# Vision Zero San José



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The Vision Zero San Jose plan is dedicated to those who have lost their lives in a traffic crash, 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, as soon as possible.

# **Message from City Leaders**

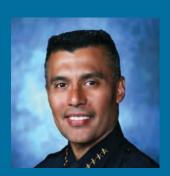




Sam Liccardo



Hans Larsen



**Larry Esquivel** 

One traffic death is one too many... and that is why we are committed to safer streets for San Jose. *Vision Zero San Jose* is our City's commitment to prioritize street safety and ensure all road users—whether you walk, bike, drive, or ride transit—are safe.

San Jose has a proud history as having one of the safest roadway systems among the larger cities in California and our nation. However, we can and must do even better. Vision Zero programs emerging initially from Europe and now in the US are showing that tremendous improvement in safety is possible through data analytics, better street design, targeted enforcement, collaborative education, removing policy barriers, and deploying crash avoidance technologies—technologies being invented right here in Silicon Valley.

Another key ingredient for achieving safer streets is through a network of strategic partnerships. San Jose government has limited resources and can't just build or enforce our way toward zero traffic deaths, though with our smart and diverse community we can unleash the power of partnerships and our people to create a "safety first" culture that moves us toward our Vision Zero goal, as soon as possible.

We look forward to working with you all to make Vision Zero San Jose a reality.

Be safe.

Sam Liccardo

Mayor

Hans Larsen

Hans 7

**Director of Transportation** 

Larry Esquivel

Chief of Police

# **Perspectives**

#### What is Vision Zero?

In 1997, the national government of Sweden introduced "Vision Zero" as a street safety policy that strives for the elimination of traffic fatalities for all transportation modes. The initial goal was to eliminate fatalities by 2020—Sweden has since adjusted their reduction target to 50% by 2020 and to zero deaths by 2050.



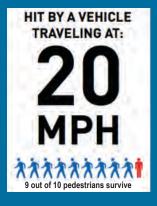
Over the past decade, many European nations have adopted Vision Zero programs and have achieved significant fatality reductions, for example: Sweden (39%), Switzerland (41%), Germany (45%), France (48%) and Spain (53%).

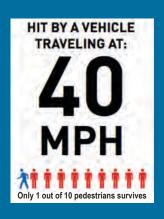
The effectiveness of Vision Zero comes from a "safety first" collaboration among political leaders, roadway designers and managers, traffic enforcement agencies, vehicle manufacturers, transit operators, government regulators, educators, public health officials, community advocates, and the public.

### **Core Principles**

The core principles that guide Vision Zero are:

- 1. Traffic deaths are preventable and unacceptable.
- 2. Human life takes priority over mobility and other objectives of the road system. 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.





- 3. Human error is inevitable and unpredictable; the transportation system should be designed to anticipate error so the consequence is not severe injury or death. Advancements in vehicle design and technology are a necessary component toward avoiding the safety impacts of human errors and poor behaviors.
- **4.** People are inherently vulnerable and speed is a fundamental predictor of crash survival. The transportation system should be designed for speeds that protect human life.
- **5**. Safe human behaviors, education and enforcement are essential contributors to a safe system.
- **6.** Policies at all levels of government need to align with making safety the highest priority for roadways.

### Related US Safety Initiatives

In addition to international Vision Zero initiatives that have become popular among European countries in the past decade and more recently for a growing number of US cities, several other similar national street safety programs have developed over the past year, as described below.



#### **Toward Zero Deaths**

In 2014, a group of national organizations led by the American Association of State Highway and Transportation Officials (AASHTO) adapted Sweden's Vision Zero program and established a national strategy on highway safety referred to as Toward Zero Deaths (TZD). TZD uses a data-driven, interdisciplinary approach and focuses on the topics of 1) safer drivers and passengers, 2) safer vulnerable users, 3) safer vehicles, 4) safer infrastructure, 5) enhanced emergency medical services, and 6) improved safety management. In 2014, San Jose Department of Transportation (DOT) registered as a "proud partner" of the Towards Zero Deaths program.



### **National Association of City Transportation Officials**

NACTO is a coalition of transportation agencies serving America's largest cities. San Jose DOT joined NACTO in 2014. NACTO has adopted advocacy actions that urge the federal government to endorse a Vision Zero policy with a goal to eliminate fatalities and serious injuries on streets, roads and highways.



#### **US DOT Mayors' Challenge for Safer People** and Safer Streets

In 2015, US DOT Secretary Anthony Foxx issued a challenge for mayors to take significant action to improve safety for bicycle riders and pedestrians of all ages and abilities over the next year. US DOT recognizes the many benefits walking and bicycling provide—including health, safety, environmental, transportation and quality of life. In March 2015, San Jose DOT, in coordination with Mayor Sam Liccardo, accepted the challenge and joined nearly 200 cities across the nation. Among the "challenge" activities include issuing a statement about the importance of bicycle and pedestrian safety, and delivering on a series of actions supporting safer streets. The actions in Vision Zero San Jose boldly address Secretary Foxx's challenge.

# Traffic Safety in San Jose



### San Jose's History as a Safe City

San Jose is consistently rated as among the safest cities in California and the nation for relatively low rates of traffic fatalities and injury crashes. San Jose's injury crash rate is about half of the national average. Through the strategic use of data and targeted investment in engineering, enforcement and education, San Jose has continued to improve street safety over the past two decades.

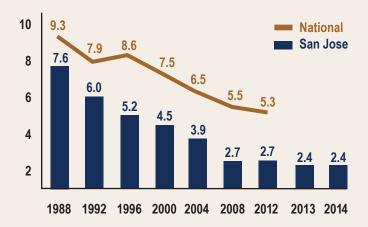
Nevertheless, in recent years, about 40 people lost their lives annually and about 150 were severely injured while traveling on San Jose streets. These deaths and injuries are unacceptable. We can and must do better.

At the core of the worldwide Vision Zero movement is the belief that death and injury on city streets is preventable. For the most part, these aren't "accidents." Traffic crashes are mostly the result of poor choices, along with roadway designs that in the past have focused on the efficiency, speed, and convenience of motorists.

San Jose has changed its priorities to focus on a city for people, not cars. Through the recent adoption of Envision San Jose 2040, San Jose has a policy to build more urban land uses, and proactively decrease driving alone, from 80% today to 40%, by significantly increasing rates of walking, biking and transit use. A key to this transportation "mode shift" policy effort is ensuring that San Jose streets are safe for all users, particularly for people who walk and bike, and people who are young and old.

