

PLEASE CLICK ON THE COUNTY OF LOS ANGELES SEAL
TO RETURN TO THIS PAGE

[CLICK HERE FOR THE DIRECTOR OF PUBLIC HEALTH'S REPORT DATED FEBRUARY 10, 2017](#)

[CLICK HERE FOR THE DIRECTOR OF PUBLIC HEALTH'S REPORT DATED MARCH 16, 2017](#)

[CLICK HERE FOR THE DIRECTOR OF PUBLIC HEALTH'S REPORT DATED JANUARY 26, 2018](#)

[CLICK HERE FOR THE DIRECTOR OF PUBLIC HEALTH'S REPORT DATED MARCH 27, 2019](#)

[CLICK HERE FOR THE DIRECTOR OF PUBLIC WORKS' REPORT DATED DECEMBER 2, 2019](#)

[CLICK HERE FOR THE DIRECTOR OF PUBLIC HEALTH'S REPORT DATED FEBRUARY 6, 2020](#)



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

February 10, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed. *Barbara Ferrer*
Director

SUBJECT: REPORT ON VISION ZERO IN LOS ANGELES COUNTY

On October 4, 2016, your Board directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County Departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas. The attached report details the strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas. It is the product of collaborative efforts of the Departments of Public Health, Public Works (DPW), Regional Planning, and Health Services; Fire Department; Sheriff's Department, Chief Executive Office, and the California Highway Patrol (CHP). Below is a summary of the report.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths, 10.3 traffic deaths per 100,000 population. The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero sees traffic deaths and injuries as predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement, and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement, and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were 63,067 distinct collisions, with 1,429 involving at least one severe injury and 300 causing a fatality. 1,566 people were severely injured (six percent of victims) and 333 were killed (one percent of victims). Collision heat maps show a concentration of pedestrian-involved fatal and severe collisions in the southern part of the County in dense urban centers, motorcycle-involved fatal and severe collisions along rural mountain roads, and both bicycle- and vehicle-involved fatal and severe collisions throughout unincorporated areas.

The report identifies key challenge areas requiring additional data analysis that will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements as Vision Zero is implemented. Key issues include: unsafe speeds, impaired driving, distracted driving, hit and runs, young males, motorcyclists, and pedestrians. For example, if speeding is found to be a primary issue on a corridor, traffic calming strategies such as roadway reconfigurations, traffic signals, curb extensions, and enhanced speed enforcement, may be possible solutions.

Recommended Strategies and Actions

Implementation of the strategies and actions described in the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas. Actions include: developing a steering committee and partnership structure to implement the program; creating a Vision Zero Action plan to identify specific engineering, enforcement, engagement, education, and evaluation strategies; and working to secure funding to implement Vision Zero strategies and actions.

If you have any questions or need additional information, please let me know.

BF:ja

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

Report to the Board of Supervisors

County Vision Zero Opportunities

Prepared by the Department of Public Health

February 10, 2017

CONTENTS

Acknowledgments.....	3
Executive Summary.....	4
Background	4
Preliminary Data Analysis and Challenge Areas.....	4
Recommended Strategies and Actions	5
Introduction	8
Report Development Process	8
Part I – Background and Opportunities	9
Motor Vehicle Crashes	9
Vision Zero and Related Traffic Safety Initiatives	10
Known Challenge Areas.....	11
Developing an Effective Approach	11
Alignment with Existing Plans and Policies	13
Part II: Preliminary Data Analysis.....	16
Background	16
Approach to Initial Analysis.....	17
Findings	19
Big Picture.....	19
Temporal, Modal, and Demographic	21
Contributing Factors.....	33
Summary of Challenge Areas	36
Part III: Current Traffic Safety Efforts.....	37
Education	37
Enforcement.....	40
Engagement (Community Outreach & Communications)	41
Engineering	42
Evaluation & Data	42
Part IV: Recommended Strategies and Actions	43
Appendix A - Funding Opportunities	47

ACKNOWLEDGMENTS

Chief Executive Office

Mark Greninger

California Highway Patrol

Chris O'Quinn
Heather Hoglund
Jose Nunez
Scott Poyner

Los Angeles County Department of Health Services

Gregory Polk
Richard Tadeo

Los Angeles County Department of Public Health

Alexis Lantz
Andrea Welsing
Angelo Bellomo
Chanda Singh
Christine Li
Cindy Harding
Doug Morales
Elizabeth Rhoades
Isabelle Sternfeld
Jean Armbruster
Jennifer Osborn
Kimberly Porter
Natalie Jimenez
Rachel Tyree
Tony Kuo
Wesley Ford
Lisa Tse

Los Angeles County Sheriff's Department

Dana Chemnitzer
Darren Harris
Jim McDonnell
Robert Hill
Scott Johnson

Los Angeles Department of Transportation

Jacqui Swartz
Michael Manalo
Nat Gale
Tim Fremaux

Los Angeles County Department of Public Works

Alan Fong
Arnel Dulay
Coby Skye
Dean Lehman
Emiko Thompson
Gilbert Tsoi
John Calas
John Halaka
John Ickis
John Walker
Khoa Nguyen
Mary Reyes
Pat Proano
Patrick Anderson
Pete Flores
Rudy Lee
Shari Afshari
Youn Sim

Los Angeles County Department of Regional Planning

Connie Chung
Daniel Hoffman
Nick Franchino
Richard Bruckner
Susan Tae
Svetha Ambati

Los Angeles County Fire Department

Daryl Osby
Debbie Aguirre
Janna Masi
John Todd
Keith Mora
Mark Savage
Philip Cocker
Ricky Lewis
Tim Smith
Wally Collins

EXECUTIVE SUMMARY

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD), Health Services (DHS), Regional Planning (DRP), Chief Executive Office (CEO), and the California Highway Patrol (CHP). DPH and DPW collaborated in conducting preliminary data analysis. DPH took the lead in preparing this report, which provides strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the U.S. Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero assumes that traffic deaths and injuries are predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were:

- 63,067 distinct collisions involving 27,786 victims
- 1,429 collisions involved at least one severe injury

- 1,566 people severely injured (six percent of victims)
- 300 collisions involving at least one fatality
- 333 people killed (one percent of victims)

The report also identifies key challenge areas that warrant additional data analysis. Additional analysis will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements. Challenge areas include:

- *Unsafe Speeds.* Speed was listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- *Impaired driving.* Driving under the influence of alcohol or drugs is involved in only eight percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes.
- *Distracted driving.* Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores a need for a coordinated approach to capture information on and to prevent distraction.
- *Hit and runs.* Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for behavior changes by motorists.
- *Young males.* Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions.
- *Motorcyclists.* 20 percent of fatal and severe collisions involved a motorcyclist. Concentrations of fatal and severe collisions were found on rural / mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- *Pedestrians.* 17 percent of fatal and severe collisions involved pedestrians; youth under age 19 and people 55 years and over were overrepresented as victims. Concentrations of fatal and severe collisions were found in both urban and rural areas.

Recommended Strategies and Actions

The County team recommends the strategies, actions, and timelines outlined below.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with your Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County is needed to identify specific engineering, enforcement, education, engagement and evaluation strategies and timelines. Further, the plan will communicate the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries.

Prioritize interventions and identify future data analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context-sensitive solutions for specific problems. Action steps include engaging community partners to “ground truth” safety issues; developing a project prioritization process; and identifying additional long-term data collection and analysis needs.

Develop metrics and targets (June 2017). To gauge the success of this initiative, develop measurable metrics and targets for the County similar to those utilized by the California Strategic Highway Safety Plan which is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan that describes innovative and culturally appropriate communication techniques to change behavior around traffic safety is needed. This would include the development of a website, public service announcements, branding, fact sheets, social and digital media, press kits, and would include strategies for ongoing public education and outreach.

Hold a press event to launch Vision Zero (June 2018). A Vision Zero press event would bring attention to the County’s multi-sector campaign to reduce traffic deaths and severe injuries and highlight what the County does and plans to do to address the problem of traffic safety.

Develop a regional approach to messaging and strategy implementation (February 2017 – ongoing). Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, Southern California Association of Governments, City of Los Angeles, and other jurisdictions would have the greatest impact in creating behavior change.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address traffic safety problems may require changes in State legislation, such as automated speed enforcement. The County should coordinate with agencies regionally to explore common legislative and policy solutions.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). The County should help to promote choices that prioritize traffic safety through messaging aimed at the County workforce including messages in County newsletters, on department websites, and on County vehicles.

Secure funding to implement Vision Zero strategies and actions (February 2017 – ongoing). A single County point-person is needed to convene the Steering Committee and to coordinate with community and regional stakeholders. Funding will also be needed to develop and implement a Vision Zero Action Plan, communications strategy, and expand traffic safety efforts.

Conclusions and Next Steps

Implementing the strategies and actions described above and further in Part IV of the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas.

INTRODUCTION

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back in 120 days on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

This "County Vision Zero Opportunities" Report examines how Vision Zero could be implemented within County unincorporated communities. The report is organized into four parts:

Part I: Background and Opportunities: Provides an overview of traffic-related fatalities, severe injuries, and key approaches for addressing the problem.

Part II: Preliminary Data Analysis: Describes sources of data that could support a County Vision Zero Initiative and includes preliminary findings analyzing 5-years-8 months of collision data.

Part III: Current County Traffic Safety Efforts: Provides an overview of engineering, education, engagement, enforcement, and evaluation/data programs administered by County agencies and their partners that support traffic safety in unincorporated Los Angeles County.

Part IV: Recommended Strategies and Actions: Based on County staff and partner expertise, this section describes recommended strategies and actions for a County Vision Zero initiative.

Report Development Process

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD, Health Services (DHS), Regional Planning (DRP), California Highway Patrol (CHP), and the Chief Executive Office (CEO). The goals of these meetings were to: 1) learn about the County's existing traffic safety education and enforcement programs; 2) learn about the County's existing communications resources and best practices; 3) tap County staff knowledge about how to design an effective Vision Zero initiative for unincorporated areas; and 4) get departmental input into this Board report. DPH and DPW also formed a "Core Team," which met every two weeks to prepare for the larger partner meetings and to develop this Board report.

PART I – BACKGROUND AND OPPORTUNITIES

Motor Vehicle Crashes

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). More than three times as many people die in traffic crashes in the U.S. as in the United Kingdom (2.8 traffic deaths per 100,000 population). If the U.S.' MVC death rate was equivalent to the best performing country (Sweden, 2.7 per 100,000 population), an estimated 24,000 lives could be saved annually and an estimated \$281 million in direct medical costs averted.¹

There has been a general downward trend in traffic fatalities in the U.S. over the last decade. This could be related to fluctuations in gas prices and unemployment rates (when gas prices and unemployment are high, people tend to drive less) and vehicle technology that better protects passengers in the event of a collision. Unfortunately, this trend is now reversing. Traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015.² Early estimates of traffic deaths for 2016 indicate a continued increase.³

In Los Angeles County as a whole, motor vehicle crashes are the leading cause of death for children five to 14 years old and the second leading cause of death for children one to four years old; young people 15 to 24 years old; and adults 25 to 44 years old. Between January 1, 2011 and August 31, 2016, at least 333 people lost their lives on roadways in County unincorporated areas and another 1,566 were severely injured.⁴ In addition to the tragic human costs, the economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion dollars.⁵

¹ Sauber-Schatz EK, Ederer DJ, Dellinger AM, Baldwin GT. Vital Signs: Motor Vehicle Injury Prevention — United States and 19 Comparison Countries. MMWR Morb Mortal Wkly Rep 2016;65. DOI: <http://dx.doi.org/10.15585/mmwr.mm6526e1>.

² National Center for Statistics and Analysis. (2016, August). 2015 motor vehicle crashes; Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 318) Washington, DC: National Highway Traffic Safety Administration.

³ National Center for Statistics and Analysis. (2016, September). *Early estimate of motor vehicle traffic fatalities for the first half (Jan-Jun) of 2016*. Crash Stats Brief Statistical Summary. Report No. DOT HS 812 332). Washington, DC: National Highway Traffic Safety Administration.

⁴ Data from Department of Public Works' Collision Geodatabase, based on California Highway Patrol records from 1/1/11 to 8/31/16 (analyzed 12/13/16)

⁵ California Department of Transportation. California Strategic Highway Safety Plan 2015 - 2019.

Vision Zero and Related Traffic Safety Initiatives

Vision Zero is a strategy that aims to reduce or eliminate traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has been adopted widely across Europe and is now gaining momentum in many American cities. Vision Zero creates a new vision for prioritizing street safety. Traffic deaths and severe injuries are viewed as predictable and preventable, and goals, measurable objectives, and timelines for eliminating them are created. These strategies include engineering, enforcement, education, and evaluation approaches, which require collaboration across a wide variety of sectors including public health, public works, communications, and law enforcement. In addition, community engagement and equity are important overarching approaches to successful implementation of Vision Zero.

In August 2015, the City of Los Angeles launched a Vision Zero Initiative as the result of a Mayoral Directive that set a city goal of eliminating all traffic deaths by 2025 and reducing deaths by 20 percent by 2017. The Los Angeles County Public Health Department has worked closely with the City to launch and implement this initiative, including helping to develop Los Angeles' Vision Zero Action Plan, which outlines specific implementation strategies and timelines. The cities of San Francisco, New York, Portland, Seattle, and Chicago have also established Vision Zero initiatives in the past five years. In Los Angeles County, a number of our 88 local jurisdictions have adopted Vision Zero goals, including Long Beach and Santa Monica.

Similarly, "Toward Zero Deaths" is a traffic safety initiative in the United States related to Vision Zero. Spearheaded primarily by state and federal government agencies, such as the Federal Highway Administration (FHWA), this approach shares a strategic vision of eliminating fatalities and serious injuries through a data-driven, interdisciplinary approach of education, enforcement, engineering, and emergency services.

In California, the California Department of Transportation (Caltrans) regularly develops and updates the California Strategic Highway Safety Plan (SHSP), a statewide data-driven plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and severe injuries. The SHSP affects all public roads (State, local, and Tribal) and all users (motorists, pedestrians, bicyclists, and motorcyclists). The goal of the SHSP is to move toward zero deaths; measurable objectives include a three percent annual reduction in the number and rate of fatalities and a 1.5 percent annual reduction in the number and rate of severe injuries.

Known Challenge Areas

Factors that influence fatality rates vary from place to place; however, a number of “challenge areas” have been identified nationally, statewide, and regionally. For example, the California Strategic Highway Safety Plan identifies alcohol and drug impairment; speeding and aggressive driving; distracted driving; pedestrians; bicyclists; motorcyclists; young drivers; and aging drivers, among others, as challenge areas to be addressed statewide. As the County conducts data analysis for the unincorporated areas to design programs and infrastructure that support traffic safety, it will be beneficial to examine best practices developed by other jurisdictions.

Developing an Effective Approach

Vision Zero has been effective in other jurisdictions and countries due to the multidisciplinary approach that brings together multiple government sectors with community leaders and stakeholders to identify solutions. Strategies are implemented and then evaluated in an iterative process to identify whether they are having the desired effect of saving lives. Summarized below are key approaches behind effective Vision Zero initiatives.

Safe streets are livable streets. Vision Zero is typically well-aligned with jurisdictions’ goals of making communities livable, walkable, economically vibrant, and sustainable. This allows for Vision Zero strategies to be seamlessly incorporated into existing work programs, and to allow for new projects and programs where human life and safety are the explicit highest priorities.

Vision Zero strategies are data-driven. Essential to the Vision Zero approach is that safety improvements and programs must be based on robust, longitudinal data analysis that identifies patterns of traffic deaths and severe injuries, as well as the primary crash factors associated with these crashes, such as speeding, left turns, lack of marked crosswalks, and red light running. This allows for targeted improvements and programs that address the specific problem(s) causing fatal and severe injury crashes.

Roadways can be designed to save lives. Once specific factors associated with crashes are understood, engineers can identify potential life-saving improvements to address the problems, i.e. engineering solutions that are known to be effective for specific crash patterns. A principle of Vision Zero is that humans will always make mistakes, but corridors can be designed and re-engineered to minimize deadly mistakes and make it challenging to engage in dangerous behavior, such as speeding. Vehicle speed is a particularly important factor to consider in roadway design because it is a fundamental predictor of

crash survival. If a pedestrian is hit by a car going 20 miles per hour (MPH), the pedestrian's risk of death is five percent; if the car is traveling at 40 MPH, the pedestrian's risk of death is 80 percent.⁶

Evaluation is essential. Tracking progress over time makes it possible to identify whether a program or infrastructure improvement is working to address the safety concern. For example, once engineering improvements have been installed along a corridor or at priority locations, engineers can continue to collect data to assess whether the improvements are addressing the identified crash factors. Similarly, evaluating specific enforcement efforts over time can help enhance programs. With a goal of zero traffic deaths, new issues may emerge over time, requiring consistent data collection and evaluation to monitor traffic safety.

Communications can drive culture change. Reducing traffic deaths requires a shift in public perception from accepting traffic deaths as unavoidable to an awareness that saving human lives is everyone's responsibility. A widespread communications campaign coupled with education strategies that target key audiences can create this shift within the general population, as well as help drive culture change within institutions.

Community engagement and an equitable approach are fundamental. Analysis done by the City of Los Angeles indicates that many of the areas with the poorest health outcomes also have a disproportionate number of severe and fatal injuries from traffic collisions. Furthermore, these communities may have other more pressing needs beyond traffic safety and/or may distrust government. An effective Vision Zero initiative considers these factors, and engages residents in developing strategies that will be effective in their communities. It is also imperative to continually re-engage the community to ensure that strategies are working as planned.

Enforcement supports policy approaches. In addition to designing safe streets and creating education and awareness campaigns, enforcement can help ensure that traffic laws are followed. Because low-income communities and communities of color may have high rates of traffic deaths and injuries, Enforcement approaches should be context sensitive, especially when working in high-burdened communities. For example, enforcement could include warnings rather than tickets to avoid disproportionate burden of traffic violation fines on low-income residents. Though not currently legal in California, tools like automated speed enforcement can be effective at reducing crashes.⁷

⁶ US Department of Transportation, National Highway Traffic Safety Administration. Literature Review on Vehicle Speeds and Pedestrian Injuries. DOT HS 809 021. October 1999. Available at: <https://one.nhtsa.gov/people/injury/research/pub/HS809012.html> (Accessed 1/6/17)

⁷ Other jurisdictions have reported declines in speeding and/or collisions due to ASE. Available at: <https://www.sfmta.com/sites/default/files/projects/2016/ASE%20Fact%20Sheet%202.5.16.pdf> (Accessed 1/9/17)

Alignment with Existing Plans and Policies

Adopting a Vision Zero approach would be consistent with County plans, policies, and goals and represents an opportunity to implement established County priorities.

Community Health Improvement Plan (CHIP), 2015 - 2020: DPH's CHIP is a strategic plan for improving health in Los Angeles County. CHIP establishes a health improvement agenda for DPH in collaboration with partners from different sectors. A primary goal of CHIP is to reduce the number of deaths and severe injuries resulting from traffic collisions through the implementation of policies and programs that promote safety.

Healthy Design Ordinance, 2012: This ordinance, developed by the Department of Regional Planning (DRP), changed the County's zoning and subdivision regulations to increase levels of physical activity and reduce obesity rates. To effectively promote physical activity, the Healthy Design Ordinance promotes safe, convenient, and pleasant places for people walking and bicycling.

Los Angeles County General Plan, 2035: Developed by DRP and adopted by the Board of Supervisors in 2015, the County's General Plan includes a number of elements that promote an increase in walking and biking and a reduction in vehicle miles traveled, including:

- **Mobility Element:** The California Complete Streets Act of 2008 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, public transit users, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit.
- **Bicycle Master Plan:** A sub-element of the Mobility Element, the Bicycle Master Plan guides the implementation of proposed bikeways, bicycle-friendly policies, and programs to promote bike ridership across all ages and skill sets. The Plan's implementation program prioritizes projects based on various factors including both crash data and obesity rates.
- **Air Quality Element:** Air pollution and climate change pose serious threats to the environment, economy, and public health. The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the goals of the Air Quality Element.
- **Community Climate Action Plan (CCAP):** A sub-element of the Air Quality Element, the Community Climate Action Plan establishes actions for reaching the County's goals to reduce

greenhouse gas (GHG) emissions in the unincorporated areas. The County set a target to reduce GHG emissions from community activities in the unincorporated areas by at least 11 percent below 2010 levels by 2020. The CCAP includes specific strategy areas for each major emission sector and quantifies the 2010 and projected 2020 emissions in the unincorporated areas. Like most California communities, a significant portion of the County's emissions are from on-road transportation sources and point to a clear need to reduce vehicle trips and vehicle miles traveled. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the CCAP's goals.

- **General Plan Implementation Programs:** Several General Plan work programs are well aligned with Vision Zero, including: 1) Livable Communities Guidelines – DRP is developing specific design measures that will be used by staff, developers and decision makers to develop projects that encourage walking, bicycling, outdoor physical activity, public transit use, and access to healthy foods. 2) Pedestrian planning – DPH and DPW are collaborating on the development of pedestrian plans in four unincorporated communities: Westmont-West Athens, West Whittier-Los Nietos, Lake Los Angeles and Walnut Park. 3) Equitable Development – DRP is preparing affordable housing and environmental justice ordinances to advance equity objectives in the General Plan, along with the development of an equity indicators toolbox.

Los Angeles County Initiatives: Vision Zero is consistent with several Board mandated initiatives, including:

- **Purposeful Aging Los Angeles Initiative:** A countywide, multi-year effort that will unite public and private leadership, resources, ideas, and strategies to improve the lives of older adults and Los Angeles County residents of all ages. The initiative includes the formulation of a three-year, Age-Friendly Action Plan, which will outline a comprehensive set of proposed strategies to enhance the County's age-friendliness across eight domains of livability, including transportation.
- **Trauma Prevention Initiative (TPI):** The Trauma Prevention Initiative targets regions of the County that experience a disproportionately high incidence of violence-related trauma visits, injuries and deaths. TPI develops and coordinates program strategies that focus on evidence-based and practice-tested interventions to reduce trauma. Traffic collisions account for many trauma visits, injuries, and deaths, and preventing them could contribute significantly to reducing the burden of trauma in the County.

County Strategic Plan, 2016 - 2021: Vision Zero is consistent with several strategies in the County's newly adopted Strategic Plan, including:

- II.2.4 Promote Active and Healthy Lifestyles: Conduct outreach to high need, traditionally underserved populations within the County by supporting safe and comfortable built environments that encourage physical activity and access to healthy food.
- II.3.3 Address the serious threat of global climate change: Create and implement policies and programs to: reduce the emission of greenhouse gases from all sectors of our community; ensure that community climate resilience is integrated into our programs and plans; and inspire others to take action.

California Strategic Highway Safety Plan (SHSP): The SHSP is a statewide, coordinated safety plan that provides a comprehensive framework for reducing fatalities and severe injuries on all public roads. The SHSP – and the accompanying SHSP Implementation Plan – are multi-disciplinary efforts involving Federal, State, and local representatives from the four “Es” (education, evaluation, engineering, and enforcement) of safety. The SHSP identifies safety needs and guides investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries.

PART II: PRELIMINARY DATA ANALYSIS

Background

When a collision occurs in unincorporated areas, multiple agencies are involved in responding to the scene, identifying collision factors, and treating victims. This results in many sources of data, which can then inform a Vision Zero approach and provide background on the collision landscape in unincorporated Los Angeles County. The following section briefly describes key agencies involved, their respective roles, and sources of data.

California Highway Patrol (CHP): CHP is responsible for traffic enforcement on unincorporated County roadways and is responsible for responding to the scene of a collision. CHP collects data for all collisions it responds to and retains this data for all municipalities. Additionally, data for all reported collisions in California available via the Statewide Integrated Traffic Records System (SWITRS). CHP also has citation data, which can provide additional information about safety concerns such as speeding and driving under the influence. Citation data is available to County departments, but requires additional staff time to clean and geocode for use.

Los Angeles County Department of Public Works (DPW): DPW requests collision reports directly from CHP as collisions occur within the unincorporated County area and enters this data into its geodatabase. DPW is also the primary agency involved in unincorporated County roadway design and maintenance. DPW does not have jurisdiction on designated State highways, such as the Pacific Coast Highway (CA-1), even if they fall within unincorporated County areas.

Los Angeles County Fire Department (LACFD): LACFD serves as the primary first-responder for suspected injury or fatal collisions in unincorporated County areas, as well as for some incorporated cities. LACFD retains records of all of its responses and services, including those related to collisions. Records typically span the time beginning when LACFD staff and/or vehicle(s) are deployed to the scene of an incident to when LACFD drops the victim off at a hospital or trauma center. LACFD also serves as a first-responder for some incorporated cities in Los Angeles County.

Los Angeles County Department of Health Services' Emergency Medical Services (EMS): EMS collects data from all emergency medical providers in Los Angeles County, including from LACFD, when transport to a hospital is involved. EMS also collects data directly from all 14 trauma centers, but not all hospitals. These trauma centers serve both unincorporated and incorporated areas. In severe injury collisions, victims are likely to be transported to a trauma center by the emergency services provider. However, victims of collisions can also transport themselves to a trauma center (or hospital); therefore transport data does not include these cases. Collision location is only available for records involving EMS

transport. Neither trauma data nor emergency service transport data is currently linked to CHP collision record data.

Los Angeles County Sheriff's Department (LASD): LASD is not a primary responder to collisions in unincorporated areas; this is the responsibility of CHP. However, in some cases, LASD will respond to a collision due to proximity. LASD is responsible for all other law enforcement in unincorporated areas and is more likely to be present in an unincorporated community for other enforcement duties.

Los Angeles County Department of Public Health (DPH): DPH is the primary recipient of Office of Statewide Health Planning and Development (OSHPD) data, which includes patient-level data from licensed health care facilities such as hospitals and emergency departments. This data includes health-related collision information, such as injury levels, outcomes, race/ethnicity, and financial costs. The data does not provide information on collision location.

Approach to Initial Analysis

To determine an approach to data analysis, traffic safety programs in other jurisdictions, including San Francisco, Seattle, and the City of Los Angeles, were reviewed to identify common categories. Most jurisdictions first analyzed collision data only, and then conducted analyses in later phases incorporating demographic data, geographic information, roadway design, and other areas. Data is typically analyzed and categorized as:

- *Big Picture* : Overview of jurisdiction as a whole, including breakdowns by collision severity and calculated fields such as “annual collision death rate.”
- *Temporal, Modal, & Demographic*: Analysis of collision data by indicators such as age, gender, or mode of victim and party. This provides more clarity about the type of person involved in severe and fatal collisions, and if there is an obvious overrepresentation of certain victim or party types.
- *Contributing Factors*: Further analysis of collision data to understand potential contributing factors to severe and fatal collisions, such as time of day, use of safety equipment, and primary collision factor.
- *Prioritization* – Analysis incorporating built environment, land use, or citation data. This information can be used to create a prioritized network of streets, such as Los Angeles’ High Injury Network, and also to provide a data-driven justification for future project prioritization.

In addition to research on efforts in other jurisdictions, three meetings were also convened with experts from various County Departments and the Los Angeles Department of Transportation to discuss common problems, past analysis on collisions in unincorporated Los Angeles County, and high-priority approaches to future analysis.

As described in the section above, no single source of data provides a comprehensive picture of where severe and fatal collisions are occurring in unincorporated areas, who is involved, injuries sustained, and costs incurred. The wide range of data available from County partners provides an excellent opportunity to further understand factors associated with traffic deaths and severe injuries on unincorporated area roadways. Due to the challenges associated with joining disparate data sources, the preliminary collision analysis contained in this report is based only on DPW's Collision Geodatabase. DPW's database includes California Highway Patrol collision records (SWITRS) data through August 31, 2016. SWITRS data is commonly used by jurisdictions throughout California, including other Vision Zero cities, such as Los Angeles and San Francisco.

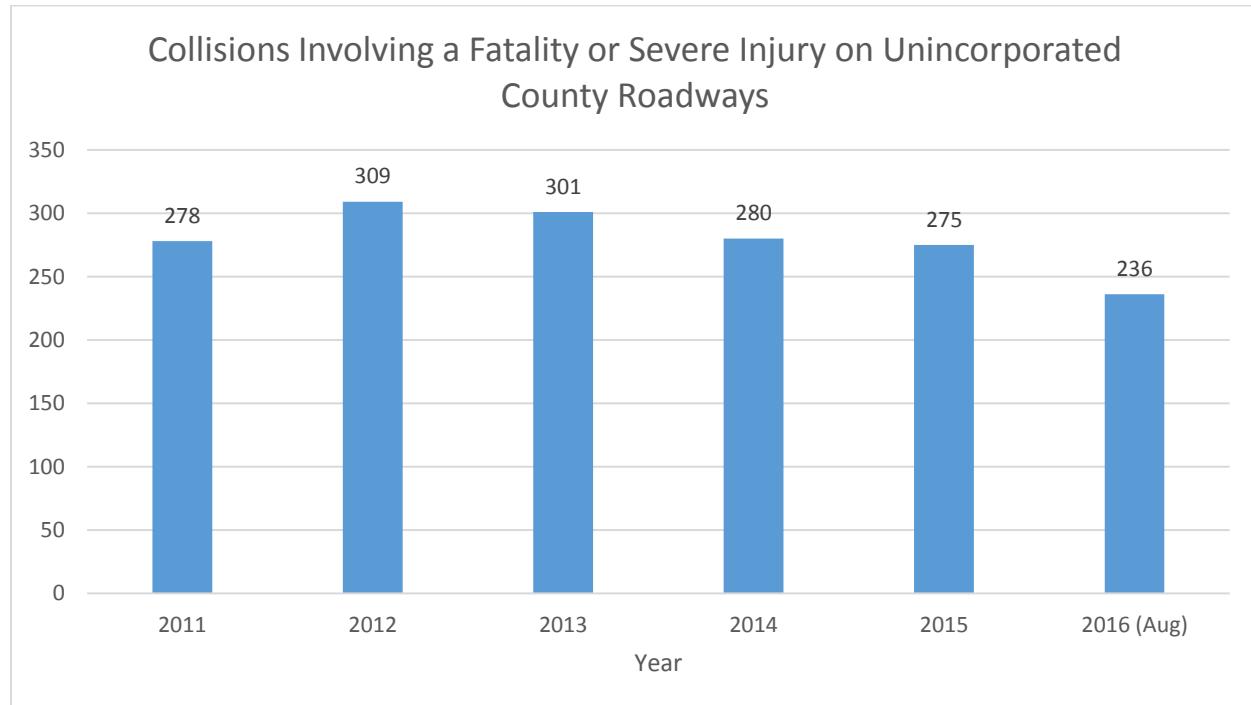
Findings

The data below summarizes information using CHP collision records data, housed in DPW's Collision Geodatabase. Unless otherwise stated, summary data is for the five-year, eight-month period beginning January 1, 2011 and ending August 31, 2016.

BIG PICTURE

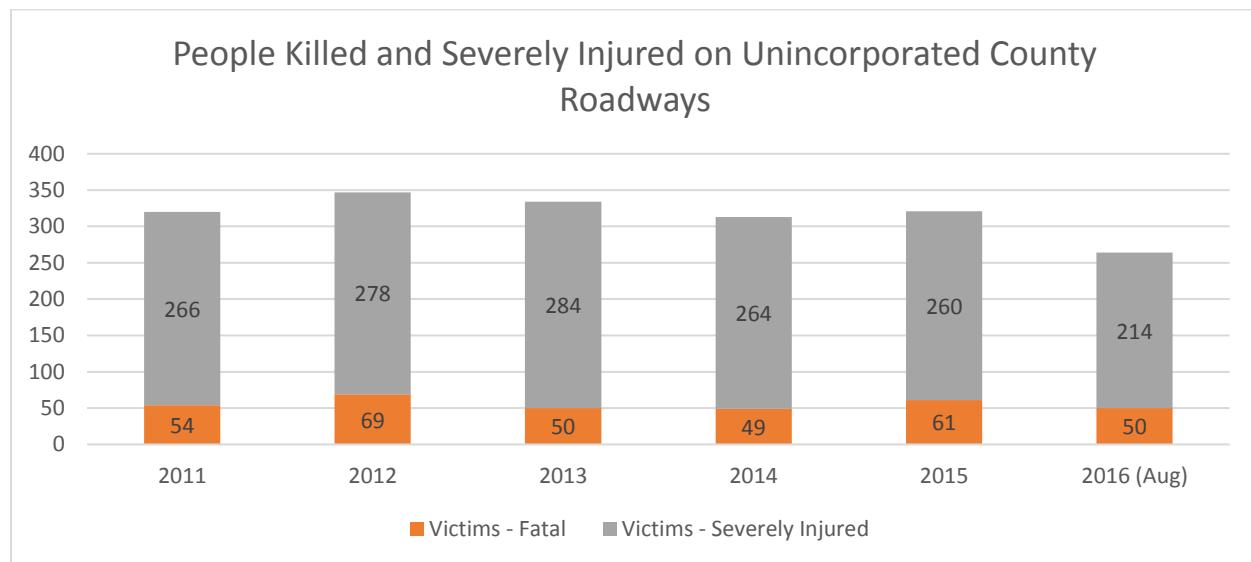
Collisions

There were 63,067 distinct collisions on unincorporated County roadways over the five-year, eight-month period. Of these collisions, 1,429 involved at least one severe injury and there were 300 with at least one fatality. A total of 1,679 collisions involved severe injuries or fatalities. Taking an average from January 1, 2011 to December 31, 2015, there are 10,917 annual collisions on unincorporated County roadways with 288 involving a fatality or severe injury. The number of collisions involving a fatality or severe injury has remained relatively constant since 2011.

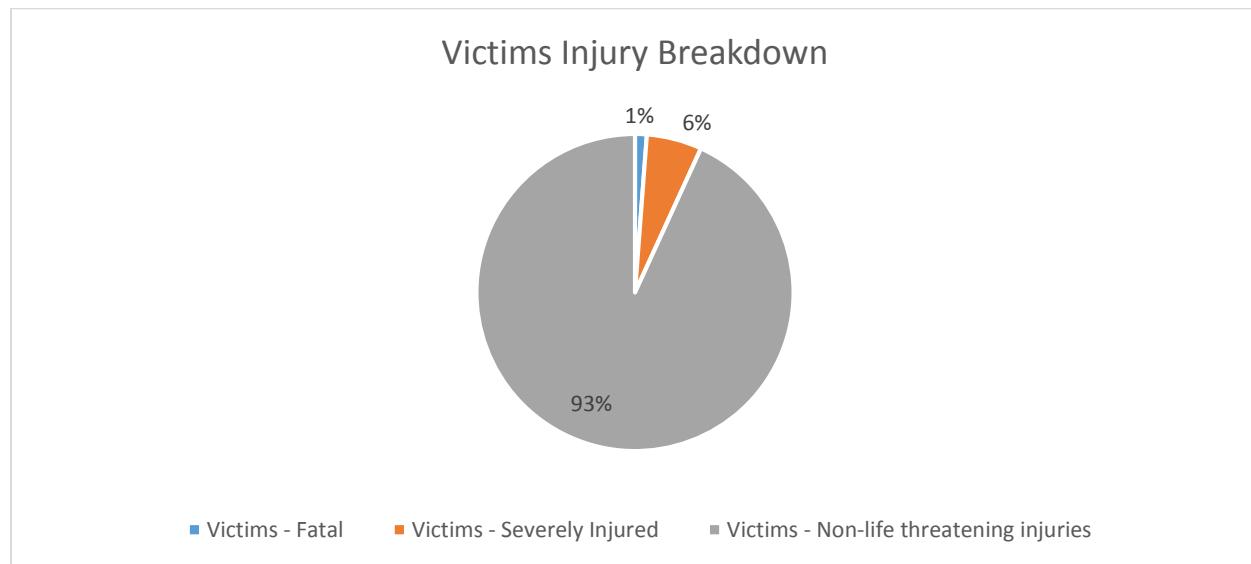


Victims

There were 27,786 victims involved in collisions on unincorporated County roadways during the five-year, eight-month period. Victims include fatalities and individuals with severe injuries, other visible injuries, or complaints of pain. Of these victims, 1,566 were severely injured and 333 incurred fatalities.



Among all victims of traffic collisions, approximately one percent died and six percent sustained severe injuries, but the vast majority (93 percent) did not suffer life-threatening injuries.



Rates

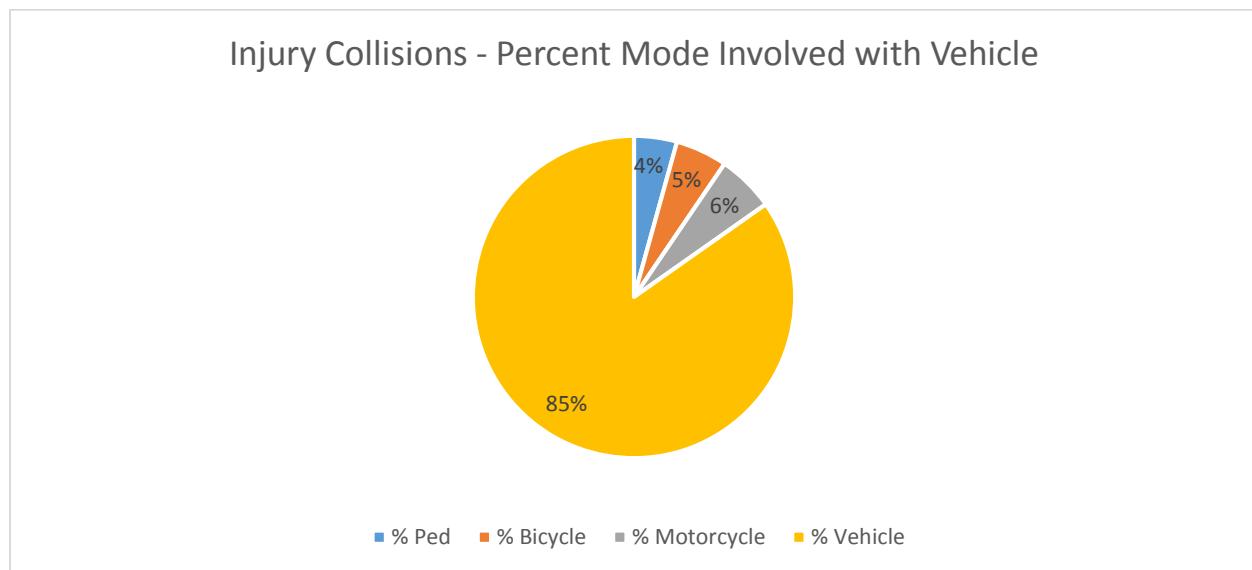
The County maintains approximately 1,188 miles of rural roads and an additional 1,998 miles of urbanized roads (total of 3,187 miles), with a daily vehicle miles travelled rate (DVMT) of 11.85 million.⁸ The following rates contextualize collisions and victims. All rates are based on averages from January 1, 2011 to December 31, 2015.

- There are approximately 3.4 collisions per roadway mile annually, with 0.09 collisions involving a fatality or severe injury per roadway mile
- There are approximately 27.4 collisions involving a fatality or severe injury per 100,000 population in the unincorporated Los Angeles County annually.⁹

TEMPORAL, MODAL, AND DEMOGRAPHIC

Mode

As shown in the chart below, among all collisions involving an injury, vehicle to vehicle injury collisions are the most common, representing approximately 85 percent of all injury collisions.

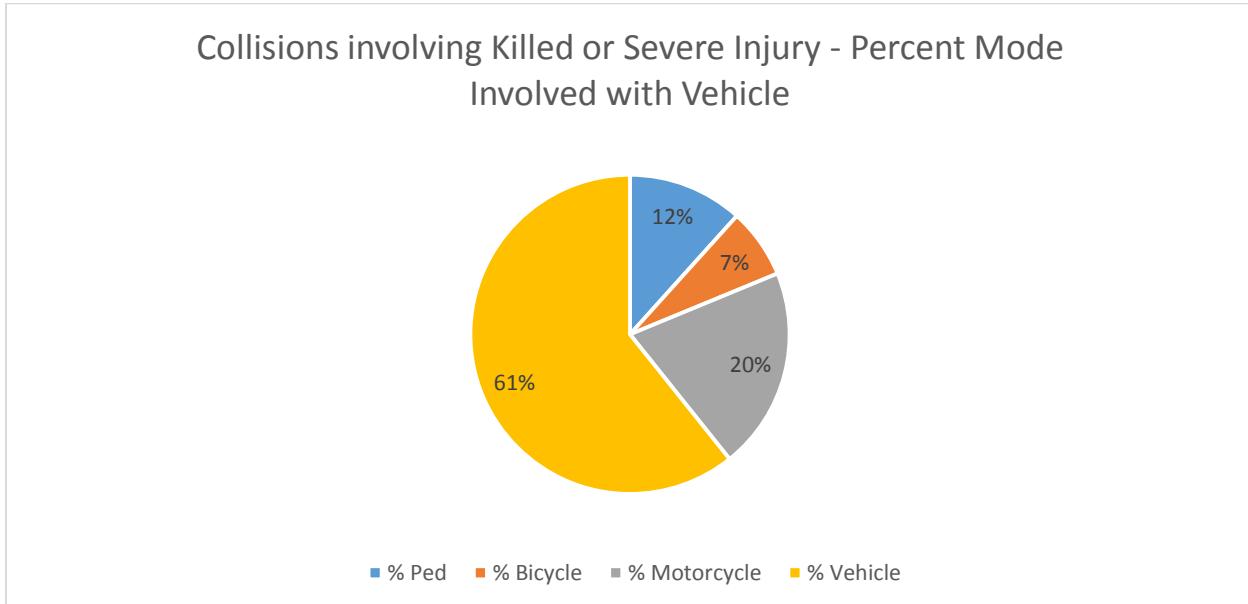


⁸ 2014 California Public Road Data Estimate, Table 6

⁹ Unincorporated area population is approximately 1,050,000 people based on estimates from the Southern California Association of Governments. Available at:

<http://www.scag.ca.gov/documents/unincarealosangelescounty.pdf> (Accessed December 27, 2016)

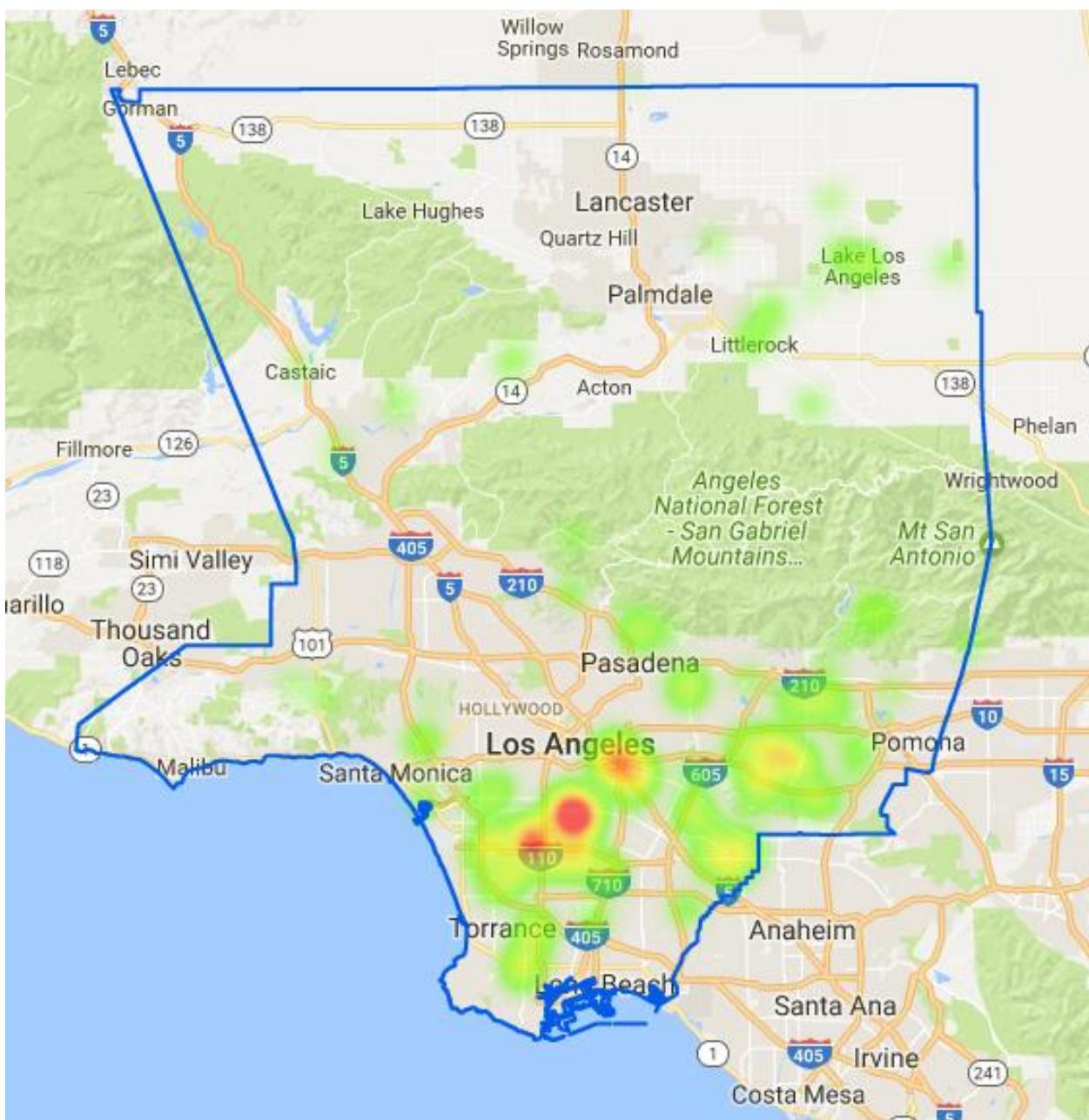
However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injury and fatality-involved collisions. For example, although pedestrians are only involved in four percent of injury collisions, they represent 12 percent of the collisions with severe injuries or fatalities. Similarly, motorcycle-involved collisions represent 20 percent of the severe and fatal collisions, but only six percent of all injury collisions.



The following heat map series shows the concentration of collisions involving killed and severely injured victims by mode. A heat map is a representation of the concentration of incidents; red areas indicate the highest concentration of incidents; yellow areas indicate a moderate concentration; and green areas indicate the lowest concentration of incidents.

Pedestrian-Involved Fatal and Severe Injury Collisions

Pedestrian-involved fatal and severe injury collisions are concentrated in the southern part of the County, largely in dense urban centers. There is also a concentration of collisions in the Antelope Valley, where community main streets are often rural, high-speed roads.

