

FINAL



Vision Zero San Jose

Two-Year Action Plan – 2017 & 2018

VISION ZERO SAN JOSE TWO-YEAR ACTION PLAN: 2017/2018



MESSAGE FROM CITY LEADERS

One traffic death is one too many... which is why we remain committed to safer streets across San Jose. Traffic deaths are preventable. Our City adopted a Vision Zero transportation safety initiative in 2015, as our City’s commitment to prioritize street safety and ensure all road users – whether you walk, bike, drive, or ride transit – are safe.

In the past two years, significant groundwork has occurred towards building a foundation to achieve Vision Zero – including data analytics, corridor safety audits, collaboration with stakeholders, construction of many projects to improve pedestrian and bicyclist safety, taking critical steps to begin rebuilding our police resources, and pursuit of the legal ability to implement automated speed enforcement technology.

This updated two-year action plan includes strategies to continue moving our City towards the goal of eliminating all traffic fatalities, and significantly reducing severe injury crashes.

However, we can’t do this alone. A key ingredient in achieving safer streets is building the awareness in our community of the need for a culture of “Safety First”. Achieving our goal of zero fatalities will take “All of Us” – motorists, bicyclists, and pedestrians – working together, watching out for each other, and being safe on our streets.

Be safe,



Sam Liccardo
Mayor



Jim Ortbal
Director of Transportation



Eddie Garcia
Chief of Police

CONTENTS

Message from City Leaders	2
Core Guiding Principles	4
Vision Zero History.....	8
Evaluation	11
Engineering.....	12
Enforcement	16
Education & Encouragement.....	17
Technology	18
Policy and Funding Alignment.....	19
Vision Zero Actions 2017 & 2018.....	20
Acknowledgements.....	25

FIGURES

Figure 1: Vision Zero Cities.....	5
Figure 2: 2014 Priority Safety Corridors.....	7
Figure 3: San Jose and National Injury Crash Rates.....	8
Figure 4: 2016 Fatalities.....	9
Figure 5: Top Traffic Violations.....	10
Figure 6: 2016 Priority Safety Corridors.....	11
Figure 7: Walk/Bike Audit Tool.....	13
Figure 8: Decrease in Enforcement Staffing and Citation Issuance.....	17
Figure 9: US Communities Deploying ASE and/or Red Light Running.....	20

TABLES

Table 1: Bike Plan Goals and Current Status.....	6
Table 2: Grant Funded Projects on Priority Safety Corridors.....	15

This Vision Zero San Jose Two-Year Action Plan is dedicated to those who have lost their lives in a traffic crash, to those who have been severely injured, and to their families and friends. Their loss inspires us to do all we can to eliminate traffic deaths and provide safe streets for all.

CORE GUIDING PRINCIPLES

Vision Zero was initiated in Sweden in 1997 as a street safety policy to eliminate traffic fatalities and reduce severe injuries. The policy has been successful across Europe in achieving significant reductions in traffic fatalities. The effectiveness of Vision Zero comes from a “safety first” collaboration among political leaders, roadway designers and managers, traffic enforcement agencies, vehicle manufacturers, transit operators, government regulators, educators, public health officials, community advocates, and the public.

In May 2015, San Jose became the fourth city in the nation to formally adopt a Vision Zero transportation safety initiative, which aims to eliminate fatalities and reduce severe injuries caused by traffic collisions. The Vision Zero San Jose (VZSJ) plan identified a series of actions centered on continuing and enhancing efforts related to Evaluation, Engineering, Education, and Enforcement, with emphasis also placed on Technology, Policy Alignment, and Partnerships.



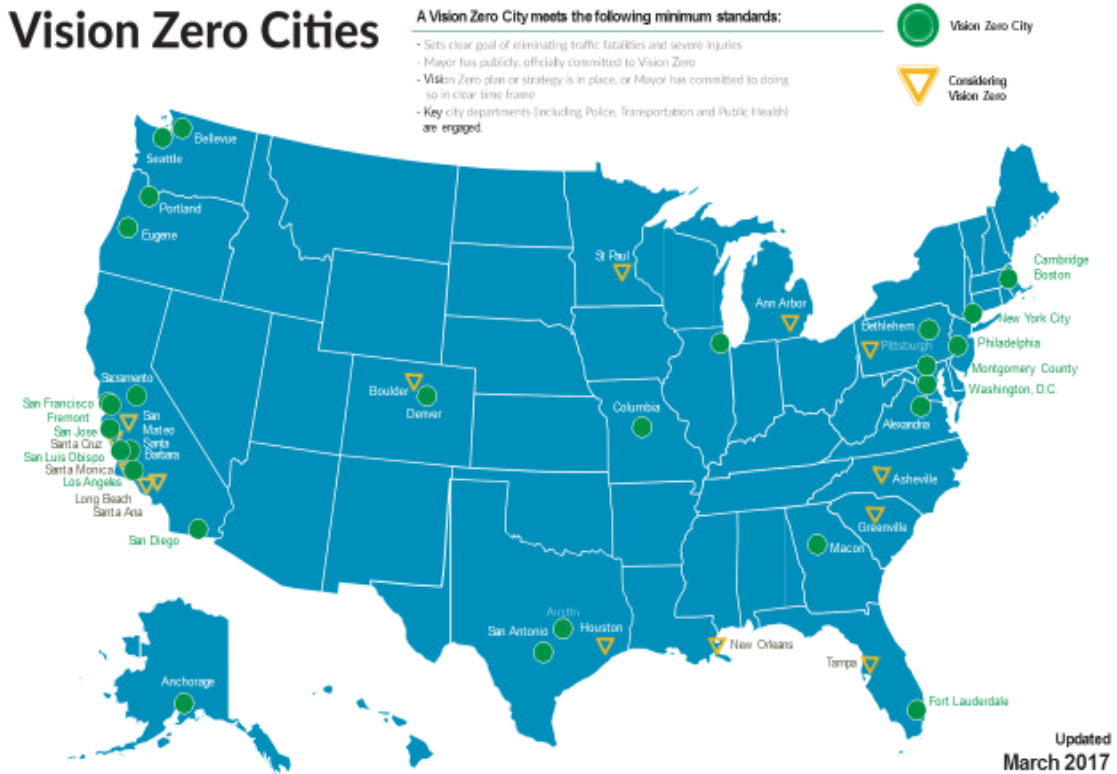
The core guiding principles that guide VZSJ are:

1. Traffic deaths are preventable and unacceptable.
2. Human life and safety takes priority over mobility.
3. Transportation system that accounts for human error.
4. Speed is a fundamental predictor of crash survival.
5. Safe human behaviors, education, engineering and enforcement are essential to a safe system.
6. Policy alignment at all levels of government.

As of March 2017, 27 cities nationwide have adopted Vision Zero policies or programs, with several others pursuing this safety initiative. The increase in deployment of Vision Zero safety principles throughout the nation has the potential of increasing its effectiveness in achieving zero fatalities.