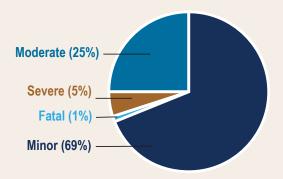
The goal of Vision Zero San Jose is to create a community culture that prioritizes traffic safety and ensures that mistakes on our roadways don't result in severe injury or death.

#### San Jose Injury Crashes Rate per 1,000 Residents



Source: National Highway Traffic Safety Administration and City of San Jose data (including City streets, County expressways, and railroad corridors).

#### **Defining Injury Crashes**



There are about 2,400 injury crashes annually in San Jose, resulting in approximately 3,200 injuries. This includes about 40 fatalities and 150 severe injuries. Injury crashes classified as "severe" involve persons with broken bones and/or ambulance trips to a hospital. "Moderate" injuries include visible cuts, abrasions, or bruises. "Minor" injuries include complaints of pain.

#### **Injury Crash Rate**

for Largest Cities in Bay Area and Southern California

Fremont	2.15
San Jose	3.18
Long Beach	4.13
San Diego	4.17
San Francisco	4.92
Santa Rosa	5.27
Oakland	5.56
Santa Ana	5.90
Anaheim	7.02
Los Angeles	7.73

Source: California Office of Traffic Safety; 2012 Calendar Year; Crash Rate per 1,000 Population

#### **Fatality Crash Rate**

for Ten Largest Cities in United States

New York City	3.29
San Jose	3.72
Chicago	4.40
San Diego	4.90
Los Angeles	5.47
Philadelphia	5.66
Phoenix	8.44
Dallas	8.75
San Antonio	8.90
Houston	9.44

Source: National Highway Traffic Safety Administration; 2011 Calendar Year; Crash Rate per 100,000 Population

### **Fatality Crash Rate**

for Global Cities

Stockholm	1.23
Berlin	1.60
Tokyo	1.70
Hong Kong	2.10
London	2.69
Paris	3 09

Source: 2010 New York City Pedestrian Safety Study, 2008 Calendar Year, Crash Rate per 100,000 Population

# Traffic Safety in San Jose

### **Annual Transportation Safety Report**

The San Jose Department of Transportation (DOT) and the San Jose Police Department (SJPD) provide an annual report to the City Council's Transportation and Environment Committee on the topic of transportation safety addressing the traditional topics of the "4E's"—evaluation, engineering, enforcement and education. This year, the annual transportation report is being "rebranded" and enhanced to incorporate the best practices of the growing Vision Zero movement... and launched as Vision Zero San Jose.

This first Vision Zero San Jose report addresses the current status of the City's many existing and successful traffic safety programs along with currently funded improvement actions. The report continues to include the traditional 4E topics of evaluation, engineering, enforcement and education, and adds new emphasis to the topics of technology, policy and partnerships. See pages 18 through 27 for the specific programs and actions in each of these seven topic areas.

> Moving toward zero traffic deaths and providing safe streets for all, as soon as possible.



### Vision Zero San Jose ASAP!

Some cities, particularly in the US, have adopted 10-year Vision Zero timelines to eliminate fatalities. This is far bolder than the 2050 goal adopted by the national government of Sweden, the world's initiator and leader for Vision Zero. Unfortunately, cities do not have all the tools available to them to fully control traffic safety outcomes. Many state and federal policies are not aligned with the safety-first orientation of Vision Zero—but this hopefully can change over time. And, perhaps the best way to safer streets is through the deployment of crash avoidance technologies on new vehicles—this can be facilitated through proactive action from vehicle manufacturers and state/federal regulators.

Vision Zero San Jose purposely has avoided setting a particular timeline as a practical matter and has instead chosen to pursue Vision Zero goals, as soon as possible (ASAP). The history of change particularly with regards to state and federal policy makes 10-years seem "unrealistic." However, the urgency for safe streets makes a 10-year goal seem "too slow." For now, our goal is to continue to make progress with advocacy, action and results, ASAP!

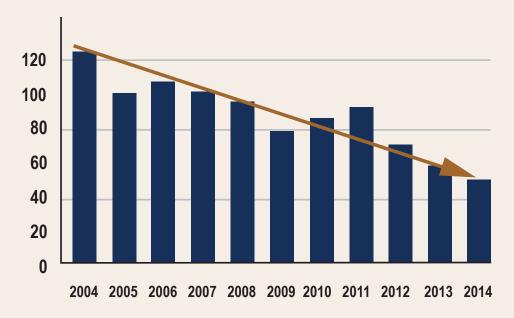
### **Past Focus Areas for Street Safety**

Over the past decade, San Jose has given priority to traffic safety programs oriented towards children and school zones, local neighborhood streets, building a better bikeway network, and making Downtown San Jose streets more friendly for walking, bicycling and using transit. The results have been remarkable:

- In 2014, there were ZERO traffic deaths within school zones and for children under 15 years old. The number of injury crashes Citywide for young children (ages 5 to 14) has steadily declined over the past decade from 122 in 2004 to 55 in 2014.
- In 2014, there was one traffic death on a local neighborhood street. Local neighborhood streets make up 62% of San Jose streets.
- In 2014, there were two traffic deaths involving bicyclists—down from six the previous year.
- In 2014, there were ZERO traffic deaths on Downtown San Jose streets.

The following are the highlights of safety programs being delivered and that are producing positive results for children, school zones, neighborhoods, bicyclists, and Downtown San Jose.

#### Child Pedestrian and Bicyclist Injury Crashes by Year (Ages 5-14)



# **Traffic Safety in San Jose**

#### **Children and School Zones**

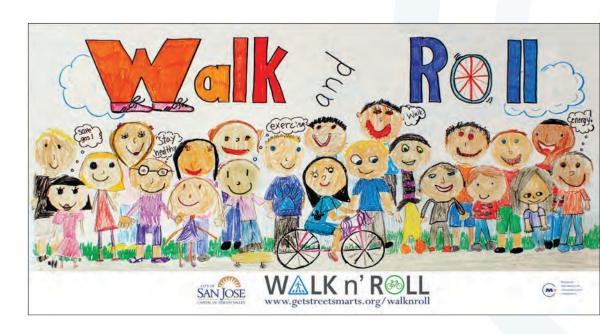
San Jose has in place a suite of programs to support safe access to schools. "Street Smarts" traffic safety education is provided on an ongoing basis by DOT to instill good traffic safety habits at an early age by focusing on safe walking, biking and driving in school zones. In 2014, training was provided to more than 24,000 children and 1,300 school parents. SJPD provides 236 adult crossing guards to support nearly 100 schools. DOT has a team of 10 parking and traffic compliance officers to support safe school zone drop-off and pick-up activities.