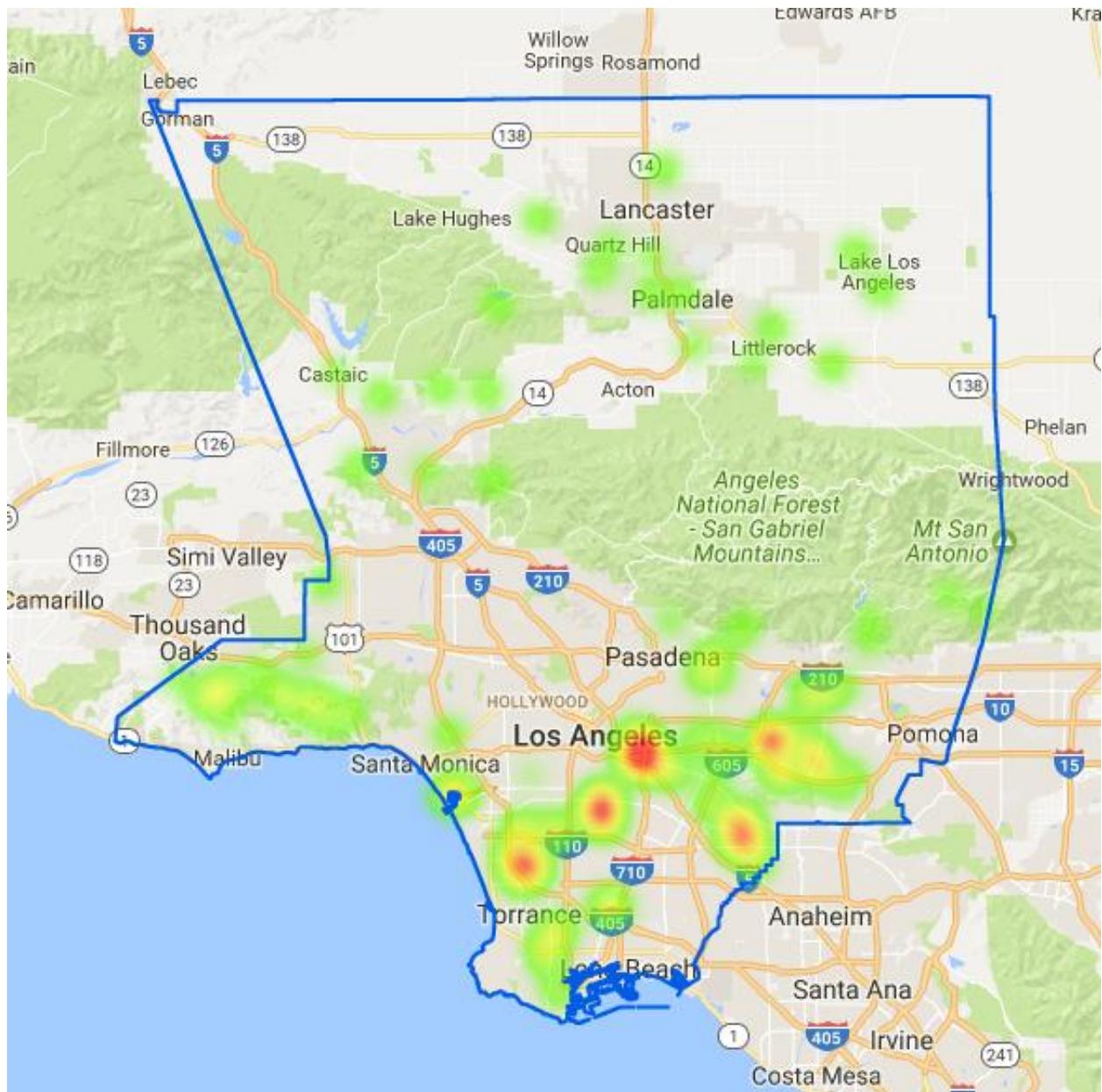


Pedestrian-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Bicycle-Involved Fatal and Severe Injury Collisions

While bicycle-involved fatal and severe injury collisions are spread throughout the County, they are more concentrated in urban areas, with some additional fatal and severe injury collisions occurring in the Antelope Valley and along County mountain roads.

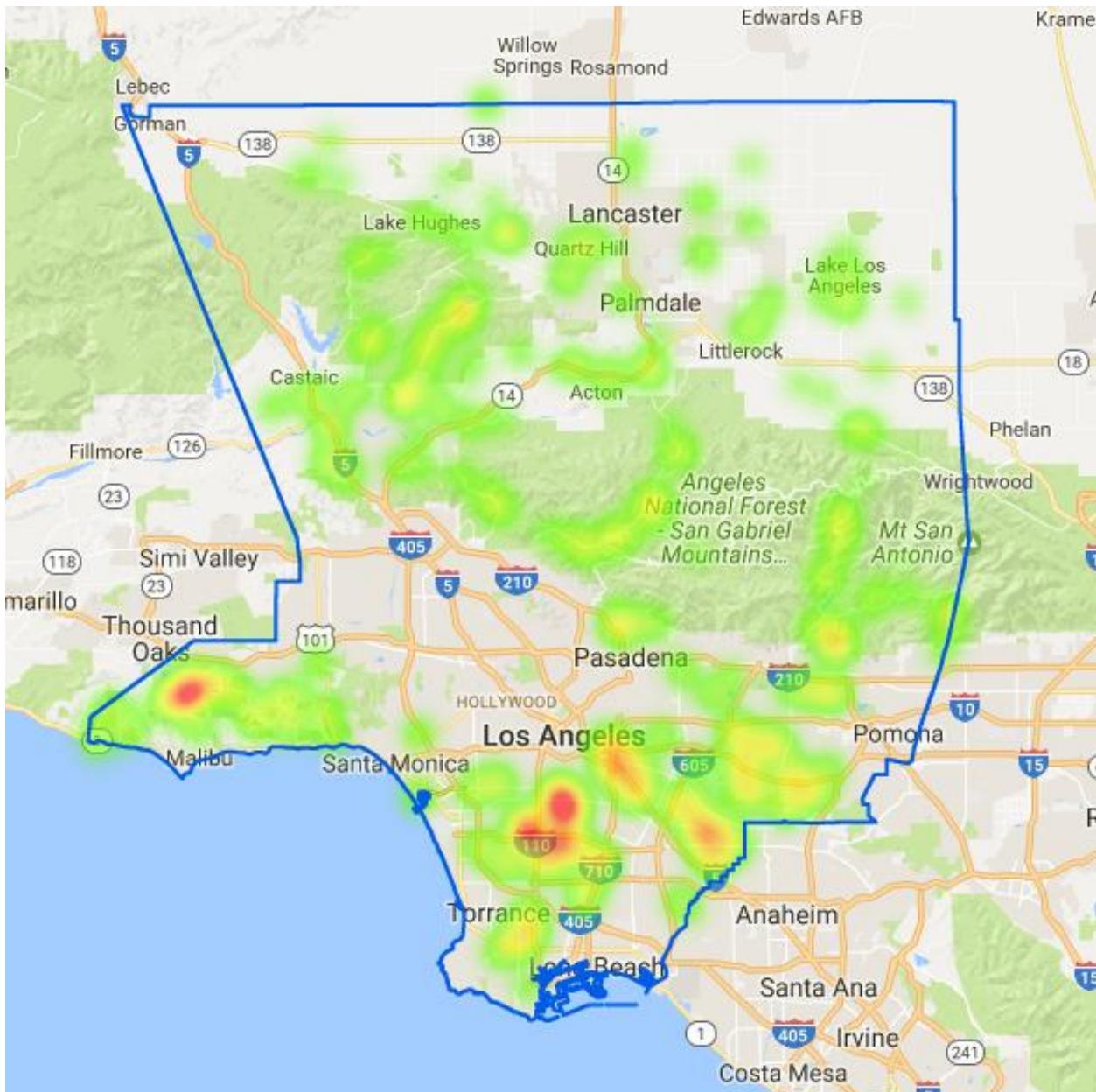


Bicycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Motorcycle-Involved Fatal and Severe Injury Collisions

Motorcycle-involved fatal and severe injury collisions are spread throughout the County. There are higher concentrations along County rural mountain roads, as well as in dense urban areas.

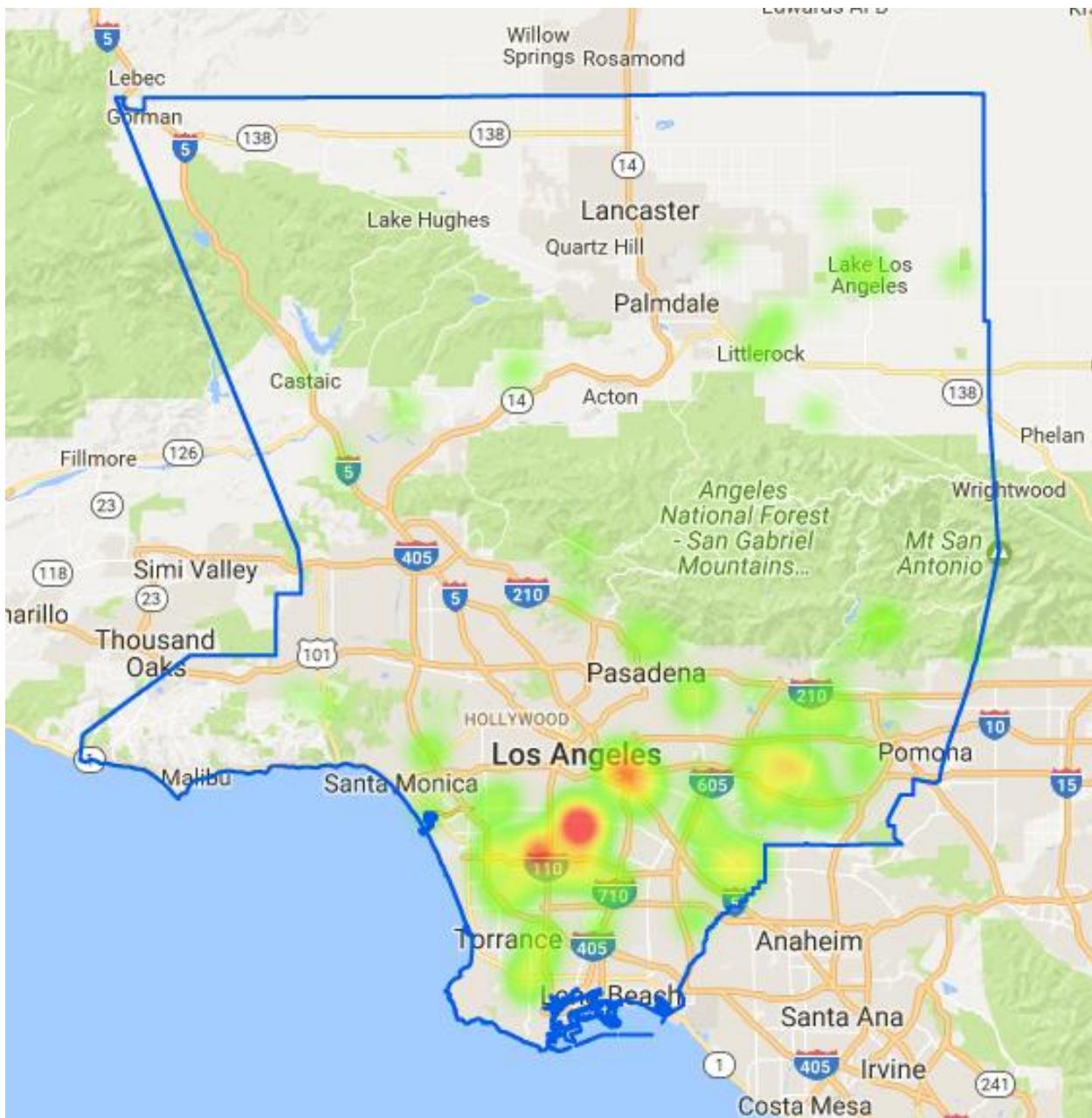


Motorcycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Vehicle to vehicle-Involved Fatal and Severe Injury Collisions

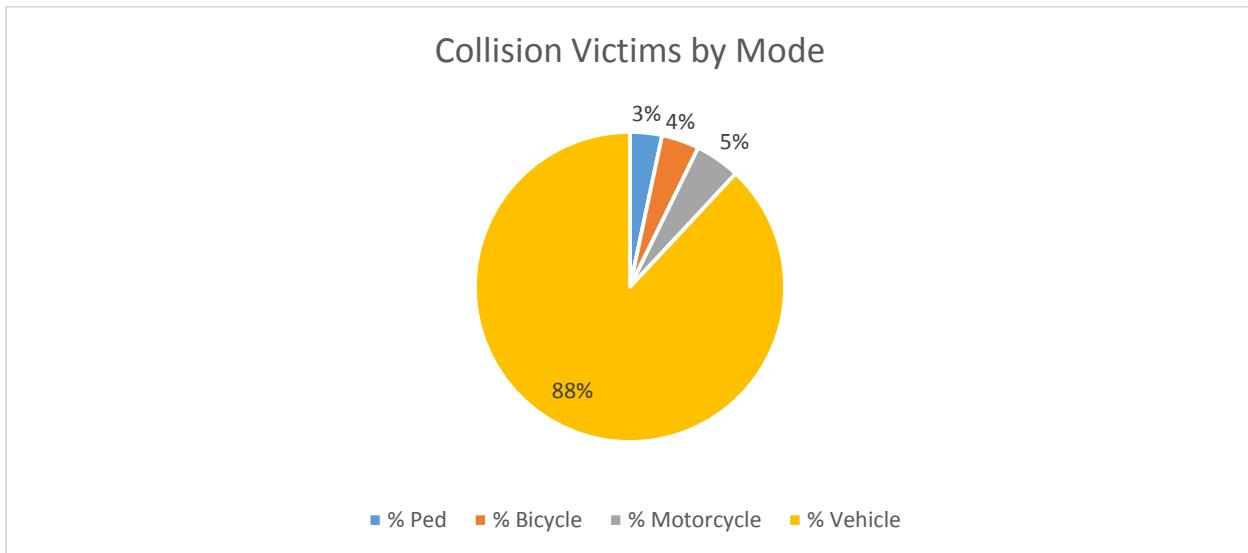
Vehicle to vehicle-involved fatal and severe collisions happen everywhere, but there is a concentration in the southern part of the County in our urbanized communities.



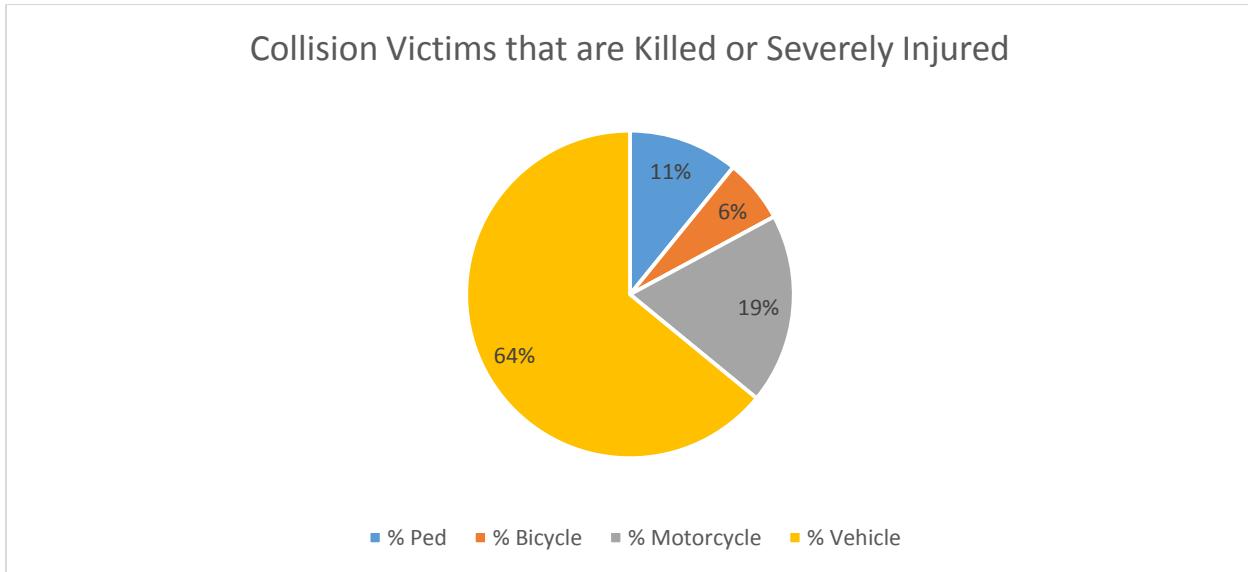
Vehicle to vehicle collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

The vast majority of victims injured as a result of traffic collisions on unincorporated County roadways were in vehicles.

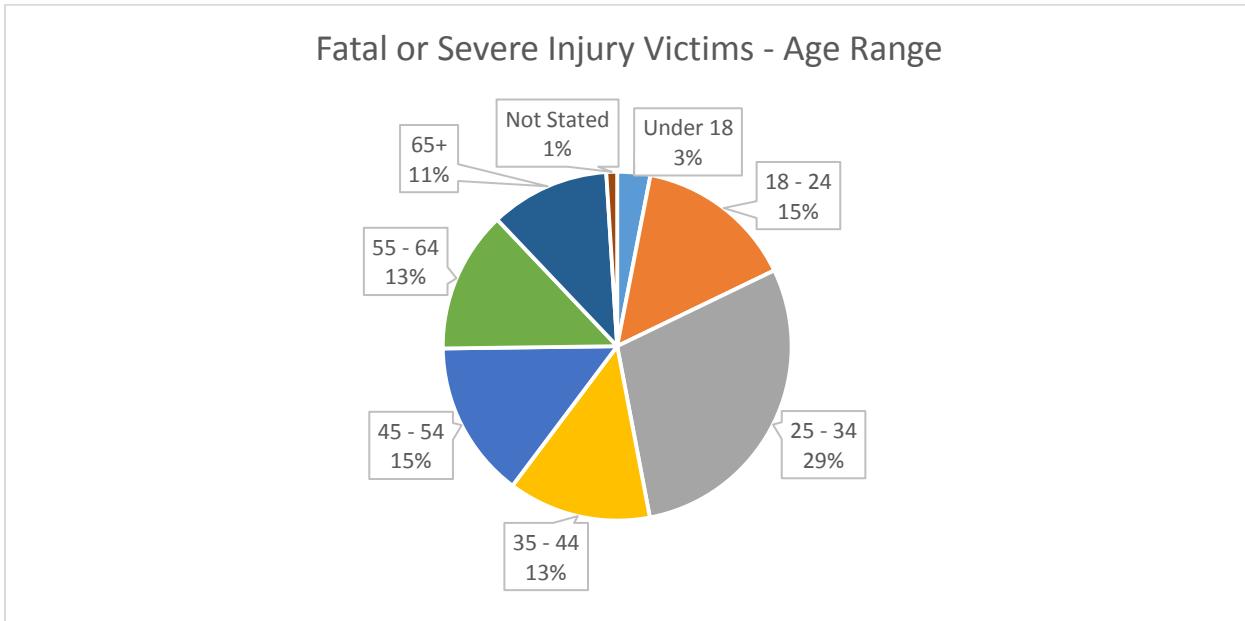


However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injuries and fatalities. Approximately 11 percent of fatal and severe injury victims are people walking, six percent are people bicycling, and 19 percent are people using a motorcycle.

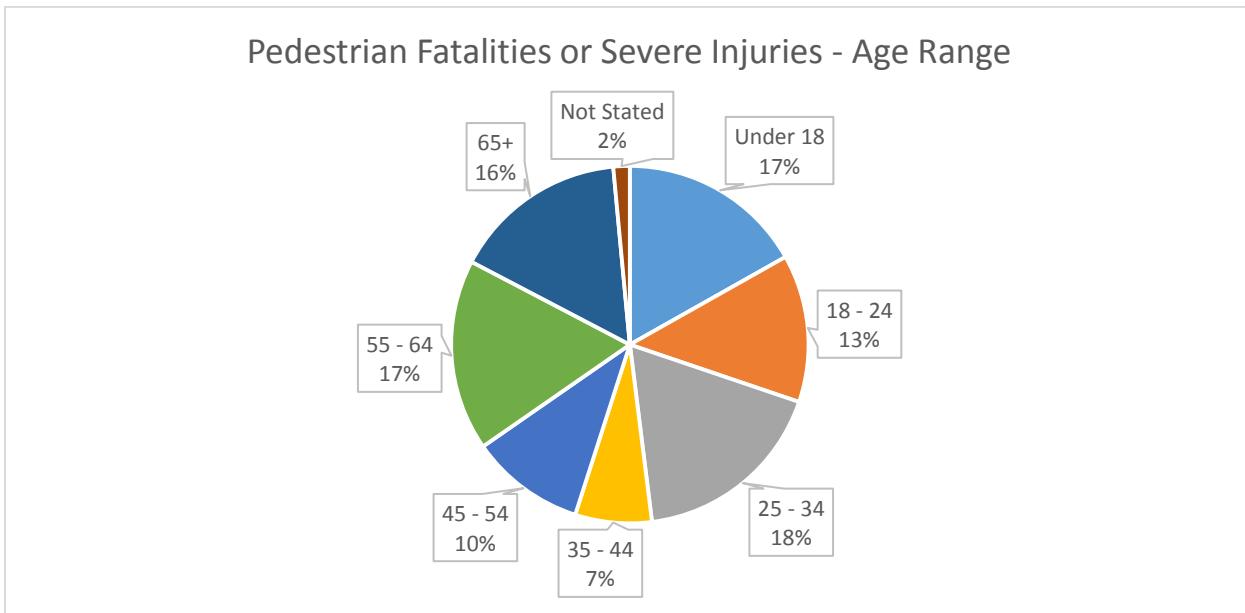


Demographics

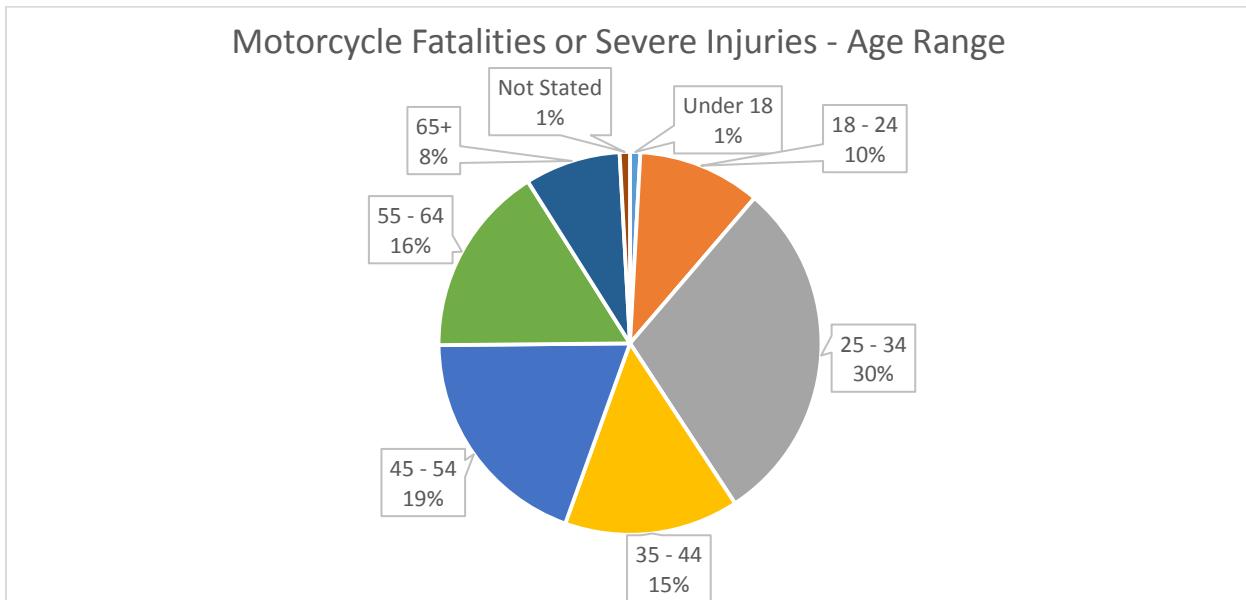
Regardless of mode, across all killed and severely injured victims there is a higher proportion of male victims (approximately 78 percent male and 22 percent female) and victims 25 to 34 years old (across both genders), for the entire time period. The chart below shows the age breakdown across all victims killed or severely injured, regardless of mode. Nearly a third of victims (29 percent) are between the ages of 25 and 34.



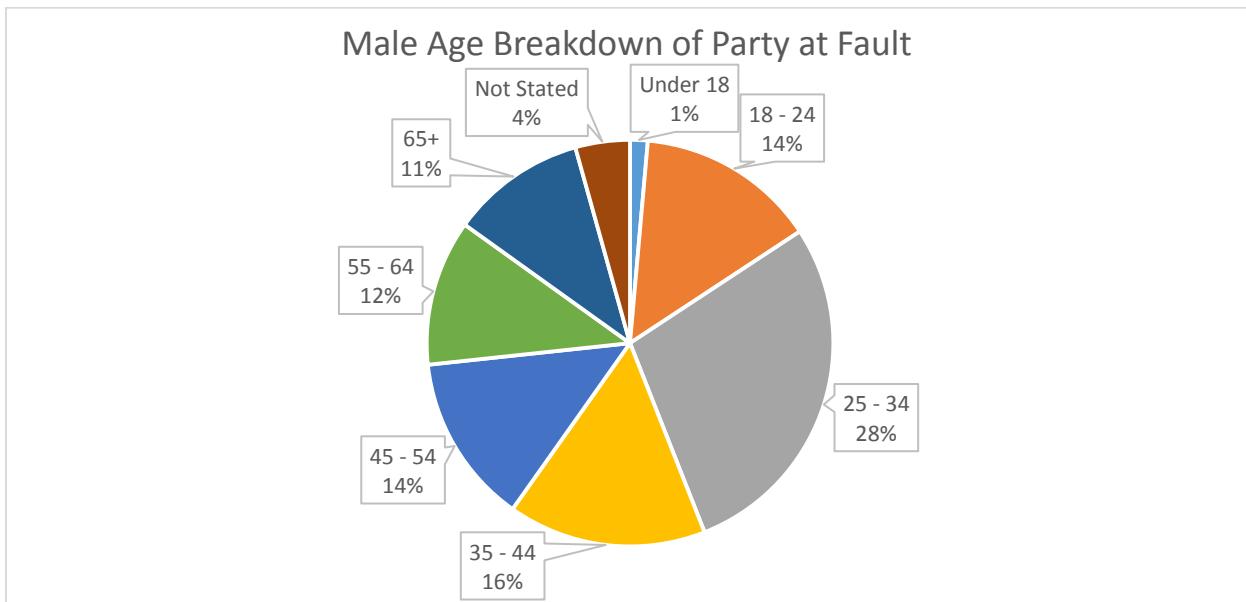
Among pedestrians killed or severely injured, victims are concentrated in both older and younger age groups. 17 percent are young people 18, 13 percent are between 18 and 25, and 33 percent are 55 and over.



The chart below shows the age breakdown for all motorcycle victims, male and female. Motorcycle victims were overwhelmingly young males: 94 percent are men, 40 percent under the age of 34.

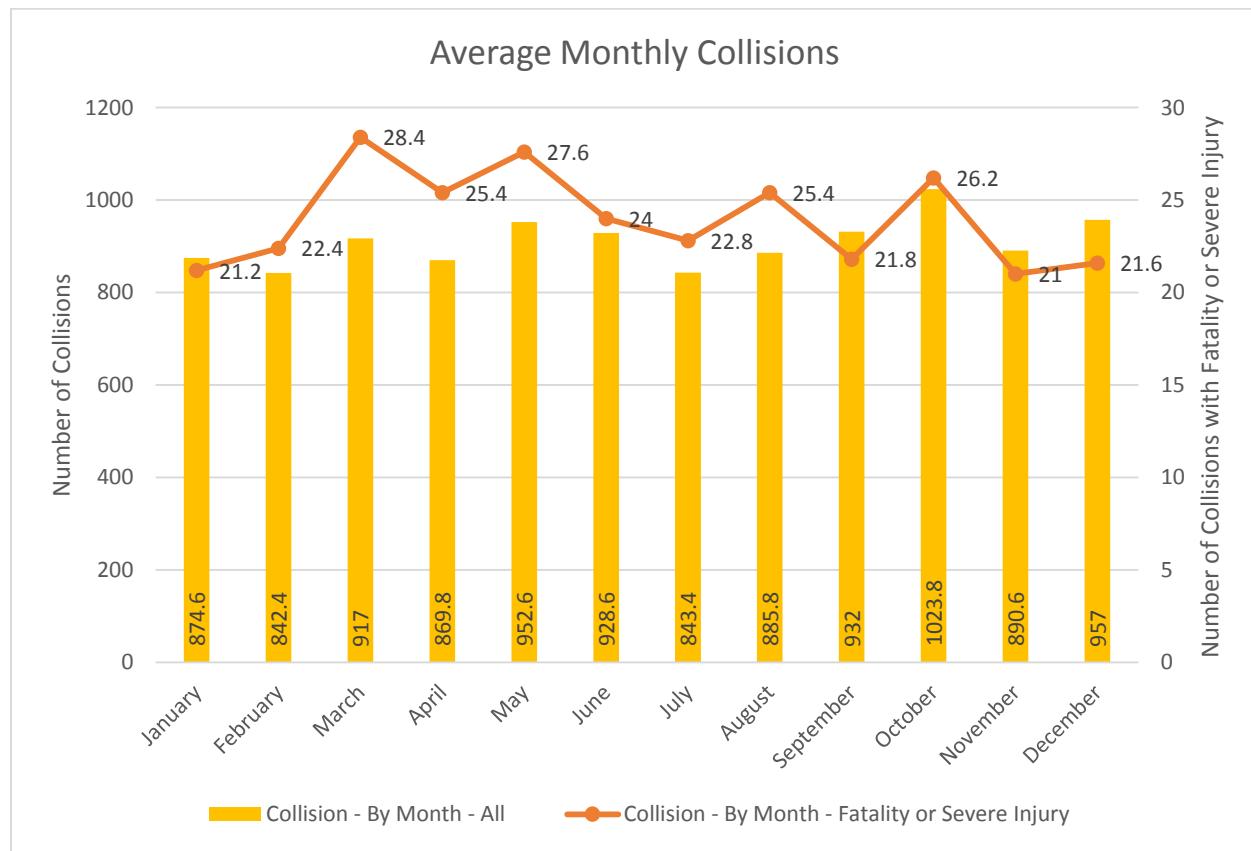


Men represented 64 percent of at-fault parties, while females represented 36 percent. Young men (under the age of 35) and older men (over the age of 55) were more likely to be labeled as “at-fault” in all collisions (no injury, complaint of pain, visible injury, severe injury, fatal) across the entire time period.

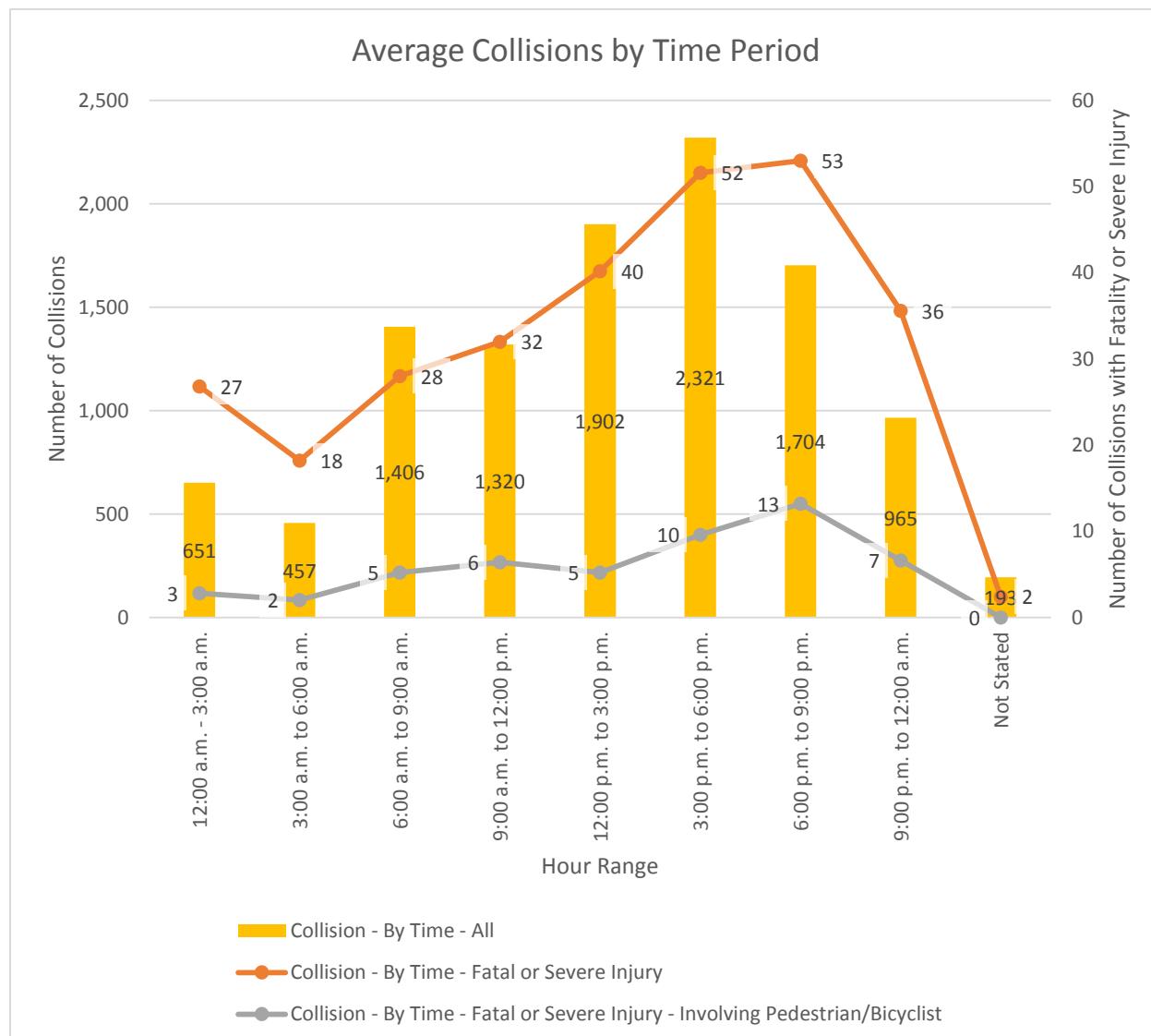


Temporal

On average from January 1, 2011 to December 31, 2015, October was found to have the highest number of collisions. Additionally, there are peaks in fatal and severe injury collisions during the months of March and May.



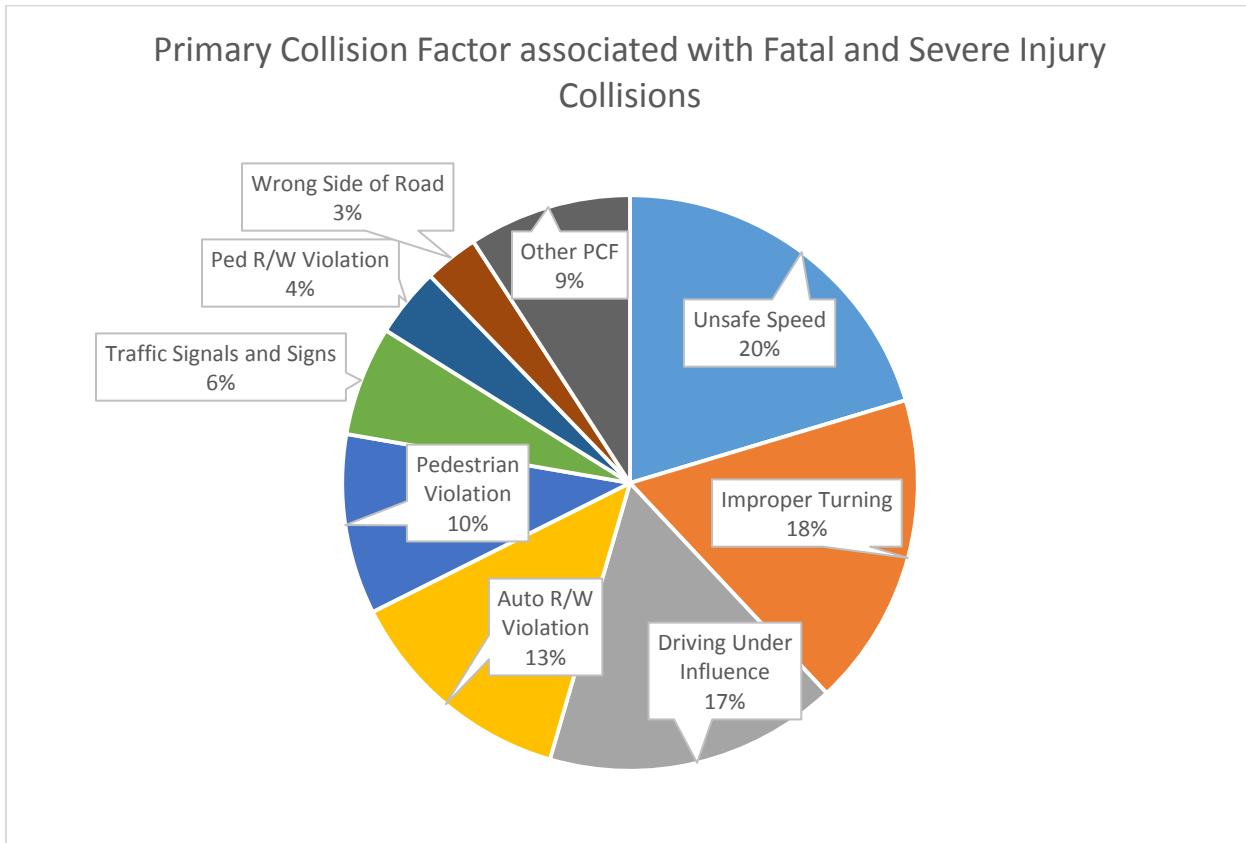
On average across all reported collisions (no injury, complaint of pain, visible injury, severe injury, fatal) during the period January 1, 2011 through December 31, 2015, most occurred between the hours of 3:00 p.m. to 6:00 p.m. High numbers of fatal and severe collisions also occurred during this period. Although there were fewer collisions overall from 6:00 p.m. to 9:00 p.m., there were high numbers of fatal and severe collisions during this time period, indicating a disproportionately high rate of fatal and severe collisions. This is also the peak time period when people walking and bicycling are involved in a fatal or severe collision, indicating that although more collisions occur during the 3:00 p.m. to 6:00 p.m. time period, the most dangerous time is from 6:00 p.m. to 9:00 p.m.



CONTRIBUTING FACTORS

Primary Collision Factor

CHP lists a single “Primary Collision Factor” (PCF) when it creates a collision report. This indicates the an officer’s determination of the primary cause of the collision. Other contributing factors may or may not exist. Unsafe speed was found to be the greatest primary collision factor, comprising 20 percent of the primary collision factors, with improper turning and driving under the influence comprising 18 percent and 17 percent, respectively.

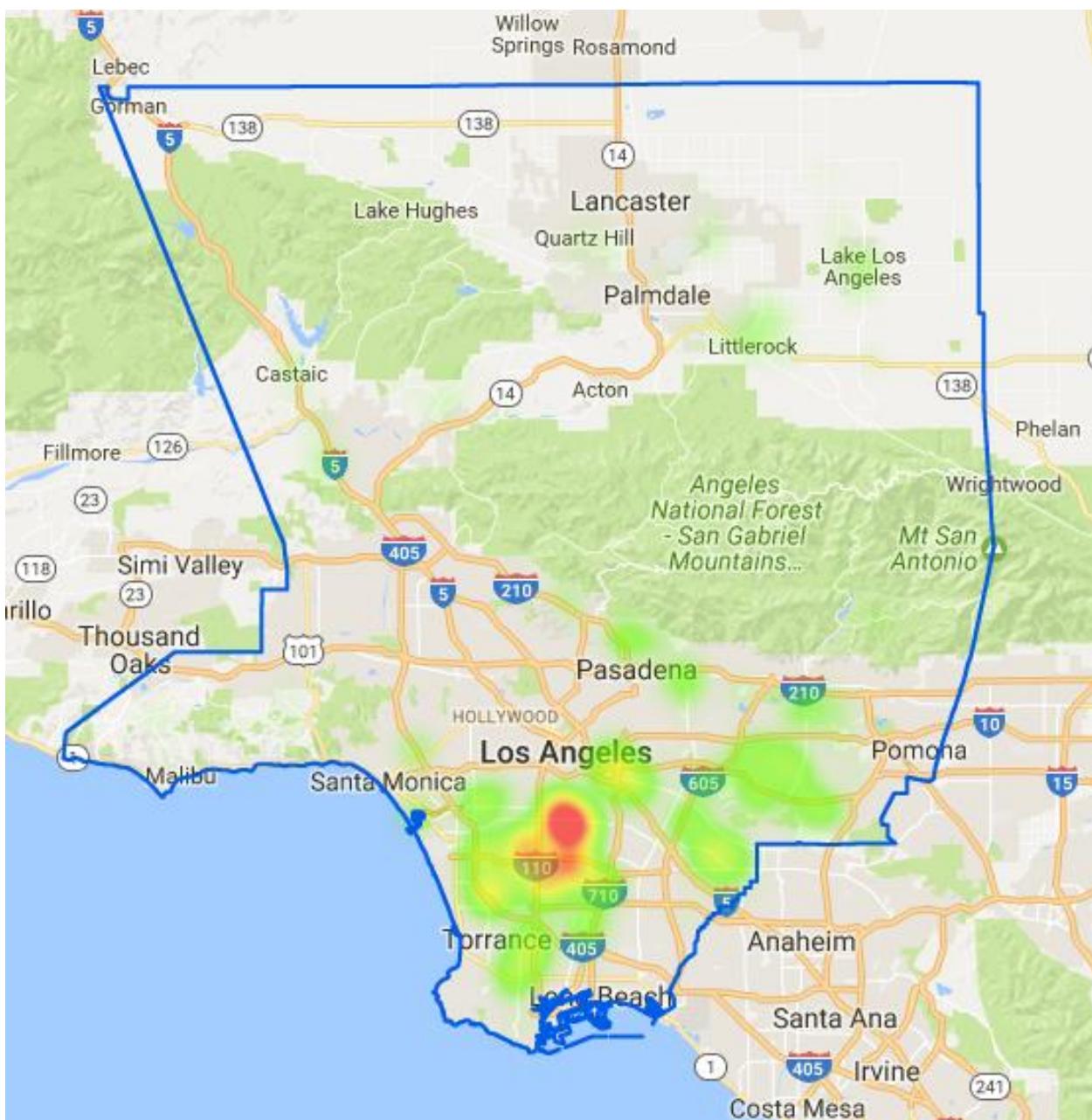


Hit and Run

Approximately 25 percent of all collisions involve hit and runs and there were 15,692, 133 involving a person killed or severely injured, during the period analyzed. This number has remained relatively constant over the past five years.

Felony Hit and Run Collisions

The heat map below shows the concentration of felony hit and run collisions. There is a concentration in the southern part of the County in urban areas. A felony hit and run involves a fatality. Among bike-involved and pedestrian-involved felony hit and run collisions, the same concentration pattern is seen.



Felony hit-and-run collisions in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

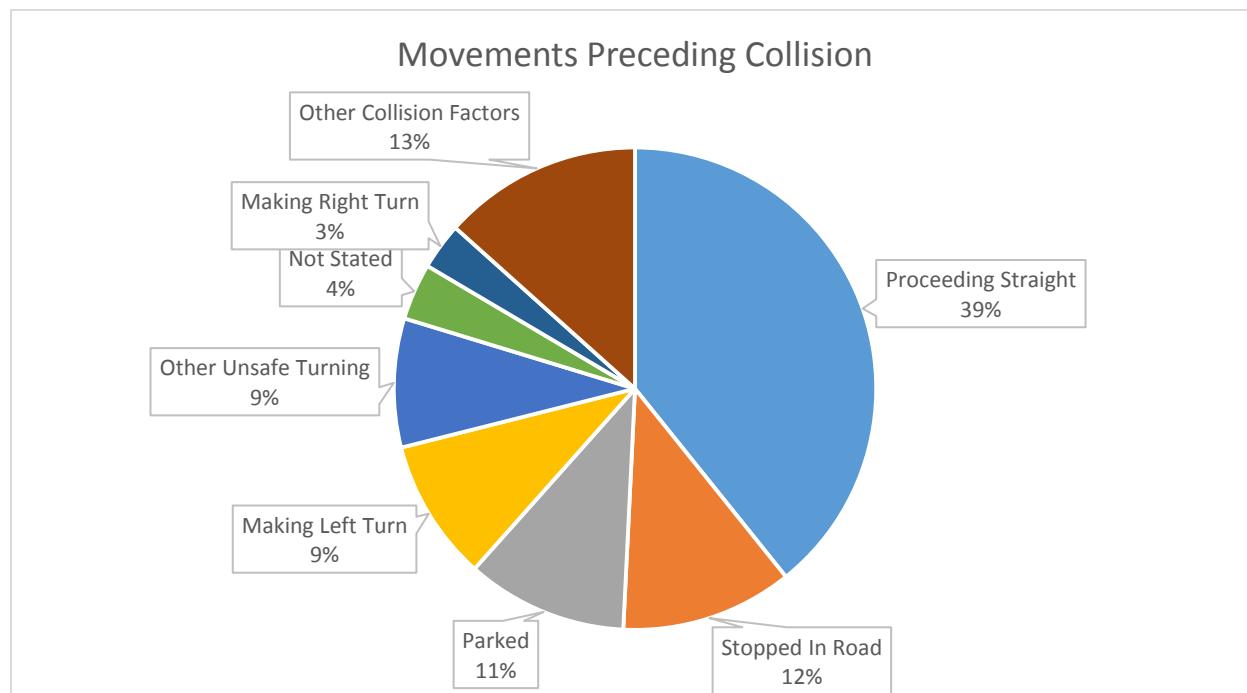
Map data ©2017 Google, INEGI

Driving Under the Influence (DUI)

For this section, “Driving Under the Influence” is defined as “Under Alcohol Influence” or “Under Drug Influence” while driving. Approximately eight percent of all crashes involve driving under the influence of alcohol or drugs; this percentage has remained relatively steady over the past five years. However, nearly 17 percent of fatal and severe injury collisions involve DUI, and 25 percent of vehicle-to-vehicle fatal collisions involve DUI.

Movement Preceding the Collision

CHP also reports vehicular movements in collisions prior to impact. Most collisions involve proceeding straight (39 percent), a turning movement (right turn, unsafe turning, left turn combined for 21 percent), stopping in the road (12 percent), and parked vehicles (11 percent).



Other Factors

Most collisions involving a fatality or severe injury occur in clear weather conditions (89 percent) and dry roadway surface conditions (96 percent). Roadway conditions (e.g., obstructions, flooding, holes), are listed as “no unusual conditions” in 97 percent of fatal and severe injury collisions.

66 percent of all collisions occur during daylight, with another 30 percent during the dark. However, collisions in the dark and during dusk are overrepresented among collisions involving a severe injury or fatality, with 52 percent occur during daylight, 43 percent in the dark, and five percent at dusk.

SUMMARY OF CHALLENGE AREAS

Based on the preliminary data analysis, the following challenge areas have been identified as warranting additional data analysis to further pinpoint causes and patterns associated with severe injury and fatal collisions, and to target programs, resources, and infrastructure enhancements.

- ***Unsafe Speeds:*** Vehicle speed can be the difference between life and death in a collision. Speed is listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- ***Impaired and distracted driving:*** Driving under the influence of alcohol or drugs is involved in 8 percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes. Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores the need for a coordinated approach to capture information on and to prevent distraction.
- ***Hit and runs:*** Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for outreach to spur behavior changes by motorists.
- ***Young males:*** Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions. For example, the percentage of collisions involving young males on motorcycles suggests young males represent a critical demographic to target for programs and messaging.
- ***Motorcyclists:*** Twenty percent of fatal and severe collisions involved a motorcyclist. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found to occur on rural or mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- ***Pedestrians:*** Seventeen percent of fatal and severe collisions involved pedestrians. Young people (under age 19) and older people (55 years and over) were overrepresented in pedestrian-involved fatalities and severe injuries. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found in urban areas where a greater probability of conflicts exist due to higher vehicular densities, as well as in rural areas, where higher vehicular speeds may be a factor.

To further pinpoint any significant factors and patterns that may be associated with collision types, additional analysis will need to be conducted, including community demographics, existing infrastructure (e.g., presence of bikeway, walkway, prevailing speed limit), traffic controls, and others.

PART III: CURRENT TRAFFIC SAFETY EFFORTS

The County and its partners currently administer various programs that support traffic safety through education, enforcement, engagement, engineering, and evaluation. CHP, the agency responsible for traffic enforcement in unincorporated areas, is currently providing the majority of the County's traffic safety programs in unincorporated communities. The Sheriff's Department, DHS Trauma Hospitals, DPH, DPW, and the Los Angeles County Office of Education are all involved in injury prevention efforts as well. The process of developing this report increased awareness about opportunities for collaboration between departments. Despite current efforts, it is clear that more can be done to prevent traffic deaths and severe injuries on unincorporated area roadways. Strategically focusing best-practice programs on key challenge areas, leveraging resources across agencies, and identifying new injury prevention resources will help the County reach its traffic safety goals.

Education

General Safety Tips

County departments and partners, such as CHP and DPH, have readily available educational materials such as pamphlets, flyers, and safety items (e.g. bicycle helmets, lights) that can be distributed during community events. CHP has educational materials that target different audiences and behaviors, including pedestrian safety, bicyclist safety, skateboard safety, motorcycle safety and helmet laws, distracted driving, and others.

Distracted Driving

Distracted driving, such as looking at a phone or texting while driving, continues to be a challenge area locally and statewide. CHP targets high school aged children through its "Teen Distracted Drivers Education and Enforcement" program, conducting focused safety presentations and press events. CHP's "Impact Teen Driver" program is designed to educate high school student drivers on the dangers of distracted driving. CHP also has an "Adult Distracted Drivers" program that targets all non-teen drivers to minimize distracted driving through public service announcements, public presentations, and direct community engagement at local events. DHS Trauma Hospitals have injury prevention programs designed to reduce trauma visits, many of which are focused on reducing distracted driving. These include presentations to community groups, safe driver pledges, and "Don't Text and Drive" campaigns.