Figure 1: Vision Zero Cities

Source: Vision Zero Network



In recent years, San Jose has changed its priorities to focus on being a city for people, not cars. Through the adoption of the Envision San José 2040 General Plan in November 2011, San Jose set a policy to build more urban land uses and to proactively decrease driving alone—from 80% today to 40% by 2040—by significantly increasing rates of walking, biking, and transit use. A key to this transportation mode shift policy is ensuring that San Jose streets are safe for all users, particularly for people who walk and bike, and for people of all ages and abilities. This excerpt from the City’s General plan exemplifies for our streets

“Design streets for people, not just cars, and to support a diverse range of urban activities and functions....The City’s roadways will be designed to be ‘Complete Streets’ that are accessible and function well for everyone, supporting a full range of activities, including pedestrians, bicycles, utilities, outdoor gathering spaces and vehicle movement.... A Complete Street provides safe, comfortable, attractive and convenient access and travel for pedestrians, bicyclists, motorists, and transit users of all ages, abilities, and preferences.”

BIKE PLAN 2020

The City adopted Bike Plan 2020, which defines the City’s vision to make bicycling an integral part of daily life. The plan recommends policies, projects, and programs to realize this vision and to create an environment where bicycling is convenient, safe, and commonplace. Improving safety for bicyclists is a core component of Bike Plan 2020 that calls for achieving the following goals by year 2020. The City is in the



process of updating the Bike Plan. Bike Plan 2025 will incorporate current City planning and policies (e.g., Envision San Jose 2040 General Plan, Urban Village Planning, and Vision Zero), changes in our transportation system (e.g., BART, BRT, and Light Rail Network), system gaps, and the planning and analysis for Next Generation Bike Network.

Table 1: Bike Plan Goals

BIKE PLAN 2020 GOALS	CURRENT STATUS
Complete a 500-mile Bikeway Network (400-miles on-street and 100 trail miles)	285 miles of bikeway and 57 miles of trails have been installed, providing a combined 342-mile bikeway network as of the end of 2016. An additional 81 miles of bikeway and 3 trail miles are planned in 2017.
Achieve 5% of all trips taken by Bike	Currently, about 1% of commute trips citywide and 4% of commute trips Downtown are by bicycle. Other trip types, such as recreational trips, tend to have higher bicycling modal share.
Reduce bike collision rate by 50%	Ongoing engineering, educational and enforcement initiatives aim towards achieving this target.
Add 5000 bike parking spaces	2550 bicycle parking spaces and 20 bicycle lockers have been installed, with an additional 600 bicycle parking spaces and nine bicycle lockers planned in 2017. This excludes any bicycle accommodations provided by private developments, or by other agencies such as at park-and-ride lots.
Achieve Gold Bicycle Friendly Community status	The City is currently at the Bronze level and is planning to apply for an upgrade within the next few years to reflect completed projects and ones that are currently underway.

SANTA CLARA COUNTY HEALTH ELEMENT

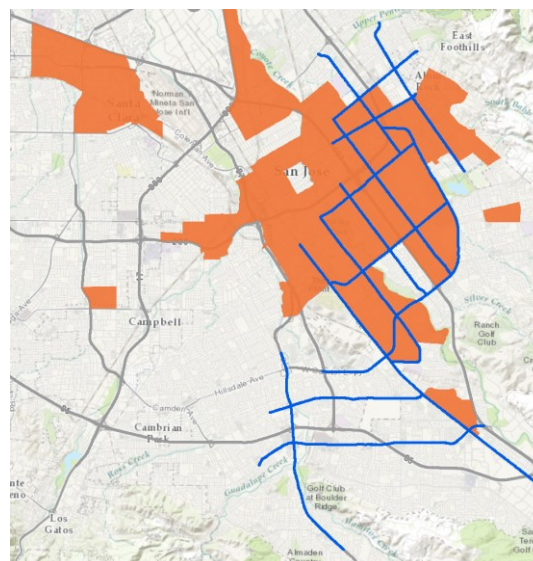
In August 2015, the Santa Clara County Board of Supervisors adopted the Health Element, a new element of the County's General Plan.¹ The Health Element incorporates and updates existing strategies and policies from the Health and Safety Chapters, and establishes a renewed emphasis on collaborative, comprehensive approaches to planning and community health. Many of the Health Element strategies are aligned with Vision Zero San Jose safety goals and Envision San José 2040 transportation policies. In particular, the Health Element includes strategies and policies that:

- Promote attractive, safe, and walkable areas that are pedestrian-friendly
- Promote Complete Streets and livable streetscapes
- Promote improving safety and reducing collisions for all users on roadways and at intersections with a high level of existing or planned pedestrian and non-motorized vehicle activity
- Develop a robust pedestrian and bicycle network that enables active transportation for recreation and transportation
 - Promote awareness and understanding of pedestrians and bicyclists as vulnerable users to improve safety on roadways, particularly children and older adults

EQUITY

Access to affordable, reliable and safe transportation widens opportunity and is essential to addressing poverty, unemployment, and other equal opportunity goals such as access to schools and health care services. The 2015 Vision Zero San Jose plan identified 14 Priority Safety Corridors (PSC) with a high frequency of fatal and severe injury traffic collisions. Many of these corridors (identified in blue) run through “communities of concern” (illustrated in orange) – that is, communities that face particular transportation challenges, either because of affordability, disability, or because of age-related mobility limitations. Communities of concern are census tracts with a concentration of both low-income and minority households at specified thresholds of significance, or with three or more of the following factors in addition to a concentration of low-income households: minority, limited English proficiency, zero-vehicle households, seniors 75 years and older, people with disability, single-parent families, and cost-burdened renters.² By prioritizing traffic safety measures on the Priority Safety Corridors, Vision Zero San Jose will prioritize safety in these communities.

Figure 2: PSC and Communities of Concern



¹ <https://www.sccgov.org/sites/dpd/PlansOrdinances/GP/Pages/Health.aspx>

² <http://planbayarea.org/the-plan/plan-details/equity-analysis.html>

Image sources: Plan Bay Area Equity Analysis; MTC Communities of Concern; San Jose Dept. of Transportation

In the interest of achieving equity and incorporating public input in the planning process, safety assessments of the Priority Safety Corridors and planning of improvements involve a significant amount of community consultation in the form of community meetings and workshops, walk audits, and surveys. Additionally, enforcement activities should not involve racial profiling.