A total of 52 radar speed display signs have been installed in school zones to alert drivers when they are exceeding the 25 MPH speed limit. San Jose is willing to experiment with new programs and in 2012, a pilot project was initiated to test the effectiveness of installing signs to establish 15 MPH school zones. Without active police enforcement, the program was found to have no significant change on school zone travel speeds.

In 2012, San Jose launched the "Walk and Roll SJ!" program to actively encourage school children to walk and bike to their neighborhood school, through the development of parent-led walking school buses and bike trains. The program has exceeded expectations in terms of increased travel by walking and

bicycling, reduced traffic congestion near schools, and enhanced safety. This popular program has 40 participating schools and funding has been secured through grants to grow the program to 55 schools.



#### Neighborhood Streets

On an ongoing basis, DOT staff evaluates improvements to the safe operations of San Jose's 1,500 miles of local neighborhood streets. Basic services include the consideration of stop signs and crosswalks based on warrants established by City Council policy and professional practice. In the past 15 years, San Jose has also invested over \$15 million toward physical traffic calming



measures like road humps, traffic circles, and choker islands. As funding resources are available, traffic calming priorities are developed by City Council offices with DOT and are coordinated with the community to establish scope and support.

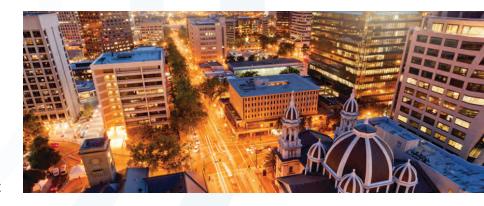


#### **Bicycling**

In 2009, the City Council approved San Jose Bike Plan 2020, a 10-year plan to transform San Jose into one of the best bicycling cities in the US. A 500mile network of safe and convenient bikeways was identified and includes a primary network of trails, green lanes, and buffered bike lanes. Through close coordination with the City's pavement maintenance program, which facilitates "restriping" street space for bicycling in a low cost manner, the bikeway network is nearly 60% complete at 290 miles today and 70 new miles are planned over the next two years. With more safe places to ride bikes, the number of people who travel by bicycle is rapidly increasing, particularly in the higher density portions of central and Downtown San Jose.

#### **Downtown**

According to WalkScore, the core area of Downtown San Jose is both a "walker's paradise" and a "biker's paradise." A decade ago, that wasn't the case when most Downtown streets were designed for high-speed, high-capacity car travel. A progressive look at redesigning Downtown streets to give priority to people rather than cars has brought improved traffic safety, multimodal access, and



livability to the urban center of Silicon Valley. Road diets, one-way street conversions, and streetscape improvements have been applied to the street corridors along San Fernando, San Carlos, Park, Almaden, Third, Fourth, Julian, and St James. More projects are in the pipeline for Downtown San Jose guided by a new "Street Life" plan developed by the Downtown San Jose Property-Based Improvement District.

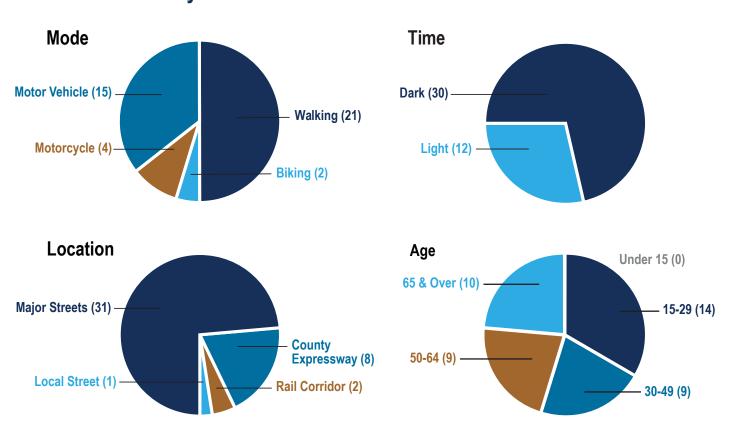
# The Case for Vision Zero San Jose

In 2014, 42 people died in traffic crashes while walking, bicycling, riding a motorcycle, or driving in San Jose. This is far too many and makes the urgent case for continuous improvement toward zero traffic deaths. The first step toward improvement requires a clear understanding of the contributing conditions. This section of the Vision Zero San Jose report focuses on the evaluation of 2014 traffic fatality data in an effort to target future traffic safety programs toward actions delivering the best outcomes.

The traffic fatality data is based on crashes occurring on City streets, County expressways, and railroad corridors in San Jose. It does not include crashes occurring on State freeways, on private streets/properties, or within unincorporated County areas.

Some key conclusions from the data indicates that traffic fatalities are most common along major streets and expressways (93%) of all fatalities) and at night (72%). Other issues of special concern are the percentage of fatalities involving pedestrians (50%) and persons over the age of 50 (45%).

### **2014 Traffic Fatality Data**



### **Summary of 2014 Fatal Traffic Crash Incidents**

When someone loses their life in a traffic crash, it is a heartbreaking tragedy. The loss of people in our community and the impact to families and friends can never be mitigated. Our goal is to learn some lessons from each incident to prevent more tragedies in the future. The following description of all 42 fatal traffic crashes from 2014 in San Jose is intended to go beyond the general statistics and provide a deeper understanding of the many circumstances involved with traffic deaths. The details provided are consistent with information disclosed in public notices released by SJPD following a fatal traffic crash but do not mention the names of affected individuals as a matter of privacy and respect. The information in the right column identifies the public agency having jurisdiction over the transportation facility where the fatal crash occured.