Impaired (Driving Under the Influence Alcohol or Drugged) Driving

CHP and some DHS Trauma Hospitals conduct presentations to engage high school-aged students and their parents about driving under the influence through its "Every 15 Minutes" program. The program includes fatal driving under the influence (DUI) simulations and designated driver education. CHP also chairs an Intoxicated Driver Task Force, which brings community partners such as Mothers Against

Drunk Driving and law enforcement together. This program is largely supported through grant funds. Injury prevention activities at some DHS Trauma Hospitals include educational programs wherein participants visit a Trauma Hospital and morgue to learn from emergency healthcare providers and see the wreckage and carnage of crashes involving DUI.

Speed and Aggressive Driving

CHP recently received a federal traffic safety grant to develop and implement the Regulate Aggressive Driving and Reduce Speed (RADARS) program to educate motorists about the dangers of aggressive driving and actively enforce related laws. The main goal of RADARS is to reduce the number of fatal and injury traffic collisions in which speed, improper turning, and driving on the wrong side of the road are primary collision factors. The RADARS program will also focus on street racing and sideshows through enhanced enforcement paired with an active public awareness campaign.

Teenage Drivers

At the State level, young drivers are disproportionately represented in collisions. CHP has several programs that target this age group including, “Start Smart” classes that help newly licensed and soon-to-be licensed teenage drivers understand the critical responsibilities of driving and that “at-fault” collisions are 100 percent preventable. The classes create an open dialogue between law enforcement, teenage drivers, and parents or guardians.

Older Adults

Through the “Age Well, Drive Smart” program, CHP aims to reduce motor vehicle collisions and pedestrian fatalities experienced by older adults and increase seniors’ alternate transportation options. “Age Well, Drive Smart” is a free, two-hour senior driver safety/mobility class. Individuals can register for the course by contacting their local CHP office. The program is funded through a “Keeping Everyone Safe” (KEYS) grant.

Bicycle and Pedestrian Safety Education

CHP, Sheriff’s Department, DPH, DPW, and DHS Trauma Hospitals are involved in promoting safe walking and bicycling. CHP conducts safety presentations, bicycle rodeos (on-road bike classes), and gives away incentives (such as bike helmets and lights) to promote safe walking and bicycling. These activities are funded through an Office of Traffic Safety grant for the 2016-2017 period. The Sheriff’s Department, through a new grant from the Office of Traffic Safety, will be conducting additional bicycle and pedestrian safety skills classes at elementary schools. This program will be available in 17 incorporated cities during 2017-2018. DPH conducts bicycle safety education workshops as part of Parks After Dark programming and distributes bicycle helmets, lights, and locks, as part of a grant from Caltrans. DPW has in the past been awarded Safe Routes to Schools grant funds for bicycle and pedestrian encouragement

programs. Although not an ongoing program, future grant opportunities may be available to support an educational program. Several DHS Trauma Hospitals offer pedestrian safety classes for students, and distribute incentive safety items such as helmets and reflective back packs.

Suggested Routes to School

School-aged children are particularly vulnerable in the case of a collision. To enhance the safety of school-aged children and their parents, DPW has maps of suggested walking routes to schools that identify suggested crossings and prioritize routes that include traffic controls. These maps are updated periodically with changes, such as new crossing guard locations.

Motorcycle Riders

CHP works to reduce the number of motorcycle-involved collision deaths and injuries through a combination of increased enforcement in areas with high incident numbers and motorcycle education and awareness. Through the grant funded “Have a Good Ride” program, CHP conducts motorcycle education classes, training approximately 60,000 riders per year across California at over 100 training sites. CHP also conducts public safety announcements via Internet, radio, and movie theaters during Motorcycle Safety Awareness Month (May), other motorcycle-heavy holidays (Memorial Day and Fourth of July), and designated motorcycle events. Messages focus on speeding, improper turning, and driving under the influence of alcohol and/or drugs.

Child Passenger Safety

Ensuring children are properly restrained can reduce injuries and fatalities during a collision. DPH funds agencies to host two-hour child passenger safety workshops on how to correctly install a car seat. The workshops are available in English and Spanish every month, and free or low-cost car seats are given to families that show proof of hardship. Funding for this program is based on citation fines. DPH intends to pursue Office of Traffic Safety grants to expand the program. DPH has also highlighted a need to provide ongoing child passenger safety education to the County workforce, especially those that transport children. DPH staff recently started collaborating with the Department of Children and Family Services to ensure staff that transport children are trained on best practices in child passenger safety. Since January 2016, approximately 500 newly hired social workers and human service aides have been trained.

CHP also has a Child Passenger Safety Program which includes child passenger safety check-up events to promote correct usage of child restraint systems; inspection of child passenger safety seats; educational classes at daycare centers, preschools, and elementary schools; and distribution of child passenger safety seats to people in need. In addition, CHP certifies personnel as child passenger safety technicians through training courses. Additionally, DHS Trauma Hospitals also provide child passenger safety classes and checks on a quarterly basis.

Enforcement

Directed Traffic Enforcement

CHP is responsible for traffic enforcement on unincorporated Los Angeles County roadways; the Sheriff's Department is responsible for traffic enforcement in 42 contract cities within Los Angeles County, many of which border unincorporated areas. The Sheriff's Department and CHP work collaboratively to conduct targeted traffic enforcement based on community concerns and data analysis identified by County departments, such as DPW.

Impaired Driving

Both CHP and Sheriff's Department target impaired driving as part of regular traffic enforcement duties. The Sheriff's Department conducts DUI checkpoints, locations where officers stop vehicles at designated locations to ascertain whether drivers may be under the influence of drugs or alcohol. This program is typically funded through grants and/or local jurisdiction funds. In 2017-2018, the Sheriff's Department has funding to do checkpoints, saturation patrols, and additional DUI enforcement in 17 contract jurisdictions. The Sheriff's Department has found DUI checkpoints to be an effective enforcement and education approach. Compliance rates have increased over time, and anecdotally, officers have observed an increase in use of rideshare services like Uber and Lyft. Using grant funding, CHP is currently conducting DUI/Driver's License Check Points throughout Los Angeles County communities, as well as traffic safety presentations at public venues in unincorporated areas that focus on the dangers of impaired driving.

Seatbelt Use

Increasing seatbelt use among all passengers in a vehicle can help reduce the likelihood of an injury or fatality in a collision scenario. The Sheriff's Department engages in "Click it or Ticket" enforcement in contracted incorporated cities. If the driver or passengers in a vehicle are not wearing seatbelts, officers can issue a citation. Enforcement of seatbelt use is conducted as part of general traffic enforcement duties. The "Click it or Ticket" campaign has a statewide and national presence. CHP plans to participate in the "Click it or Ticket" campaign by conducting a well-publicized statewide seat belt enforcement from May 22 to June 4, 2017, focusing enforcement in low compliance areas throughout California.

Collision Response

CHP responds to collisions on unincorporated County roadways. CHP Officers are responsible for completing incident reports, coordinating with other agencies, and clearing the scene of a collision.

Automated Red Light Photo Enforcement

DPW operates automated red light photo enforcement at several signalized intersections in unincorporated areas that have high rates of collisions caused by red-light running. DPW continues to

monitor and identify signalized intersections to identify those that no longer need photo enforcement and also those may benefit from it. CHP plays a key role in the success of the Automated Red Light Photo Enforcement Program, as it is responsible for the review of photos, approval of citations, checking time and speed charts, and appearances in court.

Adult Crossing Guard Program

The County's Office of Education operates an Adult Crossing Guard Program, which assigns crossing guards for elementary and middle school-aged pedestrians at locations that meet Board-approved criteria. DPW conducts traffic studies based on requests by local school districts and other entities within the unincorporated areas to determine whether crossing guard services meet the minimum criteria. Currently, there are approximately 220 locations in County unincorporated areas that are serviced by crossing guards.

Speed Enforcement

DPW conducts Engineering and Traffic Surveys for unincorporated roads. According to the California Vehicle Code, there must be a current Engineering and Traffic Survey in order to legally use radar for speed enforcement. These surveys establish the appropriate speed limit and must be updated every seven years. Currently, nearly 200 radar routes exist to assist CHP in speed enforcement. In addition, DPW has several radar speed trailers that build driver awareness of the speeds at which they are traveling in order to discourage speeding. These are deployed temporarily at key locations throughout unincorporated areas of the County.

Engagement (Community Outreach & Communications)

Monthly Awareness Campaigns

CHP conducts awareness campaigns on a different topic each month; for example, April is Distracted Driving Month. CHP broadly distributes messaging through press releases, television and radio media interviews, video public safety announcements, and social media.

Freeway and Highway Changeable Message Signs

Transportation Management Centers (TMC) are control centers for California's urban freeway and highway systems and are operated in partnership with CHP and the California Department of Transportation. Real-time traffic information is gathered 24 hours a day from several sources, including electronic sensors in the pavement, freeway call boxes, and video cameras. TMCs operate changeable message signs along the freeways and highways. These signs provide helpful information, including road closures due to traffic collisions, inclement weather advisories, and traffic safety messages. In 2015, messages focused on speeding included: "Slow Down and Save a Life," "Slow for the Cone Zone," "Move Over or Slow for Workers - It's the Law," and "Fines Increased in Work Zones - Slow Down".

Community-based Law Enforcement

Officers from CHP and the Sheriff's Department participate in various community events and programs. These events serve as a way to build trust between law enforcement and the community, and as an opportunity to distribute educational materials. The Sheriff's Department participates in the Los Angeles County Bicycle Coalition's "Ask an Officer" events, where bicyclists can engage directly with Officers about bicycle safety and the rules of the road. CHP, Sheriff's Department, and local school police participate in events, such as International Walk to School Day, a day where students are encouraged to walk to school, and National Night Out, an annual community-building campaign that promotes police-community partnerships through block parties and festivals.

Engineering

Traffic Investigation Studies

Each year, DPW reviews approximately 1,200 locations in the unincorporated areas to ensure proper traffic signs, roadway markings, and signals are in place. These traffic studies are generated by requests from constituents who are concerned about traffic safety in their neighborhoods. After collecting and analyzing data, DPW's traffic engineers design and implement traffic controls, such as signs, speed humps, and traffic signals to facilitate traffic safety.

Evaluation & Data

As described in Part II, various County departments collect data on traffic safety and use this data in their own programs to guide implementation.

PART IV: RECOMMENDED STRATEGIES AND ACTIONS

A County Vision Zero initiative would draw upon the collective expertise and resources of multiple departments to address this major public health concern. The initiative would employ a data-driven approach, proven and innovative practices, and the synergistic alignment of efforts between departments. It would engage community stakeholders to develop targeted solutions and implement strategies for traffic safety education, engineering, and enforcement. The initiative would also evaluate results to gauge success and modify programs as necessary to optimize impact.

A successful initiative will require additional resources. Since the Board motion directing the development of this report, County departments collaborated on two grant proposals that, if awarded, would help fund several of the initiative's immediate strategies and actions listed below. DPW submitted a grant proposal to Southern California Association of Governments (SCAG) on November 18, 2016 requesting support for the development of a Vision Zero Action Plan. DPH submitted a grant proposal to SCAG on the same date requesting support for the development of a Vision Zero Communications Plan, as well as support for a press event to launch a Vision Zero initiative. If SCAG awards these grants, funding will begin in July 2017. Additionally, DPW has already been selected for a Highway Safety Improvement Program grant to conduct additional collisions analysis. County departments will continue to collaborate on opportunities to seek grant funding for traffic safety initiatives, such as those described in Appendix A. However, dedicated funding will be necessary to expand traffic safety efforts and project implementation beyond current County and partner efforts.

The strategies and actions below describe specific next steps that would support the County in moving forward with an effective Vision Zero initiative.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with the Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Collaboration with internal and external partners will help ensure a successful Vision Zero initiative. A first step will be to create a partnership structure that can guide the development and implementation of Vision Zero programs and help identify and leverage resources. Regional partners may include SCAG, the Los Angeles County Metropolitan Transportation Authority, and the City of Los Angeles. State partners may include CHP, Office of Traffic Safety, Caltrans, and the Department of Motor Vehicles. Key community partners may include trauma hospitals, the American Automobile Association (AAA),

Mothers Against Drunk Driving (MADD), the Los Angeles County Bicycle Coalition (LACBC), and other community based organizations. A key lesson learned from the City of Los Angeles is the need for a single point-person and agency to provide coordinate a broad group of stakeholders.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County would identify specific engineering, enforcement, education, evaluation, and engagement strategies, along with timelines for implementation. Best practices from other jurisdictions indicate that having a completed Action Plan prepared before Vision Zero is publicly launched is critical. This allows for clear communication on the strategies and actions that will be prioritized to reduce traffic deaths and severe injuries. The Action Plan would be based on a literature and best practice reviews to identify effective strategies used by other jurisdictions. The Action Plan would target specific challenge areas (e.g. speeding), geographic areas (e.g. dense, urban areas) and demographic groups (e.g. young males) associated with concentrations of collisions involving fatalities and severe injuries in unincorporated areas. Development of the Action Plan would include outreach and engagement with community partners, County departments, partner agencies, and other stakeholders to seek input about the most effective strategies for reducing traffic deaths and severe injuries in unincorporated areas.

Prioritize interventions to address traffic fatalities; identify future analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context sensitive solutions for specific problems. This requires a holistic picture that goes beyond collision records and incorporates additional quantitative and qualitative data. For example, engaging with community members may indicate that collisions are being underreported in a certain neighborhood, which may be further confirmed by reviewing hospital intake data and conducting additional community surveys. Without a multi-pronged data analysis approach, areas experiencing severe and fatal collisions may be left out inadvertently or proposed solutions may not be in line with other community goals. This points to several data needs:

- Incorporate data from other County departments and regional partners to develop a more complete picture of traffic safety. This could also include data models to further understand appropriate engineering or program countermeasures.
- Engage community partners to understand and “ground truth” traffic safety issues and collect qualitative data. This process will help validate existing data, identify additional data sources, and implement community-driven projects.
- Bring data experts and community experts together to prioritize types of analysis and an implementation approach. This involves a joint conversation among many partners to identify how data can be used creatively and applied to problem-solving.
- Consider long-term data collection needs for all modes of travel, such as bicycle and pedestrian volumes.

Develop metrics and targets (June 2017). To gauge the success of this initiative, measurable metrics and targets can be developed for the County, similar to those utilized by the California Strategic Highway Safety (CSHS). CSHS is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan would position the County to effectively use a variety of innovative and culturally appropriate communication techniques aimed at behavior change around traffic safety. This Communications Plan would include the development of a Vision Zero website, public service announcements, branding, fact sheets, social and digital media, press kits, and talking points, and would include strategies for ongoing public education and outreach. Communications strategies could include leveraging existing media materials (e.g. from City of Los Angeles), as well as low-cost advertisement space on County bus shelters and bus circulars. The communications approach should reflect the diverse populations of Los Angeles County and address ways to reach audiences in a wide variety of geographies and languages.

Hold a press event to launch Vision Zero (June 2018). Once an Action Plan and Communications Plan are prepared and a website has been launched, a Vision Zero press event would help bring attention to the County's multi-sector campaign to reduce traffic deaths and severe injuries, and highlight future traffic safety initiatives. The event could feature elected officials, department and agency directors, community-based organizations, and survivors of traffic crashes.

Develop a regional approach to Vision Zero messaging and strategy implementation (February 2017 – ongoing). The unincorporated areas are disparate “islands” that vary in geography, climate, demographics, and land uses. A campaign to reduce traffic deaths would be most effective if behavior change messages were well-aligned and coordinated across the region, especially given that unincorporated area residents travel widely as part of their daily lives. Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, SCAG, the City of Los Angeles, and other jurisdictions, would have the greatest influence on social norms and encourage behavior change. Similarly, the County’s engineering, enforcement, and education strategies should be implemented in close coordination with regional partners to increase success.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address several traffic safety problems may require changes in State legislation. For example, automated speed enforcement, cameras that capture speeding and issue an automated citation, is not legal in California but has been shown to be effective in other states. The County could coordinate with other jurisdictions

and agencies to explore common legislative and policy solutions that would enhance traffic safety regionally.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). Reducing traffic deaths and severe injuries requires community-wide awareness and behavior change, as well as an institutional focus on traffic safety. People driving, walking, bicycling, and riding motorcycles face choices every day, such as whether to speed while driving or use their cell phones while in a crosswalk. Likewise, County staff make choices that impact traffic safety when planning and designing communities, and when developing education and enforcement programs. The County could help to promote choices that prioritize traffic safety through messaging aimed at the County workforce in County newsletters and on department websites. Similarly, a broad, shared policy direction would help ensure all County Departments have the opportunity to promote traffic safety.

APPENDIX A - FUNDING OPPORTUNITIES

Jurisdictions typically fund their efforts through a combination of grant resources, general funds, and changing existing internal processes or programs to align more closely with the Vision Zero program. The summary below highlights potential sources of funding and their uses that the County could pursue to support a Vision Zero effort. The County already pursues these sources for other transportation and safety projects.

State Highway Users Tax

The State Highway Users Tax, commonly referred to as the gasoline tax, is the primary source of funds DPW uses for ongoing operation and maintenance of roadways, safety projects and programs, and transportation improvement projects. The County's gasoline tax revenues have dropped from about \$190 million in fiscal year (FY) 2014-15 to about \$150 million in FY 2015-16, and are projected to be only about \$144 million in FY 2016-17 and FY 2017-18. This downward trend is expected to continue without State legislative action.

Measure R Local Return

Measure R is a half-cent County transportation sales tax, passed in 2008. The County receives approximately \$13 million annually. The funds, which are administered by the Los Angeles County Metropolitan Transportation Authority, can be used for all types of roadway projects and some non-infrastructure programs, including those that promote traffic safety.

Measure M Local Return

Measure M was passed by voters in November 2016 and is another half-cent County transportation sales tax that will begin July 1, 2017. The funds will be administered by the Los Angeles County Metropolitan Transportation Authority. There is a local return portion of Measure M that will distribute a percentage of the sales tax collected to Los Angeles County starting September 2017. The County expects to receive approximately \$14 million annually. Allocations and eligible projects have not yet been specified in detail. The County expects traffic safety projects to be an eligible use of funds.

Highway Safety Improvement Program (HSIP)

This Federally-funded program is a component of the "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and funds safety improvements. The program is administered by the State of California Department of Transportation on behalf of the Federal Highway Administration. DPW regularly applies for engineering projects through this source. Competitive projects are those that show high safety benefits (e.g. high crash reduction or modification factors) compared to project cost.

Office of Traffic Safety (OTS) Grants

The State's Office of Traffic Safety (OTS) offers grants to address distracted driving, alcohol impaired driving, motorcycle safety, and pedestrian and bicycle safety. OTS grants are a primary source of funding for the programs administered by CHP and Sheriff's Department, which are described within the report. OTS grants are on a two-year cycle, and can be challenging to administer.

Active Transportation Program

The Active Transportation Program (ATP) is administered by the California Department of Transportation (Caltrans). The purpose of the ATP is to encourage increased use of active modes of transportation (walking and bicycling), among all ages, and aims to increase the safety and mobility of non-motorized users through non-infrastructure programs and engineering projects. To date, this grant has been administered annually. DPW and DPH have applied for this grant in the past, and DPW applies for it regularly to build projects that promote safety.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) administers a Sustainability Planning Grant program, which funds planning and media campaigns related to active transportation, integrated land use, and green region initiatives (e.g. climate action plans, GHG reduction programs). The program provides direct technical assistance, rather than funds, which reduces the County's administrative burden. DPW applied for this program in November 2016 to support a media campaign and a Vision Zero Action Plan.



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

March 16, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director, Public Health *Barbara Ferrer*

Mark Pestrella, PE
Director of Public Works
Mark Pestrella

SUBJECT: REPORT BACK ON VISION ZERO MOTION (Item 41-B)

On February 14, 2017, your Board approved a motion instructing the Departments of Public Health (DPH) and Public Works (DPW), in collaboration with other County departments and stakeholder agencies and nonprofit organizations, to: (1) implement the recommended strategies and actions described in the Vision Zero Report dated February 10, 2017, (2) establish a Vision Zero Steering Committee to coordinate and implement the initiative, (3) develop a Vision Zero Action Plan for unincorporated Los Angeles County, and (4) identify opportunities to secure long-term funding to sustain the Vision Zero initiative. The motion was approved as amended to include a report back with responses to questions from your Board.

To ensure that responses are based on best practices from other jurisdictions, as requested, meetings were conducted with representatives from the following organizations: City of Los Angeles Department of Transportation (LADOT), City of San Francisco Department of Public Health, and the national non-profit Vision Zero Network (VZN), which publishes briefs on best practices in Vision Zero implementation.

Prioritizing Safety with Existing Resources

Adopting a Vision Zero approach means acknowledging that business as usual is not enough and that systemic changes are needed in our traffic safety efforts to make meaningful progress. Central to this approach is the identification of potential safety problems on roadways and subsequent use of resources in a proactive and data-driven manner to implement solutions.

For transportation departments, this means using available resources to implement a capital improvement program that implements specific, data-driven safety improvements. For law enforcement agencies, enforcement efforts need to focus on the most dangerous traffic behaviors, such as speeding and driving under the influence. For education efforts, communication strategies need to target behaviors and populations most associated with collisions. Taken together, a new Vision Zero initiative can be initiated by shifting and better coordinating available resources for a more intentional safety focus.

Vision Zero Program Scope

Your Board requested information about the scope of the County's Vision Zero program and the total budget being allocated in terms of staff, communication plan, and corrective actions. A description of the program's general framework scope and resource needs are provided below. Because the County's Vision Zero effort is still in its preliminary stages, precise resource needs are not yet fully identified. Strategies prioritized in the Action Plan described below will inform the long-term budget needed. While departments will pursue every opportunity for grant funding, achieving reductions in traffic deaths and severe injuries may require additional County investments over the long term. It is likely that these costs will be offset by savings to the County associated with the prevention of traffic deaths and injuries, such as savings in medical costs, emergency services, legal and court costs, and congestion costs. According to the California Strategic Highway Safety Plan 2015-2019, the annual economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion.

Vision Zero Action Plan: The Action Plan will prioritize engineering, education, engagement, enforcement, and evaluation strategies and identify responsible parties, benchmarks, and timelines for achieving progress. County departments have secured grant funding to assist in developing the Action Plan. In addition, relevant departments will be dedicating staff to participate in the planning effort.

Vision Zero Communications Plan, Public Launch, and Media: Crafting an effective communications campaign that leads to real behavior change is complicated and requires a deep understanding of the steps people and communities will need to take to shift perceptions and actions. The Vision Zero Communications Plan will include innovative and culturally appropriate communication techniques and will position the County to launch Vision Zero publicly. A continuous online and media presence will help build awareness of Vision Zero and support culture change. A successful communications strategy will coordinate the campaign and messaging with other regional traffic safety partners such as the California Highway Patrol (CHP), Los Angeles County Metropolitan Transit Authority (Metro), Southern California Association of Governments (SCAG), the City of Los Angeles, and others.

Data Analysis for Project and Program Prioritization: Vision Zero is a data-driven initiative. Many sources of data must be combined (including CHP, hospital, and emergency medical services data) and considered to develop effective programs and projects and to achieve a more complete picture of traffic safety issues. As the region continues to change, collision patterns and concentrations will change. Consistent and iterative data analysis will be imperative to ensure we are allocating resources effectively.

Infrastructure Improvement Identification, Design, Implementation, and Maintenance: Dwindling dedicated resources for infrastructure projects present challenges to implementing existing projects, much less new Vision Zero projects. Dedicated funding for infrastructure project identification, design, implementation, and long-term operations and maintenance would allow the County to set realistic targets for safety improvements (e.g., implement a certain number of traffic safety projects annually).

Community Engagement and Community-Based Organization Support: Behavior change can only be achieved by building awareness among residents. Investments in long-term community outreach and engagement will allow us to develop more authentic relationships and culturally relevant materials. Furthermore, effective engagement and buy-in from community partners will allow safety projects, such as infrastructure improvements, to be promoted and more effectively implemented.

Program Expansion and/or Development and Implementation: Currently, the County and its partners have education, enforcement, and evaluation programs that support traffic safety goals. Some are implemented through competitive grant funds and others have dedicated funding. Through best practices research, the County and its partners will identify opportunities to expand the reach of our most effective programs and, as needed, develop new programs.

Dedicated Staff in Departments and Partner Agencies: Lead staff from each partner department or agency will be necessary to implement the Vision Zero Action Plan and sustain the initiative. Staff are needed to convene, facilitate, and organize meetings; coordinate County staff and regional and community partners; oversee communications efforts; develop and implement programs and action plans; identify, design, and implement infrastructure improvements; collect, analyze, and maintain high-quality data and communicate this information across a diverse body of stakeholders; and engage in and oversee community outreach.

Grant Writing and Administration: County departments have and will continue to seek grant funding sources to support traffic safety efforts, public education and outreach, and enhanced enforcement. This requires dedicated staff time to pursue and administer grants to support all program activities.

Potential Revenue Streams to Support Vision Zero

Your Board requested information about potential ongoing revenue sources for the County's Vision Zero initiative. DPW has identified the following opportunities for financing the County's Vision Zero efforts.

Senate Bill 1: If enacted, the bill would provide an additional \$200 million in annual funding to the County for the first 3 years for the repair and preservation of streets and roads, safety enhancement projects, active transportation, and other general transportation infrastructure needs. This is the most promising opportunity for continuing long-term financing for staffing and implementation of Vision Zero initiatives.

Measure M: This measure is the new half-cent transportation sales tax approved by Los Angeles County voters in November 2016, which allocates approximately \$3.5 billion over 40 years to Metro and the County's subregions for various active transportation, first/last mile, complete

streets, and modal connectivity programs and projects. Measure M does not provide for a specific formula allocation of these funds to the County or cities. However, through its presence and participation in essentially all of the subregions, the County will be well-positioned to advocate for funding of eligible projects that incorporate Vision Zero initiatives.

Grant Funds: The County will continue to apply for various competitive grant programs to support Vision Zero, such as those offered by the State's Highway Safety Improvement and Active Transportation Programs. Grant funds are available for public education and outreach efforts, and potential sources include the State Office of Traffic Safety and SCAG. General funds may be needed for any local matches required by these grants. In addition, grant funds will be sought to support ongoing coordination of the Vision Zero initiative within the County.

County Transportation Funds: Ongoing funds eligible to staff to implement Vision Zero initiatives include Road funds (gas tax), Proposition C Local Return (with nexus to transit), Measure R Local Return, and Measure M Local Return for which revenue begins in FY 2017-18.

The County's Road funds, Proposition C Local Return, and Measure R Local Return funds are currently fully committed to ongoing operation, maintenance, and safety programs critical to the quality of life in unincorporated communities and to Supervisorial District Transportation Improvement Program (TIP) projects. Due to the steady decline of the County's gasoline tax revenues from \$190 million in FY 2014-15 to a projected \$143 million in FY 2017-18, DPW has had to defer \$74 million in previously planned TIP projects and place a heavier burden of TIP financing on the limited Proposition C and Measure R Local Return funds and future Measure M Local Return proceeds. Further, Measure M has a requirement that local agencies contribute 3 percent of the cost of the new Measure M transit lines in their jurisdictions. The County's obligation for this is estimated to exceed \$62 million through year 2029.

Vision Zero Budget Allocations in the City of Los Angeles

Vision Zero jurisdictions take a combination of approaches for funding, including both dedicated annual funding and grant funding. Approaches to start-up costs vary across jurisdictions.

In the City of Los Angeles, the LADOT initially assigned Vision Zero to existing engineering staff, but soon after hired a Principal Project Coordinator to lead the initiative full-time. The Principal Project Coordinator previously led the Mayor's Great Streets Initiative, had experience leading cross-departmental efforts, and was given authority to work with other department directors to incorporate Vision Zero into their existing work.

The City of Los Angeles 2016-2017 budget dedicates \$3.6 million for Vision Zero projects, programs, and staff salaries. These funds were allocated through an innovative inter-departmental budget process within several months of publicly launching Vision Zero.

The City of Los Angeles 2016-2017 Vision Zero funds are being distributed as follows:

- \$2.5 million to LADOT: Continuous funding for six Vision Zero staff, street maintenance, safety improvement projects, and speed zone survey work on the City's high-injury network.
- \$264,000 to Bureau of Engineering (BOE): Engineering design and survey work and staff to manage safety projects on the high-injury network.

- \$316,000 to Bureau of Street Lighting (BSL): Staff and street lighting projects along the high-injury network and at top 50 schools in the Safe Routes to Schools Program.
- \$500,000 to Bureau of Street Services (BSS): Construction of safety improvements, such as pedestrian refuge islands, and installation of curb ramps.

The City's current Vision Zero budget is also supplemented by the following grant funds:

- \$500,000 from the California Office of Traffic Safety for Vision Zero Education and Outreach
- \$1 million from the California Active Transportation Program for a Vision Zero Education Campaign, which is part of a larger \$2.2 million Safe Routes to School Education Programs grant
- \$400,000 from SCAG for ongoing education and outreach campaign activities

Location of County Vision Zero Efforts

Your Board sought information on where the County's Vision Zero initiative would be located, within DPW or DPH, and how other jurisdictions have approached this issue. Vision Zero requires multiple sectors to come together to share and use data consistently, define clear responsibilities, break down silos, participate in joint decision making, develop shared objectives, and unite behind common goals. Fostering a sense of shared ownership for Vision Zero outcomes is necessary for success. In this sense, each involved agency must play a lead role.

As the County's transportation agency responsible for building and maintaining unincorporated area roadways, DPW must play a leading role in this initiative. Vision Zero is based on the understanding that the speed at which pedestrians, bicyclists, or vehicle occupants are struck is the fundamental factor in the severity of injuries sustained. As current law prohibits agencies from arbitrarily setting or lowering speed limits, the County's expanding transportation system must be designed to discourage speeding and additional roadway features must be incorporated into our existing roadway networks to promote safe behavior and protect human life. DPW has developed a Collision Geodatabase capable of mapping locations where traffic collisions have occurred and identifying hot spots experiencing high concentrations of collisions. For these reasons, strong leadership from DPW is paramount.

As the County's public health agency, DPH's mission is to protect lives and promote health. DPH staff members are trained in conducting population-level analysis and surveillance and in collaborating with a wide array of stakeholders, such as local jurisdictions, regional agencies, and community stakeholders. DPH regularly plays the role of "backbone organization" on efforts requiring multiple sectors to commit to a common agenda to solve a specific health or social problem. Effective backbone support includes guiding vision and strategy; convening, facilitating, and coordinating meetings and aligned activities; establishing shared measurement practices; building public will; advancing strategic policy; and mobilizing funding. DPH staff have extensive experience leading such cross-sector initiatives. For these reasons, strong leadership from DPH is also paramount.

DPH and DPW recommend basing the Vision Zero Initiative leadership structure on the City of San Francisco's model. In San Francisco, the transportation and public health agencies co-lead the City's Vision Zero Task Force and have worked together to identify resources to fund the

initiative's activities. San Francisco's agencies credit this partnership with providing essential leadership in breaking down silos and advancing Vision Zero programs.

Another key lesson learned from other jurisdictions is the need for a single point-person and agency to coordinate the initiative. Therefore, DPW will allocate existing engineering staff to serve as the initial County Vision Zero Coordinator. As the initiative progresses, additional resources for dedicated Vision Zero staff may be required.

Partnering with Neighboring Cities

Your Board has requested a status update on collaborative efforts with "hot-spot" cities and how we can leverage our resources in partnership with these cities.

Existing Relationships and Resources

Many County departments are currently working with our local jurisdictions in different capacities that could be leveraged for the Vision Zero initiative.

Chief Executive Office: Has general services agreements with all cities within the County except for the City of Los Angeles. These agreements provide a mechanism for the cities to contract with County departments for services

DPW: Provides traffic advisory services to some contract cities under the general services agreements. Local jurisdictions can pay DPW to provide engineering design service support for a project in their own jurisdiction. In addition, DPW often works with jurisdictions that border unincorporated communities on project development and scoping. DPW also participates in regional groups where other jurisdictions have a presence, including Metro's Streets and Freeways Committee, Subregional Councils of Governments (COGs) meetings, and others.

DPH: Provides pass-through grant funding and technical assistance to County jurisdictions for a variety of health-focused initiatives, including active transportation planning; policy efforts related to tobacco prevention, nutrition education, and access to healthy foods; and organization of emergency response and communicable disease response. DPH serves as the Public Health Department for 85 of the 88 incorporated cities in the County, excluding Long Beach, Pasadena, and Vernon, and also works regularly with community-based organizations across the County. DPH is currently working closely with the City of Los Angeles on its Vision Zero Initiative.

CHP: Provides traffic enforcement services to unincorporated area communities, but also provides services and implements educational programs targeting other Los Angeles County jurisdictions.

Sheriff's Department: Provides crime enforcement services to unincorporated areas. For certain contracted incorporated jurisdictions, the Sheriff's Department provides both crime and traffic enforcement services.

Department of Health Services: Provides hospital services for all of the County, including residents of incorporated cities.

Fire Department: Provides services for unincorporated communities, and also provides fire services to additional Los Angeles County jurisdictions on a contract basis.

Leveraging Resources and Partnering

The County already collaborates with other jurisdictions and intends to continue doing so within the Vision Zero initiative. Several Los Angeles County jurisdictions have moved ahead with their own Vision Zero initiatives and can provide lessons learned and resources, such as media campaigns and project linkages. These jurisdictions include Los Angeles, Long Beach, and Santa Monica.

In order for the County to effectively promote Vision Zero broadly and provide supportive services to other jurisdictions, it must focus initially on creating a broader understanding of Vision Zero among County departments, establishing cross-agency/departmental relationships, institutionalizing approaches, and identifying short- and long-term resources for an unincorporated area effort. Once the County has a well-articulated and understood Vision Zero plan and has built broader relationships with existing Vision Zero cities and regional agencies, it will be in a better position to support other cities in traffic safety efforts.

Future opportunities where the County could play a supportive role include:

- Providing countywide data gathering and analysis services
- Designing regional projects that traverse multiple jurisdictions
- Providing creative concept material for use by incorporated jurisdictions
- Speaking at Subregional Councils of Governments to emphasize a traffic safety lens in project identification, development, and implementation
- Hosting learning opportunities for local jurisdiction staff, such as trainings and webinars
- Coordinating enforcement efforts more closely (e.g., Driving Under the Influence (DUI) Checkpoint deployment)

Summarizing Data

Your Board requested information about further geographic breakdown of persons who have been killed or severely injured in unincorporated areas. As the County moves forward with Vision Zero, it may be useful to sort data by certain communities or geographic areas, such as Service Planning Areas, within which disproportionately high levels of collisions have occurred. Currently, the DPW's Vision Zero GIS Application includes point-specific collision data that can be grouped in a number of ways, such as primary collision factor, involved parties, mode of travel, and gender. Boundary data could be added to this application in the future, as needed, to help define next steps in program development, implementation, and resource allocation.

We will develop an annual progress report to your Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of our Vision Zero Action Plan, and a description of detailed resource needs. If you have any questions or need additional information, please let us know.

BF:ja

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Shelia Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

January 26, 2018

TO: Each Supervisor

FROM: Mark Pestrella
Director of Public Works

Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director of Public Health

**SUBJECT: 2017 ANNUAL REPORT BOARD MOTION OF FEBRUARY 14, 2017,
AGENDA ITEM 41-B IMPLEMENTING VISION ZERO**

On February 14, 2017, your Board approved a motion instructing the Departments of Public Works (DPW) and Public Health (DPH), in collaboration with other County departments, stakeholder agencies, and nonprofit organizations to:

- Implement the recommended strategies and actions described in the Vision Zero Report and Board memo dated February 10, 2017;
- Develop a Vision Zero Steering Committee and partnership structure;
- Develop a Vision Zero Action Plan for unincorporated County communities; and
- Identify opportunities to secure long-term funding to sustain the Vision Zero initiative.

The motion was approved as amended to include responses to the Supervisors' questions that were provided in a Board memo dated March 16, 2017. The March Board memo stated that our Departments would develop an annual progress report to the Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of our Action Plan, and a description of detailed resource needs. This report provides an overview of progress in 2017.

I. STEERING COMMITTEE AND PARTNERSHIP STRUCTURE

Vision Zero Core Team

The Vision Zero Core Team is composed of staff and administration from the initiative's co-leading Departments, DPW and DPH. The Core Team is tasked with guiding the development and

implementation of Vision Zero strategies and programs and met ten times in 2017. Our Departments collaboratively developed a guide for the development of the Action Plan and related communications efforts, discussed collision data analysis strategies, analyzed Action Plans from other jurisdictions to identify best practices, pursued grant opportunities, and coordinated numerous meetings with internal and external partners. It is anticipated that the Core Team will meet monthly throughout 2018.

Vision Zero Action Plan Advisory Committee (APAC)

The Vision Zero APAC is a multiagency group co-led by DPW and DPH. The APAC includes staff and administration from the Fire Department, Sheriff's Department, Department of Health Services, the Department of Regional Planning, the Chief Executive Office, California Highway Patrol (CHP), and representatives from each of the Board offices. The APAC convened twice in 2017. The main purpose of the meetings was to engage internal stakeholders in the Vision Zero initiative and discuss agency roles. Discussions centered on data collection, Action Plan development, community engagement, goals, metrics, and benchmarking. It is anticipated that the APAC will meet four to six times in 2018.

Internal and External Partnerships

Collaboration with internal and external partners is very important as the Vision Zero initiative takes form. In 2017, DPH and DPW arranged individual meetings with 11 community-based organizations (CBOs), nonprofit agencies, and special interest groups, including Bike San Gabriel Valley, The Automobile Club, Advancement Project, Multicultural Communities for Mobility, Safe Routes to School National Partnership, California Walks, Prevention Institute, the American Association of Retired Persons, the Los Angeles Bicycle Coalition, Los Angeles Walks, and Investing in Place.

The meetings with the CBOs, nonprofit agencies, and special interest groups resulted in feedback on the process for their involvement in the development and implementation of the Action Plan and how best to engage the broader community. We also requested their input on Vision Zero strategies and best practices, as many of them have been involved in similar efforts in other jurisdictions. In 2018, we anticipate hosting a series of meetings with these external stakeholders to solicit and vet strategies for specific Action Plan topics, such as education, enforcement, equity, and engagement.

We also met with CHP and these meetings resulted in a broader understanding of existing efforts and initial strategies, processes, and systems changes to include in the Vision Zero Action Plan. Ongoing meetings with the CHP and County departments will occur in 2018.

The information and feedback we received from our internal and external partners has informed the development of our preliminary outreach plan and will prove to be very helpful as we develop and implement the Action Plan.

II. COMMUNITY OUTREACH AND ENGAGEMENT STRATEGY

Investing in long-term community awareness strategies and gaining buy-in from community partners is paramount to the goals of Vision Zero. Preliminary data shows that several County communities appear to be hot spots for fatal and severe injury collisions. To address hot spots, a variety of countermeasures

will be deployed, such as new or modified traffic safety infrastructure, educational outreach, and focused enforcement. The success of these projects and programs is contingent upon building awareness and gaining the trust of unincorporated County area residents and creating behavior change throughout all communities.

Although a community outreach and engagement plan has not been finalized, we have discussed the following goals and strategies aimed at ensuring a transparent and efficient process during the development of an action plan:

- Informing the community about the Vision Zero initiative;
- Gathering information to shape the Action Plan strategies;
- Vetting the draft Action Plan strategies with the community and nonprofit stakeholders; and
- Creating momentum within unincorporated County communities for future engagement during the implementation of the Action Plan.

In 2017 our Departments also initiated various Vision Zero outreach tools, including a draft community survey that will be used to inform and gain support for Vision Zero. Accomplishments like this provide a solid foundation to launch a more comprehensive outreach campaign in future years. By engaging community stakeholders frequently and authentically, we anticipate support for the Vision Zero initiative will grow and produce positive change.

III. ACTION PLAN

An Action Plan for unincorporated County will serve as the roadmap for County departments and partner agencies in the implementation of specific engineering, enforcement, and education strategies to reduce traffic deaths and severe injuries toward zero. To develop this document, best practices from other jurisdictions, including the Cities of Los Angeles, New York, Philadelphia, Portland, San Francisco, Seattle, and Washington D.C., were, and will continue to be, evaluated.

A draft Action Plan outline is attached to this report (Attachment 1). It is anticipated that the Action Plan will be completed by fall 2018 with the support of a \$50,000 technical assistance grant from the Southern California Association of Governments (SCAG). Consultant interviews were conducted on November 13, 2017, and SCAG is currently conducting contract negotiations with the top candidates. It is expected that the onboarding of a consultant will occur in early 2018.

IV. TRAFFIC COLLISION DATA ANALYSIS AND INTERVENTION PRIORITIZATION

DPW maintains a traffic collision geodatabase based on reports prepared by the CHP. The collision trends that were detailed in the February 10, 2017 Board report have not changed (Attachment II). A preliminary review of the data revealed specific challenge areas that warrant additional analysis to more deeply understand the causes and patterns associated with the severe injury and fatal collision types. These include: unsafe speeds, impaired and distracted driving, and hit and runs. The young male demographic, motorcyclists, and pedestrians were also identified as high-risk groups. Further analysis and pinpointing of significant factors that may contribute to these collisions will be conducted in 2018. In November 2017, through a \$247,500 grant from the California Department of Transportation, DPW engaged a traffic consultant to assist in this effort. Additional systematic safety analysis will enable targeting of programs, resources, and infrastructure enhancements aimed at reducing fatal and severe injury collisions.

Research by and discussions between Departments occurred throughout 2017 on potential methodologies to focus our efforts. Targeted strategies for traffic safety education, engineering, and enforcement will be developed and implemented in priority areas. We intend to implement consistent evaluations and adjust strategies as needed. The DPW traffic consultant will aid in developing an intervention prioritization process. Priority areas and interventions will be data-driven, transparent to the public, and will include an equity lens.

V. METRICS AND TARGETS

Metrics and targets are essential for the County, its partners, and the public to monitor the success of the Vision Zero initiative. When the Action Plan strategies are formed, performance metrics and goals will be established and included in the Plan. Ongoing evaluation will take place to gauge the success of the County's actions and adjustments will be made where necessary to ensure positive results.

VI. COMMUNICATIONS PLAN, PRESS EVENT, AND REGIONAL MESSAGING

Communication of the Vision Zero goals, objectives, actions, and strategies will require techniques and approaches that reflect and resonate with the diverse populations of the County. In 2017 a variety of potential strategies were explored by the Core Team. These include the development of a Vision Zero website that is currently underway, public service announcements, branding, facts sheets, social and digital media, and the creation of talking points that can be used by anyone that is promoting the initiative.

DPW expects to hire a consultant in early 2018 to assist in developing a comprehensive communications plan for Vision Zero. Once on board, the Public Information Officers of each of the participating Departments, as well as our partners, will be meeting to discuss messaging strategies that could work within the unincorporated areas of the County and on a regional level. A press strategy will be a component of the communications plan, which will be a part of the Action Plan.

VII. CROSS-AGENCY LEGISLATIVE AND POLICY STRATEGY

As stated in the February 10, 2017 Board report, strategies to address traffic safety problems may require changes in State law. We had preliminary discussions on strategies that would require State legislation, including the feasibility of modifying the requirement for setting and enforcing speed limits. As collaboration among stakeholders continues to strengthen through the Action Plan development process, further stakeholder discussions will follow to collectively develop legislative proposals.

VIII. TRAFFIC SAFETY WITHIN THE COUNTY

Reducing traffic deaths and severe injuries toward zero requires awareness, buy-in, and behavior change. We can initiate these changes by engaging with County employees. County staff make choices that impact traffic safety when planning and designing communities and when developing and implementing education and enforcement programs. County staff also operate vehicles and other heavy equipment on the County's roadway network every day. It is imperative that all County staff be made aware of the Vision Zero initiative and that traffic safety is promoted consistently across County agencies.

In 2017, DPH and DPW discussed the need to identify safety measures utilized by the various County departments who operate vehicle fleets and assess whether there is data associated with any existing traffic safety programs. By analyzing data, focused program enhancements could be introduced to further promote traffic safety among the County workforce.

As a County Department that operates and maintains a large fleet of vehicles, DPW administers various traffic safety programs. For example, the "How Am I Driving?" program allows the public to report any unsafe behaviors exhibited by employees so that further action can occur, such as additional employee training. Ways to promote traffic safety among all County departments will be further explored in the upcoming year and will potentially be included in the Action Plan.

IX. FUNDING

There are several potential revenue streams to support the Vision Zero initiative; these are detailed in a March 16, 2017 report to your Board (Attachment III). These include revenues generated by the enactment of Senate Bill 1 and Measure M, County transportation funds, and various competitive grant programs. Efforts to obtain grants have been successful and we continue to pursue additional grant opportunities. For example, a \$50,000 SCAG grant was awarded to DPW to assist in the development of the Action Plan. Additionally, a \$247,500 California Department of Transportation grant will fund further collision analysis that will lead to specific traffic safety enhancement strategies.

A detailed description of resources needs will be provided when the Action Plan has been completed. We anticipate the short-term funding for start-up activities of the Vision Zero initiative to be limited and the resource needs may exceed the grants we have obtained so far. We are currently looking for other resources to address this. Simultaneously, we will continue to work with your offices and the Chief Executive Office to identify opportunities to secure long-term funding to sustain the Vision Zero initiative.

The 2019 annual report will be provided to you no later than February 14, 2019. If you have any questions or need additional information regarding the progress of the Vision Zero initiative, please let us know.

BF:MP

Attachments

c: Chief Executive Office
 County Counsel
 Executive Officer, Board of Supervisors

Vision Zero Action Plan Outline

Section 1 – Signed Message from the Board of Supervisors

Section 2 – Our Vision, Our Commitment

- Includes definition of Vision Zero by making mention of engineering, enforcement, education, engagement, and evaluation.
- Pictures of Department Heads/Chiefs with signatures.
- Include remarks that relate this effort to other County goals and policies (General Plan, etc.)

Section 3 – Our Guiding Principles

The following principles guide our actions and serve as the basis for our decisions:

- Equity
- Data-driven resource prioritization
- Transparency

Section 4 – Our Communities Deserve Vision Zero

- Big Picture Data Discussion
- Hotspot Data Maps
- Map with first person names tied to it to humanize the effort
- Informational graphics summarizing challenge areas:
 - Unsafe Speeds
 - Impaired and Distracted Driving
 - Hit and Runs
 - Young Males
 - Motorcycles
 - Pedestrians

Section 5 – Planning for Action

- Brief explanation of Action Plan development process with mention of core team, Vision Zero Action Plan Advisory Committee, and subcommittees, etc.

Section 6 – You Spoke, We Listened: The Action Plan Engagement Process

- Discussion of outreach process (i.e., meetings with external partners, campaign efforts, survey results, etc.)
- Plan for continuous outreach.

Section 7 – Prioritizing Safety, Mobility, and Quality of Life

- Brief discussion of prioritization methodology.
- Yielded results of prioritization methodology (i.e., disclosure/maps of high-injury networks)

Section 8 – The Vision Zero Toolbox

- Outline countermeasures (across all E's not just Engineering) that will enhance safety on unincorporated roadways.

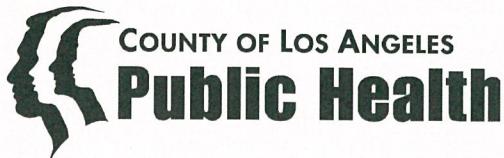
Section 9 – Time for Action

- Include table that shows:
 - Actions, categorized by vision goals (slow streets, etc.)
 - Lead agency
 - Supporting agencies
 - Timeframe (Vision Zero Year or Fiscal Year)
 - Tracking/benchmarking metric (either specific or general direction (decreasing, increasing))
 - Related County Initiatives (General Plan)

Section 10 – Vision Zero on a Regional Level

Section 11 – Acknowledgements

P:\TLPUB\GEN\VZ\BOARD\2017 A REP\2018-02-14 VZ AP OUTLINE.DOCX



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

Attachment II



BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

February 10, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed. *Barbara Ferrer*
Director

SUBJECT: REPORT ON VISION ZERO IN LOS ANGELES COUNTY

On October 4, 2016, your Board directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County Departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas. The attached report details the strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas. It is the product of collaborative efforts of the Departments of Public Health, Public Works (DPW), Regional Planning, and Health Services; Fire Department; Sheriff's Department, Chief Executive Office, and the California Highway Patrol (CHP). Below is a summary of the report.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths, 10.3 traffic deaths per 100,000 population. The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero sees traffic deaths and injuries as predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement, and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement, and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were 63,067 distinct collisions, with 1,429 involving at least one severe injury and 300 causing a fatality. 1,566 people were severely injured (six percent of victims) and 333 were killed (one percent of victims). Collision heat maps show a concentration of pedestrian-involved fatal and severe collisions in the southern part of the County in dense urban centers, motorcycle-involved fatal and severe collisions along rural mountain roads, and both bicycle- and vehicle-involved fatal and severe collisions throughout unincorporated areas.