VISION ZERO HISTORY

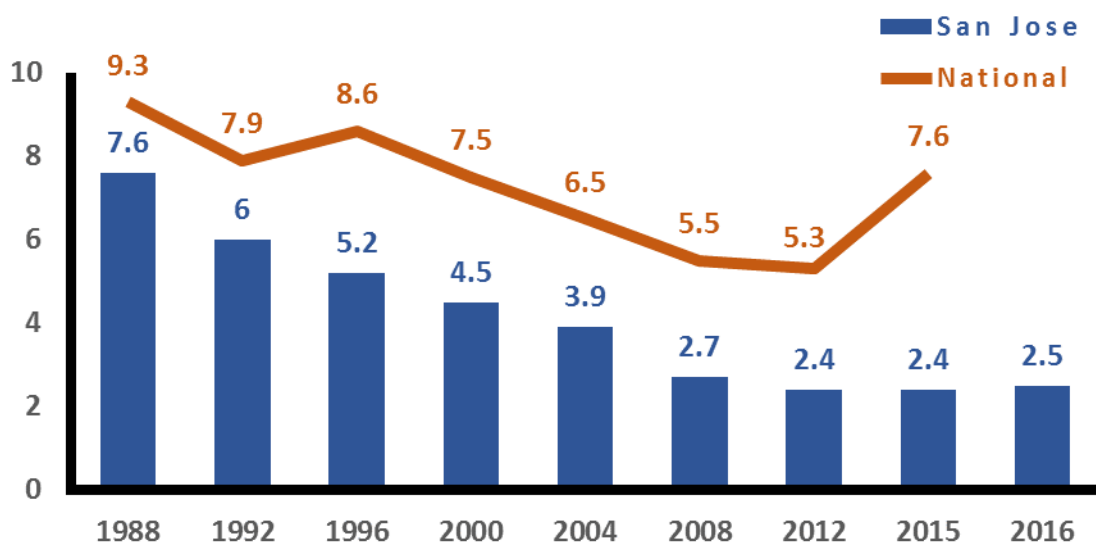
Why Vision Zero? Why now?

In May of 2015, Mayor Sam Liccardo announced San Jose’s entry into the small but growing group of American cities pursuing Vision Zero: the goal to eliminate roadway fatalities and severe injuries. Although San Jose is one of the safest cities in California and the nation, City leaders agree that no loss of life on our roadways is acceptable.

As reported by the National Safety Council (NSC), an estimated 40,200 people died on US streets and highways in 2016, the highest in nine years. This represents a 6% increase over 2015 and a 14% increase over 2014, the most dramatic two-year escalation in 53 years. An estimated 4.6 million roadway users were seriously injured, resulting in a 7% increase over 2015. According to the NSC, the estimated cost to society due to medical and work loss costs caused by these crash-related deaths and injuries is \$432 billion.

Although San Jose’s injury crash rate slightly increased in 2016 as shown *below*, it is still significantly lower (about one-third) than the national average, which unfortunately is on the rise.

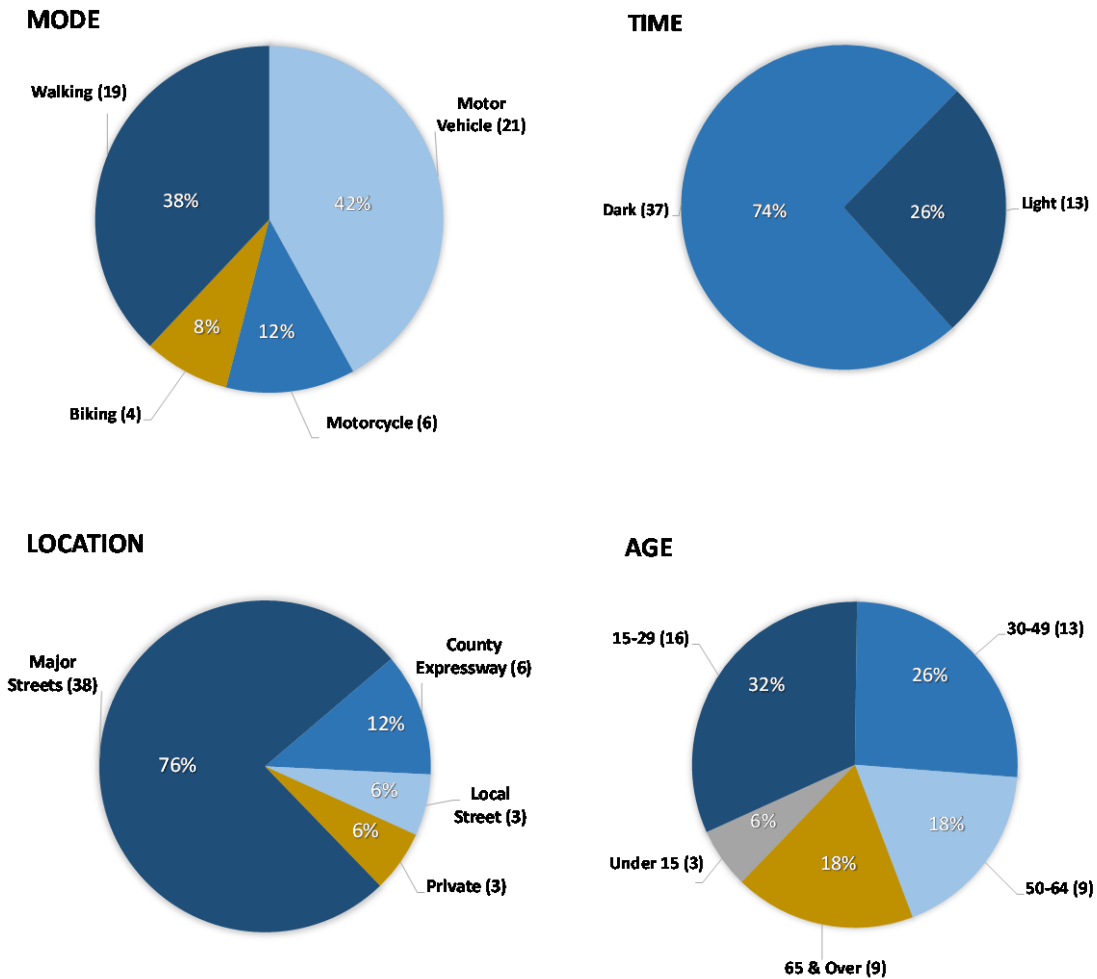
Figure 3: San Jose and National Injury Crash Rates



Tragically, 50 people died in 2016 as the result of traffic collisions in San Jose. While this is a reduction from the 60 fatalities that occurred in 2015, one traffic death remains one too many. As illustrated on the following *Figure 4*, fatalities mostly took place on the City’s major streets (88%), and at night (74%). The fatal collisions mostly involved motorists (54%) and pedestrians (38%), with the majority between the age of 15 and 64 (76%). These percentages do not take

into account factors such as the transportation modal share, percentage of seniors out of the total population, etc. For example, based on available data for years 2010-2015, an average of 0.9% of adults over the age of 16 commuted via cycling, and 1.6% walked.

Figure 4: 2016 Fatalities



Key Conclusions

- 88% (44) of all fatalities occurred on major roadways, with the remaining 12% split between local roads (3) and private streets (3).
- 74% (37) of all fatalities occurred at night
- 62% (31) of fatalities occurred mid-block and 38% (19) at intersections.
- 38% of fatalities involved pedestrians.
- 92% of fatalities involved adults and seniors.
- Speeding is the highest collision factor (18%) in fatalities and major injuries.