#### **People Who Died While Walking**

	at 6:22 pm (dark), a 69-year old male walked across Tully Rd (a 5-lane major street) mid-block near Vista r and was hit by a 73-year old motorist.	City
	at 9:00 pm (dark), an intoxicated 38-year old male walked across Almaden Expwy (a 6-lane major street) k near Foxworthy Av, and was hit by a 63-year old motorist.	County
	at 1:55 am (dark), an intoxicated 26-year old male walked across Capitol Expwy (a 6-lane major street) k near Seven Trees Blvd, and was hit by an unknown motorist (hit and run).	County
	at 10:33 am, an 84-year old male walked across King Rd (a 4-lane major street) at St James St, and was 61-year old motorist.	City
	at 5:08 pm, a 92-year old male walked across Capitol Expwy (a 6-lane major street) mid-block near aum Av, and was hit by a 60-year old motorist.	County
	at 9:30 pm (dark), an intoxicated 51-year old male walked across Capitol Expwy (an 8-lane major street) k near Silver Creek Rd, and was hit by an unknown motorist (hit and run).	County
	at 9:04 pm (dark), an intoxicated 51-year old male chased a dog across the light rail transit (LRT) tracks outhwest Expwy near Stokes St, and was hit by LRT vehicle.	VTA
0 - 7/45	-1.7.05	0.1

On 7/15 at 7:25 am, a 57-year old male walking on the sidewalk along Jackson Av (a 4-lane major street) near Port City Wy, was hit by a 56-year old motorist.

# The Case for Vision Zero San Jose

### **People Who Died While Walking** (Continued)

On 7/29 at 12:45am (dark), a 16 year old male walking on LRT tracks near Route 85 and Cottle Rd, was hit by LRT vehicle.	VTA
On 8/08 at 2:47 pm, an intoxicated 45-year old male ran across Burdette Dr (a 2-lane local street) mid-block near King Rd, and was hit by a 34-year old motorist.	City
On 8/18 at 8:15 pm (dark), an intoxicated 42-year old male ran across Senter Rd (a 4-lane major street) mid-block near Oldham Wy, and was hit by 31-year old motorist.	City
On 9/24 at 12:30 am (dark), a 65-year old male walked across Tully Rd (a 6-lane major street) mid-block near Alvin Av, and was hit by a 22-year old motorist.	City
On 10/03 at 12:13 am (dark), a 55-year old male walked across Senter Rd (a 6-lane major street) at Baltic Av, and was hit by an unknown motorist (hit and run).	City
On 10/13 at 7:59 pm (dark), a 48-year old female walked across McKee Rd (a 4-lane major street) in a crosswalk at 34th St, and was hit by an unknown motorist (hit and run).	City
On 10/26 at 12:59 am (dark), a 22-year old male walked across 10th St (a 2-lane, one-way major street) mid-block near San Antonio St, and was hit by an intoxicated 22-year old motorist.	City
On 10/30 at 10:41 pm (dark), a 54-year old male walked across Monterey Rd (a 6-lane major street) mid-block near Senter Rd, and was hit by a 61-year old motorist.	City
On 10/31 at 12:33 am (dark), a 75-year old female walked across McKee Rd (a 4-lane major street) mid-block near Challenger Av, and was hit by a 20-year old motorist.	City
On 11/11 at 4:28 pm, a 74-year old male walked across King Rd (a 4-lane major street) at a signalized intersection at Barberry Ln, and was hit by an intoxicated 40-year old motorist who ran a red light.	City
On 12/05 at 5:25 pm (dark), a 67-year old female walked across Tully Rd (a 6-lane major street) near Brahms Av, and was hit by an unknown motorist (hit and run).	City
On 12/07 at 5:06 pm (dark), a 52-year old male walked across The Alameda (a 4-lane major street) in a crosswalk at McKendrie St, and was hit by an unknown motorist (hit and run).	City
On 12/17 at 1:40 pm, a 87-year old male rode a wheelchair across McLaughlin Av (a 4-lane major street) against a red light at a signalized intersection at Carnelian Dr, and was hit by a 46-year old motorist.	City

### **People Who Died While Bicycling**

On 8/17 at 9:51 pm (dark), a 51-year old male bicycling across Senter Rd (a 4-lane major street) in a crosswalk at Balfour Dr, was hit by an unknown motorist (hit and run).	City
On 9/05 at 8:00 pm (dark), an intoxicated 53-year old male bicycling across Capitol Expwy (a 6-lane major street) mid-block near Tuers Dr, was hit by a 22-year old motorist.	County

### **People Who Died While Riding a Motorcycle**

On 1/18 at 2:32 am (dark), an intoxicated 20-year old male traveling along Almaden Expwy (a 6-lane major street) at Redmond Av, hit a raised island and crashed his motorcycle.	County
On 3/16 at 4:52 pm, a 57-year old female traveling along Monterey Rd (a 4-lane major street) near Bailey Av, hit another motorcycle while trying to pass.	City
On 6/16 at 6:54 am, a 39-year old male traveling along Berryessa Rd (a 4-lane major street) near Commercial St, was hit by a 52-year-old motorist driving a semi-trailer truck making a u-turn.	City
On 8/31 at 8:55 pm (dark), a 25-year old male traveling along Stevens Creek Blvd (a 6-lane major street) at Albany Dr, ran a red light and was hit by a 18-year old motorist.	City

### People Who Died as a Driver or Passenger in a Motor Vehicle

On 2/01 at 2:11 am (dark), a 21-year old male passenger was killed, when an intoxicated 48-year old motorist, driving along Branham Ln (a 4-lane major street) near Royale Park Dr, veered off road and hit a tree.	City
On 2/09 at 3:35 am (dark), a 22-year old male passenger was killed when an intoxicated 22-year old motorist was speeding along Branham Ln (a 4-lane major street) near Snell Av, veered off road and hit a tree.	City
On 3/09 at 1:37 am (dark), a 22-year old male speeding along Santa Clara St (a 4-lane major street) at 24th St, veered off road and hit a tree.	City
On 4/17 at 12:06 am (dark), a 42-year old male driving along Almaden Expwy (a 6-lane major street) at Coleman Rd, was hit by an intoxicated 43-year old motorist who ran a red light.	County
On 4/26 at 3:25 pm, an intoxicated 48-year old male driving along Toyon Av (a 2-lane major street) near McKee Rd, veered off road and hit a tree.	City
On 5/01 at 10:39 pm (dark), an 89-year old female driving along Coleman Av (a 6-lane major street) near Aviation Av, hit another vehicle and a light pole.	City