The report identifies key challenge areas requiring additional data analysis that will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements as Vision Zero is implemented. Key issues include: unsafe speeds, impaired driving, distracted driving, hit and runs, young males, motorcyclists, and pedestrians. For example, if speeding is found to be a primary issue on a corridor, traffic calming strategies such as roadway reconfigurations, traffic signals, curb extensions, and enhanced speed enforcement, may be possible solutions.

Recommended Strategies and Actions

Implementation of the strategies and actions described in the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas. Actions include: developing a steering committee and partnership structure to implement the program; creating a Vision Zero Action plan to identify specific engineering, enforcement, engagement, education, and evaluation strategies; and working to secure funding to implement Vision Zero strategies and actions.

If you have any questions or need additional information, please let me know.

BF:ja

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

Report to the Board of Supervisors

County Vision Zero Opportunities

Prepared by the Department of Public Health

February 10, 2017

CONTENTS

Acknowledgments.....	3
Executive Summary.....	4
Background	4
Preliminary Data Analysis and Challenge Areas.....	4
Recommended Strategies and Actions	5
Introduction	8
Report Development Process	8
Part I – Background and Opportunities	9
Motor Vehicle Crashes	9
Vision Zero and Related Traffic Safety Initiatives	10
Known Challenge Areas.....	11
Developing an Effective Approach	11
Alignment with Existing Plans and Policies	13
Part II: Preliminary Data Analysis.....	16
Background	16
Approach to Initial Analysis.....	17
Findings	19
Big Picture.....	19
Temporal, Modal, and Demographic	21
Contributing Factors.....	33
Summary of Challenge Areas	36
Part III: Current Traffic Safety Efforts.....	37
Education	37
Enforcement.....	40
Engagement (Community Outreach & Communications)	41
Engineering	42
Evaluation & Data	42
Part IV: Recommended Strategies and Actions	43
Appendix A - Funding Opportunities	47

ACKNOWLEDGMENTS

Chief Executive Office

Mark Greninger

California Highway Patrol

Chris O'Quinn
Heather Hoglund
Jose Nunez
Scott Poyner

Los Angeles County Department of Health Services

Gregory Polk
Richard Tadeo

Los Angeles County Department of Public Health

Alexis Lantz
Andrea Welsing
Angelo Bellomo
Chanda Singh
Christine Li
Cindy Harding
Doug Morales
Elizabeth Rhoades
Isabelle Sternfeld
Jean Armbruster
Jennifer Osborn
Kimberly Porter
Natalie Jimenez
Rachel Tyree
Tony Kuo
Wesley Ford
Lisa Tse

Los Angeles County Sheriff's Department

Dana Chemnitzer
Darren Harris
Jim McDonnell
Robert Hill
Scott Johnson

Los Angeles Department of Transportation

Jacqui Swartz
Michael Manalo
Nat Gale
Tim Fremaux

Los Angeles County Department of Public Works

Alan Fong
Arnel Dulay
Coby Skye
Dean Lehman
Emiko Thompson
Gilbert Tsoi
John Calas
John Halaka
John Ickis
John Walker
Khoa Nguyen
Mary Reyes
Pat Proano
Patrick Anderson
Pete Flores
Rudy Lee
Shari Afshari
Youn Sim

Los Angeles County Department of Regional Planning

Connie Chung
Daniel Hoffman
Nick Franchino
Richard Bruckner
Susan Tae
Svetha Ambati

Los Angeles County Fire Department

Daryl Osby
Debbie Aguirre
Janna Masi
John Todd
Keith Mora
Mark Savage
Philip Cocker
Ricky Lewis
Tim Smith
Wally Collins

EXECUTIVE SUMMARY

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD), Health Services (DHS), Regional Planning (DRP), Chief Executive Office (CEO), and the California Highway Patrol (CHP). DPH and DPW collaborated in conducting preliminary data analysis. DPH took the lead in preparing this report, which provides strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the U.S. Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero assumes that traffic deaths and injuries are predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were:

- 63,067 distinct collisions involving 27,786 victims
- 1,429 collisions involved at least one severe injury

- 1,566 people severely injured (six percent of victims)
- 300 collisions involving at least one fatality
- 333 people killed (one percent of victims)

The report also identifies key challenge areas that warrant additional data analysis. Additional analysis will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements. Challenge areas include:

- *Unsafe Speeds.* Speed was listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- *Impaired driving.* Driving under the influence of alcohol or drugs is involved in only eight percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes.
- *Distracted driving.* Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores a need for a coordinated approach to capture information on and to prevent distraction.
- *Hit and runs.* Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for behavior changes by motorists.
- *Young males.* Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions.
- *Motorcyclists.* 20 percent of fatal and severe collisions involved a motorcyclist. Concentrations of fatal and severe collisions were found on rural / mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- *Pedestrians.* 17 percent of fatal and severe collisions involved pedestrians; youth under age 19 and people 55 years and over were overrepresented as victims. Concentrations of fatal and severe collisions were found in both urban and rural areas.

Recommended Strategies and Actions

The County team recommends the strategies, actions, and timelines outlined below.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with your Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County is needed to identify specific engineering, enforcement, education, engagement and evaluation strategies and timelines. Further, the plan will communicate the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries.

Prioritize interventions and identify future data analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context-sensitive solutions for specific problems. Action steps include engaging community partners to “ground truth” safety issues; developing a project prioritization process; and identifying additional long-term data collection and analysis needs.

Develop metrics and targets (June 2017). To gauge the success of this initiative, develop measurable metrics and targets for the County similar to those utilized by the California Strategic Highway Safety Plan which is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan that describes innovative and culturally appropriate communication techniques to change behavior around traffic safety is needed. This would include the development of a website, public service announcements, branding, fact sheets, social and digital media, press kits, and would include strategies for ongoing public education and outreach.

Hold a press event to launch Vision Zero (June 2018). A Vision Zero press event would bring attention to the County’s multi-sector campaign to reduce traffic deaths and severe injuries and highlight what the County does and plans to do to address the problem of traffic safety.

Develop a regional approach to messaging and strategy implementation (February 2017 – ongoing). Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, Southern California Association of Governments, City of Los Angeles, and other jurisdictions would have the greatest impact in creating behavior change.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address traffic safety problems may require changes in State legislation, such as automated speed enforcement. The County should coordinate with agencies regionally to explore common legislative and policy solutions.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). The County should help to promote choices that prioritize traffic safety through messaging aimed at the County workforce including messages in County newsletters, on department websites, and on County vehicles.

Secure funding to implement Vision Zero strategies and actions (February 2017 – ongoing). A single County point-person is needed to convene the Steering Committee and to coordinate with community and regional stakeholders. Funding will also be needed to develop and implement a Vision Zero Action Plan, communications strategy, and expand traffic safety efforts.

Conclusions and Next Steps

Implementing the strategies and actions described above and further in Part IV of the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas.

INTRODUCTION

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back in 120 days on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

This "County Vision Zero Opportunities" Report examines how Vision Zero could be implemented within County unincorporated communities. The report is organized into four parts:

Part I: Background and Opportunities: Provides an overview of traffic-related fatalities, severe injuries, and key approaches for addressing the problem.

Part II: Preliminary Data Analysis: Describes sources of data that could support a County Vision Zero Initiative and includes preliminary findings analyzing 5-years-8 months of collision data.

Part III: Current County Traffic Safety Efforts: Provides an overview of engineering, education, engagement, enforcement, and evaluation/data programs administered by County agencies and their partners that support traffic safety in unincorporated Los Angeles County.

Part IV: Recommended Strategies and Actions: Based on County staff and partner expertise, this section describes recommended strategies and actions for a County Vision Zero initiative.

Report Development Process

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD, Health Services (DHS), Regional Planning (DRP), California Highway Patrol (CHP), and the Chief Executive Office (CEO). The goals of these meetings were to: 1) learn about the County's existing traffic safety education and enforcement programs; 2) learn about the County's existing communications resources and best practices; 3) tap County staff knowledge about how to design an effective Vision Zero initiative for unincorporated areas; and 4) get departmental input into this Board report. DPH and DPW also formed a "Core Team," which met every two weeks to prepare for the larger partner meetings and to develop this Board report.

PART I – BACKGROUND AND OPPORTUNITIES

Motor Vehicle Crashes

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). More than three times as many people die in traffic crashes in the U.S. as in the United Kingdom (2.8 traffic deaths per 100,000 population). If the U.S.' MVC death rate was equivalent to the best performing country (Sweden, 2.7 per 100,000 population), an estimated 24,000 lives could be saved annually and an estimated \$281 million in direct medical costs averted.¹

There has been a general downward trend in traffic fatalities in the U.S. over the last decade. This could be related to fluctuations in gas prices and unemployment rates (when gas prices and unemployment are high, people tend to drive less) and vehicle technology that better protects passengers in the event of a collision. Unfortunately, this trend is now reversing. Traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015.² Early estimates of traffic deaths for 2016 indicate a continued increase.³

In Los Angeles County as a whole, motor vehicle crashes are the leading cause of death for children five to 14 years old and the second leading cause of death for children one to four years old; young people 15 to 24 years old; and adults 25 to 44 years old. Between January 1, 2011 and August 31, 2016, at least 333 people lost their lives on roadways in County unincorporated areas and another 1,566 were severely injured.⁴ In addition to the tragic human costs, the economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion dollars.⁵

¹ Sauber-Schatz EK, Ederer DJ, Dellinger AM, Baldwin GT. Vital Signs: Motor Vehicle Injury Prevention — United States and 19 Comparison Countries. MMWR Morb Mortal Wkly Rep 2016;65. DOI: <http://dx.doi.org/10.15585/mmwr.mm6526e1>.

² National Center for Statistics and Analysis. (2016, August). 2015 motor vehicle crashes; Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 318) Washington, DC: National Highway Traffic Safety Administration.

³ National Center for Statistics and Analysis. (2016, September). *Early estimate of motor vehicle traffic fatalities for the first half (Jan-Jun) of 2016*. Crash Stats Brief Statistical Summary. Report No. DOT HS 812 332). Washington, DC: National Highway Traffic Safety Administration.

⁴ Data from Department of Public Works' Collision Geodatabase, based on California Highway Patrol records from 1/1/11 to 8/31/16 (analyzed 12/13/16)

⁵ California Department of Transportation. California Strategic Highway Safety Plan 2015 - 2019.

Vision Zero and Related Traffic Safety Initiatives

Vision Zero is a strategy that aims to reduce or eliminate traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has been adopted widely across Europe and is now gaining momentum in many American cities. Vision Zero creates a new vision for prioritizing street safety. Traffic deaths and severe injuries are viewed as predictable and preventable, and goals, measurable objectives, and timelines for eliminating them are created. These strategies include engineering, enforcement, education, and evaluation approaches, which require collaboration across a wide variety of sectors including public health, public works, communications, and law enforcement. In addition, community engagement and equity are important overarching approaches to successful implementation of Vision Zero.

In August 2015, the City of Los Angeles launched a Vision Zero Initiative as the result of a Mayoral Directive that set a city goal of eliminating all traffic deaths by 2025 and reducing deaths by 20 percent by 2017. The Los Angeles County Public Health Department has worked closely with the City to launch and implement this initiative, including helping to develop Los Angeles' Vision Zero Action Plan, which outlines specific implementation strategies and timelines. The cities of San Francisco, New York, Portland, Seattle, and Chicago have also established Vision Zero initiatives in the past five years. In Los Angeles County, a number of our 88 local jurisdictions have adopted Vision Zero goals, including Long Beach and Santa Monica.

Similarly, "Toward Zero Deaths" is a traffic safety initiative in the United States related to Vision Zero. Spearheaded primarily by state and federal government agencies, such as the Federal Highway Administration (FHWA), this approach shares a strategic vision of eliminating fatalities and serious injuries through a data-driven, interdisciplinary approach of education, enforcement, engineering, and emergency services.

In California, the California Department of Transportation (Caltrans) regularly develops and updates the California Strategic Highway Safety Plan (SHSP), a statewide data-driven plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and severe injuries. The SHSP affects all public roads (State, local, and Tribal) and all users (motorists, pedestrians, bicyclists, and motorcyclists). The goal of the SHSP is to move toward zero deaths; measurable objectives include a three percent annual reduction in the number and rate of fatalities and a 1.5 percent annual reduction in the number and rate of severe injuries.

Known Challenge Areas

Factors that influence fatality rates vary from place to place; however, a number of “challenge areas” have been identified nationally, statewide, and regionally. For example, the California Strategic Highway Safety Plan identifies alcohol and drug impairment; speeding and aggressive driving; distracted driving; pedestrians; bicyclists; motorcyclists; young drivers; and aging drivers, among others, as challenge areas to be addressed statewide. As the County conducts data analysis for the unincorporated areas to design programs and infrastructure that support traffic safety, it will be beneficial to examine best practices developed by other jurisdictions.

Developing an Effective Approach

Vision Zero has been effective in other jurisdictions and countries due to the multidisciplinary approach that brings together multiple government sectors with community leaders and stakeholders to identify solutions. Strategies are implemented and then evaluated in an iterative process to identify whether they are having the desired effect of saving lives. Summarized below are key approaches behind effective Vision Zero initiatives.

Safe streets are livable streets. Vision Zero is typically well-aligned with jurisdictions’ goals of making communities livable, walkable, economically vibrant, and sustainable. This allows for Vision Zero strategies to be seamlessly incorporated into existing work programs, and to allow for new projects and programs where human life and safety are the explicit highest priorities.

Vision Zero strategies are data-driven. Essential to the Vision Zero approach is that safety improvements and programs must be based on robust, longitudinal data analysis that identifies patterns of traffic deaths and severe injuries, as well as the primary crash factors associated with these crashes, such as speeding, left turns, lack of marked crosswalks, and red light running. This allows for targeted improvements and programs that address the specific problem(s) causing fatal and severe injury crashes.

Roadways can be designed to save lives. Once specific factors associated with crashes are understood, engineers can identify potential life-saving improvements to address the problems, i.e. engineering solutions that are known to be effective for specific crash patterns. A principle of Vision Zero is that humans will always make mistakes, but corridors can be designed and re-engineered to minimize deadly mistakes and make it challenging to engage in dangerous behavior, such as speeding. Vehicle speed is a particularly important factor to consider in roadway design because it is a fundamental predictor of

crash survival. If a pedestrian is hit by a car going 20 miles per hour (MPH), the pedestrian's risk of death is five percent; if the car is traveling at 40 MPH, the pedestrian's risk of death is 80 percent.⁶

Evaluation is essential. Tracking progress over time makes it possible to identify whether a program or infrastructure improvement is working to address the safety concern. For example, once engineering improvements have been installed along a corridor or at priority locations, engineers can continue to collect data to assess whether the improvements are addressing the identified crash factors. Similarly, evaluating specific enforcement efforts over time can help enhance programs. With a goal of zero traffic deaths, new issues may emerge over time, requiring consistent data collection and evaluation to monitor traffic safety.

Communications can drive culture change. Reducing traffic deaths requires a shift in public perception from accepting traffic deaths as unavoidable to an awareness that saving human lives is everyone's responsibility. A widespread communications campaign coupled with education strategies that target key audiences can create this shift within the general population, as well as help drive culture change within institutions.

Community engagement and an equitable approach are fundamental. Analysis done by the City of Los Angeles indicates that many of the areas with the poorest health outcomes also have a disproportionate number of severe and fatal injuries from traffic collisions. Furthermore, these communities may have other more pressing needs beyond traffic safety and/or may distrust government. An effective Vision Zero initiative considers these factors, and engages residents in developing strategies that will be effective in their communities. It is also imperative to continually re-engage the community to ensure that strategies are working as planned.

Enforcement supports policy approaches. In addition to designing safe streets and creating education and awareness campaigns, enforcement can help ensure that traffic laws are followed. Because low-income communities and communities of color may have high rates of traffic deaths and injuries, Enforcement approaches should be context sensitive, especially when working in high-burdened communities. For example, enforcement could include warnings rather than tickets to avoid disproportionate burden of traffic violation fines on low-income residents. Though not currently legal in California, tools like automated speed enforcement can be effective at reducing crashes.⁷

⁶ US Department of Transportation, National Highway Traffic Safety Administration. Literature Review on Vehicle Speeds and Pedestrian Injuries. DOT HS 809 021. October 1999. Available at: <https://one.nhtsa.gov/people/injury/research/pub/HS809012.html> (Accessed 1/6/17)

⁷ Other jurisdictions have reported declines in speeding and/or collisions due to ASE. Available at: <https://www.sfmta.com/sites/default/files/projects/2016/ASE%20Fact%20Sheet%202.5.16.pdf> (Accessed 1/9/17)

Alignment with Existing Plans and Policies

Adopting a Vision Zero approach would be consistent with County plans, policies, and goals and represents an opportunity to implement established County priorities.

Community Health Improvement Plan (CHIP), 2015 - 2020: DPH's CHIP is a strategic plan for improving health in Los Angeles County. CHIP establishes a health improvement agenda for DPH in collaboration with partners from different sectors. A primary goal of CHIP is to reduce the number of deaths and severe injuries resulting from traffic collisions through the implementation of policies and programs that promote safety.

Healthy Design Ordinance, 2012: This ordinance, developed by the Department of Regional Planning (DRP), changed the County's zoning and subdivision regulations to increase levels of physical activity and reduce obesity rates. To effectively promote physical activity, the Healthy Design Ordinance promotes safe, convenient, and pleasant places for people walking and bicycling.

Los Angeles County General Plan, 2035: Developed by DRP and adopted by the Board of Supervisors in 2015, the County's General Plan includes a number of elements that promote an increase in walking and biking and a reduction in vehicle miles traveled, including:

- **Mobility Element:** The California Complete Streets Act of 2008 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, public transit users, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit.
- **Bicycle Master Plan:** A sub-element of the Mobility Element, the Bicycle Master Plan guides the implementation of proposed bikeways, bicycle-friendly policies, and programs to promote bike ridership across all ages and skill sets. The Plan's implementation program prioritizes projects based on various factors including both crash data and obesity rates.
- **Air Quality Element:** Air pollution and climate change pose serious threats to the environment, economy, and public health. The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the goals of the Air Quality Element.
- **Community Climate Action Plan (CCAP):** A sub-element of the Air Quality Element, the Community Climate Action Plan establishes actions for reaching the County's goals to reduce

greenhouse gas (GHG) emissions in the unincorporated areas. The County set a target to reduce GHG emissions from community activities in the unincorporated areas by at least 11 percent below 2010 levels by 2020. The CCAP includes specific strategy areas for each major emission sector and quantifies the 2010 and projected 2020 emissions in the unincorporated areas. Like most California communities, a significant portion of the County's emissions are from on-road transportation sources and point to a clear need to reduce vehicle trips and vehicle miles traveled. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the CCAP's goals.

- **General Plan Implementation Programs:** Several General Plan work programs are well aligned with Vision Zero, including: 1) Livable Communities Guidelines – DRP is developing specific design measures that will be used by staff, developers and decision makers to develop projects that encourage walking, bicycling, outdoor physical activity, public transit use, and access to healthy foods. 2) Pedestrian planning – DPH and DPW are collaborating on the development of pedestrian plans in four unincorporated communities: Westmont-West Athens, West Whittier-Los Nietos, Lake Los Angeles and Walnut Park. 3) Equitable Development – DRP is preparing affordable housing and environmental justice ordinances to advance equity objectives in the General Plan, along with the development of an equity indicators toolbox.

Los Angeles County Initiatives: Vision Zero is consistent with several Board mandated initiatives, including:

- **Purposeful Aging Los Angeles Initiative:** A countywide, multi-year effort that will unite public and private leadership, resources, ideas, and strategies to improve the lives of older adults and Los Angeles County residents of all ages. The initiative includes the formulation of a three-year, Age-Friendly Action Plan, which will outline a comprehensive set of proposed strategies to enhance the County's age-friendliness across eight domains of livability, including transportation.
- **Trauma Prevention Initiative (TPI):** The Trauma Prevention Initiative targets regions of the County that experience a disproportionately high incidence of violence-related trauma visits, injuries and deaths. TPI develops and coordinates program strategies that focus on evidence-based and practice-tested interventions to reduce trauma. Traffic collisions account for many trauma visits, injuries, and deaths, and preventing them could contribute significantly to reducing the burden of trauma in the County.

County Strategic Plan, 2016 - 2021: Vision Zero is consistent with several strategies in the County's newly adopted Strategic Plan, including:

- II.2.4 Promote Active and Healthy Lifestyles: Conduct outreach to high need, traditionally underserved populations within the County by supporting safe and comfortable built environments that encourage physical activity and access to healthy food.
- II.3.3 Address the serious threat of global climate change: Create and implement policies and programs to: reduce the emission of greenhouse gases from all sectors of our community; ensure that community climate resilience is integrated into our programs and plans; and inspire others to take action.

California Strategic Highway Safety Plan (SHSP): The SHSP is a statewide, coordinated safety plan that provides a comprehensive framework for reducing fatalities and severe injuries on all public roads. The SHSP – and the accompanying SHSP Implementation Plan – are multi-disciplinary efforts involving Federal, State, and local representatives from the four “Es” (education, evaluation, engineering, and enforcement) of safety. The SHSP identifies safety needs and guides investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries.

PART II: PRELIMINARY DATA ANALYSIS

Background

When a collision occurs in unincorporated areas, multiple agencies are involved in responding to the scene, identifying collision factors, and treating victims. This results in many sources of data, which can then inform a Vision Zero approach and provide background on the collision landscape in unincorporated Los Angeles County. The following section briefly describes key agencies involved, their respective roles, and sources of data.

California Highway Patrol (CHP): CHP is responsible for traffic enforcement on unincorporated County roadways and is responsible for responding to the scene of a collision. CHP collects data for all collisions it responds to and retains this data for all municipalities. Additionally, data for all reported collisions in California available via the Statewide Integrated Traffic Records System (SWITRS). CHP also has citation data, which can provide additional information about safety concerns such as speeding and driving under the influence. Citation data is available to County departments, but requires additional staff time to clean and geocode for use.

Los Angeles County Department of Public Works (DPW): DPW requests collision reports directly from CHP as collisions occur within the unincorporated County area and enters this data into its geodatabase. DPW is also the primary agency involved in unincorporated County roadway design and maintenance. DPW does not have jurisdiction on designated State highways, such as the Pacific Coast Highway (CA-1), even if they fall within unincorporated County areas.

Los Angeles County Fire Department (LACFD): LACFD serves as the primary first-responder for suspected injury or fatal collisions in unincorporated County areas, as well as for some incorporated cities. LACFD retains records of all of its responses and services, including those related to collisions. Records typically span the time beginning when LACFD staff and/or vehicle(s) are deployed to the scene of an incident to when LACFD drops the victim off at a hospital or trauma center. LACFD also serves as a first-responder for some incorporated cities in Los Angeles County.

Los Angeles County Department of Health Services' Emergency Medical Services (EMS): EMS collects data from all emergency medical providers in Los Angeles County, including from LACFD, when transport to a hospital is involved. EMS also collects data directly from all 14 trauma centers, but not all hospitals. These trauma centers serve both unincorporated and incorporated areas. In severe injury collisions, victims are likely to be transported to a trauma center by the emergency services provider. However, victims of collisions can also transport themselves to a trauma center (or hospital); therefore transport data does not include these cases. Collision location is only available for records involving EMS

transport. Neither trauma data nor emergency service transport data is currently linked to CHP collision record data.

Los Angeles County Sheriff's Department (LASD): LASD is not a primary responder to collisions in unincorporated areas; this is the responsibility of CHP. However, in some cases, LASD will respond to a collision due to proximity. LASD is responsible for all other law enforcement in unincorporated areas and is more likely to be present in an unincorporated community for other enforcement duties.

Los Angeles County Department of Public Health (DPH): DPH is the primary recipient of Office of Statewide Health Planning and Development (OSHPD) data, which includes patient-level data from licensed health care facilities such as hospitals and emergency departments. This data includes health-related collision information, such as injury levels, outcomes, race/ethnicity, and financial costs. The data does not provide information on collision location.

Approach to Initial Analysis

To determine an approach to data analysis, traffic safety programs in other jurisdictions, including San Francisco, Seattle, and the City of Los Angeles, were reviewed to identify common categories. Most jurisdictions first analyzed collision data only, and then conducted analyses in later phases incorporating demographic data, geographic information, roadway design, and other areas. Data is typically analyzed and categorized as:

- *Big Picture* : Overview of jurisdiction as a whole, including breakdowns by collision severity and calculated fields such as “annual collision death rate.”
- *Temporal, Modal, & Demographic*: Analysis of collision data by indicators such as age, gender, or mode of victim and party. This provides more clarity about the type of person involved in severe and fatal collisions, and if there is an obvious overrepresentation of certain victim or party types.
- *Contributing Factors*: Further analysis of collision data to understand potential contributing factors to severe and fatal collisions, such as time of day, use of safety equipment, and primary collision factor.
- *Prioritization* – Analysis incorporating built environment, land use, or citation data. This information can be used to create a prioritized network of streets, such as Los Angeles’ High Injury Network, and also to provide a data-driven justification for future project prioritization.

In addition to research on efforts in other jurisdictions, three meetings were also convened with experts from various County Departments and the Los Angeles Department of Transportation to discuss common problems, past analysis on collisions in unincorporated Los Angeles County, and high-priority approaches to future analysis.

As described in the section above, no single source of data provides a comprehensive picture of where severe and fatal collisions are occurring in unincorporated areas, who is involved, injuries sustained, and costs incurred. The wide range of data available from County partners provides an excellent opportunity to further understand factors associated with traffic deaths and severe injuries on unincorporated area roadways. Due to the challenges associated with joining disparate data sources, the preliminary collision analysis contained in this report is based only on DPW's Collision Geodatabase. DPW's database includes California Highway Patrol collision records (SWITRS) data through August 31, 2016. SWITRS data is commonly used by jurisdictions throughout California, including other Vision Zero cities, such as Los Angeles and San Francisco.

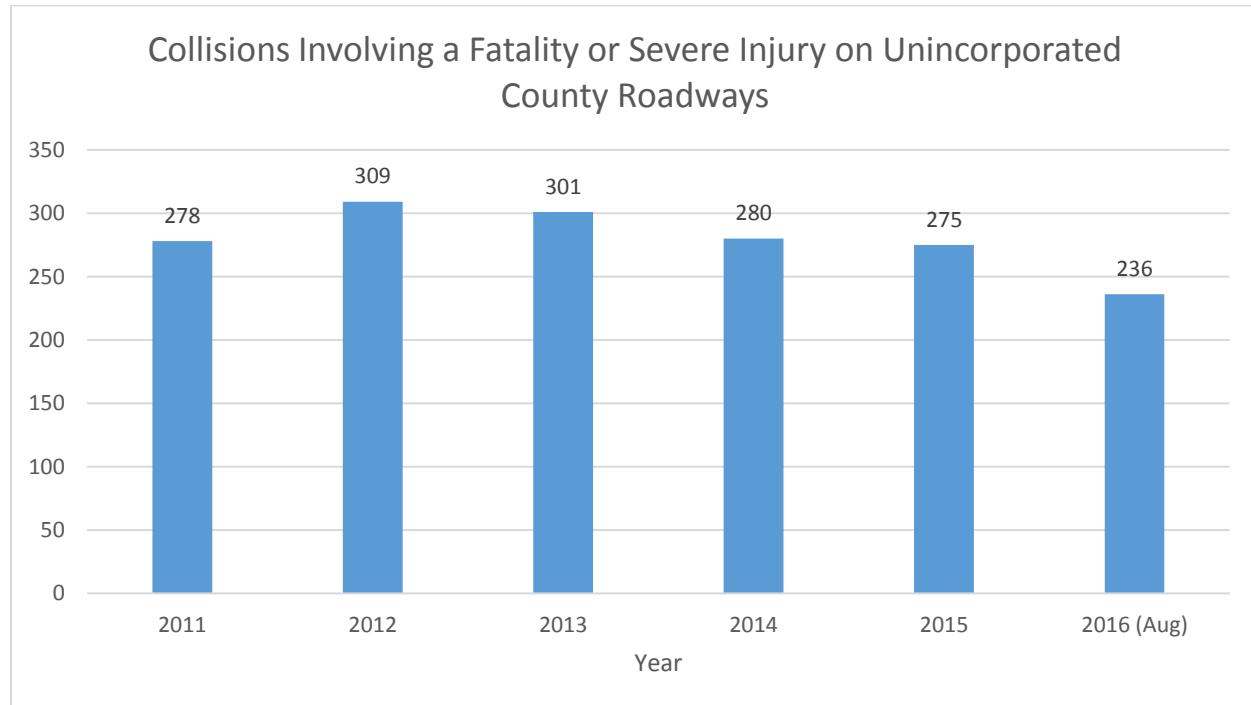
Findings

The data below summarizes information using CHP collision records data, housed in DPW's Collision Geodatabase. Unless otherwise stated, summary data is for the five-year, eight-month period beginning January 1, 2011 and ending August 31, 2016.

BIG PICTURE

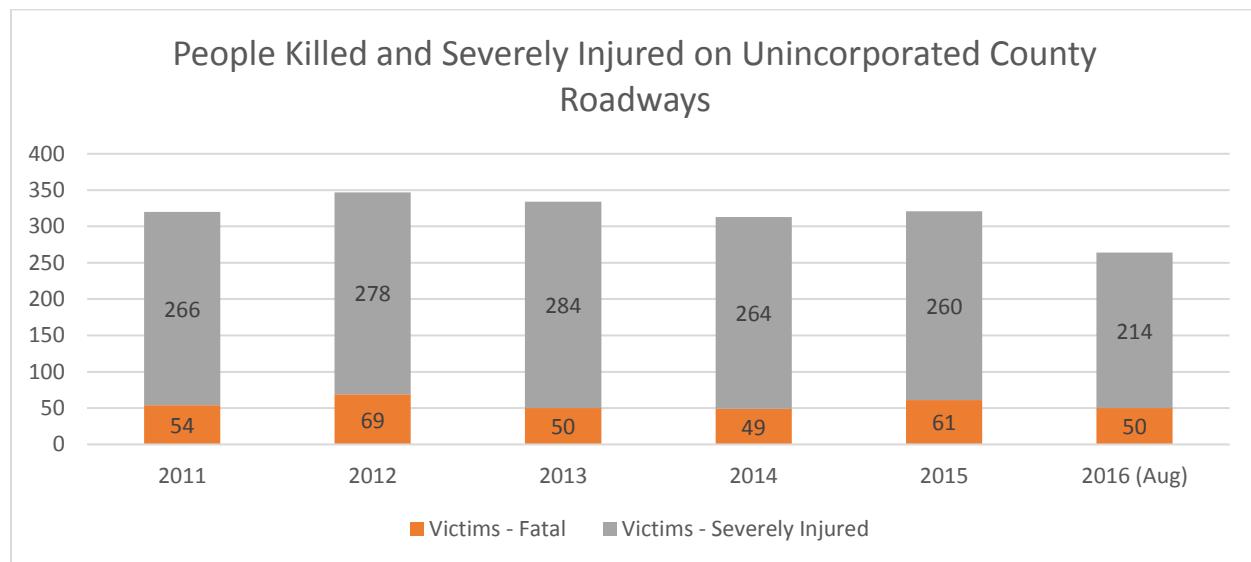
Collisions

There were 63,067 distinct collisions on unincorporated County roadways over the five-year, eight-month period. Of these collisions, 1,429 involved at least one severe injury and there were 300 with at least one fatality. A total of 1,679 collisions involved severe injuries or fatalities. Taking an average from January 1, 2011 to December 31, 2015, there are 10,917 annual collisions on unincorporated County roadways with 288 involving a fatality or severe injury. The number of collisions involving a fatality or severe injury has remained relatively constant since 2011.

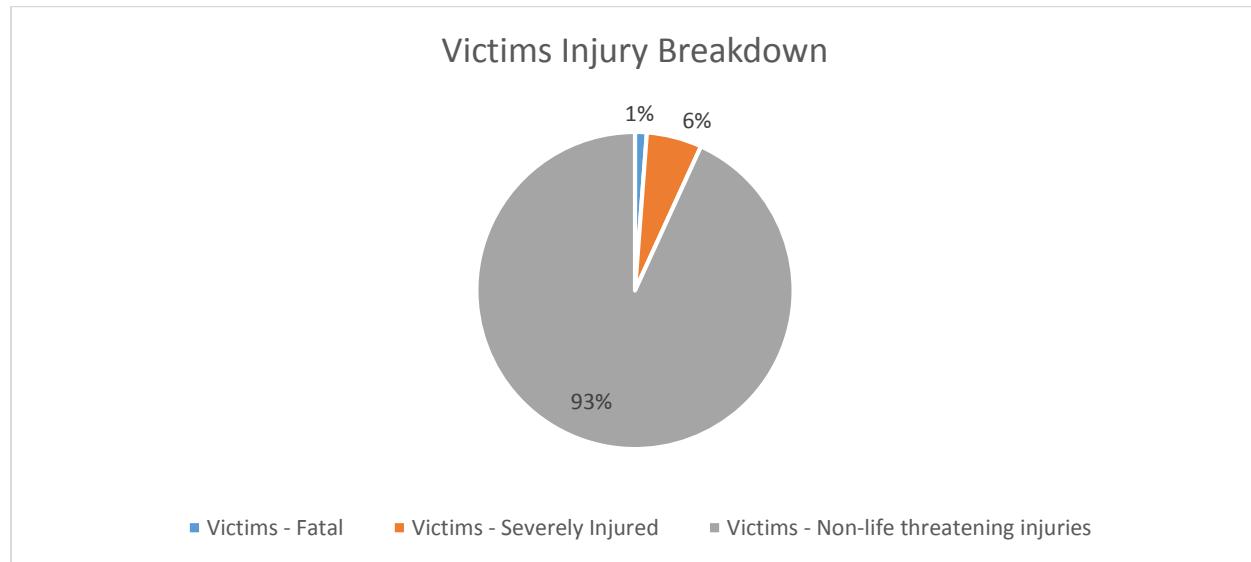


Victims

There were 27,786 victims involved in collisions on unincorporated County roadways during the five-year, eight-month period. Victims include fatalities and individuals with severe injuries, other visible injuries, or complaints of pain. Of these victims, 1,566 were severely injured and 333 incurred fatalities.



Among all victims of traffic collisions, approximately one percent died and six percent sustained severe injuries, but the vast majority (93 percent) did not suffer life-threatening injuries.



Rates

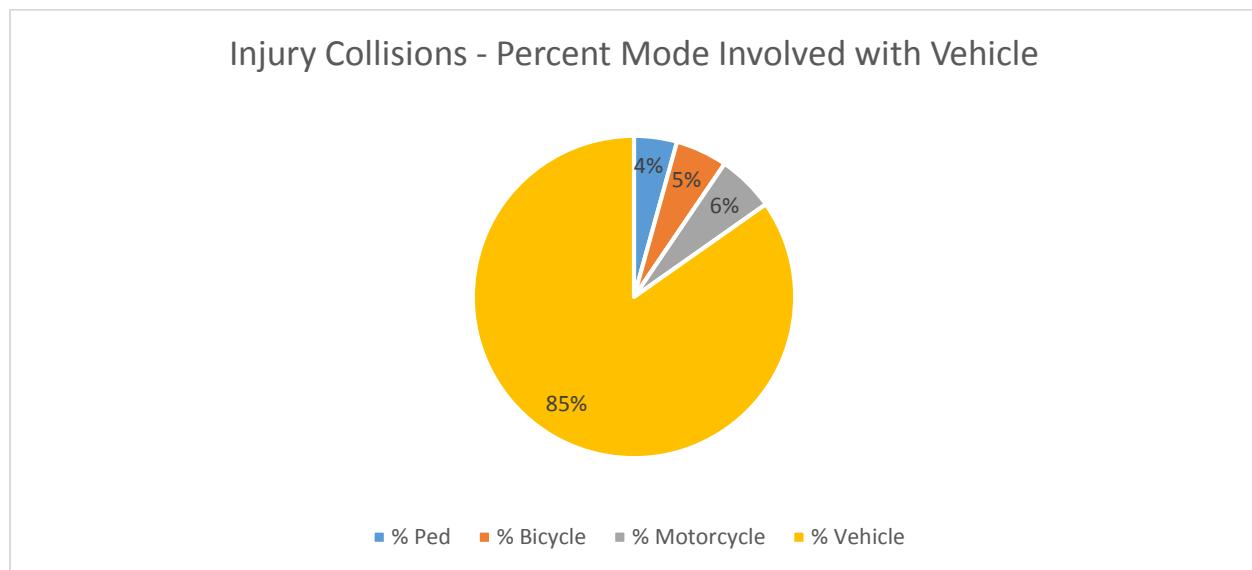
The County maintains approximately 1,188 miles of rural roads and an additional 1,998 miles of urbanized roads (total of 3,187 miles), with a daily vehicle miles travelled rate (DVMT) of 11.85 million.⁸ The following rates contextualize collisions and victims. All rates are based on averages from January 1, 2011 to December 31, 2015.

- There are approximately 3.4 collisions per roadway mile annually, with 0.09 collisions involving a fatality or severe injury per roadway mile
- There are approximately 27.4 collisions involving a fatality or severe injury per 100,000 population in the unincorporated Los Angeles County annually.⁹

TEMPORAL, MODAL, AND DEMOGRAPHIC

Mode

As shown in the chart below, among all collisions involving an injury, vehicle to vehicle injury collisions are the most common, representing approximately 85 percent of all injury collisions.

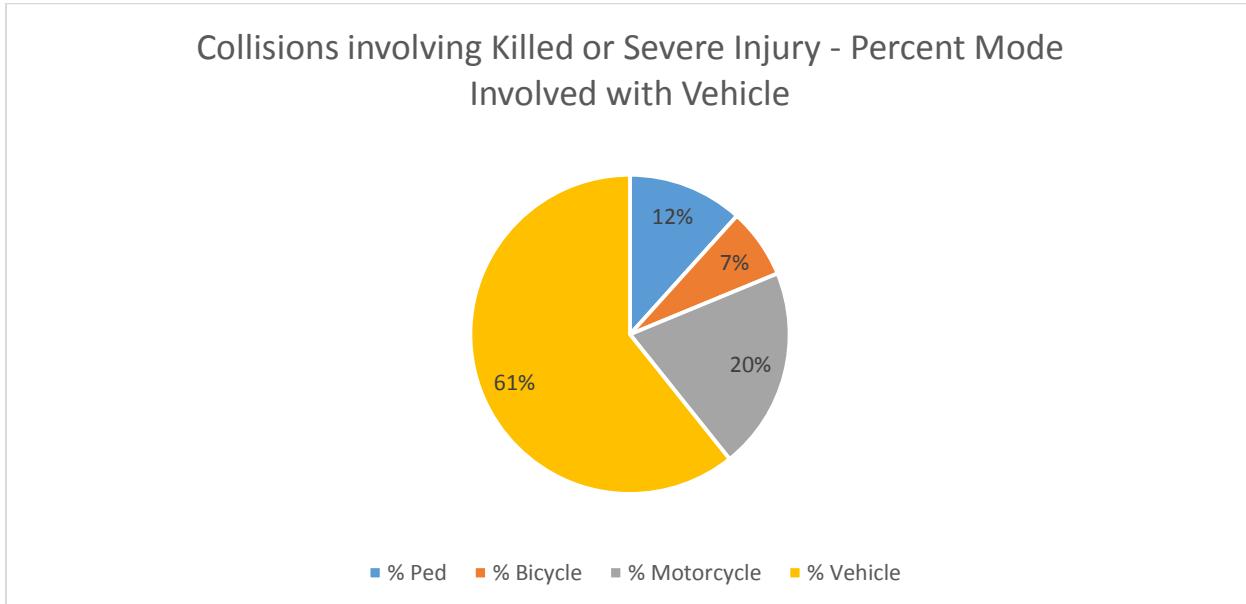


⁸ 2014 California Public Road Data Estimate, Table 6

⁹ Unincorporated area population is approximately 1,050,000 people based on estimates from the Southern California Association of Governments. Available at:

<http://www.scag.ca.gov/documents/unincarealosangelescounty.pdf> (Accessed December 27, 2016)

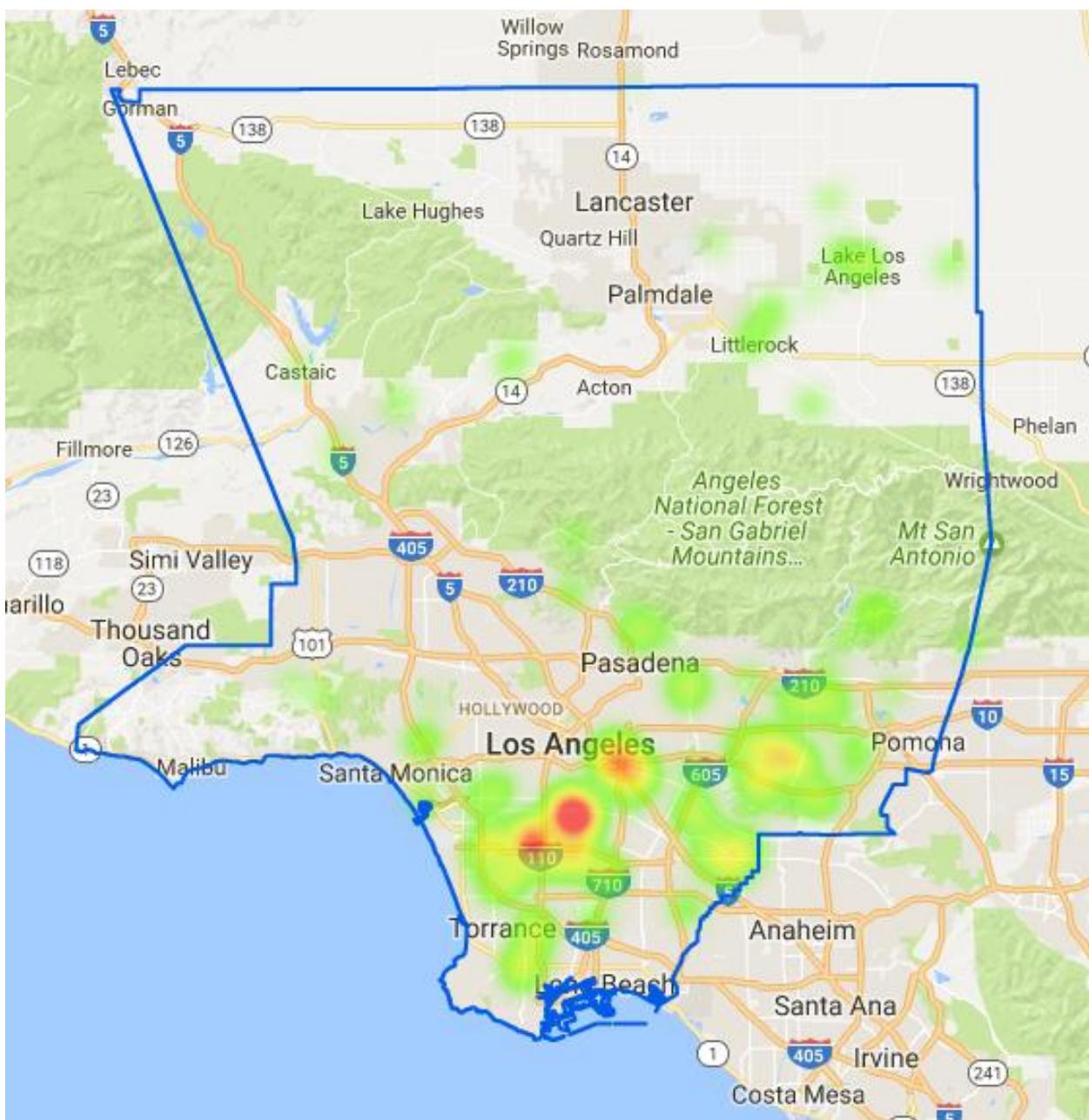
However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injury and fatality-involved collisions. For example, although pedestrians are only involved in four percent of injury collisions, they represent 12 percent of the collisions with severe injuries or fatalities. Similarly, motorcycle-involved collisions represent 20 percent of the severe and fatal collisions, but only six percent of all injury collisions.



The following heat map series shows the concentration of collisions involving killed and severely injured victims by mode. A heat map is a representation of the concentration of incidents; red areas indicate the highest concentration of incidents; yellow areas indicate a moderate concentration; and green areas indicate the lowest concentration of incidents.

Pedestrian-Involved Fatal and Severe Injury Collisions

Pedestrian-involved fatal and severe injury collisions are concentrated in the southern part of the County, largely in dense urban centers. There is also a concentration of collisions in the Antelope Valley, where community main streets are often rural, high-speed roads.

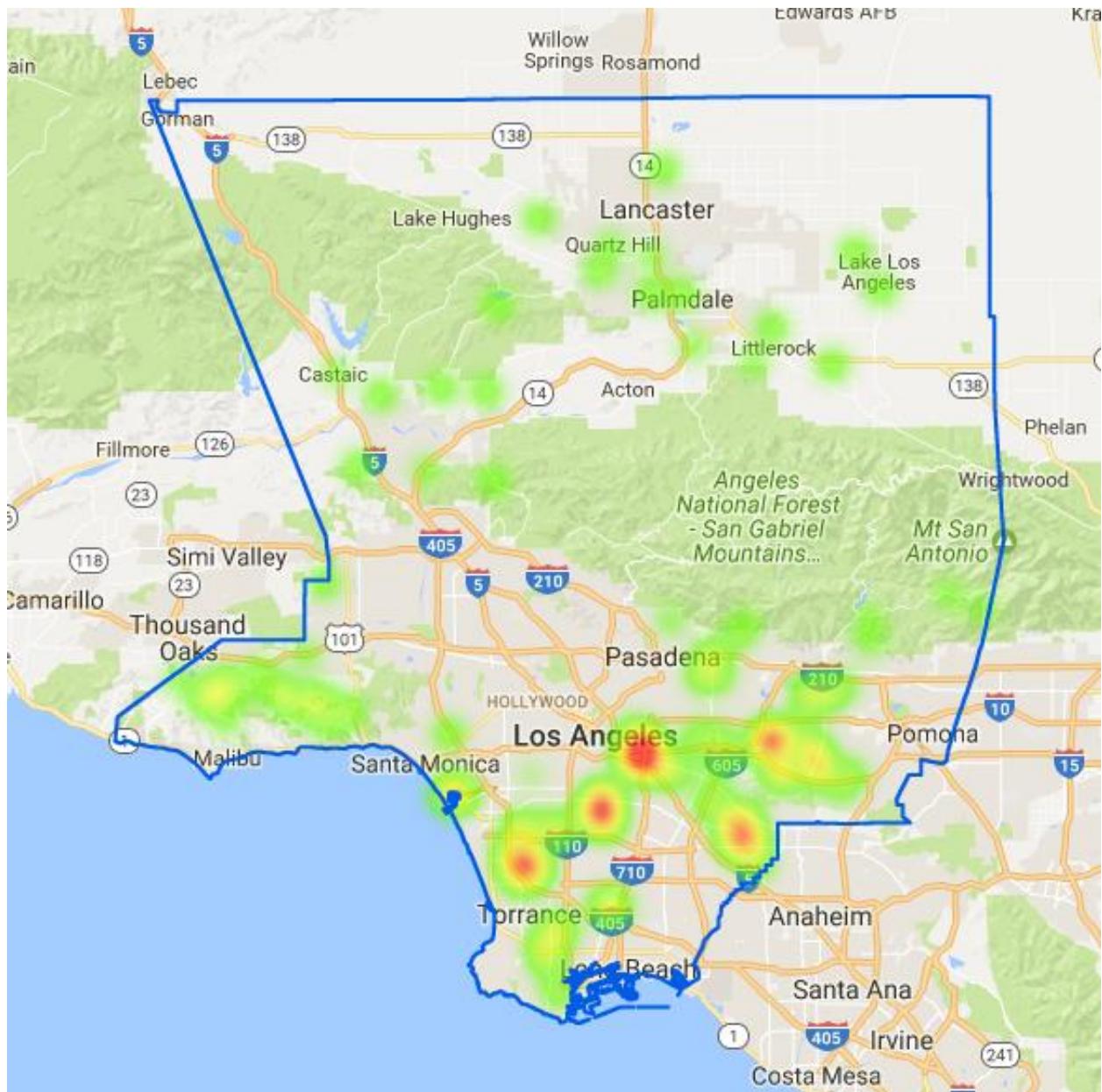


Pedestrian-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Bicycle-Involved Fatal and Severe Injury Collisions

While bicycle-involved fatal and severe injury collisions are spread throughout the County, they are more concentrated in urban areas, with some additional fatal and severe injury collisions occurring in the Antelope Valley and along County mountain roads.