Injuries and fatalities on our roadways not only affect victims and their families, but also leave economic impacts and stoke many people's fear of walking and biking. Every traffic fatality results in a \$1.4 million cost to society based on an estimate of the National Highway Traffic Safety Administration.³ Using this estimate means that, in addition to the devastation caused to the families of the 50 victims of fatal collisions in San Jose in 2016, these traffic collisions resulted in an approximate \$70 million in societal loss. Additionally, the fear of being injured in a traffic collision may discourage some people from walking or biking.

Priority Safety Corridors

Immediately after announcing its Vision Zero transportation safety initiative in 2015, San Jose began taking action to focus limited resources, engage the community, and begin the process of updating priorities. Through the analysis of traffic collision records over a five-year period between 2010 and 2014, fourteen Priority Safety Corridors were identified. These corridors are long segments of City streets and expressways, with the highest frequency of fatal and severe injury traffic collisions. Slightly over fifty percent of the fatal traffic crashes in 2014 occurred on these streets. A map of the corridors is shown on *Figure 2* of this report.

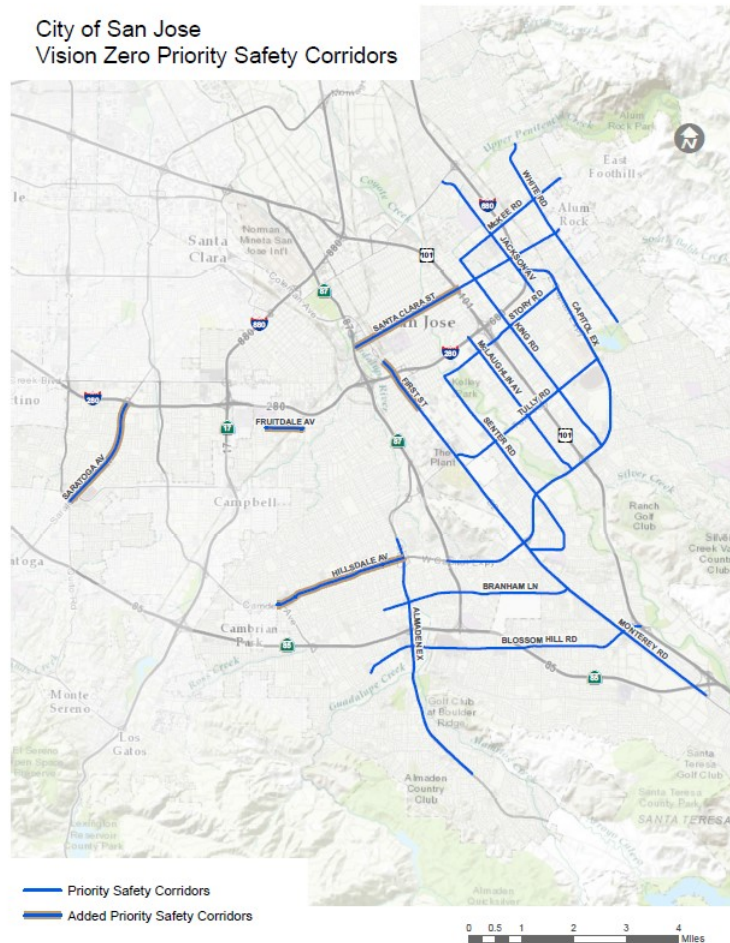
The original priority safety corridors include portions of Almaden Expressway, Alum Rock Avenue, Blossom Hill Road, Branham Lane, Capitol Expressway, Jackson Avenue, King Road, McKee Road, McLaughlin Avenue, Monterey Road, Senter Road, Story Road, Tully Road, and White Road. Safety audits and analysis were conducted for each of the 14 identified corridors, and a set of engineering, education and enforcement measures were identified in the individual corridor reports. These recommendations are being utilized in applying for, and successfully being awarded multiple grant funding projects.

The Vision Zero Priority Safety Corridors were recently revisited based on a review of five-year collision data between 2012-2016, particularly the number and location of fatalities and severe injuries. This review resulted in the identification of an additional nine miles of major road segments listed below and shown on *Figure 6*. The combined 17 Priority Safety Corridors, comprising about 72 miles, still represents 3% of San Jose's approximately 2,400-mile roadway system. Two of the corridors, First Street/Market Street and Santa Clara Street, are also within Communities of Concern. About 33% of the 2016 fatalities and severe injuries took place on the updated Priority Safety Corridors shown on *Figure 5*.

- First Street / Market Street – Alma Avenue to San Salvador Street
- Fruitdale Avenue – Sherman Oaks Drive to Meridian Avenue
- Saratoga Avenue – SR 280 to Lawrence Expressway
- Hillsdale Avenue / Camden Avenue – Almaden Expressway to Leigh Avenue
- Santa Clara Street – US 101 (Bayshore) to SR 87 (Guadalupe Parkway)

³ Blincoe, L. J., Miller, T. R., Zaloshnja, E., & Lawrence, B. A. (2015, May). The economic and societal impact of motor vehicle crashes, 2010. (Revised) (Report No. DOT HS 812 013). Washington, DC: National Highway Traffic Safety Administration

Figure 5: 2016 Priority Safety Corridors



EVALUATION

San Jose's Vision Zero initiative began with an evaluation of fatal and severe injury crashes from 2010 through 2014, leading to the identification of 14 Priority Safety Corridors that experienced over 50% of the fatalities in 2014. Extensive data analysis, field reviews, and consultation with stakeholders occurred for each of these corridors. These comprehensive reviews are helping to focus engineering, education, and enforcement efforts today. The identified engineering improvements also became the basis for staff applying for; and the City being awarded a total of over \$25 million in grant funds for several Priority Safety Corridors.

This approach was again repeated in analyzing the 2012-2016 crash data and five additional major roadway segments have been identified with a comparatively high frequency of fatality and major injury collisions, and thereby were added to the Priority Safety Corridors. Success of this Vision Zero Action Plan requires that Evaluation remain as an integral part of the process. The Department of Transportation will continue to analyze crash records, field inspection findings, and other traffic safety data to identify high-crash intersections and corridors, and behaviors that contribute to crashes. Monitoring the effectiveness of implemented programs will be the key for the plan's success in working towards Vision Zero goals. As applicable, community feedback will be sought through community meetings, surveys, and other avenues.