# The Case for Vision Zero San Jose

### People Who Died as a Driver or Passenger in a Motor Vehicle (Continued)

On 5/02 at 4:09 pm, an 18-year old female passenger was killed when a 17-year old motorist driving along North First St (a 4-lane major street) at Tasman Dr, ran a red light, hit another vehicle and a light pole.	City
On 6/03 at 11:02 am, an 85-year old female passenger was killed from jumping out of a moving vehicle traveling along San Felipe Rd (a 2-lane major street) near Heartland Wy.	City
On 6/11 at 9:05 pm (dark), an intoxicated 26-year old male speeding along Camden Av (a 4-lane major street) near Little Falls Dr, veered off road and hit a tree.	City
On 7/09 at 1:56 am (dark), a 39-year old male driving along Santa Teresa Blvd (a 6-lane major street) near Miyuki Dr, veered off road and hit a tree.	City
On 7/26 at 2:17 am (dark), a 30-year old male driving along Palisade Dr (a 2-lane major street) near Coyote Rd, hit several parked cars and a tree.	City
On 9/16 at 1:16 am (dark), a 23-year old male driving along Blossom Hill Rd (a 6-lane major street) near Cottle Rd, veered off road and hit a tree.	City
On 10/17 at 11:38 pm (dark), a 24-year old male driving along Blossom Hill Rd (a 4-lane major street) near Waltrip Ln, veered off road and hit a concrete sign.	City
On 11/04 at 7:43 am, a 22-year old male speeding along Almaden Expwy (a 6-lane major street) at Hillsdale Av, veered to avoid other vehicles and was ejected from vehicle as it flipped.	County
On 12/16 at 11:59 pm (dark), a 22-year old male speeding along Yerba Buena Rd (a 4-lane major street) near Chisin St, veered off road and hit a power pole.	City



### **New Focus Areas for Street Safety**

The evaluation of data for traffic fatalities and severe injuries on San Jose streets reveals that the most significant safety issues are associated with people walking across major streets in the dark, particularly senior citizens. A contributing factor in 36% of the fatalities was traveling under the influence of alcohol or drugs. In response, San Jose is increasing its efforts towards addressing these concerns.

#### **Major Streets**

In 2014, 93% of traffic fatalities occurred on major City streets and County expressways. In addition, an evaluation of all fatalities and severe injuries over the past five years has identified that the most severe crashes occur on just a small part of the overall street network (see page 20). These major streets are the focus of investment for engineering, enforcement, and education.

#### Street Lighting

Fatal traffic crashes occur most frequently at night when visibility is limited. To help improve night-time safety, San Jose is upgrading its street lights from "yellow" sodium vapor lights to brighter and more energy efficient "white" Light-Emitting Diode (LED) lights. As a result of a major LED conversion program being implemented in 2015, about 37% of San Jose's streets will be retrofitted with brighter lighting - including nearly all portions of the 14 major streets identified as having the highest frequency of fatalities and severe injuries in recent years.



#### **Senior Citizens**

In 2014, the average age of persons who died in traffic crashes on San Jose streets was 55. Ten fatalities involved persons between the ages of 65 and 92. In addition to safety improvements on major streets and improved street lighting, DOT is implementing other programs focused on safety for senior citizens. Walking cycles at traffic signals have been extended. Many enhanced crosswalks were recently installed in areas near senior housing complexes, community centers, medical offices, and churches. Last year, 2,100 senior residents participated in traffic safety education programs.



#### **Intoxicated Travel**

A total of 15 fatalities in 2014 involved intoxicated travel. The people traveling under the influence of alcohol or drugs included: 6 pedestrians, 1 bicyclist, 1 motorcycle rider, and 7 motor vehicle drivers.

# Vision Zero San Jose in Action

A multi-decade focus on the 4E's of evaluation, engineering, enforcement and education has contributed to San Jose's good relative record for traffic safety. The Vision Zero San Jose action plan includes continuing the successful implementation of the 4E's and adding a program of advocacy related to technology, policy, and partnerships. The planned actions for 2015 / 2016 are described in the following sections.

### **Evaluation**

The evaluation actions include continuing to gather and analyze crash data by SJPD and DOT to guide the strategic deployment of enforcement, engineering, and education resources. SJPD prepares crash reports for all traffic incidents involving injuries and significant property damage. DOT receives the reports and maintains a database of crash records. DOT also conducts a field inspection of major crash sites to facilitate timely repair or improvement of traffic safety devices.

On an ongoing basis, SJPD and DOT analyze traffic safety statistics to identify high crash intersections and corridors, behaviors that contribute to crashes, hot spots for crashes related to walking and bicycling, and crashes related to youth and seniors. SJPD maintains a database of public concerns related to traffic speeding. Annually, DOT conducts an interdisciplinary review of traffic crash data to identify roadway safety improvements.

Continuous improvement efforts are currently underway by SJPD and DOT to streamline the development and management of traffic crash data through the preparation of electronic crash reports. Currently reports are written on paper by SJPD and then information is separately entered into a database by DOT. Preparation of crash reports in an electronic form allows for reduced data entry, faster availability, and enhanced levels of data analytics.

### **Engineering**

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

San Jose has adopted various master plans, policies and design guides that shape the development of San Jose's multimodal transportation system. The San Jose City Council has adopted a "complete streets" policy, a bicycle master plan, and pedestrian design guidelines. San Jose DOT also uses the Urban Street Design Guide and the Urban Bikeway Design Guide developed by the National Association of City Transportation Officials (NACTO). A training session for San Jose DOT staff and transportation professionals from throughout Santa Clara County on the NACTO guides was held at San Jose City Hall on March 12–13, 2015.



The City's adopted Five-Year Transportation Capital Improvement Program (CIP) includes investments in excess of \$80 million specifically targeted towards providing a safer transportation system for all users. Among the investment highlights include:

- Install 20 **enhanced crosswalks** annually on major streets with pedestrian activated flashing beacons and with center safety islands or curb extensions to decrease street crossing width.
- Install 19,000 **LED streetlight conversions** in 2015 for improved nighttime visibility targeted in areas with the highest rates of traffic crashes. Develop a plan to convert the remaining 40,000 streetlights to LED.
- Construct major "complete street" improvements along the following eight street corridors, having a combined investment value of \$20 million: McLaughlin Avenue, Jackson Avenue, Ocala Avenue, Park Avenue, St John Street, San Carlos Street, The Alameda, and Taylor Street (at Route 87).
- · Construct improvements providing "safe routes to school" valued at \$5 million in vicinity of schools participating in the Walk and Roll, SJ! Program to increase walking and bicycling to school.
- Install 70 miles of **new and enhanced bikeways** over next two years, primarily implemented through the City's pavement maintenance program and with grant funds. The City is striving to complete an interconnected 500-mile bikeway network by 2020.

highest priority locations.