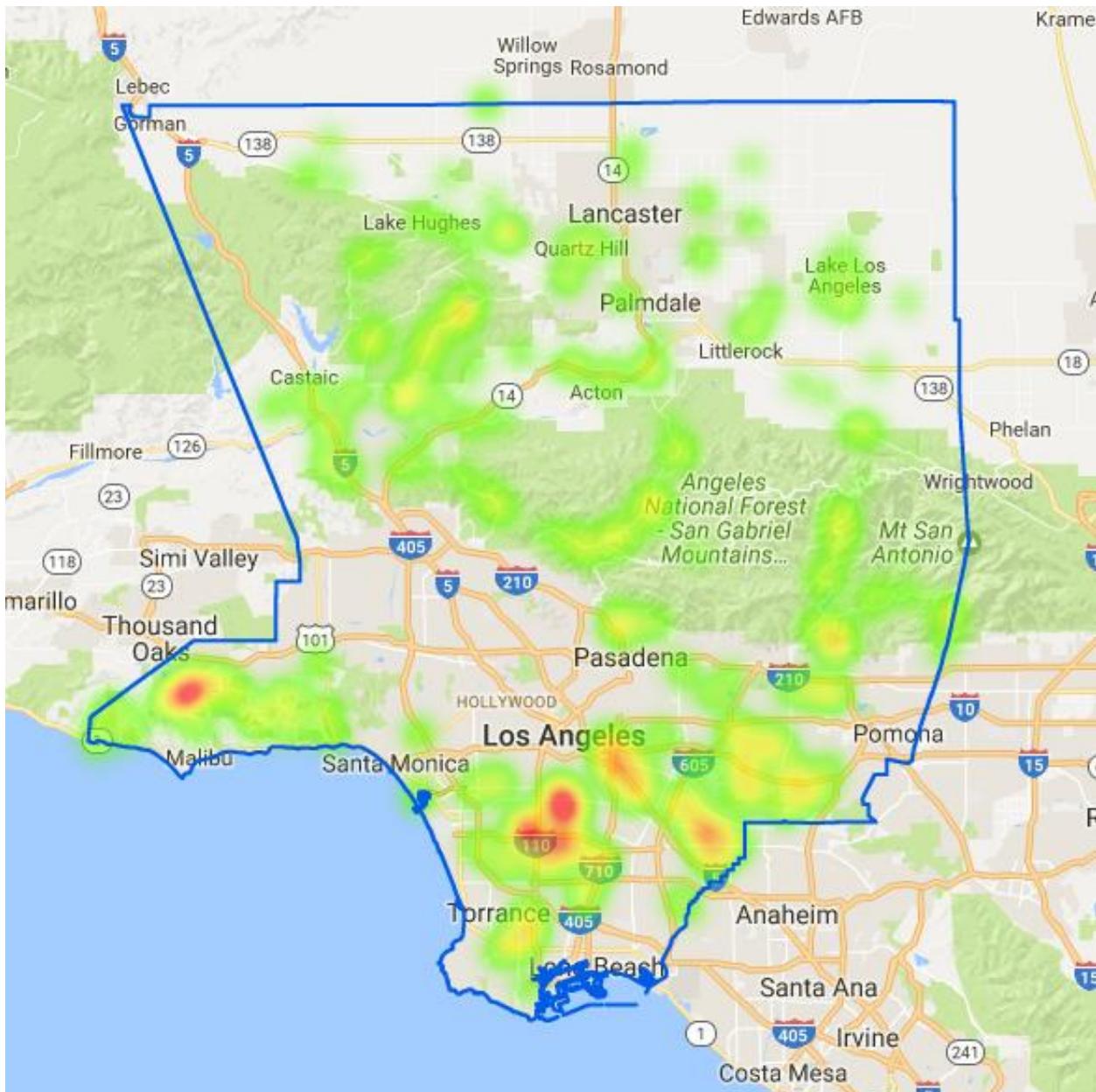


Bicycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Motorcycle-Involved Fatal and Severe Injury Collisions

Motorcycle-involved fatal and severe injury collisions are spread throughout the County. There are higher concentrations along County rural mountain roads, as well as in dense urban areas.

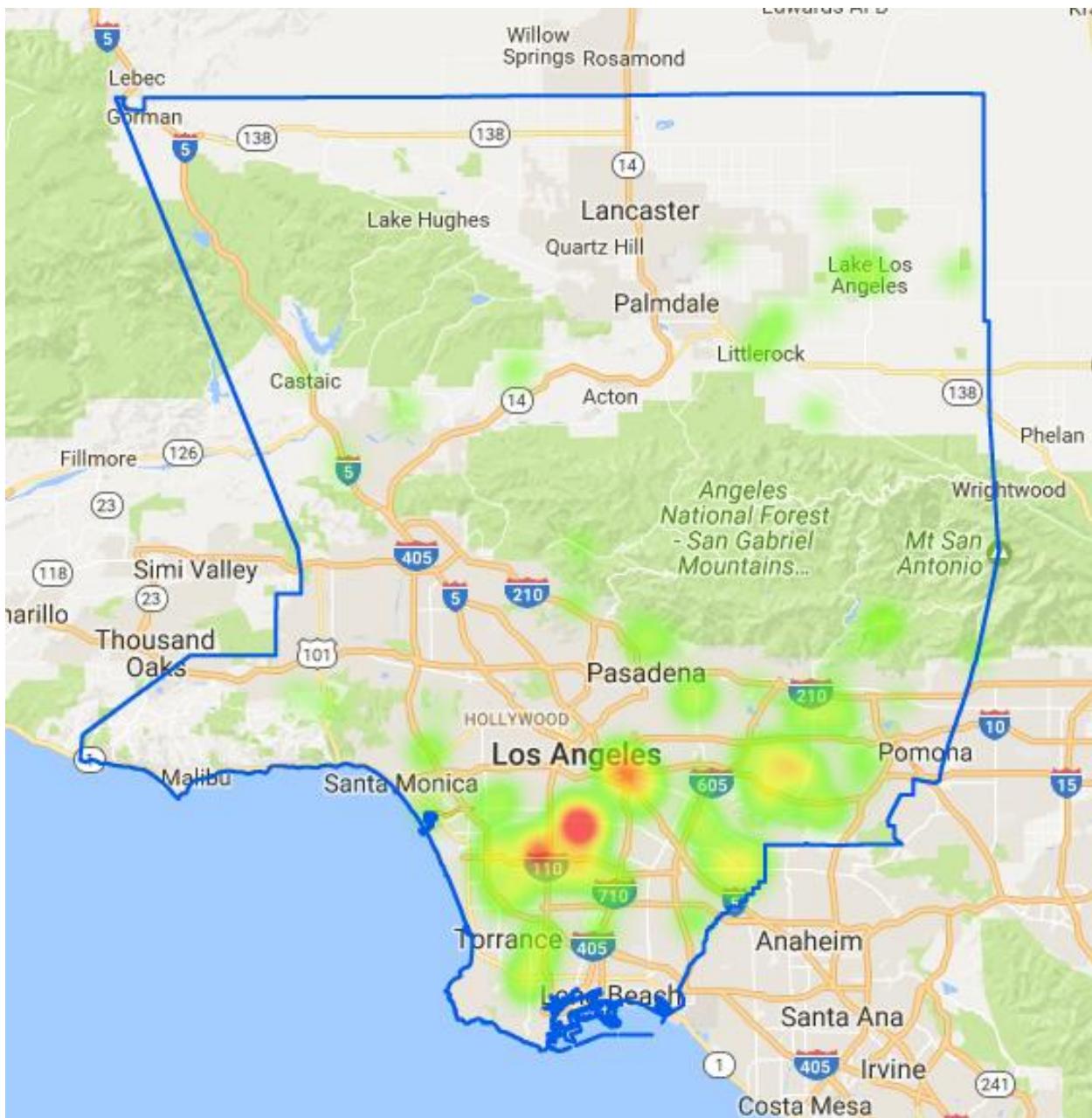


Motorcycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Vehicle to vehicle-Involved Fatal and Severe Injury Collisions

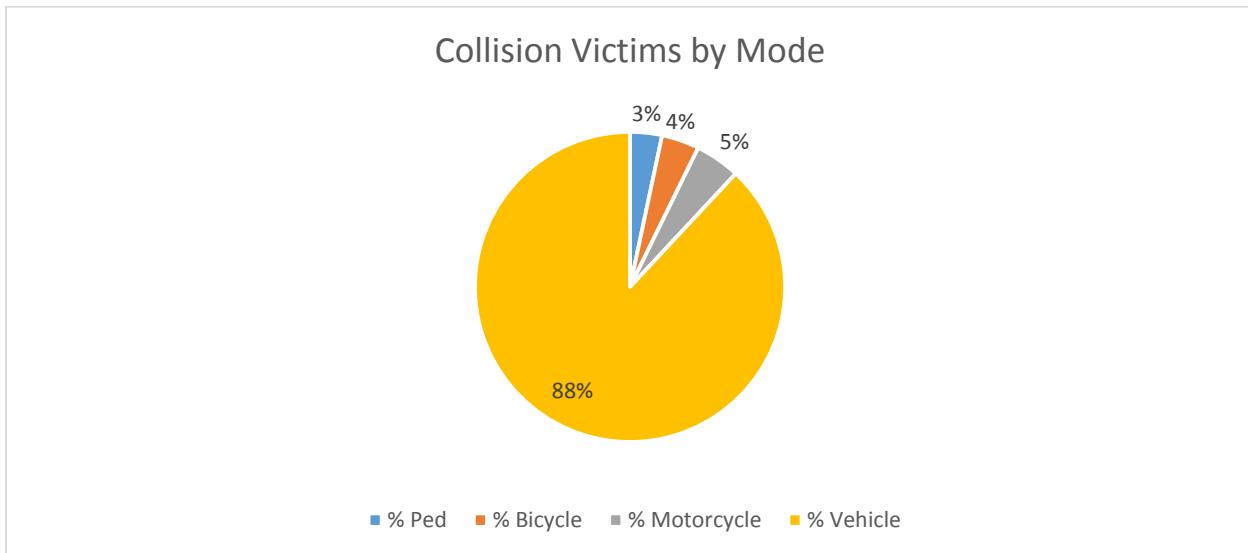
Vehicle to vehicle-involved fatal and severe collisions happen everywhere, but there is a concentration in the southern part of the County in our urbanized communities.



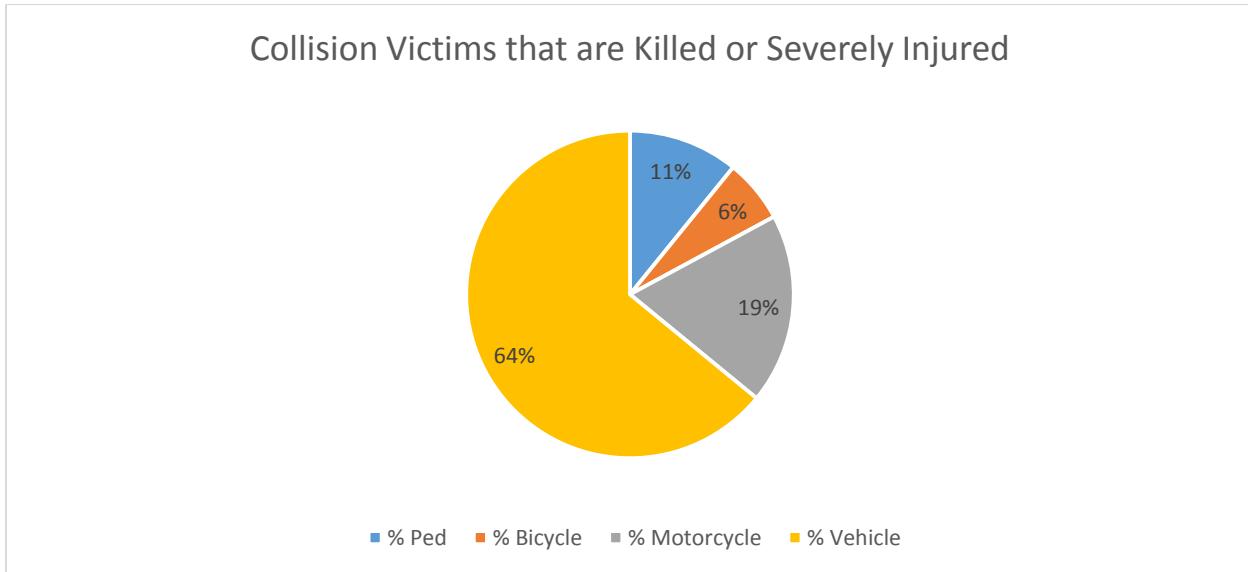
Vehicle to vehicle collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

The vast majority of victims injured as a result of traffic collisions on unincorporated County roadways were in vehicles.

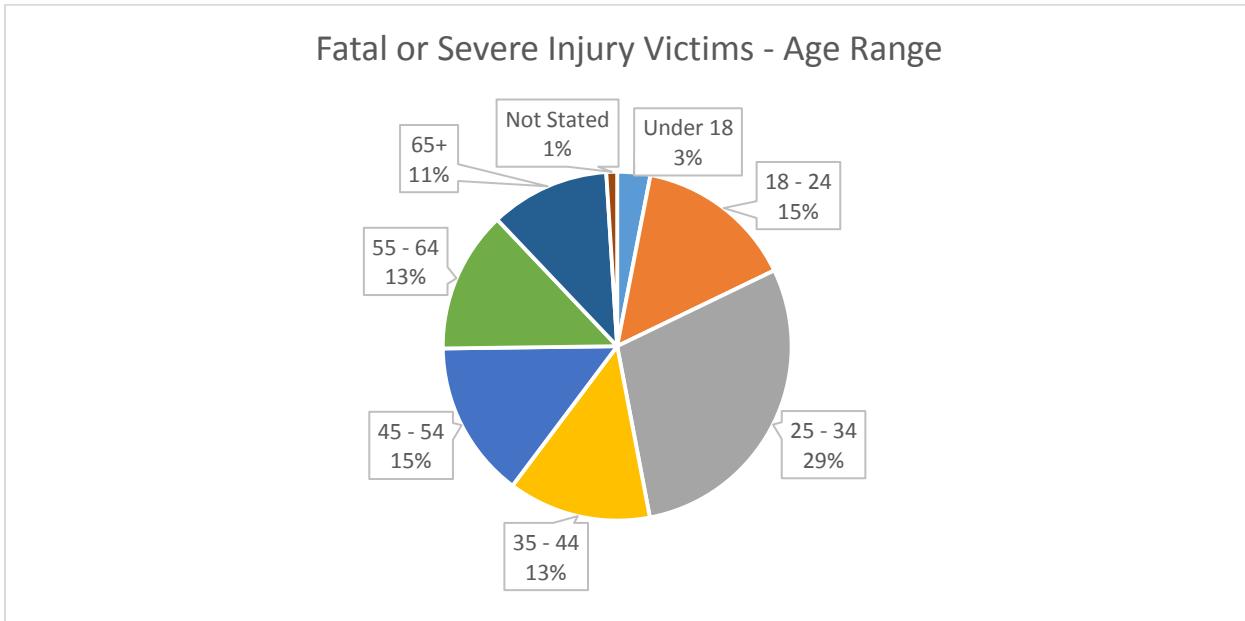


However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injuries and fatalities. Approximately 11 percent of fatal and severe injury victims are people walking, six percent are people bicycling, and 19 percent are people using a motorcycle.

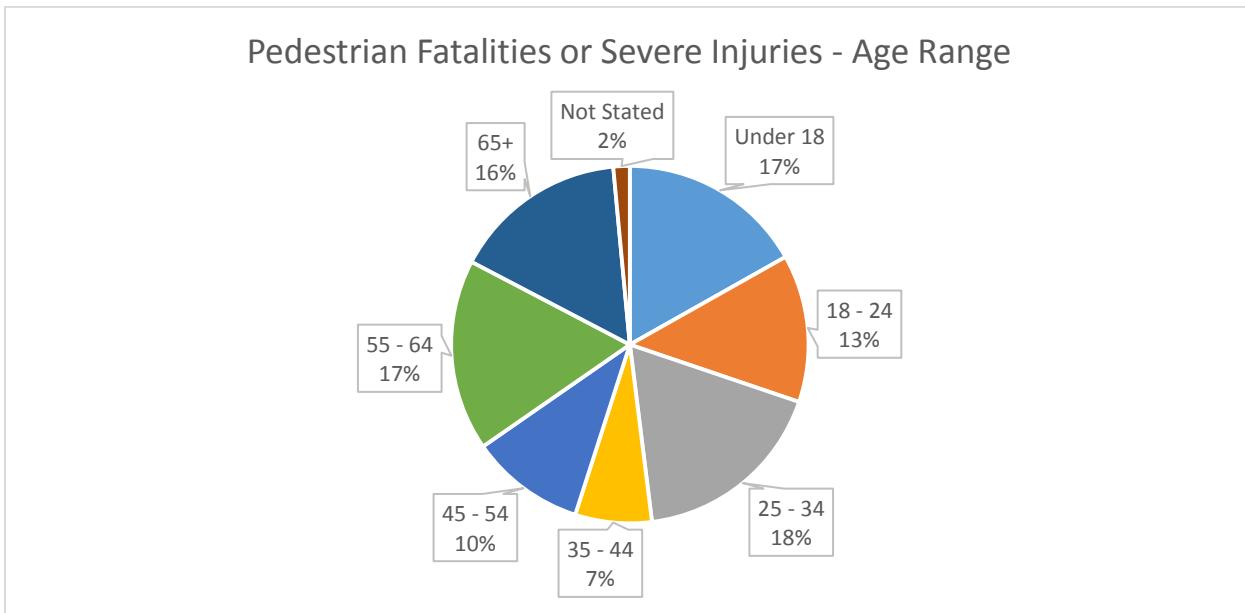


Demographics

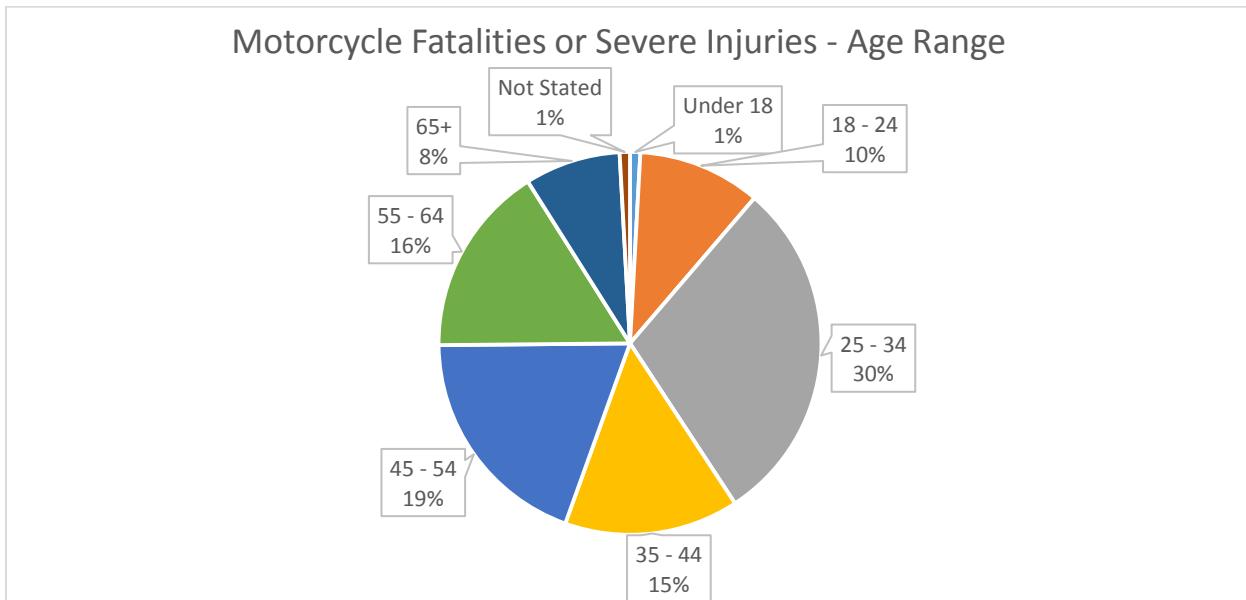
Regardless of mode, across all killed and severely injured victims there is a higher proportion of male victims (approximately 78 percent male and 22 percent female) and victims 25 to 34 years old (across both genders), for the entire time period. The chart below shows the age breakdown across all victims killed or severely injured, regardless of mode. Nearly a third of victims (29 percent) are between the ages of 25 and 34.



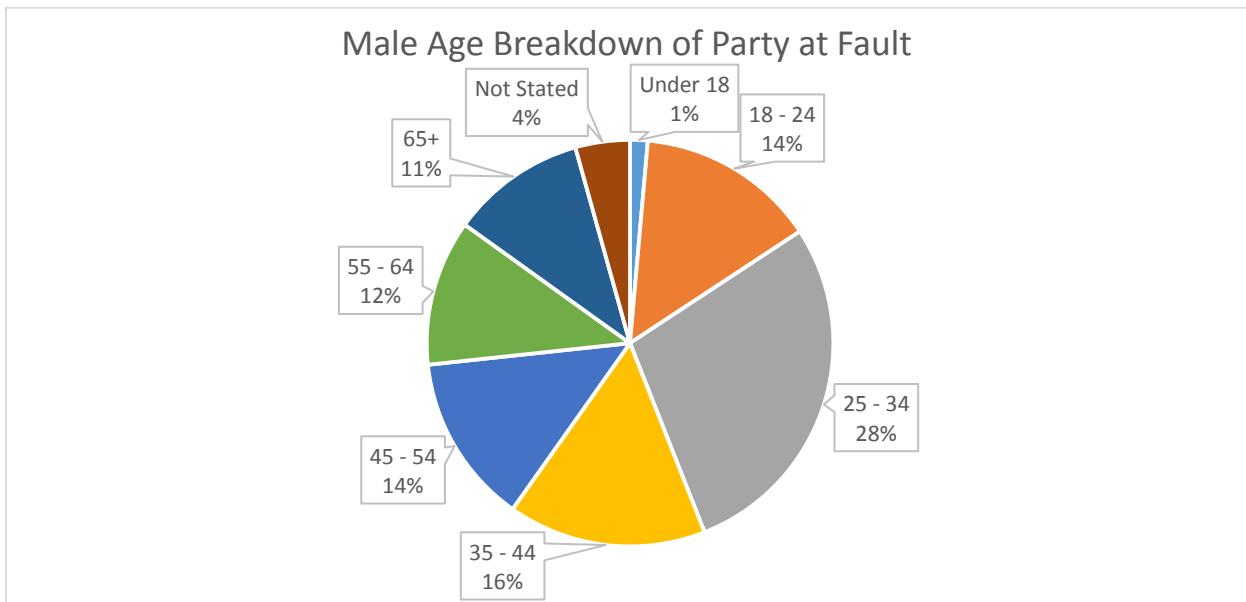
Among pedestrians killed or severely injured, victims are concentrated in both older and younger age groups. 17 percent are young people 18, 13 percent are between 18 and 25, and 33 percent are 55 and over.



The chart below shows the age breakdown for all motorcycle victims, male and female. Motorcycle victims were overwhelmingly young males: 94 percent are men, 40 percent under the age of 34.

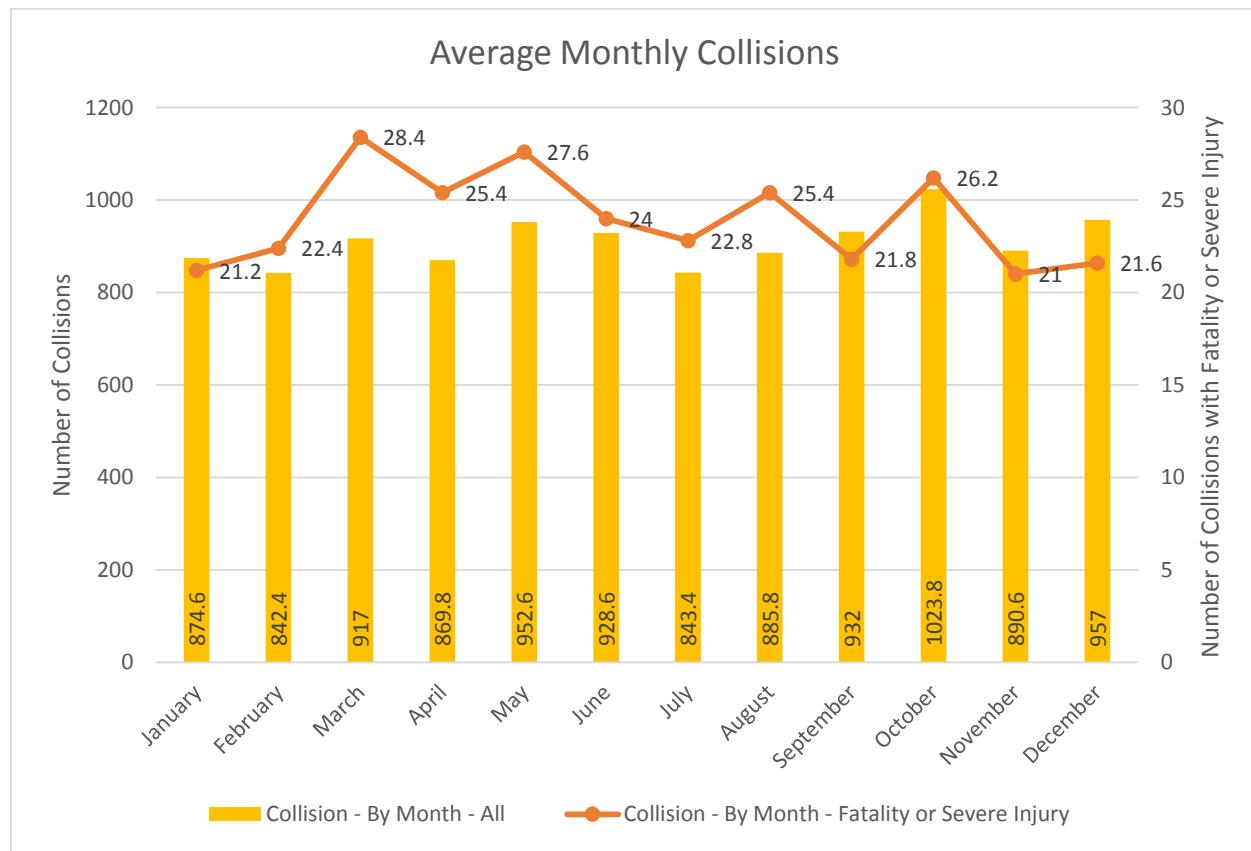


Men represented 64 percent of at-fault parties, while females represented 36 percent. Young men (under the age of 35) and older men (over the age of 55) were more likely to be labeled as “at-fault” in all collisions (no injury, complaint of pain, visible injury, severe injury, fatal) across the entire time period.

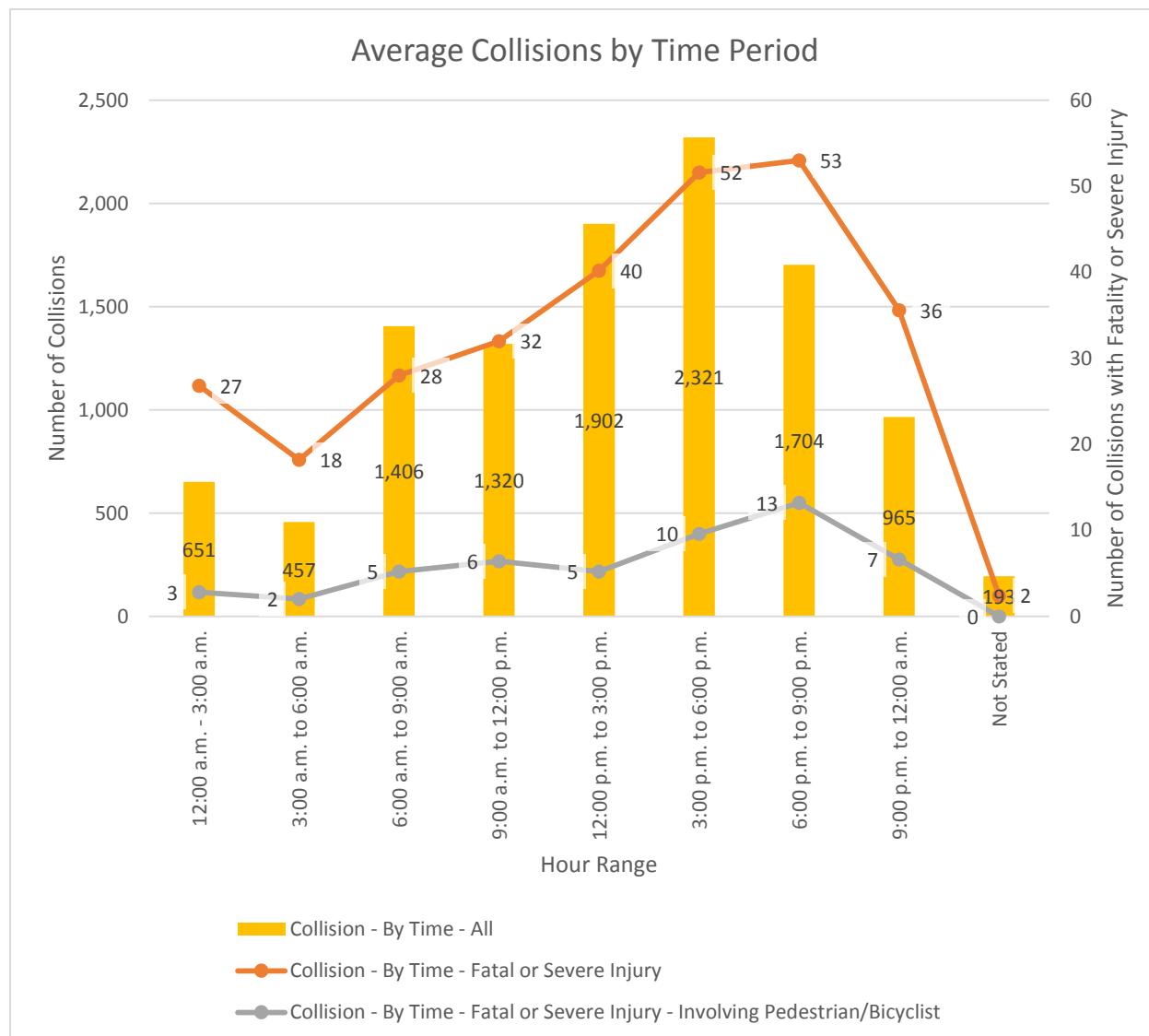


Temporal

On average from January 1, 2011 to December 31, 2015, October was found to have the highest number of collisions. Additionally, there are peaks in fatal and severe injury collisions during the months of March and May.



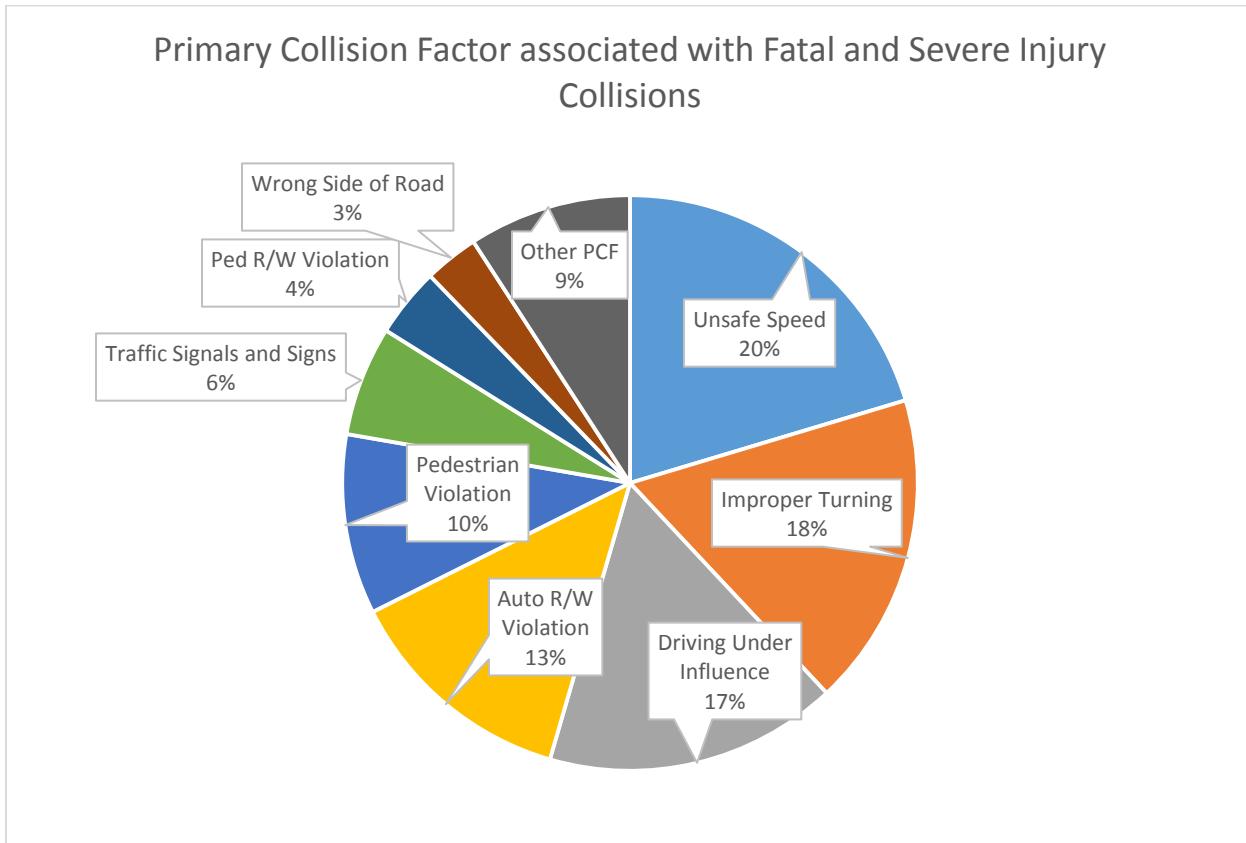
On average across all reported collisions (no injury, complaint of pain, visible injury, severe injury, fatal) during the period January 1, 2011 through December 31, 2015, most occurred between the hours of 3:00 p.m. to 6:00 p.m. High numbers of fatal and severe collisions also occurred during this period. Although there were fewer collisions overall from 6:00 p.m. to 9:00 p.m., there were high numbers of fatal and severe collisions during this time period, indicating a disproportionately high rate of fatal and severe collisions. This is also the peak time period when people walking and bicycling are involved in a fatal or severe collision, indicating that although more collisions occur during the 3:00 p.m. to 6:00 p.m. time period, the most dangerous time is from 6:00 p.m. to 9:00 p.m.



CONTRIBUTING FACTORS

Primary Collision Factor

CHP lists a single “Primary Collision Factor” (PCF) when it creates a collision report. This indicates the an officer’s determination of the primary cause of the collision. Other contributing factors may or may not exist. Unsafe speed was found to be the greatest primary collision factor, comprising 20 percent of the primary collision factors, with improper turning and driving under the influence comprising 18 percent and 17 percent, respectively.

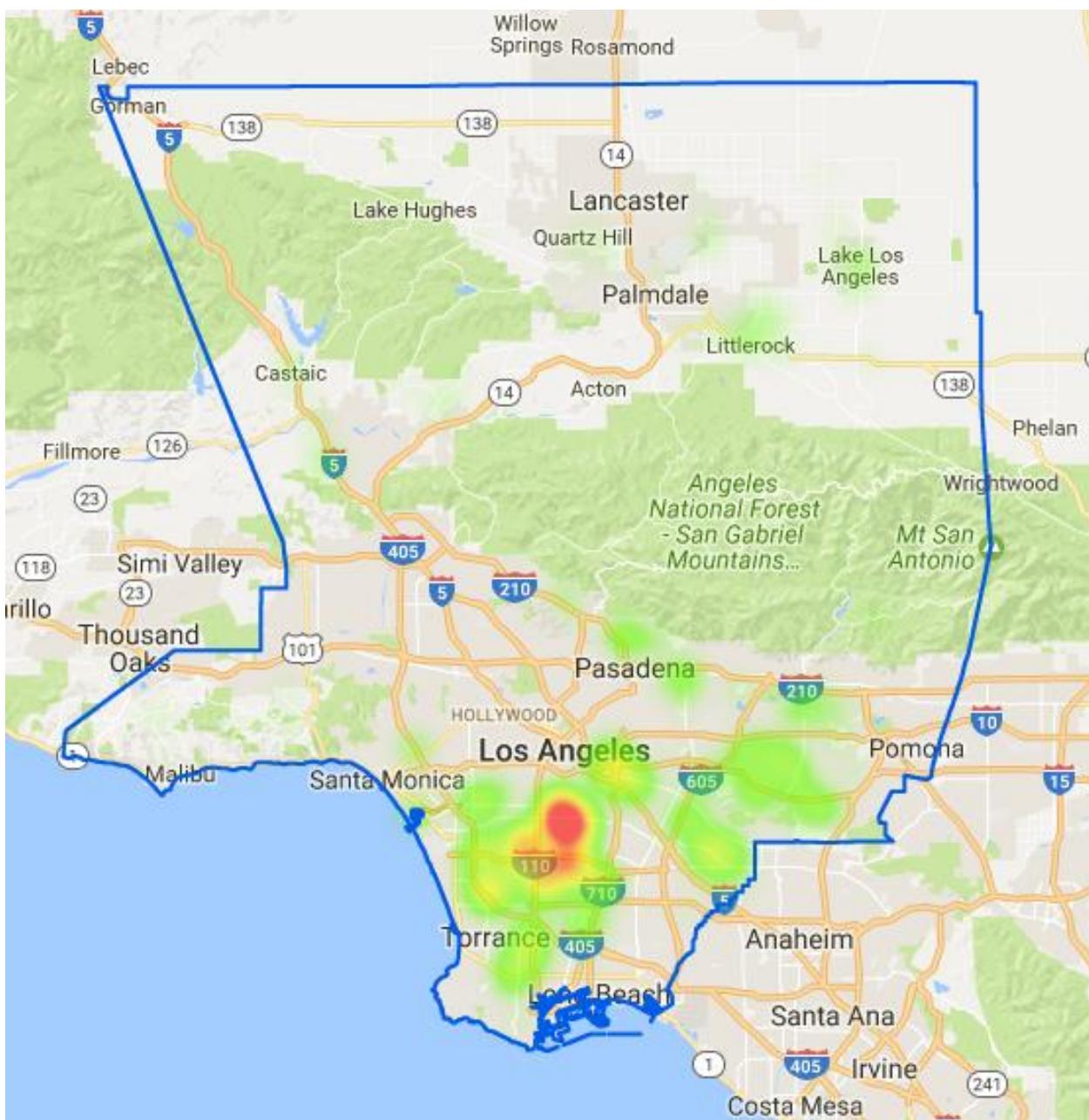


Hit and Run

Approximately 25 percent of all collisions involve hit and runs and there were 15,692, 133 involving a person killed or severely injured, during the period analyzed. This number has remained relatively constant over the past five years.

Felony Hit and Run Collisions

The heat map below shows the concentration of felony hit and run collisions. There is a concentration in the southern part of the County in urban areas. A felony hit and run involves a fatality. Among bike-involved and pedestrian-involved felony hit and run collisions, the same concentration pattern is seen.



Felony hit-and-run collisions in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

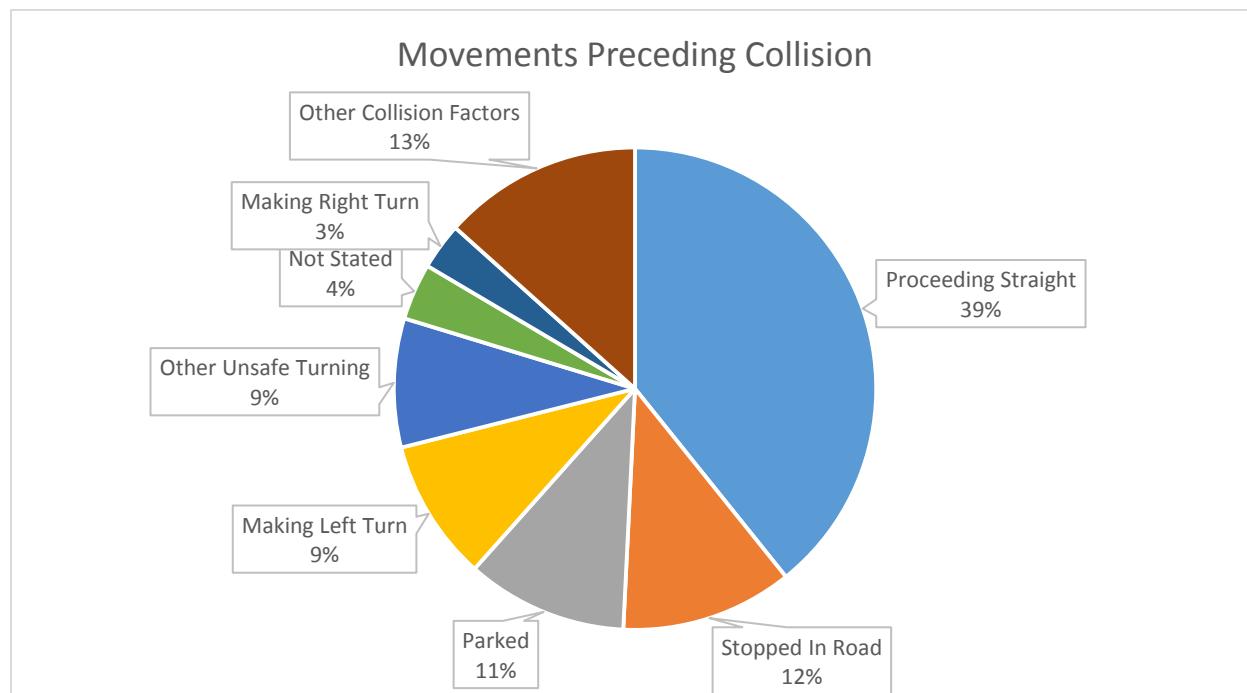
Map data ©2017 Google, INEGI

Driving Under the Influence (DUI)

For this section, “Driving Under the Influence” is defined as “Under Alcohol Influence” or “Under Drug Influence” while driving. Approximately eight percent of all crashes involve driving under the influence of alcohol or drugs; this percentage has remained relatively steady over the past five years. However, nearly 17 percent of fatal and severe injury collisions involve DUI, and 25 percent of vehicle-to-vehicle fatal collisions involve DUI.

Movement Preceding the Collision

CHP also reports vehicular movements in collisions prior to impact. Most collisions involve proceeding straight (39 percent), a turning movement (right turn, unsafe turning, left turn combined for 21 percent), stopping in the road (12 percent), and parked vehicles (11 percent).



Other Factors

Most collisions involving a fatality or severe injury occur in clear weather conditions (89 percent) and dry roadway surface conditions (96 percent). Roadway conditions (e.g., obstructions, flooding, holes), are listed as “no unusual conditions” in 97 percent of fatal and severe injury collisions.

66 percent of all collisions occur during daylight, with another 30 percent during the dark. However, collisions in the dark and during dusk are overrepresented among collisions involving a severe injury or fatality, with 52 percent occur during daylight, 43 percent in the dark, and five percent at dusk.

SUMMARY OF CHALLENGE AREAS

Based on the preliminary data analysis, the following challenge areas have been identified as warranting additional data analysis to further pinpoint causes and patterns associated with severe injury and fatal collisions, and to target programs, resources, and infrastructure enhancements.

- ***Unsafe Speeds:*** Vehicle speed can be the difference between life and death in a collision. Speed is listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- ***Impaired and distracted driving:*** Driving under the influence of alcohol or drugs is involved in 8 percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes. Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores the need for a coordinated approach to capture information on and to prevent distraction.
- ***Hit and runs:*** Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for outreach to spur behavior changes by motorists.
- ***Young males:*** Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions. For example, the percentage of collisions involving young males on motorcycles suggests young males represent a critical demographic to target for programs and messaging.
- ***Motorcyclists:*** Twenty percent of fatal and severe collisions involved a motorcyclist. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found to occur on rural or mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- ***Pedestrians:*** Seventeen percent of fatal and severe collisions involved pedestrians. Young people (under age 19) and older people (55 years and over) were overrepresented in pedestrian-involved fatalities and severe injuries. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found in urban areas where a greater probability of conflicts exist due to higher vehicular densities, as well as in rural areas, where higher vehicular speeds may be a factor.

To further pinpoint any significant factors and patterns that may be associated with collision types, additional analysis will need to be conducted, including community demographics, existing infrastructure (e.g., presence of bikeway, walkway, prevailing speed limit), traffic controls, and others.

PART III: CURRENT TRAFFIC SAFETY EFFORTS

The County and its partners currently administer various programs that support traffic safety through education, enforcement, engagement, engineering, and evaluation. CHP, the agency responsible for traffic enforcement in unincorporated areas, is currently providing the majority of the County's traffic safety programs in unincorporated communities. The Sheriff's Department, DHS Trauma Hospitals, DPH, DPW, and the Los Angeles County Office of Education are all involved in injury prevention efforts as well. The process of developing this report increased awareness about opportunities for collaboration between departments. Despite current efforts, it is clear that more can be done to prevent traffic deaths and severe injuries on unincorporated area roadways. Strategically focusing best-practice programs on key challenge areas, leveraging resources across agencies, and identifying new injury prevention resources will help the County reach its traffic safety goals.

Education

General Safety Tips

County departments and partners, such as CHP and DPH, have readily available educational materials such as pamphlets, flyers, and safety items (e.g. bicycle helmets, lights) that can be distributed during community events. CHP has educational materials that target different audiences and behaviors, including pedestrian safety, bicyclist safety, skateboard safety, motorcycle safety and helmet laws, distracted driving, and others.

Distracted Driving

Distracted driving, such as looking at a phone or texting while driving, continues to be a challenge area locally and statewide. CHP targets high school aged children through its "Teen Distracted Drivers Education and Enforcement" program, conducting focused safety presentations and press events. CHP's "Impact Teen Driver" program is designed to educate high school student drivers on the dangers of distracted driving. CHP also has an "Adult Distracted Drivers" program that targets all non-teen drivers to minimize distracted driving through public service announcements, public presentations, and direct community engagement at local events. DHS Trauma Hospitals have injury prevention programs designed to reduce trauma visits, many of which are focused on reducing distracted driving. These include presentations to community groups, safe driver pledges, and "Don't Text and Drive" campaigns.

Impaired (Driving Under the Influence Alcohol or Drugged) Driving

CHP and some DHS Trauma Hospitals conduct presentations to engage high school-aged students and their parents about driving under the influence through its "Every 15 Minutes" program. The program includes fatal driving under the influence (DUI) simulations and designated driver education. CHP also chairs an Intoxicated Driver Task Force, which brings community partners such as Mothers Against

Drunk Driving and law enforcement together. This program is largely supported through grant funds. Injury prevention activities at some DHS Trauma Hospitals include educational programs wherein participants visit a Trauma Hospital and morgue to learn from emergency healthcare providers and see the wreckage and carnage of crashes involving DUI.

Speed and Aggressive Driving

CHP recently received a federal traffic safety grant to develop and implement the Regulate Aggressive Driving and Reduce Speed (RADARS) program to educate motorists about the dangers of aggressive driving and actively enforce related laws. The main goal of RADARS is to reduce the number of fatal and injury traffic collisions in which speed, improper turning, and driving on the wrong side of the road are primary collision factors. The RADARS program will also focus on street racing and sideshows through enhanced enforcement paired with an active public awareness campaign.

Teenage Drivers

At the State level, young drivers are disproportionately represented in collisions. CHP has several programs that target this age group including, “Start Smart” classes that help newly licensed and soon-to-be licensed teenage drivers understand the critical responsibilities of driving and that “at-fault” collisions are 100 percent preventable. The classes create an open dialogue between law enforcement, teenage drivers, and parents or guardians.

Older Adults

Through the “Age Well, Drive Smart” program, CHP aims to reduce motor vehicle collisions and pedestrian fatalities experienced by older adults and increase seniors’ alternate transportation options. “Age Well, Drive Smart” is a free, two-hour senior driver safety/mobility class. Individuals can register for the course by contacting their local CHP office. The program is funded through a “Keeping Everyone Safe” (KEYS) grant.