ENGINEERING

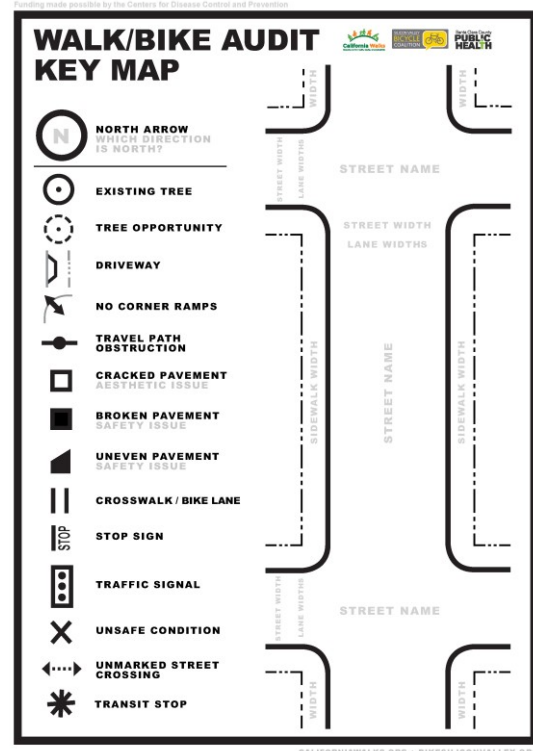
On an ongoing basis, engineers and planners in DOT identify and develop projects designed to improve safety on San Jose’s streets. The analysis of crash data helps guide the scope and priority of projects. Various funding sources such as grants, and City revenues support the implementation of projects subject to annual review by City Council.

San Jose has adopted its General Plan 2040, Bike Plan 2020, and various policies and design guides that shape the development of San Jose’s multimodal transportation system. The City’s proposed 2018-2022 Five-Year Transportation Capital Improvement Program is expected to include investments of approximately \$96.7 million in traffic safety and multi-modal improvements. These capital funds provide for a variety of projects, such as: signal upgrades and retiming, street lighting upgrades, neighborhood traffic calming, improvements to pedestrian and bicycle facilities, and pavement maintenance.

Using the results of the data analysis and feedback from community meetings held in 2015, a multidisciplinary team conducted field safety assessments at high collision locations and areas identified at the community meetings along each of the original Priority Safety Corridors. The assessment process included driving through each corridor, biking some corridors, and walking the corridors with a focus on locations where fatalities and severe injury crashes occurred and at high crash areas.

Safety assessments have been developed for each corridor with recommendations focused on engineering measures that would help reduce vehicle speeds, minimize traffic conflicts, and create safer and more accessible facilities for pedestrians, cyclists and transit users. The recommendations range from relatively low-cost items such as trimming trees that may obstruct visibility; to mid-cost items, such as enhancing a crosswalk with flashing beacons and refuge median islands; to higher-cost improvements, such as installing a new traffic signal. The safety assessments also include some targeted recommendations for enforcement and traffic safety education. Many of the recommendations made following the safety assessments were included in the grant applications discussed in this action plan.

Figure 6: Section of the Walk/Bike Audit Tool



The more common types of recommended improvements included the following:

On City-maintained roads:

- Install retroreflective borders on signal backplates
- Repair damaged sidewalks
- Complete sidewalk gaps
- Install/upgrade pedestrian ramps to current ADA standards (directional ramps where appropriate)
- Install/upgrade Accessible Pedestrian Signals (APS) for crosswalks
- Upgrade signal heads from 8" to 12"
- Replace faded and missing signal head back plates
- Trim trees that obstruct visibility including of traffic control devices
- Paint median island noses yellow (retroreflective)
- Enhance crosswalks to high visibility where needed
- Convert streetlights to LED
- Install yield lines in advance of crosswalks at free right turn lanes
- Ensure maximum range of 2.5 - 3 ft/sec for pedestrian crossing time near senior facilities
- Study the placement of VTA bus stops in relation to crossings, and the ease of access to bus stops; and consider bus stop relocations to improve pedestrian access and safety
- Consider requesting bus stop amenities such as shelters and benches
- Install green bike lane treatment at approach and departure transition zones of major intersections
- Install buffered bike lanes where feasible, and establish missing links
- Consider installing safety awareness messages on signal cabinets
- Consider using pavement markings and flexible delineators to tighten curb radius as a short-term measure where tightening curb radius is recommended
- Consider reviewing automatic pedestrian recall for peak periods of day for locations with significant pedestrian demand
- Consider reviewing Leading Pedestrian Interval (LPI) for peak periods of day for locations with significant pedestrian demand
- Consider reviewing right-turn-on-red restrictions for locations with significant pedestrian demand and/or poor visibility
- Consider pedestrian sensors with pedestrian adaptive signal timing where feasible

On County Expressways:

- Work with County to consider designating and buffering bike lanes where there are currently undesignated shoulders
- Continue to fund Intelligent Transportation System (ITS)/Signal Infrastructure Projects and traffic responsive signal timing improvements throughout the corridor as part the County Expressway Plan 2040

During summer 2016, the City applied for grant funding for safety improvement projects as a direct result of the Priority Safety Corridor assessments. For the second round of the One Bay Area Grant Program (OBAG 2) funding, the City's applications included McKee Road between US 101 and Toyon Avenue, and Tully Road between Monterey Road and Capitol Expressway, as well as the East Julian and St. James Streets couplet and West San Carlos Street.⁴ For the 2016 Highway Safety Improvement Program (HSIP Cycle 8) funding, the City's applications included Senter Road and White Road.⁵ An overview of the proposed safety improvements is highlighted below.

Table 2: Grant Funded Projects on Priority Safety Corridors

PRIORITY SAFETY CORRIDOR	FUNDING PROGRAM	SUMMARY PROPOSED IMPROVEMENTS
<p>McKee Road (US101 – Toyon Ave)</p>	<p>OBAG Grant: \$8,622,594 Local Match: \$2,357,406</p>	<ul style="list-style-type: none"> • New and enhance existing bike lanes, bike racks and a two-way cycletrack • New standard and raised crosswalks and ADA curb ramps and enhance existing crosswalks for high visibility • Radar speed feedback signs to slow down drivers • Raised median islands and pedestrian median fencing • Modify right-turn slip-lanes and/or reduce corner radii at intersections to reduce vehicle speed and improve pedestrian crossing • Make traffic signals more visible and responsive to people walking, bicycling, and driving, including by improving the size and location of signal heads and providing bike detection and Accessible Pedestrian Signals. Enhance general pavement markings and signage to provide clearer information to people traveling via all modes and narrow vehicle lanes to slow down traffic.
<p>Jackson Avenue (McKee Rd – Alum Rock Ave)</p>	<p>OBAG Grant: \$1,500,000 Local Match: \$701,000</p>	<ul style="list-style-type: none"> • Install green bike lanes at conflict zones, and enhancements to the pedestrian facilities. Install two new signals, as well as modifications at existing signals