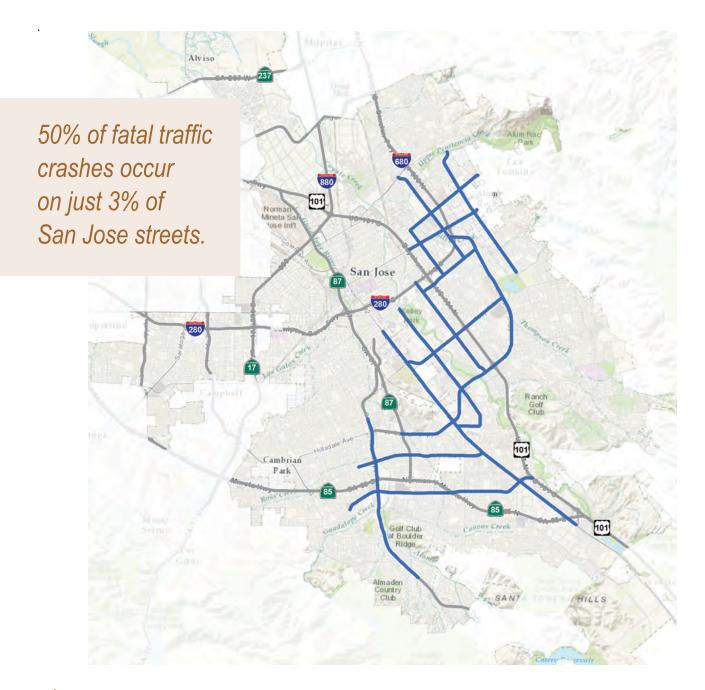
- Construct approximately 12 new traffic signals or major signal modifications over next two years at the
- Install 7 new speed feedback signs in 2015 to reduce traffic speeds and increasing the total number of speed feedback signs to 67.
- · Consider "road diets" along Camden Avenue, Lincoln Avenue, Moorpark Avenue, Second Street, and Third Street, subject to community review, to be implemented in 2015 with pavement maintenance program. Consider road diet projects for 2016 along other streets including Branham Lane.
- Construct 300 new ADA curb ramps annually at locations requested by persons with disabilities and other priority locations.
- Facilitate repair of sidewalks with uneven surfaces by adjoining property owner at about 7,500 locations annually.
- Provide neighborhood traffic safety services addressing visibility, stop signs, crosswalks, and speed management, including the installation of physical traffic calming projects for adverse neighborhood speeding conditions.



# Vision Zero San Jose in Action

### San Jose's "Safety Priority Streets"

The evaluation of crash data from the five-year period from 2010 through 2014 has identified 14 major street segments that have the highest frequency of fatal and severe injury for people walking, bicycling, motorcycle riding, and driving. Since 2013, 50% of the fatal traffic crashes occured on these streets which represent only 3% of the overall San Jose street system. These streets 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 Improvement Plans for San Jose's "Safety Priority Streets"

- 1. Almaden Expressway: Foxworthy Av to Trinidad Dr Coordinate with County to evaluate safety issues and determine feasible improvements.
- 2. Alum Rock Avenue: Route 101 to Manning Av A "complete streets" Bus Rapid Transit corridor project is under construction with safety improvements including: new median busway with pedestrian safety islands; new pedestrian-oriented traffic signals at Eastgate Av and at Scharff Av; and LED streetlight conversions.
- 3. Blossom Hill Road: Meridian Ave to Route 101 Project under preliminary development to add safe routes for walking and bicycling at 101/Blossom Hill interchange. Further evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 4. Branham Lane: Cherry Av to Monterey Rd Street segment with 6-lanes is planned in 2016 for a "road diet" and buffered bike lanes. The narrow 2-lane segment is in preliminary development for widening to 4 lanes, with bike lanes, and with new traffic signal at Kingspark Dr. LED streetlight conversions recently completed.
- 5. Capitol Expressway: Route 680 to Route 87 Coordinate with County to evaluate safety issues and determine feasible improvements. A sidewalk gap closure project is funded for construction in 2016.
- 6. Jackson Avenue: Berryessa Rd to Story Rd A "complete streets" corridor project is funded for construction in 2016, with new pedestrian-oriented traffic signals at Luz Av and at Alexian Dr. LED streetlight conversions recently completed.
- 7. King Road: Berryessa Rd to Story Rd A traffic signal modification at Virginia PI is funded for construction in 2016. Further evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 8. McKee Road: Route 101 to Toyon Ave Evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 9. McLaughlin Avenue: I-680 to Capitol Expwy A "complete streets" corridor project is funded for construction in 2016, including installation of enhanced crosswalks. LED streetlight conversions recently completed.
- 10. Monterey Road: Alma Av to Bernal Rd Buffered bike lanes were installed in 2014 with pavement resurfacing project. New traffic signal was installed in 2014 at Cottage Grove Av. Further evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 11. Senter Road: Story Rd to Monterey Rd Evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 12. Story Road: Senter Rd to Capital Expwy Buffered bike lanes were installed in 2014 with pavement resurfacing project. Further evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 13. Tully Road: Monterey Rd to Capital Expwy Buffered bike lanes will be installed in 2015 with pavement resurfacing project. Further evaluate safety issues and determine feasible improvements. LED streetlight conversions recently completed.
- 14. White Road: Penitencia Creek Rd to Cunningham Ave New bike lanes from McKee Av to Ocala Av will be installed in 2015 with pavement resurfacing project. New traffic signal at Hyland Av will be constructed in 2015. LED streetlight conversions recently completed.

# Vision Zero San Jose in Action

#### **Enforcement and Education**

SJPD provides a variety of traffic enforcement services targeted towards addressing high crash hot spots and unsafe behaviors like intoxicated driving, speeding, and red light running. It is acknowledged that due to a current high vacancy rate of San Jose police officers, dedicated staff for traffic enforcement has been reduced. As an offsetting measure, patrol officers have been cross-trained to perform traffic enforcement services.



As a cost effective and educational measure to address speeding issues, SJPD deploys seven mobile "Your Speed" sign trailers and is purchasing five more for a total of twelve speed feedback trailers. With grant funds provided by the California Office of Traffic Safety, SJPD implements occasional sobriety checkpoints to enforce and deter intoxicated driving.

San Jose has continued to see traffic safety in school zones steadily improve over the past decade. SJPD administers the City's Adult Crossing Guard program which staffs 122 intersections with safety guards that provide support

to nearly 100 schools. Additionally, DOT has a team of 10 parking and traffic control officers that are deployed to support safe school zone drop-off and pick-up activities.