Bicycle and Pedestrian Safety Education

CHP, Sheriff’s Department, DPH, DPW, and DHS Trauma Hospitals are involved in promoting safe walking and bicycling. CHP conducts safety presentations, bicycle rodeos (on-road bike classes), and gives away incentives (such as bike helmets and lights) to promote safe walking and bicycling. These activities are funded through an Office of Traffic Safety grant for the 2016-2017 period. The Sheriff’s Department, through a new grant from the Office of Traffic Safety, will be conducting additional bicycle and pedestrian safety skills classes at elementary schools. This program will be available in 17 incorporated cities during 2017-2018. DPH conducts bicycle safety education workshops as part of Parks After Dark programming and distributes bicycle helmets, lights, and locks, as part of a grant from Caltrans. DPW has in the past been awarded Safe Routes to Schools grant funds for bicycle and pedestrian encouragement

programs. Although not an ongoing program, future grant opportunities may be available to support an educational program. Several DHS Trauma Hospitals offer pedestrian safety classes for students, and distribute incentive safety items such as helmets and reflective back packs.

Suggested Routes to School

School-aged children are particularly vulnerable in the case of a collision. To enhance the safety of school-aged children and their parents, DPW has maps of suggested walking routes to schools that identify suggested crossings and prioritize routes that include traffic controls. These maps are updated periodically with changes, such as new crossing guard locations.

Motorcycle Riders

CHP works to reduce the number of motorcycle-involved collision deaths and injuries through a combination of increased enforcement in areas with high incident numbers and motorcycle education and awareness. Through the grant funded “Have a Good Ride” program, CHP conducts motorcycle education classes, training approximately 60,000 riders per year across California at over 100 training sites. CHP also conducts public safety announcements via Internet, radio, and movie theaters during Motorcycle Safety Awareness Month (May), other motorcycle-heavy holidays (Memorial Day and Fourth of July), and designated motorcycle events. Messages focus on speeding, improper turning, and driving under the influence of alcohol and/or drugs.

Child Passenger Safety

Ensuring children are properly restrained can reduce injuries and fatalities during a collision. DPH funds agencies to host two-hour child passenger safety workshops on how to correctly install a car seat. The workshops are available in English and Spanish every month, and free or low-cost car seats are given to families that show proof of hardship. Funding for this program is based on citation fines. DPH intends to pursue Office of Traffic Safety grants to expand the program. DPH has also highlighted a need to provide ongoing child passenger safety education to the County workforce, especially those that transport children. DPH staff recently started collaborating with the Department of Children and Family Services to ensure staff that transport children are trained on best practices in child passenger safety. Since January 2016, approximately 500 newly hired social workers and human service aides have been trained.

CHP also has a Child Passenger Safety Program which includes child passenger safety check-up events to promote correct usage of child restraint systems; inspection of child passenger safety seats; educational classes at daycare centers, preschools, and elementary schools; and distribution of child passenger safety seats to people in need. In addition, CHP certifies personnel as child passenger safety technicians through training courses. Additionally, DHS Trauma Hospitals also provide child passenger safety classes and checks on a quarterly basis.

Enforcement

Directed Traffic Enforcement

CHP is responsible for traffic enforcement on unincorporated Los Angeles County roadways; the Sheriff's Department is responsible for traffic enforcement in 42 contract cities within Los Angeles County, many of which border unincorporated areas. The Sheriff's Department and CHP work collaboratively to conduct targeted traffic enforcement based on community concerns and data analysis identified by County departments, such as DPW.

Impaired Driving

Both CHP and Sheriff's Department target impaired driving as part of regular traffic enforcement duties. The Sheriff's Department conducts DUI checkpoints, locations where officers stop vehicles at designated locations to ascertain whether drivers may be under the influence of drugs or alcohol. This program is typically funded through grants and/or local jurisdiction funds. In 2017-2018, the Sheriff's Department has funding to do checkpoints, saturation patrols, and additional DUI enforcement in 17 contract jurisdictions. The Sheriff's Department has found DUI checkpoints to be an effective enforcement and education approach. Compliance rates have increased over time, and anecdotally, officers have observed an increase in use of rideshare services like Uber and Lyft. Using grant funding, CHP is currently conducting DUI/Driver's License Check Points throughout Los Angeles County communities, as well as traffic safety presentations at public venues in unincorporated areas that focus on the dangers of impaired driving.

Seatbelt Use

Increasing seatbelt use among all passengers in a vehicle can help reduce the likelihood of an injury or fatality in a collision scenario. The Sheriff's Department engages in "Click it or Ticket" enforcement in contracted incorporated cities. If the driver or passengers in a vehicle are not wearing seatbelts, officers can issue a citation. Enforcement of seatbelt use is conducted as part of general traffic enforcement duties. The "Click it or Ticket" campaign has a statewide and national presence. CHP plans to participate in the "Click it or Ticket" campaign by conducting a well-publicized statewide seat belt enforcement from May 22 to June 4, 2017, focusing enforcement in low compliance areas throughout California.

Collision Response

CHP responds to collisions on unincorporated County roadways. CHP Officers are responsible for completing incident reports, coordinating with other agencies, and clearing the scene of a collision.

Automated Red Light Photo Enforcement

DPW operates automated red light photo enforcement at several signalized intersections in unincorporated areas that have high rates of collisions caused by red-light running. DPW continues to

monitor and identify signalized intersections to identify those that no longer need photo enforcement and also those may benefit from it. CHP plays a key role in the success of the Automated Red Light Photo Enforcement Program, as it is responsible for the review of photos, approval of citations, checking time and speed charts, and appearances in court.

Adult Crossing Guard Program

The County's Office of Education operates an Adult Crossing Guard Program, which assigns crossing guards for elementary and middle school-aged pedestrians at locations that meet Board-approved criteria. DPW conducts traffic studies based on requests by local school districts and other entities within the unincorporated areas to determine whether crossing guard services meet the minimum criteria. Currently, there are approximately 220 locations in County unincorporated areas that are serviced by crossing guards.

Speed Enforcement

DPW conducts Engineering and Traffic Surveys for unincorporated roads. According to the California Vehicle Code, there must be a current Engineering and Traffic Survey in order to legally use radar for speed enforcement. These surveys establish the appropriate speed limit and must be updated every seven years. Currently, nearly 200 radar routes exist to assist CHP in speed enforcement. In addition, DPW has several radar speed trailers that build driver awareness of the speeds at which they are traveling in order to discourage speeding. These are deployed temporarily at key locations throughout unincorporated areas of the County.

Engagement (Community Outreach & Communications)

Monthly Awareness Campaigns

CHP conducts awareness campaigns on a different topic each month; for example, April is Distracted Driving Month. CHP broadly distributes messaging through press releases, television and radio media interviews, video public safety announcements, and social media.

Freeway and Highway Changeable Message Signs

Transportation Management Centers (TMC) are control centers for California's urban freeway and highway systems and are operated in partnership with CHP and the California Department of Transportation. Real-time traffic information is gathered 24 hours a day from several sources, including electronic sensors in the pavement, freeway call boxes, and video cameras. TMCs operate changeable message signs along the freeways and highways. These signs provide helpful information, including road closures due to traffic collisions, inclement weather advisories, and traffic safety messages. In 2015, messages focused on speeding included: "Slow Down and Save a Life," "Slow for the Cone Zone," "Move Over or Slow for Workers - It's the Law," and "Fines Increased in Work Zones - Slow Down".

Community-based Law Enforcement

Officers from CHP and the Sheriff's Department participate in various community events and programs. These events serve as a way to build trust between law enforcement and the community, and as an opportunity to distribute educational materials. The Sheriff's Department participates in the Los Angeles County Bicycle Coalition's "Ask an Officer" events, where bicyclists can engage directly with Officers about bicycle safety and the rules of the road. CHP, Sheriff's Department, and local school police participate in events, such as International Walk to School Day, a day where students are encouraged to walk to school, and National Night Out, an annual community-building campaign that promotes police-community partnerships through block parties and festivals.

Engineering

Traffic Investigation Studies

Each year, DPW reviews approximately 1,200 locations in the unincorporated areas to ensure proper traffic signs, roadway markings, and signals are in place. These traffic studies are generated by requests from constituents who are concerned about traffic safety in their neighborhoods. After collecting and analyzing data, DPW's traffic engineers design and implement traffic controls, such as signs, speed humps, and traffic signals to facilitate traffic safety.

Evaluation & Data

As described in Part II, various County departments collect data on traffic safety and use this data in their own programs to guide implementation.

PART IV: RECOMMENDED STRATEGIES AND ACTIONS

A County Vision Zero initiative would draw upon the collective expertise and resources of multiple departments to address this major public health concern. The initiative would employ a data-driven approach, proven and innovative practices, and the synergistic alignment of efforts between departments. It would engage community stakeholders to develop targeted solutions and implement strategies for traffic safety education, engineering, and enforcement. The initiative would also evaluate results to gauge success and modify programs as necessary to optimize impact.

A successful initiative will require additional resources. Since the Board motion directing the development of this report, County departments collaborated on two grant proposals that, if awarded, would help fund several of the initiative's immediate strategies and actions listed below. DPW submitted a grant proposal to Southern California Association of Governments (SCAG) on November 18, 2016 requesting support for the development of a Vision Zero Action Plan. DPH submitted a grant proposal to SCAG on the same date requesting support for the development of a Vision Zero Communications Plan, as well as support for a press event to launch a Vision Zero initiative. If SCAG awards these grants, funding will begin in July 2017. Additionally, DPW has already been selected for a Highway Safety Improvement Program grant to conduct additional collisions analysis. County departments will continue to collaborate on opportunities to seek grant funding for traffic safety initiatives, such as those described in Appendix A. However, dedicated funding will be necessary to expand traffic safety efforts and project implementation beyond current County and partner efforts.

The strategies and actions below describe specific next steps that would support the County in moving forward with an effective Vision Zero initiative.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with the Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Collaboration with internal and external partners will help ensure a successful Vision Zero initiative. A first step will be to create a partnership structure that can guide the development and implementation of Vision Zero programs and help identify and leverage resources. Regional partners may include SCAG, the Los Angeles County Metropolitan Transportation Authority, and the City of Los Angeles. State partners may include CHP, Office of Traffic Safety, Caltrans, and the Department of Motor Vehicles. Key community partners may include trauma hospitals, the American Automobile Association (AAA),

Mothers Against Drunk Driving (MADD), the Los Angeles County Bicycle Coalition (LACBC), and other community based organizations. A key lesson learned from the City of Los Angeles is the need for a single point-person and agency to provide coordinate a broad group of stakeholders.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County would identify specific engineering, enforcement, education, evaluation, and engagement strategies, along with timelines for implementation. Best practices from other jurisdictions indicate that having a completed Action Plan prepared before Vision Zero is publicly launched is critical. This allows for clear communication on the strategies and actions that will be prioritized to reduce traffic deaths and severe injuries. The Action Plan would be based on a literature and best practice reviews to identify effective strategies used by other jurisdictions. The Action Plan would target specific challenge areas (e.g. speeding), geographic areas (e.g. dense, urban areas) and demographic groups (e.g. young males) associated with concentrations of collisions involving fatalities and severe injuries in unincorporated areas. Development of the Action Plan would include outreach and engagement with community partners, County departments, partner agencies, and other stakeholders to seek input about the most effective strategies for reducing traffic deaths and severe injuries in unincorporated areas.

Prioritize interventions to address traffic fatalities; identify future analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context sensitive solutions for specific problems. This requires a holistic picture that goes beyond collision records and incorporates additional quantitative and qualitative data. For example, engaging with community members may indicate that collisions are being underreported in a certain neighborhood, which may be further confirmed by reviewing hospital intake data and conducting additional community surveys. Without a multi-pronged data analysis approach, areas experiencing severe and fatal collisions may be left out inadvertently or proposed solutions may not be in line with other community goals. This points to several data needs:

- Incorporate data from other County departments and regional partners to develop a more complete picture of traffic safety. This could also include data models to further understand appropriate engineering or program countermeasures.
- Engage community partners to understand and “ground truth” traffic safety issues and collect qualitative data. This process will help validate existing data, identify additional data sources, and implement community-driven projects.
- Bring data experts and community experts together to prioritize types of analysis and an implementation approach. This involves a joint conversation among many partners to identify how data can be used creatively and applied to problem-solving.
- Consider long-term data collection needs for all modes of travel, such as bicycle and pedestrian volumes.

Develop metrics and targets (June 2017). To gauge the success of this initiative, measurable metrics and targets can be developed for the County, similar to those utilized by the California Strategic Highway Safety (CSHS). CSHS is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan would position the County to effectively use a variety of innovative and culturally appropriate communication techniques aimed at behavior change around traffic safety. This Communications Plan would include the development of a Vision Zero website, public service announcements, branding, fact sheets, social and digital media, press kits, and talking points, and would include strategies for ongoing public education and outreach. Communications strategies could include leveraging existing media materials (e.g. from City of Los Angeles), as well as low-cost advertisement space on County bus shelters and bus circulars. The communications approach should reflect the diverse populations of Los Angeles County and address ways to reach audiences in a wide variety of geographies and languages.

Hold a press event to launch Vision Zero (June 2018). Once an Action Plan and Communications Plan are prepared and a website has been launched, a Vision Zero press event would help bring attention to the County's multi-sector campaign to reduce traffic deaths and severe injuries, and highlight future traffic safety initiatives. The event could feature elected officials, department and agency directors, community-based organizations, and survivors of traffic crashes.

Develop a regional approach to Vision Zero messaging and strategy implementation (February 2017 – ongoing). The unincorporated areas are disparate “islands” that vary in geography, climate, demographics, and land uses. A campaign to reduce traffic deaths would be most effective if behavior change messages were well-aligned and coordinated across the region, especially given that unincorporated area residents travel widely as part of their daily lives. Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, SCAG, the City of Los Angeles, and other jurisdictions, would have the greatest influence on social norms and encourage behavior change. Similarly, the County’s engineering, enforcement, and education strategies should be implemented in close coordination with regional partners to increase success.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address several traffic safety problems may require changes in State legislation. For example, automated speed enforcement, cameras that capture speeding and issue an automated citation, is not legal in California but has been shown to be effective in other states. The County could coordinate with other jurisdictions

and agencies to explore common legislative and policy solutions that would enhance traffic safety regionally.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). Reducing traffic deaths and severe injuries requires community-wide awareness and behavior change, as well as an institutional focus on traffic safety. People driving, walking, bicycling, and riding motorcycles face choices every day, such as whether to speed while driving or use their cell phones while in a crosswalk. Likewise, County staff make choices that impact traffic safety when planning and designing communities, and when developing education and enforcement programs. The County could help to promote choices that prioritize traffic safety through messaging aimed at the County workforce in County newsletters and on department websites. Similarly, a broad, shared policy direction would help ensure all County Departments have the opportunity to promote traffic safety.

APPENDIX A - FUNDING OPPORTUNITIES

Jurisdictions typically fund their efforts through a combination of grant resources, general funds, and changing existing internal processes or programs to align more closely with the Vision Zero program. The summary below highlights potential sources of funding and their uses that the County could pursue to support a Vision Zero effort. The County already pursues these sources for other transportation and safety projects.

State Highway Users Tax

The State Highway Users Tax, commonly referred to as the gasoline tax, is the primary source of funds DPW uses for ongoing operation and maintenance of roadways, safety projects and programs, and transportation improvement projects. The County's gasoline tax revenues have dropped from about \$190 million in fiscal year (FY) 2014-15 to about \$150 million in FY 2015-16, and are projected to be only about \$144 million in FY 2016-17 and FY 2017-18. This downward trend is expected to continue without State legislative action.

Measure R Local Return

Measure R is a half-cent County transportation sales tax, passed in 2008. The County receives approximately \$13 million annually. The funds, which are administered by the Los Angeles County Metropolitan Transportation Authority, can be used for all types of roadway projects and some non-infrastructure programs, including those that promote traffic safety.

Measure M Local Return

Measure M was passed by voters in November 2016 and is another half-cent County transportation sales tax that will begin July 1, 2017. The funds will be administered by the Los Angeles County Metropolitan Transportation Authority. There is a local return portion of Measure M that will distribute a percentage of the sales tax collected to Los Angeles County starting September 2017. The County expects to receive approximately \$14 million annually. Allocations and eligible projects have not yet been specified in detail. The County expects traffic safety projects to be an eligible use of funds.

Highway Safety Improvement Program (HSIP)

This Federally-funded program is a component of the "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and funds safety improvements. The program is administered by the State of California Department of Transportation on behalf of the Federal Highway Administration. DPW regularly applies for engineering projects through this source. Competitive projects are those that show high safety benefits (e.g. high crash reduction or modification factors) compared to project cost.

Office of Traffic Safety (OTS) Grants

The State's Office of Traffic Safety (OTS) offers grants to address distracted driving, alcohol impaired driving, motorcycle safety, and pedestrian and bicycle safety. OTS grants are a primary source of funding for the programs administered by CHP and Sheriff's Department, which are described within the report. OTS grants are on a two-year cycle, and can be challenging to administer.

Active Transportation Program

The Active Transportation Program (ATP) is administered by the California Department of Transportation (Caltrans). The purpose of the ATP is to encourage increased use of active modes of transportation (walking and bicycling), among all ages, and aims to increase the safety and mobility of non-motorized users through non-infrastructure programs and engineering projects. To date, this grant has been administered annually. DPW and DPH have applied for this grant in the past, and DPW applies for it regularly to build projects that promote safety.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) administers a Sustainability Planning Grant program, which funds planning and media campaigns related to active transportation, integrated land use, and green region initiatives (e.g. climate action plans, GHG reduction programs). The program provides direct technical assistance, rather than funds, which reduces the County's administrative burden. DPW applied for this program in November 2016 to support a media campaign and a Vision Zero Action Plan.



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

Attachment III



BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

March 16, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director, Public Health *Barbara Ferrer*

Mark Pestrella, PE
Director of Public Works
Mark Pestrella

SUBJECT: **REPORT BACK ON VISION ZERO MOTION (Item 41-B)**

On February 14, 2017, your Board approved a motion instructing the Departments of Public Health (DPH) and Public Works (DPW), in collaboration with other County departments and stakeholder agencies and nonprofit organizations, to: (1) implement the recommended strategies and actions described in the Vision Zero Report dated February 10, 2017, (2) establish a Vision Zero Steering Committee to coordinate and implement the initiative, (3) develop a Vision Zero Action Plan for unincorporated Los Angeles County, and (4) identify opportunities to secure long-term funding to sustain the Vision Zero initiative. The motion was approved as amended to include a report back with responses to questions from your Board.

To ensure that responses are based on best practices from other jurisdictions, as requested, meetings were conducted with representatives from the following organizations: City of Los Angeles Department of Transportation (LADOT), City of San Francisco Department of Public Health, and the national non-profit Vision Zero Network (VZN), which publishes briefs on best practices in Vision Zero implementation.

Prioritizing Safety with Existing Resources

Adopting a Vision Zero approach means acknowledging that business as usual is not enough and that systemic changes are needed in our traffic safety efforts to make meaningful progress. Central to this approach is the identification of potential safety problems on roadways and subsequent use of resources in a proactive and data-driven manner to implement solutions.

For transportation departments, this means using available resources to implement a capital improvement program that implements specific, data-driven safety improvements. For law enforcement agencies, enforcement efforts need to focus on the most dangerous traffic behaviors, such as speeding and driving under the influence. For education efforts, communication strategies need to target behaviors and populations most associated with collisions. Taken together, a new Vision Zero initiative can be initiated by shifting and better coordinating available resources for a more intentional safety focus.

Vision Zero Program Scope

Your Board requested information about the scope of the County's Vision Zero program and the total budget being allocated in terms of staff, communication plan, and corrective actions. A description of the program's general framework scope and resource needs are provided below. Because the County's Vision Zero effort is still in its preliminary stages, precise resource needs are not yet fully identified. Strategies prioritized in the Action Plan described below will inform the long-term budget needed. While departments will pursue every opportunity for grant funding, achieving reductions in traffic deaths and severe injuries may require additional County investments over the long term. It is likely that these costs will be offset by savings to the County associated with the prevention of traffic deaths and injuries, such as savings in medical costs, emergency services, legal and court costs, and congestion costs. According to the California Strategic Highway Safety Plan 2015-2019, the annual economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion.

Vision Zero Action Plan: The Action Plan will prioritize engineering, education, engagement, enforcement, and evaluation strategies and identify responsible parties, benchmarks, and timelines for achieving progress. County departments have secured grant funding to assist in developing the Action Plan. In addition, relevant departments will be dedicating staff to participate in the planning effort.

Vision Zero Communications Plan, Public Launch, and Media: Crafting an effective communications campaign that leads to real behavior change is complicated and requires a deep understanding of the steps people and communities will need to take to shift perceptions and actions. The Vision Zero Communications Plan will include innovative and culturally appropriate communication techniques and will position the County to launch Vision Zero publicly. A continuous online and media presence will help build awareness of Vision Zero and support culture change. A successful communications strategy will coordinate the campaign and messaging with other regional traffic safety partners such as the California Highway Patrol (CHP), Los Angeles County Metropolitan Transit Authority (Metro), Southern California Association of Governments (SCAG), the City of Los Angeles, and others.

Data Analysis for Project and Program Prioritization: Vision Zero is a data-driven initiative. Many sources of data must be combined (including CHP, hospital, and emergency medical services data) and considered to develop effective programs and projects and to achieve a more complete picture of traffic safety issues. As the region continues to change, collision patterns and concentrations will change. Consistent and iterative data analysis will be imperative to ensure we are allocating resources effectively.

Infrastructure Improvement Identification, Design, Implementation, and Maintenance: Dwindling dedicated resources for infrastructure projects present challenges to implementing existing projects, much less new Vision Zero projects. Dedicated funding for infrastructure project identification, design, implementation, and long-term operations and maintenance would allow the County to set realistic targets for safety improvements (e.g., implement a certain number of traffic safety projects annually).

Community Engagement and Community-Based Organization Support: Behavior change can only be achieved by building awareness among residents. Investments in long-term community outreach and engagement will allow us to develop more authentic relationships and culturally relevant materials. Furthermore, effective engagement and buy-in from community partners will allow safety projects, such as infrastructure improvements, to be promoted and more effectively implemented.

Program Expansion and/or Development and Implementation: Currently, the County and its partners have education, enforcement, and evaluation programs that support traffic safety goals. Some are implemented through competitive grant funds and others have dedicated funding. Through best practices research, the County and its partners will identify opportunities to expand the reach of our most effective programs and, as needed, develop new programs.

Dedicated Staff in Departments and Partner Agencies: Lead staff from each partner department or agency will be necessary to implement the Vision Zero Action Plan and sustain the initiative. Staff are needed to convene, facilitate, and organize meetings; coordinate County staff and regional and community partners; oversee communications efforts; develop and implement programs and action plans; identify, design, and implement infrastructure improvements; collect, analyze, and maintain high-quality data and communicate this information across a diverse body of stakeholders; and engage in and oversee community outreach.

Grant Writing and Administration: County departments have and will continue to seek grant funding sources to support traffic safety efforts, public education and outreach, and enhanced enforcement. This requires dedicated staff time to pursue and administer grants to support all program activities.

Potential Revenue Streams to Support Vision Zero

Your Board requested information about potential ongoing revenue sources for the County's Vision Zero initiative. DPW has identified the following opportunities for financing the County's Vision Zero efforts.

Senate Bill 1: If enacted, the bill would provide an additional \$200 million in annual funding to the County for the first 3 years for the repair and preservation of streets and roads, safety enhancement projects, active transportation, and other general transportation infrastructure needs. This is the most promising opportunity for continuing long-term financing for staffing and implementation of Vision Zero initiatives.

Measure M: This measure is the new half-cent transportation sales tax approved by Los Angeles County voters in November 2016, which allocates approximately \$3.5 billion over 40 years to Metro and the County's subregions for various active transportation, first/last mile, complete

streets, and modal connectivity programs and projects. Measure M does not provide for a specific formula allocation of these funds to the County or cities. However, through its presence and participation in essentially all of the subregions, the County will be well-positioned to advocate for funding of eligible projects that incorporate Vision Zero initiatives.

Grant Funds: The County will continue to apply for various competitive grant programs to support Vision Zero, such as those offered by the State's Highway Safety Improvement and Active Transportation Programs. Grant funds are available for public education and outreach efforts, and potential sources include the State Office of Traffic Safety and SCAG. General funds may be needed for any local matches required by these grants. In addition, grant funds will be sought to support ongoing coordination of the Vision Zero initiative within the County.

County Transportation Funds: Ongoing funds eligible to staff to implement Vision Zero initiatives include Road funds (gas tax), Proposition C Local Return (with nexus to transit), Measure R Local Return, and Measure M Local Return for which revenue begins in FY 2017-18.

The County's Road funds, Proposition C Local Return, and Measure R Local Return funds are currently fully committed to ongoing operation, maintenance, and safety programs critical to the quality of life in unincorporated communities and to Supervisorial District Transportation Improvement Program (TIP) projects. Due to the steady decline of the County's gasoline tax revenues from \$190 million in FY 2014-15 to a projected \$143 million in FY 2017-18, DPW has had to defer \$74 million in previously planned TIP projects and place a heavier burden of TIP financing on the limited Proposition C and Measure R Local Return funds and future Measure M Local Return proceeds. Further, Measure M has a requirement that local agencies contribute 3 percent of the cost of the new Measure M transit lines in their jurisdictions. The County's obligation for this is estimated to exceed \$62 million through year 2029.

Vision Zero Budget Allocations in the City of Los Angeles

Vision Zero jurisdictions take a combination of approaches for funding, including both dedicated annual funding and grant funding. Approaches to start-up costs vary across jurisdictions.

In the City of Los Angeles, the LADOT initially assigned Vision Zero to existing engineering staff, but soon after hired a Principal Project Coordinator to lead the initiative full-time. The Principal Project Coordinator previously led the Mayor's Great Streets Initiative, had experience leading cross-departmental efforts, and was given authority to work with other department directors to incorporate Vision Zero into their existing work.

The City of Los Angeles 2016-2017 budget dedicates \$3.6 million for Vision Zero projects, programs, and staff salaries. These funds were allocated through an innovative inter-departmental budget process within several months of publicly launching Vision Zero.

The City of Los Angeles 2016-2017 Vision Zero funds are being distributed as follows:

- \$2.5 million to LADOT: Continuous funding for six Vision Zero staff, street maintenance, safety improvement projects, and speed zone survey work on the City's high-injury network.
- \$264,000 to Bureau of Engineering (BOE): Engineering design and survey work and staff to manage safety projects on the high-injury network.

- \$316,000 to Bureau of Street Lighting (BSL): Staff and street lighting projects along the high-injury network and at top 50 schools in the Safe Routes to Schools Program.
- \$500,000 to Bureau of Street Services (BSS): Construction of safety improvements, such as pedestrian refuge islands, and installation of curb ramps.

The City's current Vision Zero budget is also supplemented by the following grant funds:

- \$500,000 from the California Office of Traffic Safety for Vision Zero Education and Outreach
- \$1 million from the California Active Transportation Program for a Vision Zero Education Campaign, which is part of a larger \$2.2 million Safe Routes to School Education Programs grant
- \$400,000 from SCAG for ongoing education and outreach campaign activities

Location of County Vision Zero Efforts

Your Board sought information on where the County's Vision Zero initiative would be located, within DPW or DPH, and how other jurisdictions have approached this issue. Vision Zero requires multiple sectors to come together to share and use data consistently, define clear responsibilities, break down silos, participate in joint decision making, develop shared objectives, and unite behind common goals. Fostering a sense of shared ownership for Vision Zero outcomes is necessary for success. In this sense, each involved agency must play a lead role.

As the County's transportation agency responsible for building and maintaining unincorporated area roadways, DPW must play a leading role in this initiative. Vision Zero is based on the understanding that the speed at which pedestrians, bicyclists, or vehicle occupants are struck is the fundamental factor in the severity of injuries sustained. As current law prohibits agencies from arbitrarily setting or lowering speed limits, the County's expanding transportation system must be designed to discourage speeding and additional roadway features must be incorporated into our existing roadway networks to promote safe behavior and protect human life. DPW has developed a Collision Geodatabase capable of mapping locations where traffic collisions have occurred and identifying hot spots experiencing high concentrations of collisions. For these reasons, strong leadership from DPW is paramount.

As the County's public health agency, DPH's mission is to protect lives and promote health. DPH staff members are trained in conducting population-level analysis and surveillance and in collaborating with a wide array of stakeholders, such as local jurisdictions, regional agencies, and community stakeholders. DPH regularly plays the role of "backbone organization" on efforts requiring multiple sectors to commit to a common agenda to solve a specific health or social problem. Effective backbone support includes guiding vision and strategy; convening, facilitating, and coordinating meetings and aligned activities; establishing shared measurement practices; building public will; advancing strategic policy; and mobilizing funding. DPH staff have extensive experience leading such cross-sector initiatives. For these reasons, strong leadership from DPH is also paramount.

DPH and DPW recommend basing the Vision Zero Initiative leadership structure on the City of San Francisco's model. In San Francisco, the transportation and public health agencies co-lead the City's Vision Zero Task Force and have worked together to identify resources to fund the

initiative's activities. San Francisco's agencies credit this partnership with providing essential leadership in breaking down silos and advancing Vision Zero programs.

Another key lesson learned from other jurisdictions is the need for a single point-person and agency to coordinate the initiative. Therefore, DPW will allocate existing engineering staff to serve as the initial County Vision Zero Coordinator. As the initiative progresses, additional resources for dedicated Vision Zero staff may be required.

Partnering with Neighboring Cities

Your Board has requested a status update on collaborative efforts with "hot-spot" cities and how we can leverage our resources in partnership with these cities.

Existing Relationships and Resources

Many County departments are currently working with our local jurisdictions in different capacities that could be leveraged for the Vision Zero initiative.

Chief Executive Office: Has general services agreements with all cities within the County except for the City of Los Angeles. These agreements provide a mechanism for the cities to contract with County departments for services

DPW: Provides traffic advisory services to some contract cities under the general services agreements. Local jurisdictions can pay DPW to provide engineering design service support for a project in their own jurisdiction. In addition, DPW often works with jurisdictions that border unincorporated communities on project development and scoping. DPW also participates in regional groups where other jurisdictions have a presence, including Metro's Streets and Freeways Committee, Subregional Councils of Governments (COGs) meetings, and others.

DPH: Provides pass-through grant funding and technical assistance to County jurisdictions for a variety of health-focused initiatives, including active transportation planning; policy efforts related to tobacco prevention, nutrition education, and access to healthy foods; and organization of emergency response and communicable disease response. DPH serves as the Public Health Department for 85 of the 88 incorporated cities in the County, excluding Long Beach, Pasadena, and Vernon, and also works regularly with community-based organizations across the County. DPH is currently working closely with the City of Los Angeles on its Vision Zero Initiative.

CHP: Provides traffic enforcement services to unincorporated area communities, but also provides services and implements educational programs targeting other Los Angeles County jurisdictions.

Sheriff's Department: Provides crime enforcement services to unincorporated areas. For certain contracted incorporated jurisdictions, the Sheriff's Department provides both crime and traffic enforcement services.

Department of Health Services: Provides hospital services for all of the County, including residents of incorporated cities.

Fire Department: Provides services for unincorporated communities, and also provides fire services to additional Los Angeles County jurisdictions on a contract basis.

Leveraging Resources and Partnering

The County already collaborates with other jurisdictions and intends to continue doing so within the Vision Zero initiative. Several Los Angeles County jurisdictions have moved ahead with their own Vision Zero initiatives and can provide lessons learned and resources, such as media campaigns and project linkages. These jurisdictions include Los Angeles, Long Beach, and Santa Monica.

In order for the County to effectively promote Vision Zero broadly and provide supportive services to other jurisdictions, it must focus initially on creating a broader understanding of Vision Zero among County departments, establishing cross-agency/departmental relationships, institutionalizing approaches, and identifying short- and long-term resources for an unincorporated area effort. Once the County has a well-articulated and understood Vision Zero plan and has built broader relationships with existing Vision Zero cities and regional agencies, it will be in a better position to support other cities in traffic safety efforts.

Future opportunities where the County could play a supportive role include:

- Providing countywide data gathering and analysis services
- Designing regional projects that traverse multiple jurisdictions
- Providing creative concept material for use by incorporated jurisdictions
- Speaking at Subregional Councils of Governments to emphasize a traffic safety lens in project identification, development, and implementation
- Hosting learning opportunities for local jurisdiction staff, such as trainings and webinars
- Coordinating enforcement efforts more closely (e.g., Driving Under the Influence (DUI) Checkpoint deployment)

Summarizing Data

Your Board requested information about further geographic breakdown of persons who have been killed or severely injured in unincorporated areas. As the County moves forward with Vision Zero, it may be useful to sort data by certain communities or geographic areas, such as Service Planning Areas, within which disproportionately high levels of collisions have occurred. Currently, the DPW's Vision Zero GIS Application includes point-specific collision data that can be grouped in a number of ways, such as primary collision factor, involved parties, mode of travel, and gender. Boundary data could be added to this application in the future, as needed, to help define next steps in program development, implementation, and resource allocation.

We will develop an annual progress report to your Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of our Vision Zero Action Plan, and a description of detailed resource needs. If you have any questions or need additional information, please let us know.

BF:ja

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

Muntu Davis, M.D., M.P.H.
Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 288-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

March 27, 2019

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director of Public Health

Mark Pestrella
Director of Public Works

SUBJECT: **2018 VISION ZERO ANNUAL REPORT**

On February 14, 2017, the Board of Supervisors (Board) approved a motion instructing Public Works and the Department of Public Health (DPH), in collaboration with other County departments, stakeholder agencies, and nonprofit organizations to:

- Implement the recommended strategies and actions described in the Vision Zero Report and Board memo dated February 10, 2017 (see attached);
- Develop a Vision Zero Steering Committee and partnership structure;
- Develop a Vision Zero Action Plan for unincorporated communities;
- Identify opportunities to secure long-term funding to sustain the Vision Zero initiative.

In response to the motion, a report was issued on March 16, 2017, which committed to provide an annual progress report to your Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of the action plan, and a detailed description of resource needs. This report provides an overview of the Vision Zero efforts in 2018.

Between January 1, 2018, and December 31, 2018, there were 71 fatal collisions on unincorporated County-maintained roadways. Between 2013 and 2017 traffic fatalities increased by 36 percent and severe injuries increased by 33 percent in the unincorporated communities.

STEERING COMMITTEE AND PARTNERSHIP STRUCTURE

The Vision Zero teams and committees were initially structured for the development of an action plan and include a Vision Zero Coordinating Team, Vision Zero Core Team, and a Vision Zero Action Plan Advisory Committee. These groups are described in more detail below.

This structure is expected to be revised in 2019, once the action plan is developed and staff shift their focus on the implementation phase. Developing a structure for routine coordination and accountability among County departments and agencies will be essential to ensure proper implementation of the action plan, as well as for tracking progress and challenges.

Vision Zero Coordinating Team

Key staff from DPH and Public Works formed a coordinating team to oversee the development of the action plan. Staff activities included project management; research to identify best practices; gathering, cleaning, and analyzing of data; meeting individually with key departments; convening stakeholders; drafting and editing the action plan; and securing grant funding to support efforts.

Vision Zero Core Team

The core team, composed of staff and administration from Public Works and DPH, met three times during 2018. This team provided guidance to the coordinating team at key decision-making points and advised on data analysis, development of actions, engagement with key agencies, and funding opportunities. The core team collaboratively assisted with the development of the initial actions in the draft action plan and began reviewing funding needs for implementation.

Vision Zero Action Plan Advisory Committee

The Vision Zero Action Plan Advisory Committee (APAC) is a multiagency group that is co-led by DPH and Public Works, to advise on the overall direction of the action plan. With increased participation from additional departments, the Vision Zero APAC is now comprised of representatives from DPH, Public Works, Fire, Los Angeles County Sheriff's Department, Department of Health Services, Department of Regional Planning, Department of Parks and Recreation, Beaches and Harbors, Internal Services Departments, Los Angeles County Chief Executive Office; California Highway Patrol (CHP), Board offices, and County Counsel. In 2018, Vision Zero APAC representatives met three times to discuss the development of the actions in the draft action plan; to identify lead departments to carry out the actions; and, to establish evaluation metrics for those actions. Finally, Vision Zero APAC representatives were responsible for circulating the draft action plan within their respective departments for review.

ACTION PLAN

With the support of a \$50,000 technical assistance grant from the Southern California Associations of Governments, a consultant was onboarded in March 2018 to assist with the development of the draft action plan. In September 2018 DPH and Public Works collaboratively produced the first draft of the action plan for review by the Vision Zero APAC. The second draft of the action plan was then distributed for review in November 2018.

The draft action plan sets the goal of eliminating traffic fatalities on unincorporated roadways by 2035 and includes over 60 actions organized into the following five overarching objectives: (1) enhance County processes and collaboration; (2) foster a culture of traffic safety; (3) address health inequities and protect vulnerable users; (4) collaborate with communities to enhance street safety; and (5) be transparent, responsive, and accountable.

During individual meetings with the departments and agencies, traffic safety best practices were reviewed. For example, discussions with the CHP entailed developing traffic enforcement strategies under Vision Zero in tandem with education and enforcement actions. Additionally, discussions with the Office of Cannabis Management focused on strategies to prevent drugged driving, and, discussions with Public Works' Green Streets Task Force focused on opportunities to incorporate stormwater capture elements into traffic safety enhancement projects.

Based on collision data analysis from the last 5-years, corridors experiencing concentrations of fatal and severe injury collisions (Collision Concentration Corridors) were identified. According to the analysis, 50 percent of fatal and severe collisions were found to be concentrated on 125 miles of roadway or about 3.7 percent of the total roadway network maintained by the County. To further focus resources on the greatest needs, the Collision Concentration Corridors were further prioritized by ranking the corridors and assigning additional weight to those that experienced a higher number of fatal collisions, higher numbers of collisions involving people walking or biking, and/or a higher number of collisions that occurred in disadvantaged communities. These Priority Corridors will be the focus for Vision Zero-driven infrastructure improvements and programs over the first 5 years of the Vision Zero initiative.

Following a public review and comment period of the draft action plan, the final action plan is expected to be submitted to the Board in the summer of 2019.

COMMUNITY OUTREACH AND ENGAGEMENT STRATEGY

In 2018 DPH and Public Works convened three meetings with a number of non governmental organizations, including the American Automobile Association, American Association of Retired Persons, First 5 California, Bike San Gabriel Valley, the Los Angeles County Bicycle Coalition, People for Mobility Justice, and others, to solicit input on potential actions and discuss how to best engage the broader community. A survey

was also conducted on traffic safety perceptions and experiences and distributed at community meetings in a number of unincorporated areas. Results of the survey will be included in the action plan.

DPH and Public Works hosted information booths at the Rosemead Boulevard Complete Streets event and at the Camina en Walnut Park Demonstration event. The information booths provided the public with an opportunity to learn about the types of engineering treatments that may be implemented through the Vision Zero initiative. The Camina en Walnut Park event provided residents with the opportunity to physically experience engineering treatments, such as protected bike lanes, curb extensions, and high-visibility crosswalks, proven to reduce fatal and severe injury collisions.

CROSS-AGENCY LEGISLATIVE AND POLICY STRATEGY

Strategies to address traffic safety problems may require changes in State law. In August 2018 the County pursued to support State Assembly Bill 2363 to convene a State-level Zero Traffic Fatalities Task Force that will analyze the existing process for establishing speed limits in California and recommend whether an alternative method should be considered. DPH and Public Works continued to monitor and provide updates on legislation consistent with Vision Zero and the County's legislative priorities.

FUNDING

DPH and Public Works submitted various grant applications to Caltrans' Active Transportation Program, Caltrans' Highway Safety Improvement Program, Southern California Associations of Governments' Sustainability Planning Grant, and the California Office of Traffic Safety's Grant Program, as a first step in the implementation process.

It is anticipated that the final action plan will be submitted to the Board with a description of required resources to begin implementing each of the actions. While it is anticipated that some of the actions can be absorbed as part of current workloads, most proposed innovative programs will require new resources. Similarly, engineering safety enhancements will require additional resources since it is anticipated that funding from grant opportunities and allocations from the County's Road Fund will not be sufficient.

The 2019 annual report will be provided to your Board no later than February 14, 2020. If you have any questions or need additional information regarding the progress of the Vision Zero initiative, please contact us.

BF:MP

Attachment

c: Chief Executive Officer
 County Counsel
 Executive Officer, Board of Supervisors



Attachment



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

February 10, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed. *Barbara Ferrer*
Director

SUBJECT: **REPORT ON VISION ZERO IN LOS ANGELES COUNTY**

On October 4, 2016, your Board directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County Departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas. The attached report details the strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas. It is the product of collaborative efforts of the Departments of Public Health, Public Works (DPW), Regional Planning, and Health Services; Fire Department; Sheriff's Department, Chief Executive Office, and the California Highway Patrol (CHP). Below is a summary of the report.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths, 10.3 traffic deaths per 100,000 population. The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero sees traffic deaths and injuries as predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement, and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement, and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were 63,067 distinct collisions, with 1,429 involving at least one severe injury and 300 causing a fatality. 1,566 people were severely injured (six percent of victims) and 333 were killed (one percent of victims). Collision heat maps show a concentration of pedestrian-involved fatal and severe collisions in the southern part of the County in dense urban centers, motorcycle-involved fatal and severe collisions along rural mountain roads, and both bicycle- and vehicle-involved fatal and severe collisions throughout unincorporated areas.

The report identifies key challenge areas requiring additional data analysis that will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements as Vision Zero is implemented. Key issues include: unsafe speeds, impaired driving, distracted driving, hit and runs, young males, motorcyclists, and pedestrians. For example, if speeding is found to be a primary issue on a corridor, traffic calming strategies such as roadway reconfigurations, traffic signals, curb extensions, and enhanced speed enforcement, may be possible solutions.

Recommended Strategies and Actions

Implementation of the strategies and actions described in the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas. Actions include: developing a steering committee and partnership structure to implement the program; creating a Vision Zero Action plan to identify specific engineering, enforcement, engagement, education, and evaluation strategies; and working to secure funding to implement Vision Zero strategies and actions.

If you have any questions or need additional information, please let me know.

BF:ja

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

Report to the Board of Supervisors

County Vision Zero Opportunities

Prepared by the Department of Public Health

February 10, 2017

CONTENTS

Acknowledgments.....	3
Executive Summary.....	4
Background	4
Preliminary Data Analysis and Challenge Areas.....	4
Recommended Strategies and Actions	5
Introduction	8
Report Development Process	8
Part I – Background and Opportunities	9
Motor Vehicle Crashes	9
Vision Zero and Related Traffic Safety Initiatives	10
Known Challenge Areas.....	11
Developing an Effective Approach.....	11
Alignment with Existing Plans and Policies	13
Part II: Preliminary Data Analysis.....	16
Background	16
Approach to Initial Analysis.....	17
Findings	19
Big Picture.....	19
Temporal, Modal, and Demographic	21
Contributing Factors.....	33
Summary of Challenge Areas	36
Part III: Current Traffic Safety Efforts.....	37
Education	37
Enforcement.....	40
Engagement (Community Outreach & Communications)	41
Engineering	42
Evaluation & Data	42
Part IV: Recommended Strategies and Actions	43
Appendix A - Funding Opportunities	47

ACKNOWLEDGMENTS

Chief Executive Office

Mark Greninger

California Highway Patrol

Chris O'Quinn
Heather Hoglund
Jose Nunez
Scott Poyner

Los Angeles County Department of Health Services

Gregory Polk
Richard Tadeo

Los Angeles County Department of Public Health

Alexis Lantz
Andrea Welsing
Angelo Bellomo
Chanda Singh
Christine Li
Cindy Harding
Doug Morales
Elizabeth Rhoades
Isabelle Sternfeld
Jean Armbruster
Jennifer Osborn
Kimberly Porter
Natalie Jimenez
Rachel Tyree
Tony Kuo
Wesley Ford
Lisa Tse

Los Angeles County Sheriff's Department

Dana Chemnitzer
Darren Harris
Jim McDonnell
Robert Hill
Scott Johnson

Los Angeles Department of Transportation

Jacqui Swartz
Michael Manalo
Nat Gale
Tim Fremaux

Los Angeles County Department of Public Works

Alan Fong
Arnel Dulay
Coby Skye
Dean Lehman
Emiko Thompson
Gilbert Tsoi
John Calas
John Halaka
John Ickis
John Walker
Khoa Nguyen
Mary Reyes
Pat Proano
Patrick Anderson
Pete Flores
Rudy Lee
Shari Afshari
Youn Sim

Los Angeles County Department of Regional Planning

Connie Chung
Daniel Hoffman
Nick Franchino
Richard Bruckner
Susan Tae
Svetha Ambati

Los Angeles County Fire Department

Daryl Osby
Debbie Aguirre
Janna Masi
John Todd
Keith Mora
Mark Savage
Philip Cocker
Ricky Lewis
Tim Smith
Wally Collins

EXECUTIVE SUMMARY

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD), Health Services (DHS), Regional Planning (DRP), Chief Executive Office (CEO), and the California Highway Patrol (CHP). DPH and DPW collaborated in conducting preliminary data analysis. DPH took the lead in preparing this report, which provides strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the U.S. Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero assumes that traffic deaths and injuries are predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were:

- 63,067 distinct collisions involving 27,786 victims
- 1,429 collisions involved at least one severe injury

- 1,566 people severely injured (six percent of victims)
- 300 collisions involving at least one fatality
- 333 people killed (one percent of victims)

The report also identifies key challenge areas that warrant additional data analysis. Additional analysis will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements. Challenge areas include:

- *Unsafe Speeds.* Speed was listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- *Impaired driving.* Driving under the influence of alcohol or drugs is involved in only eight percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes.
- *Distracted driving.* Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores a need for a coordinated approach to capture information on and to prevent distraction.
- *Hit and runs.* Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for behavior changes by motorists.
- *Young males.* Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions.
- *Motorcyclists.* 20 percent of fatal and severe collisions involved a motorcyclist. Concentrations of fatal and severe collisions were found on rural / mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- *Pedestrians.* 17 percent of fatal and severe collisions involved pedestrians; youth under age 19 and people 55 years and over were overrepresented as victims. Concentrations of fatal and severe collisions were found in both urban and rural areas.

Recommended Strategies and Actions

The County team recommends the strategies, actions, and timelines outlined below.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with your Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County is needed to identify specific engineering, enforcement, education, engagement and evaluation strategies and timelines. Further, the plan will communicate the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries.

Prioritize interventions and identify future data analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context-sensitive solutions for specific problems. Action steps include engaging community partners to “ground truth” safety issues; developing a project prioritization process; and identifying additional long-term data collection and analysis needs.

Develop metrics and targets (June 2017). To gauge the success of this initiative, develop measurable metrics and targets for the County similar to those utilized by the California Strategic Highway Safety Plan which is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan that describes innovative and culturally appropriate communication techniques to change behavior around traffic safety is needed. This would include the development of a website, public service announcements, branding, fact sheets, social and digital media, press kits, and would include strategies for ongoing public education and outreach.

Hold a press event to launch Vision Zero (June 2018). A Vision Zero press event would bring attention to the County’s multi-sector campaign to reduce traffic deaths and severe injuries and highlight what the County does and plans to do to address the problem of traffic safety.

Develop a regional approach to messaging and strategy implementation (February 2017 – ongoing). Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, Southern California Association of Governments, City of Los Angeles, and other jurisdictions would have the greatest impact in creating behavior change.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address traffic safety problems may require changes in State legislation, such as automated speed enforcement. The County should coordinate with agencies regionally to explore common legislative and policy solutions.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). The County should help to promote choices that prioritize traffic safety through messaging aimed at the County workforce including messages in County newsletters, on department websites, and on County vehicles.

Secure funding to implement Vision Zero strategies and actions (February 2017 – ongoing). A single County point-person is needed to convene the Steering Committee and to coordinate with community and regional stakeholders. Funding will also be needed to develop and implement a Vision Zero Action Plan, communications strategy, and expand traffic safety efforts.

Conclusions and Next Steps

Implementing the strategies and actions described above and further in Part IV of the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas.

INTRODUCTION

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back in 120 days on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

This "County Vision Zero Opportunities" Report examines how Vision Zero could be implemented within County unincorporated communities. The report is organized into four parts:

Part I: Background and Opportunities: Provides an overview of traffic-related fatalities, severe injuries, and key approaches for addressing the problem.

