parking removal and vehicle travel lane repurposing. Significant funding is also needed beyond current availability to achieve the level of investment needed to get closer to zero fatalities.

Major culture change around traffic safety

Significant change is needed around changing norms around dangerous driving behaviors. This could be achieved through major investment in high-visibility community engagement and campaigns, as seen from anti-smoking or seatbelt wearing campaigns. More resources would be needed, including coordination across the region on messaging. Additional changes to traffic safety could be achieved through changes to driver education at the State level.

We need to achieve Complementary City Goals that are critical to safety

Mode shift to sustainable trips, including tools such as congestion pricing and Slow Streets

Moving more trips to active transportation, such as biking, walking, and transit, is critical to achieving our safety goals. Tools such as congestion pricing require state legislation. Better management and regulation of Transportation Network Companies could improve street safety, contribute to mode shift goals, and support our Transit First Policy and climate change goals.

More local housing density, especially affordable housing

Building more housing closer to jobs, schools, and services will increase the number of biking, walking, and transit trips. Making this housing affordable is critical to safety; approximately 20% of people killed in crashes in 2020 in SF were homeless or marginally housed. Providing housing for people who are experiencing homelessness will support the most vulnerable to traffic crashes.
San Francisco’s High Injury Network

The Vision Zero High Injury Network (HIN) guides the city’s investments in infrastructure and programs, and ensures that Vision Zero projects support those most in need.

75% of San Francisco’s severe and fatal traffic injuries occur on just 13% of our streets.

31% of city streets are in Communities of Concern, and 50% of the High Injury Network is in those same communities.

High Injury Network
The 13% of streets where 75% of severe and fatal collisions occur.

Metropolitan Transportation Commission Communities of Concern
Low-income communities, communities of color, seniors, and people who rely on walking and transit as their primary means of transportation.
Vision Zero SF Reflects an Evolving Approach and Lessons Learned

San Francisco was the second city in the United States to adopt Vision Zero and is a leader nationally in our commitment to prioritize street safety and eliminate traffic deaths. Since adopting Vision Zero in 2014, San Francisco has pushed the limits in what can be done to create safer streets. Through data, evaluation, and critical assessments, the City continues to evolve its approach to making streets safer for everyone.

Lessons Learned

Evolving Approach and
Vision Zero SF Reflects an

Mayor’s Executive Directive on Pedestrian Safety—Mayor Gavin Newsom directs City departments to implement solutions to reduce severe and fatal injuries.

Adopted Vision Zero to eliminate all traffic fatalities.

Began commitment to Focus on the Five to better enforce the five traffic violations that most often result in severe injury or death.

Began funding the Safe Streets for Seniors and People with Disabilities grant program to fund community-based organizations to conduct outreach on traffic safety.

Designed a Motorcycle Safety Program which evolved in later years to provide hands-on safety skills training in partnership with SFPD Traffic Company motorcycle officers.

Released the first High Injury Network map showing priority areas based on hospital and police crash data.

Adopted slower walking speeds policy, committing to increase walking times at crosswalks at all signalized intersections citywide.

Launched the Safe Speeds High Visibility Enforcement (HVE) campaign to leverage public communications campaigns with targeted speed enforcement.

Sponsored AB 342 (Chiu), a speed camera bill to begin to pursue alternatives to traditional enforcement.

Launched a Rapid Response Team to quickly and effectively make engineering changes after fatal crashes.

Launched Quick-Build Program to deliver efficient and expedited corridor safety improvements.

Began Post-Fatality Outreach, installing memorial posters and holding one-on-one conversations with members of the public at crash sites.

Launched the Safer Traffic Calming Outreach, installing new or expanded programs.

Introduced Senior and People with Disabilities Traffic Calming Program to focus safety improvements.

Implemented Car-Free Market Street Quick-Build, becoming the city’s first street to remove private vehicles to improve safety for people walking, biking, taking transit and taxis on one of our city’s busiest streets.

Introduced the Safer Intersections project to encourage safer left turns, which includes the Safety—It’s Your Turn campaign, community grants, and the Left Turn Traffic Calming pilot.

Developed Transformative Policy Agenda—released Action Strategy connecting the response to traffic deaths to the city’s goals around equity, climate change and housing affordability.