⁴ <http://mtc.ca.gov/our-work/invest-protect/focused-growth/one-bay-area-grants>

⁵ <http://dot.ca.gov/hq/LocalPrograms/hsip.html>

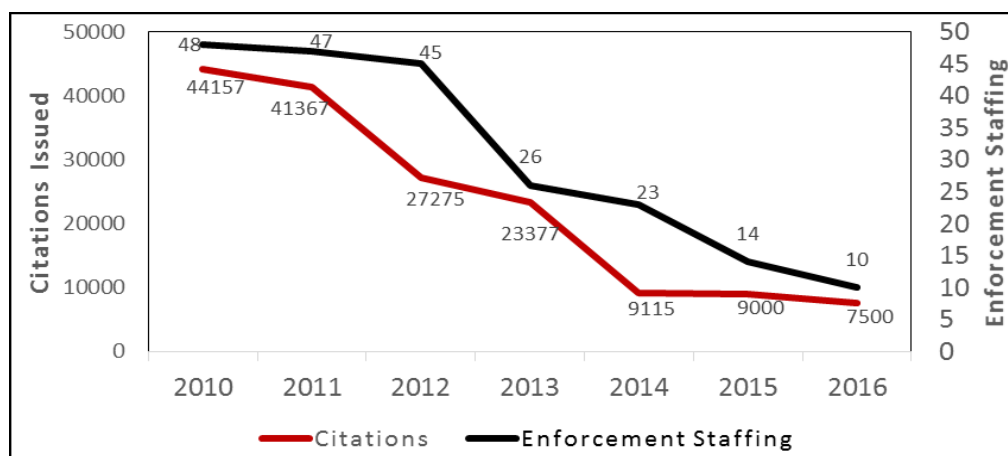
PRIORITY SAFETY CORRIDOR	FUNDING PROGRAM	SUMMARY PROPOSED IMPROVEMENTS
<p>Tully Road (Monterey Rd – Capitol Ex)</p>	<p>OBAG Grant: \$8,599,035 Local Match: \$2,350,965</p>	<ul style="list-style-type: none"> • Raised median islands and add trees and landscaping • Modify right-turn slip-lanes and/or reduce corner radii • New raised crosswalks and ADA curb ramps and enhance existing crosswalks for high visibility • Enhance existing bike lanes with buffers and green paint in conflict zones • Radar speed feedback signs to slow down drivers • Enhance general pavement markings and signage to provide clearer information to people traveling via all modes and narrow vehicle lanes to slow down traffic • Make traffic signals more visible and responsive to people walking, bicycling, and driving, including by improving the size and location of signal heads and providing bike detection and Accessible Pedestrian Signals
<p>White Road (Penitencia Creek Rd – Rose Ave)</p>	<p>HSIP Grant: \$1,223,460 Local Match: \$135,940</p>	<ul style="list-style-type: none"> • Install buffered bike lanes, enhanced crosswalks, flashing beacons, additional streetlights, and general improvements to enhance safety, visibility, and calm vehicle speeds along the corridor
<p>Senter Road (Story Rd/Keyes St – Singleton Rd)</p>	<p>HSIP Grant: \$3,638,340 Local Match: \$1,124,260</p>	<ul style="list-style-type: none"> • Install buffered bike lanes, a raised median island, fill in missing sidewalk sections, and general improvements to enhance safety, visibility, and calm vehicle speeds along the corridor
<p>McLaughlin Avenue (SR 280 – Capitol Ex)</p>	<p>HSIP Grant: \$2,513,970 Local Match: \$804,030</p>	<ul style="list-style-type: none"> • Enhance safety conditions, especially pedestrians' safety through the installation of flashing beacons, bulbouts, enhanced crosswalks, raised center median island, ADA compliant curb ramps, and sidewalk improvements
<p>Monterey Road (Alma St – Bernal Rd)</p>	<p>PICH & TDA3 \$140,000 (PICH), \$300,000 (TDA3)</p>	<ul style="list-style-type: none"> • PICH grant: Community outreach and planning of safety improvements. • TDA grant: Enhancements to signing and pavement marking to improve visibility. Upgrade and provide missing ADA curb ramps

ENFORCEMENT

Illegal behavior and poor judgment by roadway users contribute to many of the fatal crashes in San Jose. Though engineering, education, and technology solutions can mitigate some of these behaviors and reduce the severity of many resulting collisions, these measures are longer-term solutions. In the short term, targeted enforcement is needed to reduce unsafe driving, walking, and biking before serious crashes occur.

Traffic enforcement is not an easy task, and in San Jose the job of addressing unsafe and illegal roadway behavior is made more difficult by about an 80% reduction in staffing levels in the Police Department's Traffic Enforcement Unit (TEU) over the last six years. Recognizing the challenge posed by extremely limited staff resources, the Police Department is working closely with DOT and the Vision Zero Education/Engagement Team to focus TEU officers on the Priority Safety Corridors, overlap enforcement activities with outreach efforts, and train patrol officers on the use of LIDAR (Light Detection and Ranging – a modern form of RADAR) speed guns. The department has 56 such devices for use by patrol officers and is in the process of certifying officers to use them. As part of the Police Department's efforts to increase the presence of traffic enforcement in San Jose, patrol officers are being deployed on an overtime basis. Similar to the approach being taken by TEU, overtime patrol officers are focusing on high crash areas. TEU officers are also assisting with traffic safety educational efforts by handing out Vision Zero brochures that contain multi-modal safety tips.

Figure 7. Decrease in Enforcement Staffing and Citation Issuance



The San Jose Police Department (SJPd) is committed to being a 21st Century Police Department, one that promotes effective crime reduction while building public trust. In February 2016, the SJPd contracted with the Center for Law and Human Behavior at the University of Texas at El Paso (UTEP) to conduct a statistical analysis of the SJPd limited detention (or stop) data collected from September 1, 2013 through March 31, 2016. The SJPd will be incorporating the [study](http://www.sjpd.org/Records/UTEP-SJPd_Traffic-Pedestrian_Stop_Study_2017.pdf) (can be found at: http://www.sjpd.org/Records/UTEP-SJPd_Traffic-Pedestrian_Stop_Study_2017.pdf) recommendations into its 21st Century Policing workplan and implementing them in the coming months and years as is feasible given existing budget and staffing constraints. The SJPd also partnered with Police Strategies, LLC on developing a

public web [portal](http://www.sjpd.org/CrimeStats/ForceAnalysis.asp) (can be found at: <http://www.sjpd.org/CrimeStats/ForceAnalysis.asp>) that allows community members access to officer use of the Police Force Analysis System (PFAS). San Jose is the largest city in the nation to use this data analysis system and one of only two that will provide this information to the public in its ongoing effort to be a transparent police department and improve police/community relations.

EDUCATION & ENCOURAGEMENT

Public education and engagement can be effective in changing behavior. To have sustained impact on building awareness of the need for a culture of "Safety First," and ultimately achieving results with changed behaviors, will take significant ongoing efforts. To achieve optimal impact, education campaigns need to continue to be coordinated with targeted enforcement and community engagement.

Highlights of San Jose's current and expanding education and outreach efforts include:

- Walk n' Roll program targeting elementary and middle school students
- Engaging senior citizens, the homeless members of our community, driving age high school students, and adults through their place of employment
- Develop and provide educational materials in four different languages as needed

A comprehensive list of actions planned for the next two years is attached to this report. Although the City does not currently have the resources or capacity to implement a campaign at the level that would be necessary to affect significant behavior change, efforts to build awareness of Vision Zero safety goals, and the need for all roadway users to prioritize street safety are being initiated. Having a "Safety First" campaign at the State and/or national level targeting the most common behaviors that result in fatalities and severe injuries would support local efforts to build awareness of the importance of transportation safety.