Part II: Preliminary Data Analysis: Describes sources of data that could support a County Vision Zero Initiative and includes preliminary findings analyzing 5-years-8 months of collision data.

Part III: Current County Traffic Safety Efforts: Provides an overview of engineering, education, engagement, enforcement, and evaluation/data programs administered by County agencies and their partners that support traffic safety in unincorporated Los Angeles County.

Part IV: Recommended Strategies and Actions: Based on County staff and partner expertise, this section describes recommended strategies and actions for a County Vision Zero initiative.

Report Development Process

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD, Health Services (DHS), Regional Planning (DRP), California Highway Patrol (CHP), and the Chief Executive Office (CEO). The goals of these meetings were to: 1) learn about the County's existing traffic safety education and enforcement programs; 2) learn about the County's existing communications resources and best practices; 3) tap County staff knowledge about how to design an effective Vision Zero initiative for unincorporated areas; and 4) get departmental input into this Board report. DPH and DPW also formed a "Core Team," which met every two weeks to prepare for the larger partner meetings and to develop this Board report.

PART I – BACKGROUND AND OPPORTUNITIES

Motor Vehicle Crashes

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). More than three times as many people die in traffic crashes in the U.S. as in the United Kingdom (2.8 traffic deaths per 100,000 population). If the U.S.' MVC death rate was equivalent to the best performing country (Sweden, 2.7 per 100,000 population), an estimated 24,000 lives could be saved annually and an estimated \$281 million in direct medical costs averted.¹

There has been a general downward trend in traffic fatalities in the U.S. over the last decade. This could be related to fluctuations in gas prices and unemployment rates (when gas prices and unemployment are high, people tend to drive less) and vehicle technology that better protects passengers in the event of a collision. Unfortunately, this trend is now reversing. Traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015.² Early estimates of traffic deaths for 2016 indicate a continued increase.³

In Los Angeles County as a whole, motor vehicle crashes are the leading cause of death for children five to 14 years old and the second leading cause of death for children one to four years old; young people 15 to 24 years old; and adults 25 to 44 years old. Between January 1, 2011 and August 31, 2016, at least 333 people lost their lives on roadways in County unincorporated areas and another 1,566 were severely injured.⁴ In addition to the tragic human costs, the economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion dollars.⁵

¹ Sauber-Schatz EK, Ederer DJ, Dellinger AM, Baldwin GT. Vital Signs: Motor Vehicle Injury Prevention — United States and 19 Comparison Countries. MMWR Morb Mortal Wkly Rep 2016;65. DOI: <http://dx.doi.org/10.15585/mmwr.mm6526e1>.

² National Center for Statistics and Analysis. (2016, August). 2015 motor vehicle crashes; Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 318) Washington, DC: National Highway Traffic Safety Administration.

³ National Center for Statistics and Analysis. (2016, September). *Early estimate of motor vehicle traffic fatalities for the first half (Jan- Jun) of 2016*. Crash Stats Brief Statistical Summary. Report No. DOT HS 812 332). Washington, DC: National Highway Traffic Safety Administration.

⁴ Data from Department of Public Works' Collision Geodatabase, based on California Highway Patrol records from 1/1/11 to 8/31/16 (analyzed 12/13/16)

⁵ California Department of Transportation. California Strategic Highway Safety Plan 2015 - 2019.

Vision Zero and Related Traffic Safety Initiatives

Vision Zero is a strategy that aims to reduce or eliminate traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has been adopted widely across Europe and is now gaining momentum in many American cities. Vision Zero creates a new vision for prioritizing street safety. Traffic deaths and severe injuries are viewed as predictable and preventable, and goals, measurable objectives, and timelines for eliminating them are created. These strategies include engineering, enforcement, education, and evaluation approaches, which require collaboration across a wide variety of sectors including public health, public works, communications, and law enforcement. In addition, community engagement and equity are important overarching approaches to successful implementation of Vision Zero.

In August 2015, the City of Los Angeles launched a Vision Zero Initiative as the result of a Mayoral Directive that set a city goal of eliminating all traffic deaths by 2025 and reducing deaths by 20 percent by 2017. The Los Angeles County Public Health Department has worked closely with the City to launch and implement this initiative, including helping to develop Los Angeles' Vision Zero Action Plan, which outlines specific implementation strategies and timelines. The cities of San Francisco, New York, Portland, Seattle, and Chicago have also established Vision Zero initiatives in the past five years. In Los Angeles County, a number of our 88 local jurisdictions have adopted Vision Zero goals, including Long Beach and Santa Monica.

Similarly, "Toward Zero Deaths" is a traffic safety initiative in the United States related to Vision Zero. Spearheaded primarily by state and federal government agencies, such as the Federal Highway Administration (FHWA), this approach shares a strategic vision of eliminating fatalities and serious injuries through a data-driven, interdisciplinary approach of education, enforcement, engineering, and emergency services.

In California, the California Department of Transportation (Caltrans) regularly develops and updates the California Strategic Highway Safety Plan (SHSP), a statewide data-driven plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and severe injuries. The SHSP affects all public roads (State, local, and Tribal) and all users (motorists, pedestrians, bicyclists, and motorcyclists). The goal of the SHSP is to move toward zero deaths; measurable objectives include a three percent annual reduction in the number and rate of fatalities and a 1.5 percent annual reduction in the number and rate of severe injuries.

Known Challenge Areas

Factors that influence fatality rates vary from place to place; however, a number of “challenge areas” have been identified nationally, statewide, and regionally. For example, the California Strategic Highway Safety Plan identifies alcohol and drug impairment; speeding and aggressive driving; distracted driving; pedestrians; bicyclists; motorcyclists; young drivers; and aging drivers, among others, as challenge areas to be addressed statewide. As the County conducts data analysis for the unincorporated areas to design programs and infrastructure that support traffic safety, it will be beneficial to examine best practices developed by other jurisdictions.

Developing an Effective Approach

Vision Zero has been effective in other jurisdictions and countries due to the multidisciplinary approach that brings together multiple government sectors with community leaders and stakeholders to identify solutions. Strategies are implemented and then evaluated in an iterative process to identify whether they are having the desired effect of saving lives. Summarized below are key approaches behind effective Vision Zero initiatives.

Safe streets are livable streets. Vision Zero is typically well-aligned with jurisdictions’ goals of making communities livable, walkable, economically vibrant, and sustainable. This allows for Vision Zero strategies to be seamlessly incorporated into existing work programs, and to allow for new projects and programs where human life and safety are the explicit highest priorities.

Vision Zero strategies are data-driven. Essential to the Vision Zero approach is that safety improvements and programs must be based on robust, longitudinal data analysis that identifies patterns of traffic deaths and severe injuries, as well as the primary crash factors associated with these crashes, such as speeding, left turns, lack of marked crosswalks, and red light running. This allows for targeted improvements and programs that address the specific problem(s) causing fatal and severe injury crashes.

Roadways can be designed to save lives. Once specific factors associated with crashes are understood, engineers can identify potential life-saving improvements to address the problems, i.e. engineering solutions that are known to be effective for specific crash patterns. A principle of Vision Zero is that humans will always make mistakes, but corridors can be designed and re-engineered to minimize deadly mistakes and make it challenging to engage in dangerous behavior, such as speeding. Vehicle speed is a particularly important factor to consider in roadway design because it is a fundamental predictor of

crash survival. If a pedestrian is hit by a car going 20 miles per hour (MPH), the pedestrian's risk of death is five percent; if the car is traveling at 40 MPH, the pedestrian's risk of death is 80 percent.⁶

Evaluation is essential. Tracking progress over time makes it possible to identify whether a program or infrastructure improvement is working to address the safety concern. For example, once engineering improvements have been installed along a corridor or at priority locations, engineers can continue to collect data to assess whether the improvements are addressing the identified crash factors. Similarly, evaluating specific enforcement efforts over time can help enhance programs. With a goal of zero traffic deaths, new issues may emerge over time, requiring consistent data collection and evaluation to monitor traffic safety.

Communications can drive culture change. Reducing traffic deaths requires a shift in public perception from accepting traffic deaths as unavoidable to an awareness that saving human lives is everyone's responsibility. A widespread communications campaign coupled with education strategies that target key audiences can create this shift within the general population, as well as help drive culture change within institutions.

Community engagement and an equitable approach are fundamental. Analysis done by the City of Los Angeles indicates that many of the areas with the poorest health outcomes also have a disproportionate number of severe and fatal injuries from traffic collisions. Furthermore, these communities may have other more pressing needs beyond traffic safety and/or may distrust government. An effective Vision Zero initiative considers these factors, and engages residents in developing strategies that will be effective in their communities. It is also imperative to continually re-engage the community to ensure that strategies are working as planned.

Enforcement supports policy approaches. In addition to designing safe streets and creating education and awareness campaigns, enforcement can help ensure that traffic laws are followed. Because low-income communities and communities of color may have high rates of traffic deaths and injuries, Enforcement approaches should be context sensitive, especially when working in high-burdened communities. For example, enforcement could include warnings rather than tickets to avoid disproportionate burden of traffic violation fines on low-income residents. Though not currently legal in California, tools like automated speed enforcement can be effective at reducing crashes.⁷

⁶ US Department of Transportation, National Highway Traffic Safety Administration. Literature Review on Vehicle Speeds and Pedestrian Injuries. DOT HS 809 021. October 1999. Available at: <https://one.nhtsa.gov/people/injury/research/pub/HS809012.html> (Accessed 1/6/17)

⁷ Other jurisdictions have reported declines in speeding and/or collisions due to ASE. Available at: <https://www.sfmta.com/sites/default/files/projects/2016/ASE%20Fact%20Sheet%202.5.16.pdf> (Accessed 1/9/17)

Alignment with Existing Plans and Policies

Adopting a Vision Zero approach would be consistent with County plans, policies, and goals and represents an opportunity to implement established County priorities.

Community Health Improvement Plan (CHIP), 2015 - 2020: DPH's CHIP is a strategic plan for improving health in Los Angeles County. CHIP establishes a health improvement agenda for DPH in collaboration with partners from different sectors. A primary goal of CHIP is to reduce the number of deaths and severe injuries resulting from traffic collisions through the implementation of policies and programs that promote safety.

Healthy Design Ordinance, 2012: This ordinance, developed by the Department of Regional Planning (DRP), changed the County's zoning and subdivision regulations to increase levels of physical activity and reduce obesity rates. To effectively promote physical activity, the Healthy Design Ordinance promotes safe, convenient, and pleasant places for people walking and bicycling.

Los Angeles County General Plan, 2035: Developed by DRP and adopted by the Board of Supervisors in 2015, the County's General Plan includes a number of elements that promote an increase in walking and biking and a reduction in vehicle miles traveled, including:

- ***Mobility Element:*** The California Complete Streets Act of 2008 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, public transit users, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit.
- ***Bicycle Master Plan:*** A sub-element of the Mobility Element, the Bicycle Master Plan guides the implementation of proposed bikeways, bicycle-friendly policies, and programs to promote bike ridership across all ages and skill sets. The Plan's implementation program prioritizes projects based on various factors including both crash data and obesity rates.
- ***Air Quality Element:*** Air pollution and climate change pose serious threats to the environment, economy, and public health. The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the goals of the Air Quality Element.
- ***Community Climate Action Plan (CCAP):*** A sub-element of the Air Quality Element, the Community Climate Action Plan establishes actions for reaching the County's goals to reduce

greenhouse gas (GHG) emissions in the unincorporated areas. The County set a target to reduce GHG emissions from community activities in the unincorporated areas by at least 11 percent below 2010 levels by 2020. The CCAP includes specific strategy areas for each major emission sector and quantifies the 2010 and projected 2020 emissions in the unincorporated areas. Like most California communities, a significant portion of the County's emissions are from on-road transportation sources and point to a clear need to reduce vehicle trips and vehicle miles traveled. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the CCAP's goals.

- **General Plan Implementation Programs:** Several General Plan work programs are well aligned with Vision Zero, including: 1) Livable Communities Guidelines – DRP is developing specific design measures that will be used by staff, developers and decision makers to develop projects that encourage walking, bicycling, outdoor physical activity, public transit use, and access to healthy foods. 2) Pedestrian planning – DPH and DPW are collaborating on the development of pedestrian plans in four unincorporated communities: Westmont-West Athens, West Whittier-Los Nietos, Lake Los Angeles and Walnut Park. 3) Equitable Development – DRP is preparing affordable housing and environmental justice ordinances to advance equity objectives in the General Plan, along with the development of an equity indicators toolbox.

Los Angeles County Initiatives: Vision Zero is consistent with several Board mandated initiatives, including:

- **Purposeful Aging Los Angeles Initiative:** A countywide, multi-year effort that will unite public and private leadership, resources, ideas, and strategies to improve the lives of older adults and Los Angeles County residents of all ages. The initiative includes the formulation of a three-year, Age-Friendly Action Plan, which will outline a comprehensive set of proposed strategies to enhance the County's age-friendliness across eight domains of livability, including transportation.
- **Trauma Prevention Initiative (TPI):** The Trauma Prevention Initiative targets regions of the County that experience a disproportionately high incidence of violence-related trauma visits, injuries and deaths. TPI develops and coordinates program strategies that focus on evidence-based and practice-tested interventions to reduce trauma. Traffic collisions account for many trauma visits, injuries, and deaths, and preventing them could contribute significantly to reducing the burden of trauma in the County.

County Strategic Plan, 2016 - 2021: Vision Zero is consistent with several strategies in the County's newly adopted Strategic Plan, including:

- II.2.4 Promote Active and Healthy Lifestyles: Conduct outreach to high need, traditionally underserved populations within the County by supporting safe and comfortable built environments that encourage physical activity and access to healthy food.
- II.3.3 Address the serious threat of global climate change: Create and implement policies and programs to: reduce the emission of greenhouse gases from all sectors of our community; ensure that community climate resilience is integrated into our programs and plans; and inspire others to take action.

California Strategic Highway Safety Plan (SHSP): The SHSP is a statewide, coordinated safety plan that provides a comprehensive framework for reducing fatalities and severe injuries on all public roads. The SHSP – and the accompanying SHSP Implementation Plan – are multi-disciplinary efforts involving Federal, State, and local representatives from the four “Es” (education, evaluation, engineering, and enforcement) of safety. The SHSP identifies safety needs and guides investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries.

PART II: PRELIMINARY DATA ANALYSIS

Background

When a collision occurs in unincorporated areas, multiple agencies are involved in responding to the scene, identifying collision factors, and treating victims. This results in many sources of data, which can then inform a Vision Zero approach and provide background on the collision landscape in unincorporated Los Angeles County. The following section briefly describes key agencies involved, their respective roles, and sources of data.

California Highway Patrol (CHP): CHP is responsible for traffic enforcement on unincorporated County roadways and is responsible for responding to the scene of a collision. CHP collects data for all collisions it responds to and retains this data for all municipalities. Additionally, data for all reported collisions in California available via the Statewide Integrated Traffic Records System (SWITRS). CHP also has citation data, which can provide additional information about safety concerns such as speeding and driving under the influence. Citation data is available to County departments, but requires additional staff time to clean and geocode for use.

Los Angeles County Department of Public Works (DPW): DPW requests collision reports directly from CHP as collisions occur within the unincorporated County area and enters this data into its geodatabase. DPW is also the primary agency involved in unincorporated County roadway design and maintenance. DPW does not have jurisdiction on designated State highways, such as the Pacific Coast Highway (CA-1), even if they fall within unincorporated County areas.

Los Angeles County Fire Department (LACFD): LACFD serves as the primary first-responder for suspected injury or fatal collisions in unincorporated County areas, as well as for some incorporated cities. LACFD retains records of all of its responses and services, including those related to collisions. Records typically span the time beginning when LACFD staff and/or vehicle(s) are deployed to the scene of an incident to when LACFD drops the victim off at a hospital or trauma center. LACFD also serves as a first-responder for some incorporated cities in Los Angeles County.

Los Angeles County Department of Health Services' Emergency Medical Services (EMS): EMS collects data from all emergency medical providers in Los Angeles County, including from LACFD, when transport to a hospital is involved. EMS also collects data directly from all 14 trauma centers, but not all hospitals. These trauma centers serve both unincorporated and incorporated areas. In severe injury collisions, victims are likely to be transported to a trauma center by the emergency services provider. However, victims of collisions can also transport themselves to a trauma center (or hospital); therefore transport data does not include these cases. Collision location is only available for records involving EMS

transport. Neither trauma data nor emergency service transport data is currently linked to CHP collision record data.

Los Angeles County Sheriff's Department (LASD): LASD is not a primary responder to collisions in unincorporated areas; this is the responsibility of CHP. However, in some cases, LASD will respond to a collision due to proximity. LASD is responsible for all other law enforcement in unincorporated areas and is more likely to be present in an unincorporated community for other enforcement duties.

Los Angeles County Department of Public Health (DPH): DPH is the primary recipient of Office of Statewide Health Planning and Development (OSHPD) data, which includes patient-level data from licensed health care facilities such as hospitals and emergency departments. This data includes health-related collision information, such as injury levels, outcomes, race/ethnicity, and financial costs. The data does not provide information on collision location.

Approach to Initial Analysis

To determine an approach to data analysis, traffic safety programs in other jurisdictions, including San Francisco, Seattle, and the City of Los Angeles, were reviewed to identify common categories. Most jurisdictions first analyzed collision data only, and then conducted analyses in later phases incorporating demographic data, geographic information, roadway design, and other areas. Data is typically analyzed and categorized as:

- *Big Picture* : Overview of jurisdiction as a whole, including breakdowns by collision severity and calculated fields such as “annual collision death rate.”
- *Temporal, Modal, & Demographic*: Analysis of collision data by indicators such as age, gender, or mode of victim and party. This provides more clarity about the type of person involved in severe and fatal collisions, and if there is an obvious overrepresentation of certain victim or party types.
- *Contributing Factors*: Further analysis of collision data to understand potential contributing factors to severe and fatal collisions, such as time of day, use of safety equipment, and primary collision factor.
- *Prioritization* – Analysis incorporating built environment, land use, or citation data. This information can be used to create a prioritized network of streets, such as Los Angeles’ High Injury Network, and also to provide a data-driven justification for future project prioritization.

In addition to research on efforts in other jurisdictions, three meetings were also convened with experts from various County Departments and the Los Angeles Department of Transportation to discuss common problems, past analysis on collisions in unincorporated Los Angeles County, and high-priority approaches to future analysis.

As described in the section above, no single source of data provides a comprehensive picture of where severe and fatal collisions are occurring in unincorporated areas, who is involved, injuries sustained, and costs incurred. The wide range of data available from County partners provides an excellent opportunity to further understand factors associated with traffic deaths and severe injuries on unincorporated area roadways. Due to the challenges associated with joining disparate data sources, the preliminary collision analysis contained in this report is based only on DPW's Collision Geodatabase. DPW's database includes California Highway Patrol collision records (SWITRS) data through August 31, 2016. SWITRS data is commonly used by jurisdictions throughout California, including other Vision Zero cities, such as Los Angeles and San Francisco.

Findings

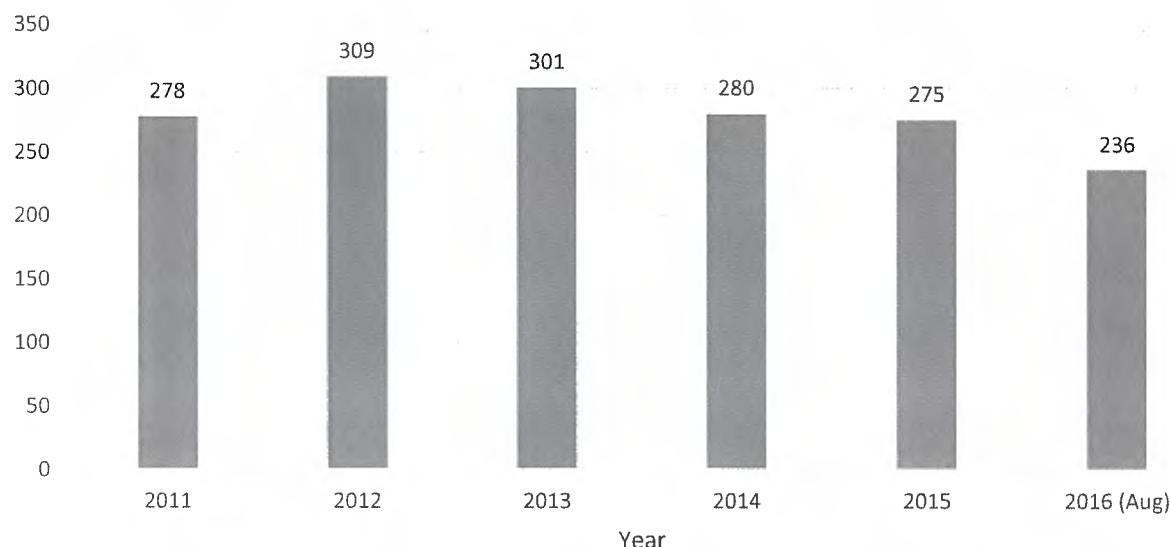
The data below summarizes information using CHP collision records data, housed in DPW's Collision Geodatabase. Unless otherwise stated, summary data is for the five-year, eight-month period beginning January 1, 2011 and ending August 31, 2016.

BIG PICTURE

Collisions

There were 63,067 distinct collisions on unincorporated County roadways over the five-year, eight-month period. Of these collisions, 1,429 involved at least one severe injury and there were 300 with at least one fatality. A total of 1,679 collisions involved severe injuries or fatalities. Taking an average from January 1, 2011 to December 31, 2015, there are 10,917 annual collisions on unincorporated County roadways with 288 involving a fatality or severe injury. The number of collisions involving a fatality or severe injury has remained relatively constant since 2011.

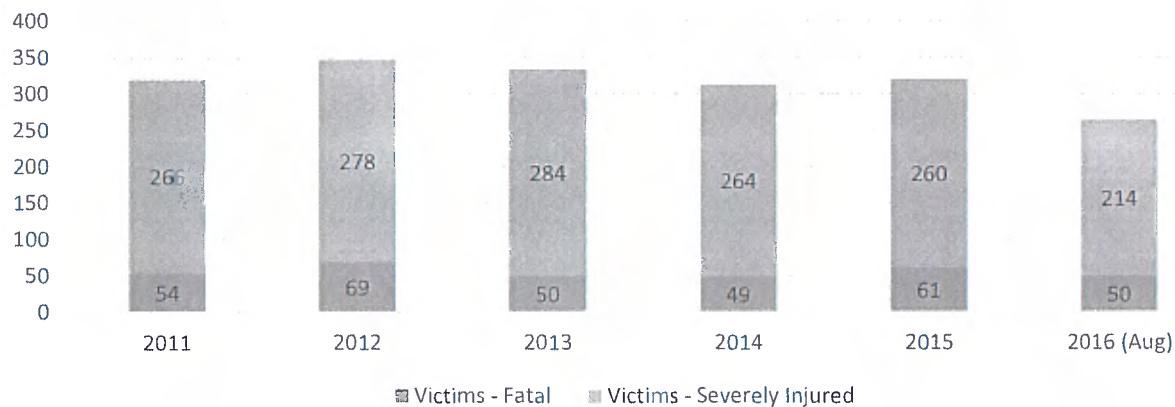
Collisions Involving a Fatality or Severe Injury on Unincorporated County Roadways



Victims

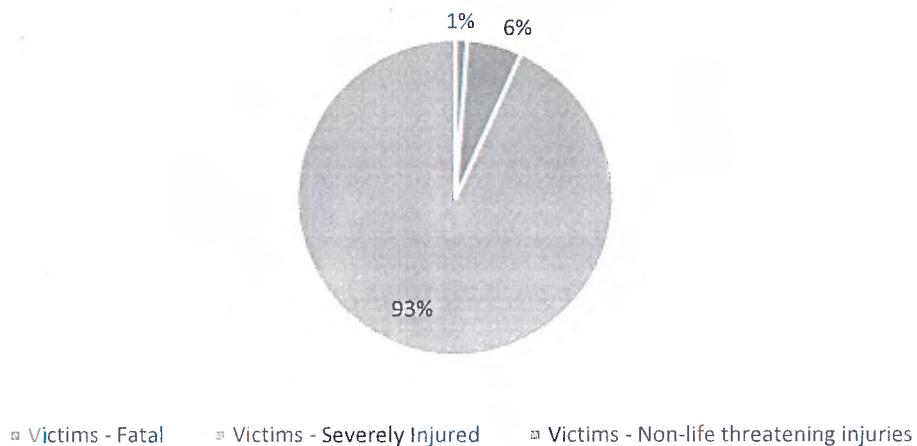
There were 27,786 victims involved in collisions on unincorporated County roadways during the five-year, eight-month period. Victims include fatalities and individuals with severe injuries, other visible injuries, or complaints of pain. Of these victims, 1,566 were severely injured and 333 incurred fatalities.

People Killed and Severely Injured on Unincorporated County Roadways



Among all victims of traffic collisions, approximately one percent died and six percent sustained severe injuries, but the vast majority (93 percent) did not suffer life-threatening injuries.

Victims Injury Breakdown



Rates

The County maintains approximately 1,188 miles of rural roads and an additional 1,998 miles of urbanized roads (total of 3,187 miles), with a daily vehicle miles travelled rate (DVMT) of 11.85 million.⁸ The following rates contextualize collisions and victims. All rates are based on averages from January 1, 2011 to December 31, 2015.

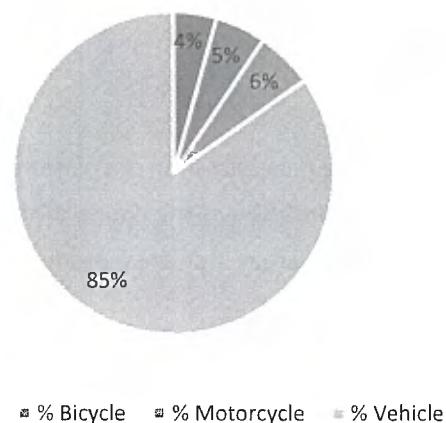
- There are approximately 3.4 collisions per roadway mile annually, with 0.09 collisions involving a fatality or severe injury per roadway mile
- There are approximately 27.4 collisions involving a fatality or severe injury per 100,000 population in the unincorporated Los Angeles County annually.⁹

TEMPORAL, MODAL, AND DEMOGRAPHIC

Mode

As shown in the chart below, among all collisions involving an injury, vehicle to vehicle injury collisions are the most common, representing approximately 85 percent of all injury collisions.

Injury Collisions - Percent Mode Involved with Vehicle



⁸ 2014 California Public Road Data Estimate, Table 6

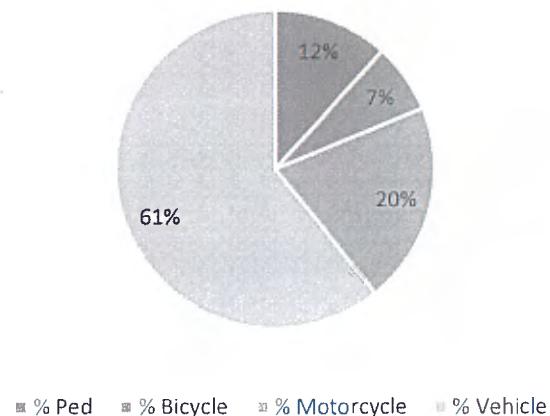
⁹ Unincorporated area population is approximately 1,050,000 people based on estimates from the Southern

California Association of Governments. Available at:

<http://www.scag.ca.gov/documents/unincarealosangelescounty.pdf> (Accessed December 27, 2016)

However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injury and fatality-involved collisions. For example, although pedestrians are only involved in four percent of injury collisions, they represent 12 percent of the collisions with severe injuries or fatalities. Similarly, motorcycle-involved collisions represent 20 percent of the severe and fatal collisions, but only six percent of all injury collisions.

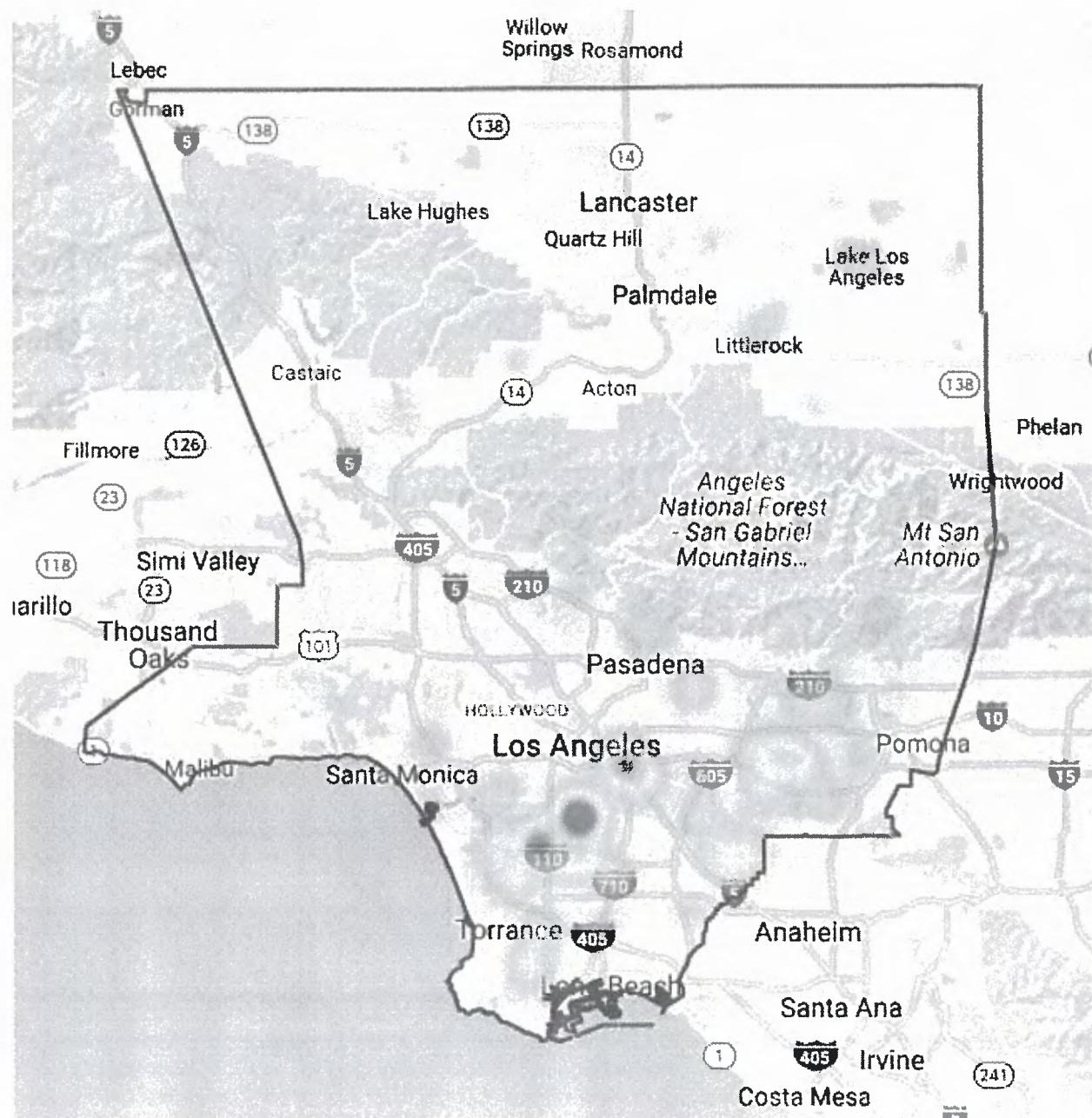
Collisions involving Killed or Severe Injury - Percent Mode Involved with Vehicle



The following heat map series shows the concentration of collisions involving killed and severely injured victims by mode. A heat map is a representation of the concentration of incidents; red areas indicate the highest concentration of incidents; yellow areas indicate a moderate concentration; and green areas indicate the lowest concentration of incidents.

Pedestrian-Involved Fatal and Severe Injury Collisions

Pedestrian-involved fatal and severe injury collisions are concentrated in the southern part of the County, largely in dense urban centers. There is also a concentration of collisions in the Antelope Valley, where community main streets are often rural, high-speed roads.

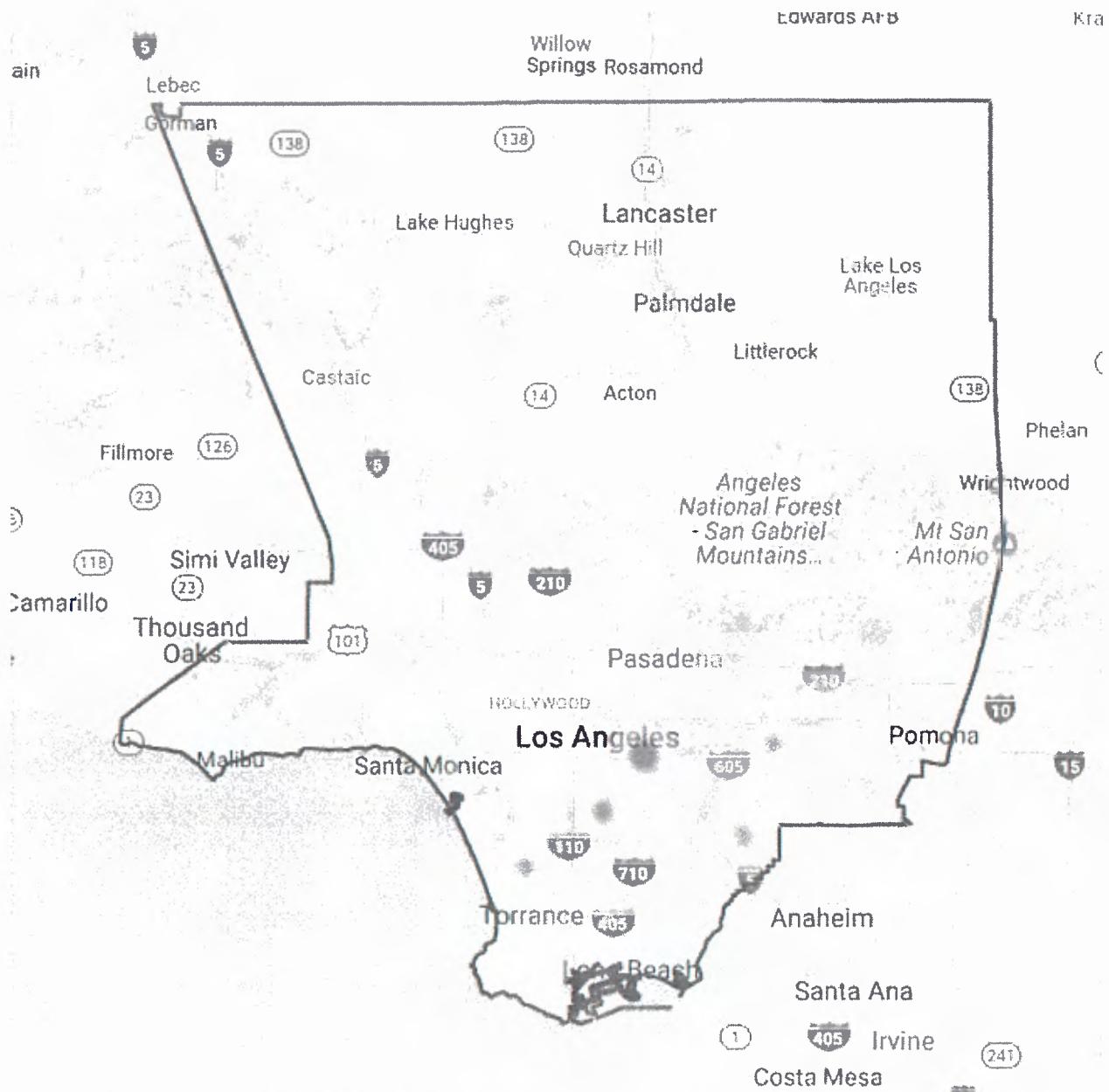


Pedestrian-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Bicycle-Involved Fatal and Severe Injury Collisions

While bicycle-involved fatal and severe injury collisions are spread throughout the County, they are more concentrated in urban areas, with some additional fatal and severe injury collisions occurring in the Antelope Valley and along County mountain roads.

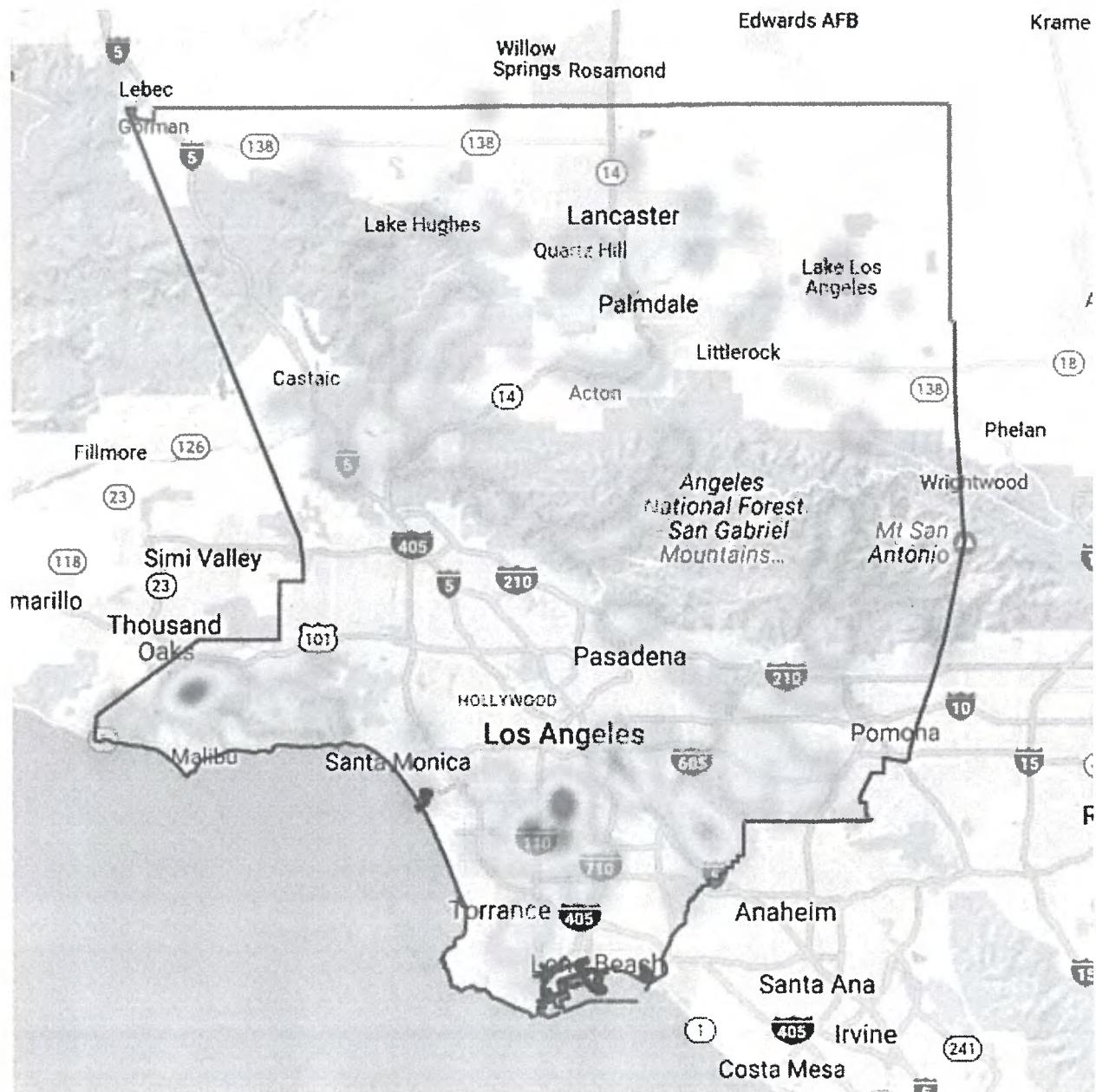


Bicycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Motorcycle-Involved Fatal and Severe Injury Collisions

Motorcycle-involved fatal and severe injury collisions are spread throughout the County. There are higher concentrations along County rural mountain roads, as well as in dense urban areas.

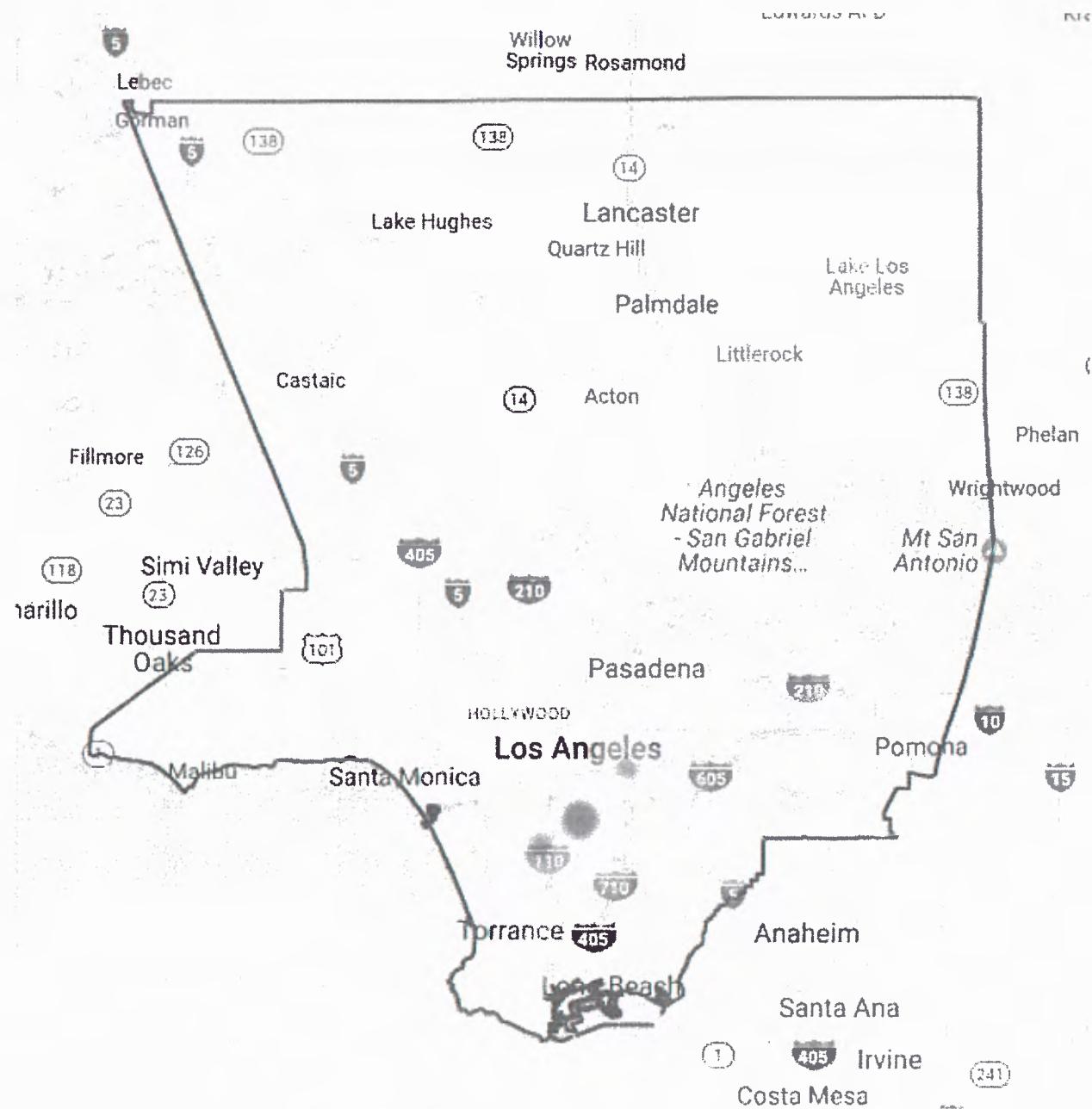


Motorcycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Vehicle to vehicle-Involved Fatal and Severe Injury Collisions

Vehicle to vehicle-involved fatal and severe collisions happen everywhere, but there is a concentration in the southern part of the County in our urbanized communities.

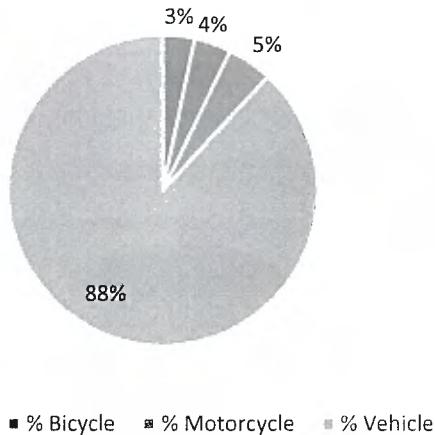


Vehicle to vehicle collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

The vast majority of victims injured as a result of traffic collisions on unincorporated County roadways were in vehicles.

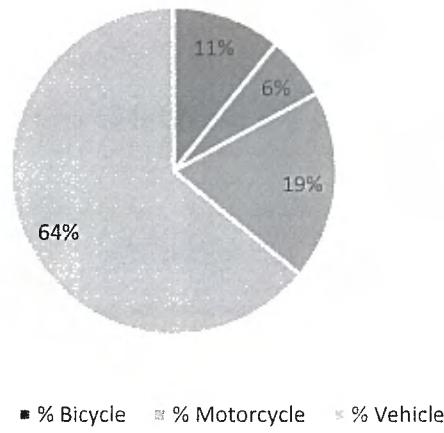
Collision Victims by Mode



■ % Ped ■ % Bicycle ■ % Motorcycle ■ % Vehicle

However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injuries and fatalities. Approximately 11 percent of fatal and severe injury victims are people walking, six percent are people bicycling, and 19 percent are people using a motorcycle.

Collision Victims that are Killed or Severely Injured

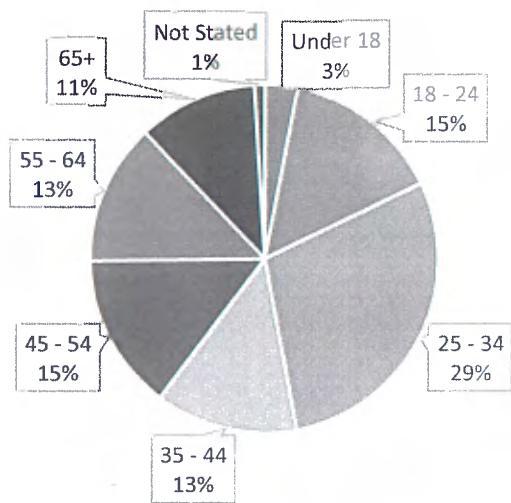


■ % Ped ■ % Bicycle ■ % Motorcycle ■ % Vehicle

Demographics

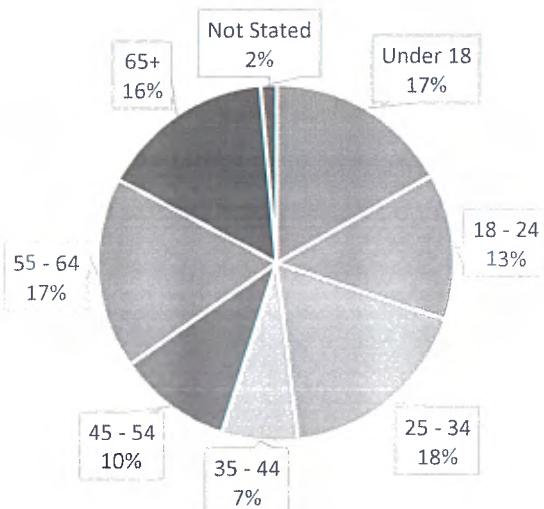
Regardless of mode, across all killed and severely injured victims there is a higher proportion of male victims (approximately 78 percent male and 22 percent female) and victims 25 to 34 years old (across both genders), for the entire time period. The chart below shows the age breakdown across all victims killed or severely injured, regardless of mode. Nearly a third of victims (29 percent) are between the ages of 25 and 34.