Implemented the City’s first neighborhood-wide 20 mph zone—reducing speed limits in the Tenderloin, where every street is on the High Injury Network.

Sponsored AB 550 (Chiu) Speed Safety Cameras, seeking out alternatives to traditional enforcement.

Introduced the city’s first neighborhood-wide Turn on Red Restriction in the Tenderloin—a neighborhood with the highest concentration of turn-related crashes.

2010

2014

2016

2017

2018

2019

2020

2021
Using Proven Tools to Address Crash Factors

SF targets its tools to address the primary factors that cause crashes on our streets. To save lives, we focus on slowing speeds and improving crossings. Our work focuses on the most effective tools that will have the largest impact on safety on our streets.

### TOOLS FOR SLOWING SPEED

<table>
<thead>
<tr>
<th>TOOL</th>
<th>COST</th>
<th>EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Progression Speeds</td>
<td>$</td>
<td>++</td>
</tr>
<tr>
<td>Speed Limit Reductions</td>
<td>$$</td>
<td>++</td>
</tr>
<tr>
<td>Speed Humps</td>
<td>$$</td>
<td>++</td>
</tr>
<tr>
<td>Speed Radar Signs</td>
<td>$$$</td>
<td>+</td>
</tr>
<tr>
<td>Speed Cameras</td>
<td>$$$</td>
<td>+++</td>
</tr>
<tr>
<td>Quick-Build Road Diets</td>
<td>$$$$</td>
<td>+++</td>
</tr>
</tbody>
</table>

### TOOLS FOR SAFER CROSSING

<table>
<thead>
<tr>
<th>TOOL</th>
<th>COST</th>
<th>EFFECTIVENESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daylighting</td>
<td>$</td>
<td>++</td>
</tr>
<tr>
<td>Continental Crosswalks</td>
<td>$</td>
<td>++</td>
</tr>
<tr>
<td>Painted Safety Zones</td>
<td>$$</td>
<td>+++</td>
</tr>
<tr>
<td>Walk Speed 3.0</td>
<td>$$</td>
<td>+++</td>
</tr>
<tr>
<td>Leading Pedestrian Intervals</td>
<td>$$</td>
<td>+++</td>
</tr>
<tr>
<td>Rapid Flashing Beacons</td>
<td>$$$</td>
<td>++</td>
</tr>
<tr>
<td>Bicycle Traffic Signals</td>
<td>$$$</td>
<td>++</td>
</tr>
<tr>
<td>New Signal Mast Arms &amp; Signal Heads</td>
<td>$$$</td>
<td>++</td>
</tr>
<tr>
<td>Red Light Cameras</td>
<td>$$$</td>
<td>++</td>
</tr>
<tr>
<td>New Traffic Signals</td>
<td>$$$</td>
<td>+++</td>
</tr>
<tr>
<td>Quick-Build Program</td>
<td>$$$</td>
<td>+++</td>
</tr>
</tbody>
</table>

**Cost:** $: Less than 10K  $$: $10K-$50K  $$$: $50K-$250K  $$$$: $250K+

**Effectiveness (Crash Reduction):** * Minimal  ++ Moderate  +++Significant

Based on national data and adapted for SF trends.

**Speed Limit Reductions:** Cities like Seattle and Portland have shown a reduction in crashes from lowering speed limits on city streets. In Seattle, speed limit signs reduced crashes by 20%. SF recently introduced its first neighborhood-wide 20 MPH speed limit in the Tenderloin. The new speed limit reductions were paired with additional education and outreach to increase awareness about the change in speed limits.

**Quick-Build Road Diets:** Quick-Build projects are reversible, adjustable traffic safety improvements that can be installed within months. Quick-Builds that remove a travel lane have been proven effective in slowing speeds in SF. For example, the 6th Street Pedestrian Safety Quick-Build resulted in a 21% decrease in 85th percentile speeds.

**Daylighting:** Pedestrian red zones improve sight lines between drivers and people crossing the streets. Neighborhood wide daylighting in the Tenderloin resulted in a 14% reduction of collisions.