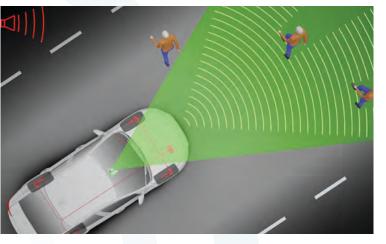
In 2002, San Jose implemented the nationally recognized "Street Smarts" program for traffic safety education, with safety messages and training to reinforce positive walking, bicycling and driving behaviors. In 2014, more than 24,000 children, 1,300 school parents, and 2,100 senior residents took part in the program. A list of safety tips is provided on the back page of this report. The program is funded on an ongoing basis. For 2015, DOT will seek opportunities to expand educational outreach working with Vision Zero San Jose partners and through advocacy for efforts at county, regional, state and national levels.





### **Technology**

Current advancements in automotive technology have the greatest opportunity to significantly move towards the elimination of traffic injuries and fatalities. Research shows that 90% of traffic crashes are associated with human factors, errors, and poor



choices. New technologies can help humans operate vehicles more safely – they can better detect pedestrians, bicyclists, and road hazards; they can manage speed, braking and lane alignment; they can see better in the dark; and they don't get drowsy, distracted, or drunk.

The world's leading car manufacturers all have research and development offices located in Silicon Valley and are inventing today the newest advancements in crash avoidance technologies. According to a Consumer Reports study on "the road to self-driving cars", highly effective crash avoidance technology is now available

and affordable with systems costing less than \$2,000. The improved safety performance of a car with a crash avoidance system can theoretically be offset by reductions in insurance premiums. Surveys of people who have tried crash avoidance technologies found that 72% said they would want them in their personal vehicle.

The technology is here. What is needed is strong policy action to start requiring crash avoidance technology in new vehicles, similar to past efforts that required the introduction of air bags. In alignment with the principles of Vision Zero, safe vehicle technology should be deployed ASAP.

The City of San Jose has created unique opportunities for innovators to deploy new transportation technologies by making ten miles of streets in North San Jose available for demonstration projects, known as the Transportation Innovation Zone (TIZ), and managed with assistance from Prospect Silicon Valley. Past and current demonstration partnerships have involved ChargePoint, BMW, Intel, Philips, Toyota, Cisco, and the Santa Clara Valley Transportation Authority (VTA). The North San Jose TIZ is a real world test bed for technologies related to transportation safety, connected vehicles and infrastructure, modern mobility services, communications infrastructure, and clean energy.



# Vision Zero San Jose in Action

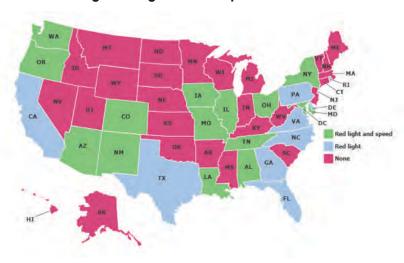
### **Policy**

Supportive policies at the state and national levels can have a significant influence on improving traffic safety. A national policy to promptly deploy crash avoidance technologies in new vehicles would be highly effective at improving safety. However, it would likely take a decade for the full benefit to be reached due to the turnover rate of vehicles. Nevertheless, a policy mandating safer vehicles should be implemented immediately.

Other policy actions can also greatly improve safety 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 US, 14 states and the District of Columbia allow automated speed enforcement. Currently, it is not allowed in California.

Automated enforcement is a recommended best practice by the Governors Highway Safety Association (GHSA), a national coalition of state highway safety officials. They urge states to enact legislation allowing the use of safety cameras to enforce speeding and red light running. Their policy on safety cameras endorses the following principles: use at high crash sites; use to supplement (not replace) traditional law enforcement personnel; implement together with a public information campaign; and use solely for safety purposes (not revenue generation), with any revenues in excess of operating costs reinvested in safety programs.

#### States Using Red Light and/or Speed Cameras





An additional policy in support of speed management involves reducing the maximum speed on city streets, thereby giving priority to human safety rather than to efficient vehicular travel. On major urban streets in Sweden, the maximum speed limit is set at 35 mph; on local neighborhood streets, the speed limit is 20 mph. In the US, speed law is set based on the preferences of the typical motorist, known as the 85th percentile rule. Maximum speeds align with what speed studies show as the preferred maximum speed for 85% of the motorists. US policy clearly favors efficiency for people who drive over the safety of people who walk and bicycle. Preferably, lower speed limits should be combined with enforcement and roadway design features that encourage slower travel.

It is recommended that as part of Vision Zero San Jose, the City consider the following policy advocacy actions:

- 1. Mandate at a national level the deployment of crash avoidance technologies in new vehicles.
- 2. Encourage national adoption of a Vision Zero policy.
- 3. Change California law to allow the use of safety cameras for automated speed enforcement.
- 4. Change national and California law to amend the methodology for establishing maximum speed limits for city streets.
- 5. Encourage implementation of county, regional, state, and national traffic safety campaigns.

### **Partnerships**

San Jose benefits from a rich network of community organizations that support the City's health and vitality, representing a diverse set of interests ranging from advocates for walking and bicycling, youth and seniors, neighborhoods and businesses. One common interest is safety. A major opportunity is to use Vision Zero San Jose as a way to rally support for creating a "safety first" culture throughout the community. An action for 2015 is to engage the City's partners to help with Vision Zero San Jose implementation, particularly as it relates to education and policy. The following are the public agencies and commmunity organizations the City regularly works with on transportation topics.



















# **Summary of 2015 / 2016 Actions**

### **Evaluation**

Continue	<ul> <li>Collecting and analyzing traffic crash data. Identifying traffic safety "hot spots" and unsafe behaviors. Researching safety program best practices. Conducting interdisciplinary annual review of high priority safety improvement needs.</li> </ul>	DOT, SJPD
Enhance	• Efficiency of crash data collection and analytics by migrating to electronic crash reporting system.	SJPD, DOT, IT
	<ul> <li>Regular coordination to determine best use of available resources for engineering, enforcement, and education.</li> </ul>	DOT, SJPD

# **Engineering**

Continue	<ul> <li>Delivering funded safety programs and capital projects including enhanced crosswalks, streetlighting, complete streets, safe routes to school, bikeways, traffic signals, speed feedback signs, road diets, curb ramps, sidewalk repairs, neighborhood traffic safety.</li> <li>Using pavement maintenance program to implement low-cost, safer street designs focusing on pedestrians, bicyclists, and vehicle speed management.</li> </ul>	DOT, DPW
Enhance	<ul> <li>Planning and funding advocacy for improvements to "Safety Priority Streets" not already covered by funded projects.</li> </ul>	DOT
Add	Proactive collaboration with County on identifying and funding safety improvements to Almaden Expressway and Capitol Expressway.	DOT, County