A Vision Zero community survey was completed by 519 people (498 English, 21 Spanish) in 2016 at various community events, to assess the awareness and familiarity of Vision Zero. In addition, 7,659 people were reached via direct email, online and social media postings, and e-newsletter and posts. The vast majority of respondents (98%) agreed with the core principles of San Jose's Vision Zero plan: *"Traffic deaths are preventable and unacceptable. One traffic death is one too many. The street system should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities."*

Other notable results from the survey include:

- 11% of respondents have been seriously injured in a traffic collision in San Jose
- 39% of respondents know someone who was seriously injured or killed in a traffic collision in San Jose
- When asked, "What would encourage you to walk more in San Jose?" the #1 answer was "more/safer street crossings," chosen by 56% of respondents
- When asked, "What would encourage you to bike more in San Jose?" the #1 answer was "Improved bike lanes like buffered or separated bike lanes," chosen by 58% of respondents

TECHNOLOGY

Research shows that 90% of crashes are caused by human error. In the heart of Silicon Valley, it is natural to look to technology as a potential solution to the issues that lead to fatal and severe injury crashes. Crash avoidance technology, fully autonomous vehicles, and automated speed enforcement all offer promising countermeasures to the human factors that lead to the most serious crashes.

San Jose has dedicated 10 miles of streets, known as the Transportation Innovation Zone (TIZ), in the city's northern end to facilitate demonstration projects. The TIZ provides a space to test advancements in technology that may help improve roadway safety. For example, the City has been working with Cisco to develop a project that would test Direct Short-Range Communication (DSRC) devices. A current study by Connected Signals is evaluating the potential safety advantages of providing real-time, predictive, traffic signal information to drivers.

Current advancements in vehicle technology have the greatest potential to significantly reduce traffic injuries and fatalities. Advanced technologies, such as front crash prevention, lane departure warning, blind spot detection, pedestrian detection, and electronic stability control can assist the driver with warnings or automatic braking to help avoid or mitigate a crash.

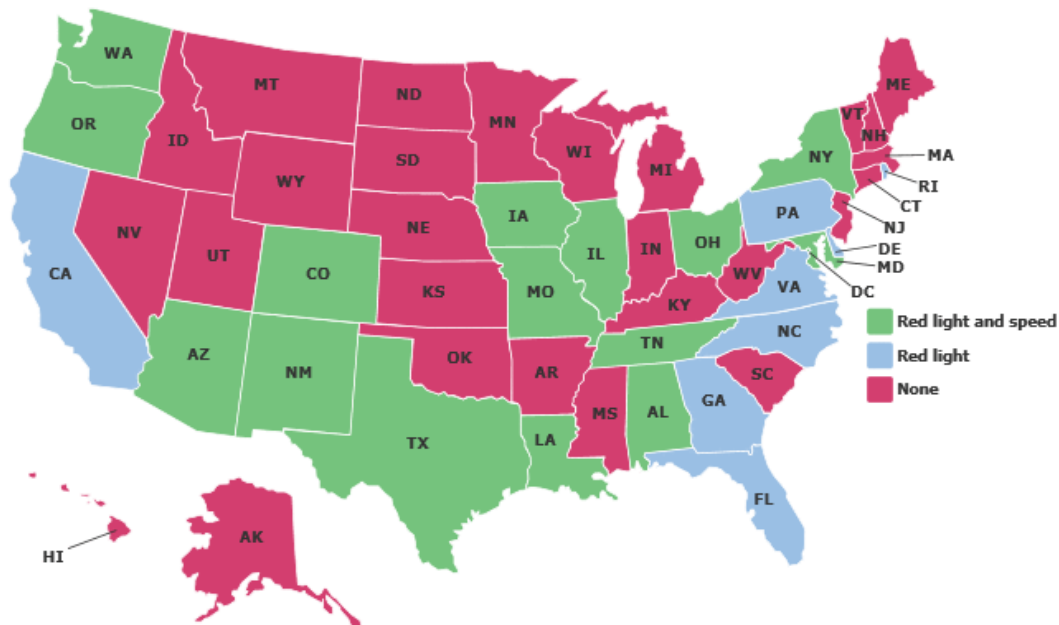
Automated speed enforcement (ASE) is an existing technology that is not currently permitted in California. Considering the staffing challenges faced by SJPd, the ability to detect speeding and cite drivers automatically has the potential to dramatically combat the single highest factor in fatal and severe injury crashes in San Jose. See the Policy section for more information about bringing ASE to San Jose.

POLICY AND FUNDING ALIGNMENT

Supportive policies at the state and national levels can have a significant influence on improving traffic safety, particularly in the near-term. These relate to the management and enforcement of vehicle speed. European countries that have implemented Vision Zero programs attribute their greatest safety improvements to the establishment of a “safety first” culture and enforcement by automated speed cameras—if you speed, you get a ticket. In the U.S., 142 communities in 14 states and the District of Columbia allow automated speed enforcement. Currently, the use of speed safety cameras is not allowed in California.

Figure 8: US Communities Deploying Automated Speed Enforcement and/or Red Light Running Cameras

Source: Insurance Institute for Highway Safety – Highway Loss Data Institute.



A current major policy effort is the joint effort of San Jose and the City and County of San Francisco, in the pursuit of State legislation to pilot this proven technology in our cities. In February 2017, Assembly member David Chui announced AB 342 – the Safe Streets Act of 2017, with Major Sam Liccardo and San Francisco Mayor Ed Lee. If approved, AB 342 would provide for a 5-year pilot of speed safety cameras to improve roadway safety.

VISION ZERO ACTIONS 2017 & 2018

EVALUATION ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Explore establishment of an advisory committee of strategic stakeholders	DOT	Stakeholders	2017
Seek public input through surveys and other measures to assess knowledge of VZSJ and multi-modal traffic safety	DOT		Ongoing
Monitor progress on VZ action items and movement towards VZ goals annually, and update the VZ Action Plan every two years	DOT		Ongoing
ENGINEERING ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Identify additional priority corridors/road segments based on collision data and perform operational and safety assessments	DOT		2017-2018
Establish priority signal timing to transit and emergency services, upgrade traffic signal for ADA compliance, install back plates and change lenses to 12"	DOT		Ongoing
Upgrade street lights to LED and perform photometric analysis where needed.	DOT		Ongoing
Upgrade signage to increase retroreflectivity, and other safety improvements in accordance with the CA-MUTCD	DOT		Ongoing
Improve bicycle facilities through physical separation, provision of green lanes, providing missing links within the grid, and providing bicycle parking.	DOT		Ongoing
Review development projects to ensure accommodation of multi-modal traffic safety during construction, and through site access and public improvements.	DOT		Ongoing
Improve pedestrian facilities with wider sidewalks, landscape buffer and refuge medians, ADA compliant curb ramps, removing crossing impediments, providing missing sidewalk links, pedestrian scale lighting, street furniture, HAWK signals; RRFB and pedestrian signals where warranted, and increasing pedestrian signal crossing time as needed.	DOT		Ongoing
Ensure safe access to all users at special events, and provide bicycle parking when appropriate.	DOT		Ongoing