**Leading Pedestrian Intervals (LPIs):** LPIs give pedestrians the head start at a crosswalk. The National Association of County Transportation Officials (NACTO) has reported LPIs to reduce pedestrian-vehicle collisions by as much as 60%.
They were developed by San Francisco’s city agencies with significant input and ideas from community groups, advocates, and the public in 2020 and 2021. Over 400 people provided input on a citywide survey, with additional community members participating in city-wide events to share ideas. Vision Zero SF commits to continued and broadened engagement as reflected in many of the identified actions, and thanks San Franciscans for their continued advocacy and partnership in ending traffic deaths.

Actions Overview

The actions outlined in the following pages are critical elements to reducing traffic deaths—categorized by Safe Streets, Safe People, Safe Vehicles, and Data Systems.
Since 2014, approximately 80 miles of corridor-level improvements have been completed or are in planning or construction. The City has approximately 80 miles remaining on the High Injury Network that need to be updated with safety improvements. This strategy commits the City to making these core safety improvements using the Quick-Build toolkit—which can include tools such as continental crosswalks, painted safety zones, daylighting, traffic signal retiming, and protected bike lanes.
SAFE STREETS

Excessive vehicle speed, inadequate visibility between travelers, and intersection conflicts all increase the likelihood of a crash that results in a severe or fatal injury. Safe Streets actions identify design and data-driven engineering tools to improve safety.

Safe Streets actions advance corridor and network-wide improvements, such as ensuring Quick-Build projects are located on the High Injury Network (HIN) or in Communities of Concern. Traffic calming measures focus on vulnerable populations, including near schools and senior centers. Safe Streets actions also increase intersection safety, especially for seniors and people with disabilities through a variety of proven measures such as daylighting, continental crosswalk upgrades, and accessible pedestrian signals. Vision Zero SF also supports expanding a network of low-car and car-free streets—such as Slow Streets and full street closures—equitably across the city and with community support.

### SLOWING VEHICLE SPEEDS

<table>
<thead>
<tr>
<th>ACTION</th>
<th>LEAD AGENCY</th>
<th>TIME FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply the Quick-Build toolkit on the entire HIN by 2024* (see map on pages 30–31 for more details).</td>
<td>SFMTA / SF Public Works</td>
<td>2024</td>
</tr>
<tr>
<td>Develop a comprehensive speed management plan with the goal of slowing vehicle speeds on the HIN using tools such as speed limit reductions (as authorized by AB 43), traffic signal re-timing, installing traffic calming devices, and re-purposing travel lanes (road diets). The Plan will include complementary tools like education and outreach and high visibility enforcement to slow speeds (see pages 34-35 for more details).</td>
<td>SFMTA</td>
<td>2022</td>
</tr>
<tr>
<td>Complete 100 traffic calming devices annually, including locations focused on areas that have been prioritized for seniors, people with disabilities, and schools.</td>
<td>SFMTA</td>
<td>Annual</td>
</tr>
<tr>
<td>Expand active transportation network for biking and walking, including low-car and car-free streets, Slow Streets, and protected bike lanes, with community support (see map on pages 38-39 for more details).</td>
<td>SFMTA / SF Recreation and Parks</td>
<td>2024</td>
</tr>
</tbody>
</table>

* This includes approximately $5M annually in unfunded needs to complete all eligible Quick-Build projects; SFMTA will look to identify this funding source in the update to the Capital Improvement Program (CIP) in 2022.

### IMPROVING VISIBILITY & REDUCING CONFLICTS FOR VULNERABLE ROAD USERS

<table>
<thead>
<tr>
<th>ACTION</th>
<th>LEAD AGENCY</th>
<th>TIME FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure all intersections on the HIN have high visibility crosswalks by 2024 and daylighting by 2023.</td>
<td>SFMTA</td>
<td>2023/2024</td>
</tr>
<tr>
<td>Modify all eligible signals on the HIN for slower walking speeds and leading pedestrian intervals.</td>
<td>SFMTA</td>
<td>2024</td>
</tr>
<tr>
<td>Upgrade 40% of signals on the HIN with Accessible Pedestrian Signals (APS) and 95% of signals on the HIN with Pedestrian Countdown Signals (PCS).</td>
<td>SFMTA</td>
<td>2024</td>
</tr>
<tr>
<td>Evaluate Tenderloin No Turn on Red (NTOR) policy and develop expansion plan based on results.</td>
<td>SFMTA</td>
<td>2022</td>
</tr>
<tr>
<td>Develop expansion for installation of left-turn traffic calming at 35 new high priority locations on the HIN.</td>
<td>SFMTA</td>
<td>2024</td>
</tr>
<tr>
<td>Expand red light camera program with eight new locations.</td>
<td>SFMTA</td>
<td>2022</td>
</tr>
</tbody>
</table>
Developing an Active Transportation Network