### **Enforcement and Education**

Continue	<ul> <li>Deploying police officers for traffic enforcement addressing hot spot locations and unsafe behaviors (speeding, intoxication, red light running, failure to yield to pedestrians, and distracted driving).</li> </ul>	SJPD
	Deploying adult crossing guards in school zones.	SJPD
	• Deploying parking and traffic control officers to support safe access in school zones. Delivery of <i>Street Smarts</i> traffic safety education to children, parents, and seniors. Delivery and growth of <i>Walk and Roll SJ</i> program to encourage safe walking and biking to school.	DOT
Enhance	• Retention and recruitment of police officers to increase staffing up to approved levels allowing for expanded traffic enforcement services.	SJPD
Add	• Explore use of automated red light running enforcement system at "hot spot" intersections, particularly along County Expressways.	DOT, SJPD, County

# **Technology and Policy**

Continue	• Deployment and promotion of transportation innovation demonstration opportunities in San Jose.	ProspectSV, DOT
	<ul> <li>Advocacy for increased transportation investment addressing safety, multimodal options, and system condition.</li> </ul>	DOT, IGR
Add	• New and increased advocacy for legislation supportive of Vision Zero transportation safety goals: 1) National legislative advocacy for deployment of crash avoidance systems in new vehicles, including detection of people walking and bicycling; 2) National advocacy for adopting a national Vision Zero policy; 3) State legislative advocacy for allowing safety cameras for automated speed enforcement in California, as allowed in many global nations and in 14 states; 4) National and State legislative advocacy amending methodology for setting speed limits to allow lower limits on city streets; and 5) General advocacy for increased investment and collaboration related to traffic safety education from private and public sources (county, regional, state and national).	DOT, IGR, Community Partners

# **Partnerships**

Continue	<ul> <li>Regular coordination with community stakeholders and public agencies focused on transportation and add <i>Vision Zero San Jose</i> implementation to agenda, including: Bicycle and Pedestrian Advisory Committee, Silicon Valley Bicycle Coalition, California Walks, SPUR San Jose, TransForm, Greenbelt Alliance, Silicon Valley Leadership Group, Prospect Silicon Valley, Traffic Safe Community Network (County), and Santa Clara Valley Transportation Authority.</li> <li>Regular coordination with San Jose Schools/City Collaborative and add <i>Vision Zero San Jose</i> implementation to agenda.</li> <li>Collaboration with established City commissions to raise awareness of <i>Vision Zero San Jose</i>, including Senior Citizens Commission, Youth Commission, and Neighborhoods Commission.</li> </ul>	DOT  Mayor's Office, DOT  DOT
Add	• Development of <i>Vision Zero San Jose</i> action plan for community-based efforts and advocacy, particularly focused on education and policy; Engage community public health partners in support of Vision Zero; Identify community members to lead and facilitate a <i>Vision Zero San Jose</i> community task force.	Community Partners, DOT

Acronym Legend DOT Department of Transportation SJPD San Jose Police Department

DPW Department of Public Works

ΙT Department of Information Technology **IGR** Office of Intergovernmental Relations

ProspectSV Prospect Silicon Valley

# **Acknowledgements**

#### San Jose Elected Officials

- · Sam Liccardo, Mayor
- Rose Herrera, Vice Mayor, Council District 8
- Ash Kalra, Chair of Transportation and Environment Committee, Council District 2
- Chappie Jones, Council District 1; Raul Peralez, Council District 3; Margie Matthews, Council District 4; Magdalena Carrasco, Council District 5; Pierluigi Oliverio, Council District 6; Tam Nguyen, Council District 7; Don Rocha, Council District 9; Johnny Khamis, Council District 10

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#### San Jose Police Department

· Larry Esquivel, Edgardo Garcia, Dave Knopf, Steve Payne, Matthew Christian

#### Other Vision Zero countries/cities, related programs/organizations, and content sources

- · Sweden, New York City, San Francisco, Seattle
- National Association of City Transportation Officials
- · Toward Zero Deaths
- US DOT Mayors' Challenge for Safer People and Safer Streets
- Governors Highway Safety Association
- National Highway Traffic Safety Administration
- California Office of Traffic Safety
- San Jose Mercury News
- Consumer Reports

# **Traffic Safety Tips**

If you want to make San José streets safer, it's just a matter of being smart! The behavior of drivers, cyclists and pedestrians play a huge role in keeping our streets safe. Follow the tips below to help ensure your safety and the safety of others.



#### **Pedestrians**

- Cross at intersections or crosswalks, not in the middle of the road or between parked cars.
- Before stepping off the curb, look left, right, and left again for traffic; and be aware of turning vehicles.
- · Make eye contact with drivers to be sure you are seen.
- · Watch for traffic the entire time while crossing a street.
- If one car stops, don't assume that other motorists have seen you and will stop, especially on multi-lane streets.
- · Avoid wearing headphones or using your phone when crossing the street.
- Wear bright colors or reflective clothing if walking at night. Consider carrying a flashlight.

#### **Bicyclists**

- Obey traffic signs and signals—people riding bicycles follow the rules of the road like motorists.
- Never ride against traffic—motorists aren't looking for people riding bicycles on the wrong side of the road.
- Use hand signals for turning or stopping.
- When turning left at an intersection, either: 1) continue across the intersection and use the crosswalk when it's safe and legal to do so (similar to a pedestrian), or (2) signal and move into the left side of the travel lane (or left turn lane) as a vehicle.
- Watch out for road hazards like sewer grates, tracks, potholes, or debris.
- Avoid the door zone—exercise care not to ride too close to parked cars.
- · Respect the right-of-way of others, including pedestrians.
- Wear a snug fitting helmet to protect your head, and never ride with headphones.
- Wear bright, light colored clothing if biking at night; and always use a headlight, taillight or rear reflectors.

#### **Motorists**

- Don't be a distracted driver. Attention should be on the road at all times.
- · Slow down in neighborhoods and near schools. Watch out for children and pets.
- · Stop for pedestrians crossing the street.
- When making a right hand turn, check for cyclists or pedestrians that may be crossing the intersection.
- Reduce your speed when passing people on bicycles, especially if the roadway is narrow. Follow the 3-foot rule.
- Maintain a consistent speed and keep a buffer zone between you and other vehicles.
- Stopping is part of driving. Obey all stop signs and traffic signals.
- · Obey the posted speed limit.





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