Finalize and implement safety measures identified in the VZ priority corridors assessment reports, and continue to apply for grant funds for design and construction	DOT		Ongoing
Collaborate with Santa Clara County to identify and fund improvements to Almaden Expressway and Capitol Expressway.	DOT	County's Roads and Airport	Ongoing
Align the delivery of capital improvements and neighborhood traffic management projects with safety improvements.	DOT		Ongoing
Use pavement maintenance program to implement low-cost, safer street designs focusing on pedestrian and cyclist movements, and auto speed management.	DOT	PW	Ongoing
Evaluate the establishment of Senior Zones with a priority given to the Priority Safety Corridors.	DOT		Ongoing
ENFORCEMENT ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Research improved methods for collecting information and reporting on collision details.	PD	DOT	2017-2018
Complete transition to electronic collision reporting, and explore the use of CrossRoads software to assist in accessing regional collision data, and staff analysis and presentation of local and regional collision data.	PD and DOT		2017-2018
Retain additional traffic enforcement officers.	PD		Ongoing
Prioritize VZ enforcement activities and other high crash corridors; enforce pedestrian and bicycle right-of-way. Provide VZ safety literature during enforcement activities. Deploy DUI/impaired driving checkpoints.	PD	DOT	Ongoing
Enforce unsafe parking behaviors of commercial and delivery vehicles, parking in bike lanes and encroaching within crosswalks, double parking, etc.	DOT	PD	Ongoing
Train and certify patrol officers on use of LIDAR guns.	PD		Ongoing
Prioritize deployment of speed feedback trailers on VZ corridors and school zones.	PD		Ongoing
EDUCATION & ENCOURAGEMENT ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Train VZ staff as defensive driving instructors to provide internal training to City staff, and to the public. Training would include safe walking and cycling practices, road sharing rules, and the negative safety impacts of distracted driving, speeding and DUI	DOT	National Safety Council	2017

Develop additional VZ educational material to support expanding the education program	DOT		2017-2018
Expand traffic safety training to driving age high school students through educational seminars, and recruit and train selected students "Train the trainer" to establish program sustainability	DOT	PD	2017-2018
Expand walking and cycling safety training for middle schools through seminars, incentives, and "Train the trainer" techniques	DOT	PD	Ongoing
Expand walking and cycling safety training for elementary schools through classroom teaching, and training of parent volunteers and drivers. Continue rodeos, incentives and safety devices such as helmets, events, school newsletters, and walking school buses	DOT	PD	Ongoing
Supply crossing guard safety kits to schools	PD	DOT	Ongoing
Distribute VZ safety education material during traffic enforcement	PD	DOT	Ongoing
Expand driving and walking safety training to senior centers, conduct walkabouts to identify safety concerns	DOT	Senior Citizens Commission	Ongoing
Expand multi-modal safety training to community centers	DOT		Ongoing
Introduce multi-modal safety training to medium and large size businesses through lunch seminars, educational booth during commute and lunch periods, internal e-mail circulation, TDM programs, etc.	DOT	Chamber of Commerce	2017-2018
Provide cycling and walking safety tips to the homeless population, install bicycle lights, supply reflective safety vests; flash lights and reflective wristbands	DOT	Food bank and homeless service providers	2017-2018
Create a targeted multi-lingual social media with appropriate VZ and multi-modal traffic safety information	DOT	VTA	Ongoing
Pursue funding to expand traffic safety education through billboards, banners and vinyl controller cabinet wraps installed at strategic locations	DOT		2017-2018
Establish educational booth and supply educational information, maps, and safety devices at strategic events such as Viva Calle and safety fairs.	DOT	Parks, Recreation and Neighborhood Services	Ongoing
Outreach to Uber, Lyft, taxi and limousine companies for interest in VZ defensive driving training in person or via web.	DOT	TNC, taxi and limousine companies	2017-2018
Update and expand the VZ website to include up-to-date collision data and maps, safety projects, and educational information.	DOT		Ongoing

Produce VZ printed safety material, educational videos customized to seniors, high school students and working adults. Establish information kiosks at mobility centers, community centers and other key locations.	DOT		Ongoing
Participate in International Walk to School day, National Bicycle Safety Month, California Pedestrian Safety Month, Bike to Work Day and other events	DOT		Ongoing
Coordinate with the County's Health Department including TSCN, SR2S Coalition, National Safety Council, VZ Coalition, BPAC, Seniors Commission, PD staff and others.	DOT		Ongoing
Work with the County's Health Department including TSCN on acquiring injury data from hospitals emergency service and other avenues	DOT		Ongoing
Work with VTA, BART, Samtrans, and neighboring cities to address transit connectivity, schedules, and service to events. Advocate for transit service improvements especially to urban villages and major traffic generators.	DOT		Ongoing
Partner with GreenTrip, Zipcar, 511, the Air District, and other organizations to implement trip reduction programs and increase environment friendly transportation modes	DOT		2017-2018
TECHNOLOGY ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Connected Signals study to evaluate impact of in-vehicle real-time traffic signal information on motorists' behavior.	Connected Signals	DOT	2016-2018
Pilot Autonomous and Connected Vehicle technology.	DOT	Demonstration Partners	2017-2018
Deploy and promote transportation innovation demonstration opportunities.	DOT	OED ProspectSV	Ongoing
POLICY & FUNDING ALIGNMENT ACTIONS	LEAD DEPARTMENT OR AGENCY	SUPPORTING DEPARTMENT OR AGENCY	TIMELINE
Adopt Complete Streets Design Guidelines	DOT		2017
Pursue Automated Speed Enforcement legislation and implement 5-year pilot program	DOT	PD	2017-2022
Research the need for Red Light Camera technology	DOT	PD	2017-2018
Identify funding sources and seek legislation that creates new funding means for VZ	DOT		

Update SJ zoning ordinance to require establishment and yearly monitoring of TDM programs by larger scale developments.	DOT		2017-2018
Develop and adopt Urban Village Plans to support high density, mixed uses, transit oriented, with bike/pedestrian accessibility and connectivity to area services and transit.	DOT		2017-2018

Note: All actions referenced in the Table above are planned for the two fiscal years of 2017-18 and 2018-19.

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San Jose Elected Officials

- Sam Liccardo, Mayor
- Magdalena Carrasco, Vice Mayor, District 5
- Charles “Chappie” Jones, District 1, Sergio Jimenez, District 2, Raul Peralez, District 3, Lan Diep, District 4, Dev Davis, District 6, Tam Nguyen, District 7, Sylvia Arenas, District 8, Donald Rocha, District 9, Johnny Khamis, District 10

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San Jose Police Department

- Edgardo Garcia, Dave Knopf, Steve Payne

Other Participants:

- Colin Heyne, Silicon Valley Bicycle Coalition
- Jaime Fearer, California Walks
- Alice Kawaguchi and Susan Lowery, Santa Clara County Department of Public Health