Supporting mode shift is critical to achieving zero traffic fatalities. More people walking and biking on safe streets helps make it safer for everyone traveling. The City will update the Active Transportation Network to expand low-stress streets for biking and walking by 2024. This network includes low-car and car-free streets, Slow Streets, and protected bike lanes. The SF Bicycle Plan will develop a more comprehensive and long-term vision for biking in the city.
SAFE PEOPLE

Everyone makes mistakes. No one should die from them. Driving over the speed limit, not yielding to people in the crosswalk, or not stopping at red lights are all dangerous driving behaviors that can be positively influenced through education, high visibility enforcement, and policy. Paired with street redesign and other traffic safety tools, Safe People actions create a culture that prioritizes traffic safety by raising awareness of the need for safer streets, reducing barriers to adopting safer driving behaviors, and creating traffic safety champions.

Safe People actions address the human aspects of traffic safety. Education campaigns informed by data and behavioral science efficiently target messages to a broad swath of residents through physical and digital marketing. Community grants and in-language materials ensure we reach vulnerable populations who are disproportionately impacted through traffic crashes. High visibility enforcement works to transparently curb dangerous driving behaviors and reduce bias. Policy decisions prioritizing traffic safety and the impact on human life, especially at the state level, can expand the city’s legal authority to achieve Vision Zero.

**ENSURE COMPLIANCE WITH TRAFFIC LAWS**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>LEAD AGENCY</th>
<th>TIME FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 50% of traffic citations for top five causes of collisions (Focus on the Five).</td>
<td>SFPD</td>
<td>Annual</td>
</tr>
<tr>
<td>Continue to extend safe speeds enforcement program with monthly ongoing speed enforcement activities rotating through HIN corridors.</td>
<td>SFPD</td>
<td>Annual</td>
</tr>
<tr>
<td>Conduct High Visibility Traffic Safety Event (HVTSE) actions along the HIN each month to target unsafe driver behaviors related to crashes. HVTSE are coordinated efforts combining prevention, education, and enforcement with a coordinated communication strategy designed to educate the public and promote compliance with the law.</td>
<td>SFPD</td>
<td>Annual</td>
</tr>
<tr>
<td>Pursue next steps from Budget &amp; Legislative Analyst’s (BLA) report analyzing data on racial disparities in traffic stops and policy recommendations to reduce racial disparities and harm during traffic stops.</td>
<td>Office of the Mayor</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**CHANGE TRAFFIC SAFETY CULTURE**

<table>
<thead>
<tr>
<th>ACTION</th>
<th>LEAD AGENCY</th>
<th>TIME FRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to regularly run culturally competent and accessible education campaigns and outreach to create traffic safety champions and shift culture through communication tools (bus ads/shelter ads, radio, social media) in San Francisco about the top crash factors in severe and fatal injuries and other dangerous driving behaviors.*</td>
<td>SFMTA</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Facilitate training opportunities for San Francisco motorcycle riders and similar road users to encourage safe and informed riding. **</td>
<td>SFMTA/SFPD</td>
<td>Annual</td>
</tr>
<tr>
<td>Provide annual grants to community-based organizations to build support for safer streets by engaging seniors and people with disabilities.</td>
<td>SFDPH</td>
<td>Annual</td>
</tr>
</tbody>
</table>

* This includes approximately $2M in unfunded needs to extend the programs after existing funding ends in 2021/2022.

** These commitments are dependent upon annual grant awards.
Advancing a Comprehensive Speed Management Plan

Speed is the leading cause of severe and fatal crashes in San Francisco. This strategy commits the City to developing a Speed Management Plan that will not only reduce speed limits, but include complementary tools like education and outreach, high visibility enforcement, and traffic calming. The plan will also work with communities to explore alternatives to traditional traffic enforcement to ensure compliance with new speed limits. Assembly Bill 43 (Friedman) authorizes cities to set lower speed limits in business activity districts, on safety corridors, and in areas with high concentrations of pedestrians and bicyclists. This speed management plan will propose initial locations that are eligible for speed limit reductions through AB 43.

SF proposes initial eligible speed limit reductions under AB 43

Initial locations eligible as business activity districts beginning 2022; new locations will be proposed on the High Injury Network beginning 2024 as determined by the legislation.
### Safe Vehicles

Safe Vehicles actions ensure that San Francisco's city fleet has the latest technology to prevent collisions and that future autonomous vehicle deployment is implemented with the safety of all road users as the primary focus.

<table>
<thead>
<tr>
<th>Action</th>
<th>Lead Agency</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomous Vehicle Safety</td>
<td>SFMTA/SFCTA</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

**Ensure federal, state, and local public policy related to autonomous vehicles is informed by SF initiatives to support the safety of all road users. Actively engage in legislative process and participate in regulatory proceedings initiated by the US DOT, CA DMV, and CA PUC to communicate these policies and goals.**

### Data

Data Systems actions improve data that informs and monitors targeted Vision Zero efforts to save lives, delivered in partnership with the Vision Zero Injury Prevention Research Collaborative. The Collaborative includes epidemiologists, trauma surgeons, emergency physicians, and key staff from the SF Department of Public Health and Zuckerberg SF General Hospital and Trauma Center. Because San Francisco’s only trauma center is run by the SF Department of Public Health, the city is able to combine hospital data with crash data from the SF Police Department for a fuller picture of severe and fatal traffic injuries in the city.

<table>
<thead>
<tr>
<th>Action</th>
<th>Lead Agency</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Reporting</td>
<td>SFDPH</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>

增加透明度和问责制，通过增加交通相关的伤害 surveillance system (TISSS) data—linked police, hospital, and EMS data—to TransBaseSF public dashboard.

Integrate SFPD Collision Data into new tracking system (Crime Data Warehouse) for timely, efficient reporting and sharing of SFPD-reported injury collisions, including geolocated data.*

Issue an annual report on severe injuries utilizing hospital (ZSFG) and police data, allowing monitoring of injury trends over time and mode.

**Trends and Analysis**

Update the HIN map with 2016-2019 linked police, hospital, and EMS data.

Issue an annual research brief to address traffic injury inequities related to homelessness, race/ethnicity, language, income, and immigration status (one topic each year) to inform policies, projects, programs, and needed data quality improvements.*

* Currently unfunded.
Vision Zero SF regularly reports the progress of the Strategic Actions. In addition, several metrics are included in the strategy, each of which are meant to quantify the impact and effectiveness of Vision Zero SF projects and programs.

<table>
<thead>
<tr>
<th>METRIC</th>
<th>2022/2024 TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick-Build projects completed on the High Injury Network</td>
<td>Apply the Quick-Build toolkit to the entire High Injury Network by 2024</td>
</tr>
<tr>
<td>Focus on the Five enforcement</td>
<td>At least 50% of traffic citations</td>
</tr>
<tr>
<td>Vision Zero outreach</td>
<td>15,000 people annually at community events and 250 million digital media impressions</td>
</tr>
<tr>
<td>Outreach grants to community organizations</td>
<td>Eight grants annually</td>
</tr>
<tr>
<td>Vision Zero community awareness</td>
<td>20% awareness of Vision Zero</td>
</tr>
<tr>
<td>Vision Zero community events</td>
<td>Hold at least 45 events annually with all materials translated</td>
</tr>
</tbody>
</table>

In addition to these metrics, Vision Zero SF will report annually on:

- The number of fatal and severe injuries by travel mode, age, sex, and race/ethnicity.
- The proportion of fatal and severe injuries in Communities of Concern.
- The outcomes of safety projects (including reductions in speed, close-calls, etc.) in an Annual Safe Streets Evaluation Report.

For detailed reporting on Vision Zero SF severe and fatal injuries, please visit: http://visionzerosf.org/maps-data/