Fatal or Severe Injury Victims - Age Range



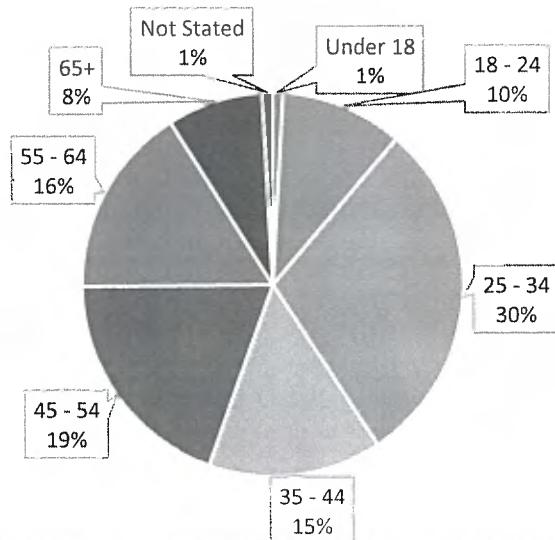
Among pedestrians killed or severely injured, victims are concentrated in both older and younger age groups. 17 percent are young people 18, 13 percent are between 18 and 25, and 33 percent are 55 and over.

Pedestrian Fatalities or Severe Injuries - Age Range



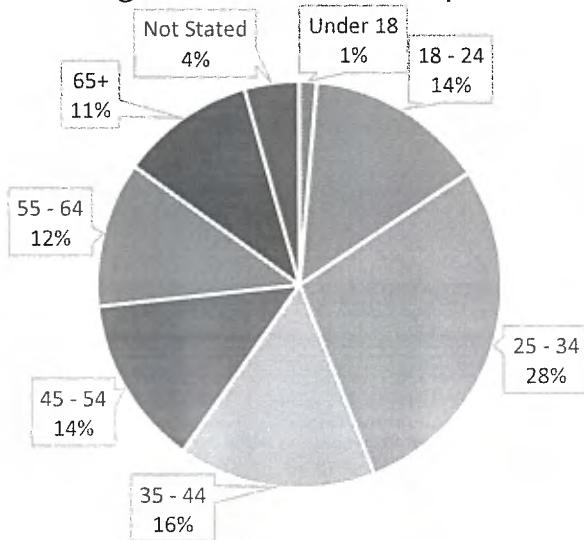
The chart below shows the age breakdown for all motorcycle victims, male and female. Motorcycle victims were overwhelmingly young males: 94 percent are men, 40 percent under the age of 34.

Motorcycle Fatalities or Severe Injuries - Age Range



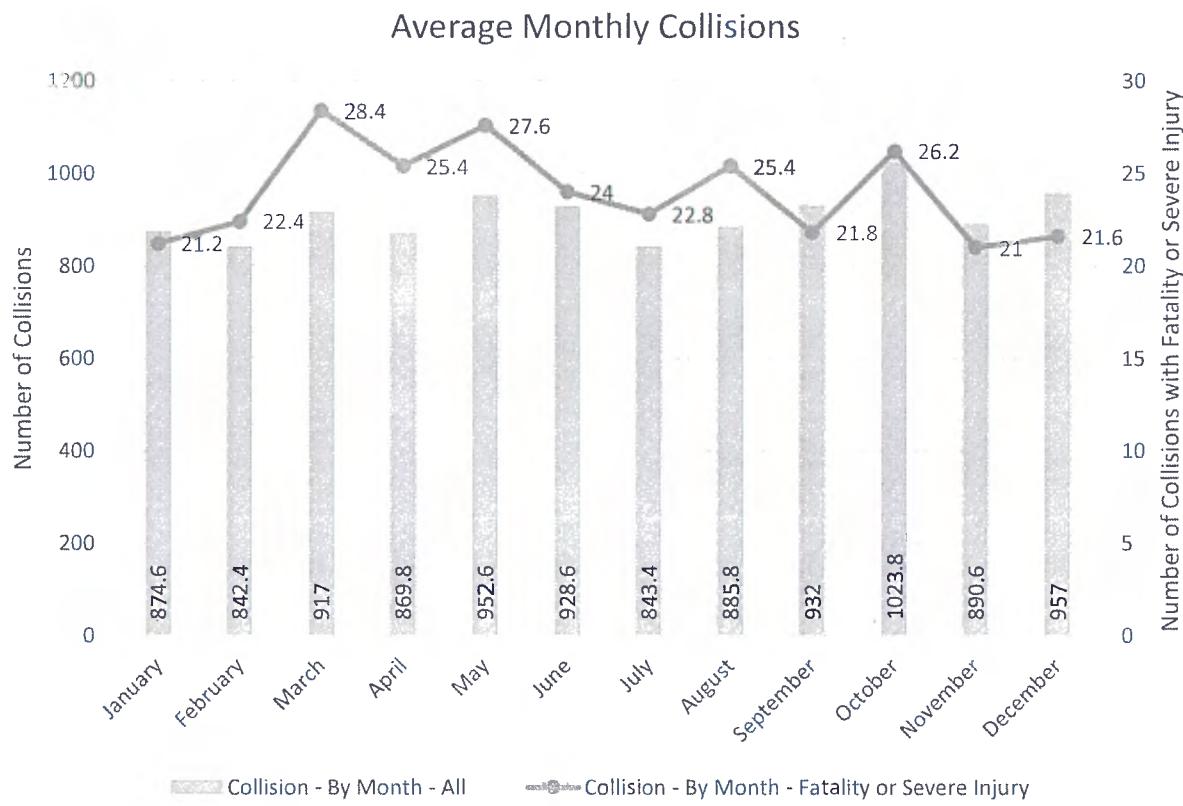
Men represented 64 percent of at-fault parties, while females represented 36 percent. Young men (under the age of 35) and older men (over the age of 55) were more likely to be labeled as "at-fault" in all collisions (no injury, complaint of pain, visible injury, severe injury, fatal) across the entire time period.

Male Age Breakdown of Party at Fault

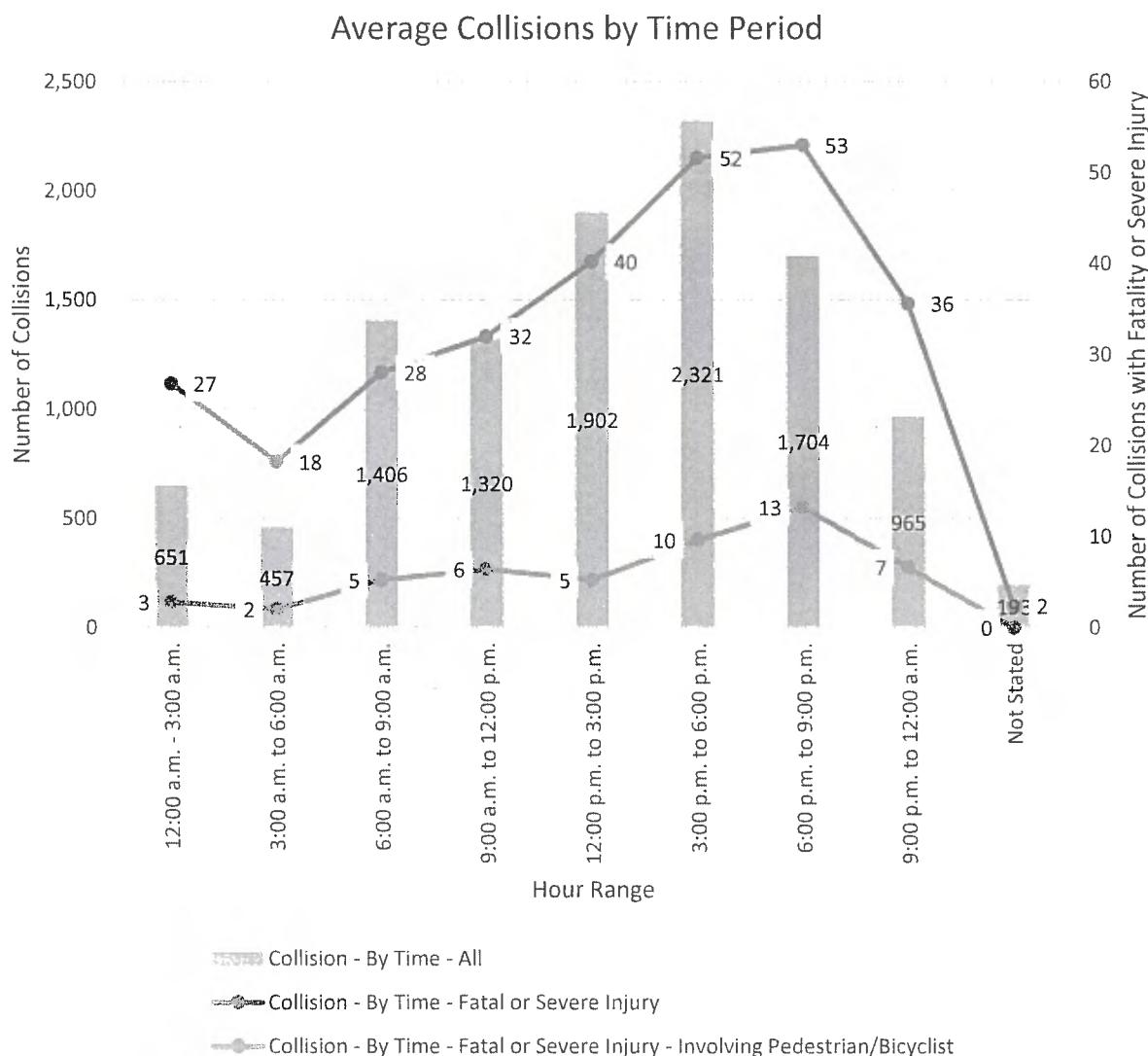


Temporal

On average from January 1, 2011 to December 31, 2015, October was found to have the highest number of collisions. Additionally, there are peaks in fatal and severe injury collisions during the months of March and May.



On average across all reported collisions (no injury, complaint of pain, visible injury, severe injury, fatal) during the period January 1, 2011 through December 31, 2015, most occurred between the hours of 3:00 p.m. to 6:00 p.m. High numbers of fatal and severe collisions also occurred during this period. Although there were fewer collisions overall from 6:00 p.m. to 9:00 p.m., there were high numbers of fatal and severe collisions during this time period, indicating a disproportionately high rate of fatal and severe collisions. This is also the peak time period when people walking and bicycling are involved in a fatal or severe collision, indicating that although more collisions occur during the 3:00 p.m. to 6:00 p.m. time period, the most dangerous time is from 6:00 p.m. to 9:00 p.m.

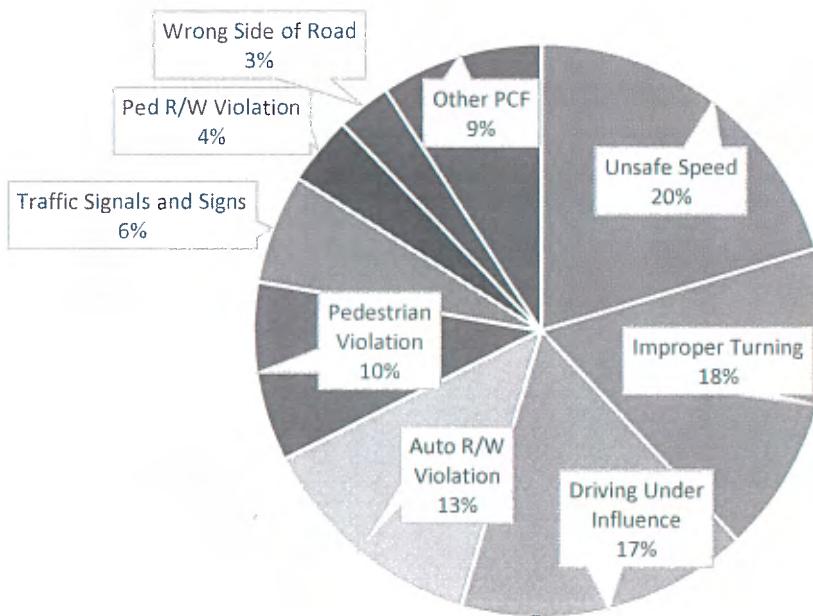


CONTRIBUTING FACTORS

Primary Collision Factor

CHP lists a single “Primary Collision Factor” (PCF) when it creates a collision report. This indicates the an officer’s determination of the primary cause of the collision. Other contributing factors may or may not exist. Unsafe speed was found to be the greatest primary collision factor, comprising 20 percent of the primary collision factors, with improper turning and driving under the influence comprising 18 percent and 17 percent, respectively.

Primary Collision Factor associated with Fatal and Severe Injury Collisions



Hit and Run

Approximately 25 percent of all collisions involve hit and runs and there were 15,692, 133 involving a person killed or severely injured, during the period analyzed. This number has remained relatively constant over the past five years.

Felony Hit and Run Collisions

The heat map below shows the concentration of felony hit and run collisions. There is a concentration in the southern part of the County in urban areas. A felony hit and run involves a fatality. Among bike-involved and pedestrian-involved felony hit and run collisions, the same concentration pattern is seen.



Felony hit-and-run collisions in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

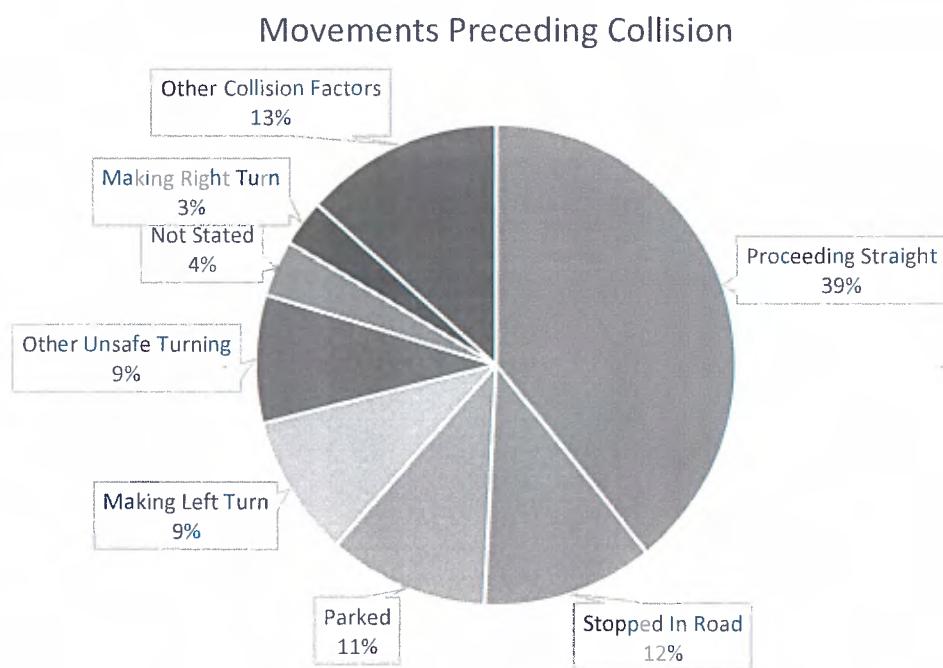
Map data ©2017 Google, INEGI

Driving Under the Influence (DUI)

For this section, “Driving Under the Influence” is defined as “Under Alcohol Influence” or “Under Drug Influence” while driving. Approximately eight percent of all crashes involve driving under the influence of alcohol or drugs; this percentage has remained relatively steady over the past five years. However, nearly 17 percent of fatal and severe injury collisions involve DUI, and 25 percent of vehicle-to-vehicle fatal collisions involve DUI.

Movement Preceding the Collision

CHP also reports vehicular movements in collisions prior to impact. Most collisions involve proceeding straight (39 percent), a turning movement (right turn, unsafe turning, left turn combined for 21 percent), stopping in the road (12 percent), and parked vehicles (11 percent).



Other Factors

Most collisions involving a fatality or severe injury occur in clear weather conditions (89 percent) and dry roadway surface conditions (96 percent). Roadway conditions (e.g., obstructions, flooding, holes), are listed as “no unusual conditions” in 97 percent of fatal and severe injury collisions.

66 percent of all collisions occur during daylight, with another 30 percent during the dark. However, collisions in the dark and during dusk are overrepresented among collisions involving a severe injury or fatality, with 52 percent occur during daylight, 43 percent in the dark, and five percent at dusk.

SUMMARY OF CHALLENGE AREAS

Based on the preliminary data analysis, the following challenge areas have been identified as warranting additional data analysis to further pinpoint causes and patterns associated with severe injury and fatal collisions, and to target programs, resources, and infrastructure enhancements.

- ***Unsafe Speeds:*** Vehicle speed can be the difference between life and death in a collision. Speed is listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- ***Impaired and distracted driving:*** Driving under the influence of alcohol or drugs is involved in 8 percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes. Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores the need for a coordinated approach to capture information on and to prevent distraction.
- ***Hit and runs:*** Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for outreach to spur behavior changes by motorists.
- ***Young males:*** Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions. For example, the percentage of collisions involving young males on motorcycles suggests young males represent a critical demographic to target for programs and messaging.
- ***Motorcyclists:*** Twenty percent of fatal and severe collisions involved a motorcyclist. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found to occur on rural or mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- ***Pedestrians:*** Seventeen percent of fatal and severe collisions involved pedestrians. Young people (under age 19) and older people (55 years and over) were overrepresented in pedestrian-involved fatalities and severe injuries. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found in urban areas where a greater probability of conflicts exist due to higher vehicular densities, as well as in rural areas, where higher vehicular speeds may be a factor.

To further pinpoint any significant factors and patterns that may be associated with collision types, additional analysis will need to be conducted, including community demographics, existing infrastructure (e.g., presence of bikeway, walkway, prevailing speed limit), traffic controls, and others.

PART III: CURRENT TRAFFIC SAFETY EFFORTS

The County and its partners currently administer various programs that support traffic safety through education, enforcement, engagement, engineering, and evaluation. CHP, the agency responsible for traffic enforcement in unincorporated areas, is currently providing the majority of the County's traffic safety programs in unincorporated communities. The Sheriff's Department, DHS Trauma Hospitals, DPH, DPW, and the Los Angeles County Office of Education are all involved in injury prevention efforts as well. The process of developing this report increased awareness about opportunities for collaboration between departments. Despite current efforts, it is clear that more can be done to prevent traffic deaths and severe injuries on unincorporated area roadways. Strategically focusing best-practice programs on key challenge areas, leveraging resources across agencies, and identifying new injury prevention resources will help the County reach its traffic safety goals.

Education

General Safety Tips

County departments and partners, such as CHP and DPH, have readily available educational materials such as pamphlets, flyers, and safety items (e.g. bicycle helmets, lights) that can be distributed during community events. CHP has educational materials that target different audiences and behaviors, including pedestrian safety, bicyclist safety, skateboard safety, motorcycle safety and helmet laws, distracted driving, and others.

Distracted Driving

Distracted driving, such as looking at a phone or texting while driving, continues to be a challenge area locally and statewide. CHP targets high school aged children through its "Teen Distracted Drivers Education and Enforcement" program, conducting focused safety presentations and press events. CHP's "Impact Teen Driver" program is designed to educate high school student drivers on the dangers of distracted driving. CHP also has an "Adult Distracted Drivers" program that targets all non-teen drivers to minimize distracted driving through public service announcements, public presentations, and direct community engagement at local events. DHS Trauma Hospitals have injury prevention programs designed to reduce trauma visits, many of which are focused on reducing distracted driving. These include presentations to community groups, safe driver pledges, and "Don't Text and Drive" campaigns.

Impaired (Driving Under the Influence Alcohol or Drugged) Driving

CHP and some DHS Trauma Hospitals conduct presentations to engage high school-aged students and their parents about driving under the influence through its "Every 15 Minutes" program. The program includes fatal driving under the influence (DUI) simulations and designated driver education. CHP also chairs an Intoxicated Driver Task Force, which brings community partners such as Mothers Against

Drunk Driving and law enforcement together. This program is largely supported through grant funds. Injury prevention activities at some DHS Trauma Hospitals include educational programs wherein participants visit a Trauma Hospital and morgue to learn from emergency healthcare providers and see the wreckage and carnage of crashes involving DUI.

Speed and Aggressive Driving

CHP recently received a federal traffic safety grant to develop and implement the Regulate Aggressive Driving and Reduce Speed (RADARS) program to educate motorists about the dangers of aggressive driving and actively enforce related laws. The main goal of RADARS is to reduce the number of fatal and injury traffic collisions in which speed, improper turning, and driving on the wrong side of the road are primary collision factors. The RADARS program will also focus on street racing and sideshows through enhanced enforcement paired with an active public awareness campaign.

Teenage Drivers

At the State level, young drivers are disproportionately represented in collisions. CHP has several programs that target this age group including, "Start Smart" classes that help newly licensed and soon-to-be licensed teenage drivers understand the critical responsibilities of driving and that "at-fault" collisions are 100 percent preventable. The classes create an open dialogue between law enforcement, teenage drivers, and parents or guardians.

Older Adults

Through the "Age Well, Drive Smart" program, CHP aims to reduce motor vehicle collisions and pedestrian fatalities experienced by older adults and increase seniors' alternate transportation options. "Age Well, Drive Smart" is a free, two-hour senior driver safety/mobility class. Individuals can register for the course by contacting their local CHP office. The program is funded through a "Keeping Everyone Safe" (KEYS) grant.

Bicycle and Pedestrian Safety Education

CHP, Sheriff's Department, DPH, DPW, and DHS Trauma Hospitals are involved in promoting safe walking and bicycling. CHP conducts safety presentations, bicycle rodeos (on-road bike classes), and gives away incentives (such as bike helmets and lights) to promote safe walking and bicycling. These activities are funded through an Office of Traffic Safety grant for the 2016-2017 period. The Sheriff's Department, through a new grant from the Office of Traffic Safety, will be conducting additional bicycle and pedestrian safety skills classes at elementary schools. This program will be available in 17 incorporated cities during 2017-2018. DPH conducts bicycle safety education workshops as part of Parks After Dark programming and distributes bicycle helmets, lights, and locks, as part of a grant from Caltrans. DPW has in the past been awarded Safe Routes to Schools grant funds for bicycle and pedestrian encouragement

programs. Although not an ongoing program, future grant opportunities may be available to support an educational program. Several DHS Trauma Hospitals offer pedestrian safety classes for students, and distribute incentive safety items such as helmets and reflective back packs.

Suggested Routes to School

School-aged children are particularly vulnerable in the case of a collision. To enhance the safety of school-aged children and their parents, DPW has maps of suggested walking routes to schools that identify suggested crossings and prioritize routes that include traffic controls. These maps are updated periodically with changes, such as new crossing guard locations.

Motorcycle Riders

CHP works to reduce the number of motorcycle-involved collision deaths and injuries through a combination of increased enforcement in areas with high incident numbers and motorcycle education and awareness. Through the grant funded “Have a Good Ride” program, CHP conducts motorcycle education classes, training approximately 60,000 riders per year across California at over 100 training sites. CHP also conducts public safety announcements via Internet, radio, and movie theaters during Motorcycle Safety Awareness Month (May), other motorcycle-heavy holidays (Memorial Day and Fourth of July), and designated motorcycle events. Messages focus on speeding, improper turning, and driving under the influence of alcohol and/or drugs.

Child Passenger Safety

Ensuring children are properly restrained can reduce injuries and fatalities during a collision. DPH funds agencies to host two-hour child passenger safety workshops on how to correctly install a car seat. The workshops are available in English and Spanish every month, and free or low-cost car seats are given to families that show proof of hardship. Funding for this program is based on citation fines. DPH intends to pursue Office of Traffic Safety grants to expand the program. DPH has also highlighted a need to provide ongoing child passenger safety education to the County workforce, especially those that transport children. DPH staff recently started collaborating with the Department of Children and Family Services to ensure staff that transport children are trained on best practices in child passenger safety. Since January 2016, approximately 500 newly hired social workers and human service aides have been trained.

CHP also has a Child Passenger Safety Program which includes child passenger safety check-up events to promote correct usage of child restraint systems; inspection of child passenger safety seats; educational classes at daycare centers, preschools, and elementary schools; and distribution of child passenger safety seats to people in need. In addition, CHP certifies personnel as child passenger safety technicians through training courses. Additionally, DHS Trauma Hospitals also provide child passenger safety classes and checks on a quarterly basis.

Enforcement

Directed Traffic Enforcement

CHP is responsible for traffic enforcement on unincorporated Los Angeles County roadways; the Sheriff's Department is responsible for traffic enforcement in 42 contract cities within Los Angeles County, many of which border unincorporated areas. The Sheriff's Department and CHP work collaboratively to conduct targeted traffic enforcement based on community concerns and data analysis identified by County departments, such as DPW.

Impaired Driving

Both CHP and Sheriff's Department target impaired driving as part of regular traffic enforcement duties. The Sheriff's Department conducts DUI checkpoints, locations where officers stop vehicles at designated locations to ascertain whether drivers may be under the influence of drugs or alcohol. This program is typically funded through grants and/or local jurisdiction funds. In 2017-2018, the Sheriff's Department has funding to do checkpoints, saturation patrols, and additional DUI enforcement in 17 contract jurisdictions. The Sheriff's Department has found DUI checkpoints to be an effective enforcement and education approach. Compliance rates have increased over time, and anecdotally, officers have observed an increase in use of rideshare services like Uber and Lyft. Using grant funding, CHP is currently conducting DUI/Driver's License Check Points throughout Los Angeles County communities, as well as traffic safety presentations at public venues in unincorporated areas that focus on the dangers of impaired driving.

Seatbelt Use

Increasing seatbelt use among all passengers in a vehicle can help reduce the likelihood of an injury or fatality in a collision scenario. The Sheriff's Department engages in "Click it or Ticket" enforcement in contracted incorporated cities. If the driver or passengers in a vehicle are not wearing seatbelts, officers can issue a citation. Enforcement of seatbelt use is conducted as part of general traffic enforcement duties. The "Click it or Ticket" campaign has a statewide and national presence. CHP plans to participate in the "Click it or Ticket" campaign by conducting a well-publicized statewide seat belt enforcement from May 22 to June 4, 2017, focusing enforcement in low compliance areas throughout California.

Collision Response

CHP responds to collisions on unincorporated County roadways. CHP Officers are responsible for completing incident reports, coordinating with other agencies, and clearing the scene of a collision.

Automated Red Light Photo Enforcement

DPW operates automated red light photo enforcement at several signalized intersections in unincorporated areas that have high rates of collisions caused by red-light running. DPW continues to

monitor and identify signalized intersections to identify those that no longer need photo enforcement and also those may benefit from it. CHP plays a key role in the success of the Automated Red Light Photo Enforcement Program, as it is responsible for the review of photos, approval of citations, checking time and speed charts, and appearances in court.

Adult Crossing Guard Program

The County's Office of Education operates an Adult Crossing Guard Program, which assigns crossing guards for elementary and middle school-aged pedestrians at locations that meet Board-approved criteria. DPW conducts traffic studies based on requests by local school districts and other entities within the unincorporated areas to determine whether crossing guard services meet the minimum criteria. Currently, there are approximately 220 locations in County unincorporated areas that are serviced by crossing guards.

Speed Enforcement

DPW conducts Engineering and Traffic Surveys for unincorporated roads. According to the California Vehicle Code, there must be a current Engineering and Traffic Survey in order to legally use radar for speed enforcement. These surveys establish the appropriate speed limit and must be updated every seven years. Currently, nearly 200 radar routes exist to assist CHP in speed enforcement. In addition, DPW has several radar speed trailers that build driver awareness of the speeds at which they are traveling in order to discourage speeding. These are deployed temporarily at key locations throughout unincorporated areas of the County.

Engagement (Community Outreach & Communications)

Monthly Awareness Campaigns

CHP conducts awareness campaigns on a different topic each month; for example, April is Distracted Driving Month. CHP broadly distributes messaging through press releases, television and radio media interviews, video public safety announcements, and social media.

Freeway and Highway Changeable Message Signs

Transportation Management Centers (TMC) are control centers for California's urban freeway and highway systems and are operated in partnership with CHP and the California Department of Transportation. Real-time traffic information is gathered 24 hours a day from several sources, including electronic sensors in the pavement, freeway call boxes, and video cameras. TMCs operate changeable message signs along the freeways and highways. These signs provide helpful information, including road closures due to traffic collisions, inclement weather advisories, and traffic safety messages. In 2015, messages focused on speeding included: "Slow Down and Save a Life," "Slow for the Cone Zone," "Move Over or Slow for Workers - It's the Law," and "Fines Increased in Work Zones - Slow Down".

Community-based Law Enforcement

Officers from CHP and the Sheriff's Department participate in various community events and programs. These events serve as a way to build trust between law enforcement and the community, and as an opportunity to distribute educational materials. The Sheriff's Department participates in the Los Angeles County Bicycle Coalition's "Ask an Officer" events, where bicyclists can engage directly with Officers about bicycle safety and the rules of the road. CHP, Sheriff's Department, and local school police participate in events, such as International Walk to School Day, a day where students are encouraged to walk to school, and National Night Out, an annual community-building campaign that promotes police-community partnerships through block parties and festivals.

Engineering

Traffic Investigation Studies

Each year, DPW reviews approximately 1,200 locations in the unincorporated areas to ensure proper traffic signs, roadway markings, and signals are in place. These traffic studies are generated by requests from constituents who are concerned about traffic safety in their neighborhoods. After collecting and analyzing data, DPW's traffic engineers design and implement traffic controls, such as signs, speed humps, and traffic signals to facilitate traffic safety.

Evaluation & Data

As described in Part II, various County departments collect data on traffic safety and use this data in their own programs to guide implementation.

PART IV: RECOMMENDED STRATEGIES AND ACTIONS

A County Vision Zero initiative would draw upon the collective expertise and resources of multiple departments to address this major public health concern. The initiative would employ a data-driven approach, proven and innovative practices, and the synergistic alignment of efforts between departments. It would engage community stakeholders to develop targeted solutions and implement strategies for traffic safety education, engineering, and enforcement. The initiative would also evaluate results to gauge success and modify programs as necessary to optimize impact.

A successful initiative will require additional resources. Since the Board motion directing the development of this report, County departments collaborated on two grant proposals that, if awarded, would help fund several of the initiative's immediate strategies and actions listed below. DPW submitted a grant proposal to Southern California Association of Governments (SCAG) on November 18, 2016 requesting support for the development of a Vision Zero Action Plan. DPH submitted a grant proposal to SCAG on the same date requesting support for the development of a Vision Zero Communications Plan, as well as support for a press event to launch a Vision Zero initiative. If SCAG awards these grants, funding will begin in July 2017. Additionally, DPW has already been selected for a Highway Safety Improvement Program grant to conduct additional collisions analysis. County departments will continue to collaborate on opportunities to seek grant funding for traffic safety initiatives, such as those described in Appendix A. However, dedicated funding will be necessary to expand traffic safety efforts and project implementation beyond current County and partner efforts.

The strategies and actions below describe specific next steps that would support the County in moving forward with an effective Vision Zero initiative.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with the Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Collaboration with internal and external partners will help ensure a successful Vision Zero initiative. A first step will be to create a partnership structure that can guide the development and implementation of Vision Zero programs and help identify and leverage resources. Regional partners may include SCAG, the Los Angeles County Metropolitan Transportation Authority, and the City of Los Angeles. State partners may include CHP, Office of Traffic Safety, Caltrans, and the Department of Motor Vehicles. Key community partners may include trauma hospitals, the American Automobile Association (AAA),

Mothers Against Drunk Driving (MADD), the Los Angeles County Bicycle Coalition (LACBC), and other community based organizations. A key lesson learned from the City of Los Angeles is the need for a single point-person and agency to provide coordinate a broad group of stakeholders.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County would identify specific engineering, enforcement, education, evaluation, and engagement strategies, along with timelines for implementation. Best practices from other jurisdictions indicate that having a completed Action Plan prepared before Vision Zero is publicly launched is critical. This allows for clear communication on the strategies and actions that will be prioritized to reduce traffic deaths and severe injuries. The Action Plan would be based on a literature and best practice reviews to identify effective strategies used by other jurisdictions. The Action Plan would target specific challenge areas (e.g. speeding), geographic areas (e.g. dense, urban areas) and demographic groups (e.g. young males) associated with concentrations of collisions involving fatalities and severe injuries in unincorporated areas. Development of the Action Plan would include outreach and engagement with community partners, County departments, partner agencies, and other stakeholders to seek input about the most effective strategies for reducing traffic deaths and severe injuries in unincorporated areas.

Prioritize interventions to address traffic fatalities; identify future analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context sensitive solutions for specific problems. This requires a holistic picture that goes beyond collision records and incorporates additional quantitative and qualitative data. For example, engaging with community members may indicate that collisions are being underreported in a certain neighborhood, which may be further confirmed by reviewing hospital intake data and conducting additional community surveys. Without a multi-pronged data analysis approach, areas experiencing severe and fatal collisions may be left out inadvertently or proposed solutions may not be in line with other community goals. This points to several data needs:

- Incorporate data from other County departments and regional partners to develop a more complete picture of traffic safety. This could also include data models to further understand appropriate engineering or program countermeasures.
- Engage community partners to understand and “ground truth” traffic safety issues and collect qualitative data. This process will help validate existing data, identify additional data sources, and implement community-driven projects.
- Bring data experts and community experts together to prioritize types of analysis and an implementation approach. This involves a joint conversation among many partners to identify how data can be used creatively and applied to problem-solving.
- Consider long-term data collection needs for all modes of travel, such as bicycle and pedestrian volumes.

Develop metrics and targets (June 2017). To gauge the success of this initiative, measurable metrics and targets can be developed for the County, similar to those utilized by the California Strategic Highway Safety (CSHS). CSHS is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan would position the County to effectively use a variety of innovative and culturally appropriate communication techniques aimed at behavior change around traffic safety. This Communications Plan would include the development of a Vision Zero website, public service announcements, branding, fact sheets, social and digital media, press kits, and talking points, and would include strategies for ongoing public education and outreach. Communications strategies could include leveraging existing media materials (e.g. from City of Los Angeles), as well as low-cost advertisement space on County bus shelters and bus circulars. The communications approach should reflect the diverse populations of Los Angeles County and address ways to reach audiences in a wide variety of geographies and languages.

Hold a press event to launch Vision Zero (June 2018). Once an Action Plan and Communications Plan are prepared and a website has been launched, a Vision Zero press event would help bring attention to the County's multi-sector campaign to reduce traffic deaths and severe injuries, and highlight future traffic safety initiatives. The event could feature elected officials, department and agency directors, community-based organizations, and survivors of traffic crashes.

Develop a regional approach to Vision Zero messaging and strategy implementation (February 2017 – ongoing). The unincorporated areas are disparate “islands” that vary in geography, climate, demographics, and land uses. A campaign to reduce traffic deaths would be most effective if behavior change messages were well-aligned and coordinated across the region, especially given that unincorporated area residents travel widely as part of their daily lives. Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, SCAG, the City of Los Angeles, and other jurisdictions, would have the greatest influence on social norms and encourage behavior change. Similarly, the County’s engineering, enforcement, and education strategies should be implemented in close coordination with regional partners to increase success.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address several traffic safety problems may require changes in State legislation. For example, automated speed enforcement, cameras that capture speeding and issue an automated citation, is not legal in California but has been shown to be effective in other states. The County could coordinate with other jurisdictions

and agencies to explore common legislative and policy solutions that would enhance traffic safety regionally.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). Reducing traffic deaths and severe injuries requires community-wide awareness and behavior change, as well as an institutional focus on traffic safety. People driving, walking, bicycling, and riding motorcycles face choices every day, such as whether to speed while driving or use their cell phones while in a crosswalk. Likewise, County staff make choices that impact traffic safety when planning and designing communities, and when developing education and enforcement programs. The County could help to promote choices that prioritize traffic safety through messaging aimed at the County workforce in County newsletters and on department websites. Similarly, a broad, shared policy direction would help ensure all County Departments have the opportunity to promote traffic safety.

APPENDIX A - FUNDING OPPORTUNITIES

Jurisdictions typically fund their efforts through a combination of grant resources, general funds, and changing existing internal processes or programs to align more closely with the Vision Zero program. The summary below highlights potential sources of funding and their uses that the County could pursue to support a Vision Zero effort. The County already pursues these sources for other transportation and safety projects.

State Highway Users Tax

The State Highway Users Tax, commonly referred to as the gasoline tax, is the primary source of funds DPW uses for ongoing operation and maintenance of roadways, safety projects and programs, and transportation improvement projects. The County's gasoline tax revenues have dropped from about \$190 million in fiscal year (FY) 2014-15 to about \$150 million in FY 2015-16, and are projected to be only about \$144 million in FY 2016-17 and FY 2017-18. This downward trend is expected to continue without State legislative action.

Measure R Local Return

Measure R is a half-cent County transportation sales tax, passed in 2008. The County receives approximately \$13 million annually. The funds, which are administered by the Los Angeles County Metropolitan Transportation Authority, can be used for all types of roadway projects and some non-infrastructure programs, including those that promote traffic safety.

Measure M Local Return

Measure M was passed by voters in November 2016 and is another half-cent County transportation sales tax that will begin July 1, 2017. The funds will be administered by the Los Angeles County Metropolitan Transportation Authority. There is a local return portion of Measure M that will distribute a percentage of the sales tax collected to Los Angeles County starting September 2017. The County expects to receive approximately \$14 million annually. Allocations and eligible projects have not yet been specified in detail. The County expects traffic safety projects to be an eligible use of funds.

Highway Safety Improvement Program (HSIP)

This Federally-funded program is a component of the "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and funds safety improvements. The program is administered by the State of California Department of Transportation on behalf of the Federal Highway Administration. DPW regularly applies for engineering projects through this source. Competitive projects are those that show high safety benefits (e.g. high crash reduction or modification factors) compared to project cost.

Office of Traffic Safety (OTS) Grants

The State's Office of Traffic Safety (OTS) offers grants to address distracted driving, alcohol impaired driving, motorcycle safety, and pedestrian and bicycle safety. OTS grants are a primary source of funding for the programs administered by CHP and Sheriff's Department, which are described within the report. OTS grants are on a two-year cycle, and can be challenging to administer.

Active Transportation Program

The Active Transportation Program (ATP) is administered by the California Department of Transportation (Caltrans). The purpose of the ATP is to encourage increased use of active modes of transportation (walking and bicycling), among all ages, and aims to increase the safety and mobility of non-motorized users through non-infrastructure programs and engineering projects. To date, this grant has been administered annually. DPW and DPH have applied for this grant in the past, and DPW applies for it regularly to build projects that promote safety.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) administers a Sustainability Planning Grant program, which funds planning and media campaigns related to active transportation, integrated land use, and green region initiatives (e.g. climate action plans, GHG reduction programs). The program provides direct technical assistance, rather than funds, which reduces the County's administrative burden. DPW applied for this program in November 2016 to support a media campaign and a Vision Zero Action Plan.



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District

Mark Ridley-Thomas
Second District

Sheila Kuehl
Third District

Janice Hahn
Fourth District

Kathryn Barger
Fifth District

March 16, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director, Public Health *[Signature]*

Mark Pestrella, PE
Director of Public Works *[Signature]*

SUBJECT: REPORT BACK ON VISION ZERO MOTION (Item 41-B)

On February 14, 2017, your Board approved a motion instructing the Departments of Public Health (DPH) and Public Works (DPW), in collaboration with other County departments and stakeholder agencies and nonprofit organizations, to: (1) implement the recommended strategies and actions described in the Vision Zero Report dated February 10, 2017, (2) establish a Vision Zero Steering Committee to coordinate and implement the initiative, (3) develop a Vision Zero Action Plan for unincorporated Los Angeles County, and (4) identify opportunities to secure long-term funding to sustain the Vision Zero initiative. The motion was approved as amended to include a report back with responses to questions from your Board.

To ensure that responses are based on best practices from other jurisdictions, as requested, meetings were conducted with representatives from the following organizations: City of Los Angeles Department of Transportation (LADOT), City of San Francisco Department of Public Health, and the national non-profit Vision Zero Network (VZN), which publishes briefs on best practices in Vision Zero implementation.

Prioritizing Safety with Existing Resources

Adopting a Vision Zero approach means acknowledging that business as usual is not enough and that systemic changes are needed in our traffic safety efforts to make meaningful progress. Central to this approach is the identification of potential safety problems on roadways and subsequent use of resources in a proactive and data-driven manner to implement solutions.

For transportation departments, this means using available resources to implement a capital improvement program that implements specific, data-driven safety improvements. For law enforcement agencies, enforcement efforts need to focus on the most dangerous traffic behaviors, such as speeding and driving under the influence. For education efforts, communication strategies need to target behaviors and populations most associated with collisions. Taken together, a new Vision Zero initiative can be initiated by shifting and better coordinating available resources for a more intentional safety focus.

Vision Zero Program Scope

Your Board requested information about the scope of the County's Vision Zero program and the total budget being allocated in terms of staff, communication plan, and corrective actions. A description of the program's general framework scope and resource needs are provided below. Because the County's Vision Zero effort is still in its preliminary stages, precise resource needs are not yet fully identified. Strategies prioritized in the Action Plan described below will inform the long-term budget needed. While departments will pursue every opportunity for grant funding, achieving reductions in traffic deaths and severe injuries may require additional County investments over the long term. It is likely that these costs will be offset by savings to the County associated with the prevention of traffic deaths and injuries, such as savings in medical costs, emergency services, legal and court costs, and congestion costs. According to the California Strategic Highway Safety Plan 2015-2019, the annual economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion.

Vision Zero Action Plan: The Action Plan will prioritize engineering, education, engagement, enforcement, and evaluation strategies and identify responsible parties, benchmarks, and timelines for achieving progress. County departments have secured grant funding to assist in developing the Action Plan. In addition, relevant departments will be dedicating staff to participate in the planning effort.

Vision Zero Communications Plan, Public Launch, and Media: Crafting an effective communications campaign that leads to real behavior change is complicated and requires a deep understanding of the steps people and communities will need to take to shift perceptions and actions. The Vision Zero Communications Plan will include innovative and culturally appropriate communication techniques and will position the County to launch Vision Zero publicly. A continuous online and media presence will help build awareness of Vision Zero and support culture change. A successful communications strategy will coordinate the campaign and messaging with other regional traffic safety partners such as the California Highway Patrol (CHP), Los Angeles County Metropolitan Transit Authority (Metro), Southern California Association of Governments (SCAG), the City of Los Angeles, and others.

Data Analysis for Project and Program Prioritization: Vision Zero is a data-driven initiative. Many sources of data must be combined (including CHP, hospital, and emergency medical services data) and considered to develop effective programs and projects and to achieve a more complete picture of traffic safety issues. As the region continues to change, collision patterns and concentrations will change. Consistent and iterative data analysis will be imperative to ensure we are allocating resources effectively.

Infrastructure Improvement Identification, Design, Implementation, and Maintenance:

Dwindling dedicated resources for infrastructure projects present challenges to implementing existing projects, much less new Vision Zero projects. Dedicated funding for infrastructure project identification, design, implementation, and long-term operations and maintenance would allow the County to set realistic targets for safety improvements (e.g., implement a certain number of traffic safety projects annually).

Community Engagement and Community-Based Organization Support: Behavior change can only be achieved by building awareness among residents. Investments in long-term community outreach and engagement will allow us to develop more authentic relationships and culturally relevant materials. Furthermore, effective engagement and buy-in from community partners will allow safety projects, such as infrastructure improvements, to be promoted and more effectively implemented.

Program Expansion and/or Development and Implementation: Currently, the County and its partners have education, enforcement, and evaluation programs that support traffic safety goals. Some are implemented through competitive grant funds and others have dedicated funding. Through best practices research, the County and its partners will identify opportunities to expand the reach of our most effective programs and, as needed, develop new programs.

Dedicated Staff in Departments and Partner Agencies: Lead staff from each partner department or agency will be necessary to implement the Vision Zero Action Plan and sustain the initiative. Staff are needed to convene, facilitate, and organize meetings; coordinate County staff and regional and community partners; oversee communications efforts; develop and implement programs and action plans; identify, design, and implement infrastructure improvements; collect, analyze, and maintain high-quality data and communicate this information across a diverse body of stakeholders; and engage in and oversee community outreach.

Grant Writing and Administration: County departments have and will continue to seek grant funding sources to support traffic safety efforts, public education and outreach, and enhanced enforcement. This requires dedicated staff time to pursue and administer grants to support all program activities.

Potential Revenue Streams to Support Vision Zero

Your Board requested information about potential ongoing revenue sources for the County's Vision Zero initiative. DPW has identified the following opportunities for financing the County's Vision Zero efforts.

Senate Bill 1: If enacted, the bill would provide an additional \$200 million in annual funding to the County for the first 3 years for the repair and preservation of streets and roads, safety enhancement projects, active transportation, and other general transportation infrastructure needs. This is the most promising opportunity for continuing long-term financing for staffing and implementation of Vision Zero initiatives.

Measure M: This measure is the new half-cent transportation sales tax approved by Los Angeles County voters in November 2016, which allocates approximately \$3.5 billion over 40 years to Metro and the County's subregions for various active transportation, first/last mile, complete

streets, and modal connectivity programs and projects. Measure M does not provide for a specific formula allocation of these funds to the County or cities. However, through its presence and participation in essentially all of the subregions, the County will be well-positioned to advocate for funding of eligible projects that incorporate Vision Zero initiatives.

Grant Funds: The County will continue to apply for various competitive grant programs to support Vision Zero, such as those offered by the State's Highway Safety Improvement and Active Transportation Programs. Grant funds are available for public education and outreach efforts, and potential sources include the State Office of Traffic Safety and SCAG. General funds may be needed for any local matches required by these grants. In addition, grant funds will be sought to support ongoing coordination of the Vision Zero initiative within the County.

County Transportation Funds: Ongoing funds eligible to staff to implement Vision Zero initiatives include Road funds (gas tax), Proposition C Local Return (with nexus to transit), Measure R Local Return, and Measure M Local Return for which revenue begins in FY 2017-18.

The County's Road funds, Proposition C Local Return, and Measure R Local Return funds are currently fully committed to ongoing operation, maintenance, and safety programs critical to the quality of life in unincorporated communities and to Supervisorial District Transportation Improvement Program (TIP) projects. Due to the steady decline of the County's gasoline tax revenues from \$190 million in FY 2014-15 to a projected \$143 million in FY 2017-18, DPW has had to defer \$74 million in previously planned TIP projects and place a heavier burden of TIP financing on the limited Proposition C and Measure R Local Return funds and future Measure M Local Return proceeds. Further, Measure M has a requirement that local agencies contribute 3 percent of the cost of the new Measure M transit lines in their jurisdictions. The County's obligation for this is estimated to exceed \$62 million through year 2029.

Vision Zero Budget Allocations in the City of Los Angeles

Vision Zero jurisdictions take a combination of approaches for funding, including both dedicated annual funding and grant funding. Approaches to start-up costs vary across jurisdictions.

In the City of Los Angeles, the LADOT initially assigned Vision Zero to existing engineering staff, but soon after hired a Principal Project Coordinator to lead the initiative full-time. The Principal Project Coordinator previously led the Mayor's Great Streets Initiative, had experience leading cross-departmental efforts, and was given authority to work with other department directors to incorporate Vision Zero into their existing work.

The City of Los Angeles 2016-2017 budget dedicates \$3.6 million for Vision Zero projects, programs, and staff salaries. These funds were allocated through an innovative inter-departmental budget process within several months of publicly launching Vision Zero.

The City of Los Angeles 2016-2017 Vision Zero funds are being distributed as follows:

- \$2.5 million to LADOT: Continuous funding for six Vision Zero staff, street maintenance, safety improvement projects, and speed zone survey work on the City's high-injury network.
- \$264,000 to Bureau of Engineering (BOE): Engineering design and survey work and staff to manage safety projects on the high-injury network.

- \$316,000 to Bureau of Street Lighting (BSL): Staff and street lighting projects along the high-injury network and at top 50 schools in the Safe Routes to Schools Program.
- \$500,000 to Bureau of Street Services (BSS): Construction of safety improvements, such as pedestrian refuge islands, and installation of curb ramps.

The City's current Vision Zero budget is also supplemented by the following grant funds:

- \$500,000 from the California Office of Traffic Safety for Vision Zero Education and Outreach
- \$1 million from the California Active Transportation Program for a Vision Zero Education Campaign, which is part of a larger \$2.2 million Safe Routes to School Education Programs grant
- \$400,000 from SCAG for ongoing education and outreach campaign activities

Location of County Vision Zero Efforts

Your Board sought information on where the County's Vision Zero initiative would be located, within DPW or DPH, and how other jurisdictions have approached this issue. Vision Zero requires multiple sectors to come together to share and use data consistently, define clear responsibilities, break down silos, participate in joint decision making, develop shared objectives, and unite behind common goals. Fostering a sense of shared ownership for Vision Zero outcomes is necessary for success. In this sense, each involved agency must play a lead role.

As the County's transportation agency responsible for building and maintaining unincorporated area roadways, DPW must play a leading role in this initiative. Vision Zero is based on the understanding that the speed at which pedestrians, bicyclists, or vehicle occupants are struck is the fundamental factor in the severity of injuries sustained. As current law prohibits agencies from arbitrarily setting or lowering speed limits, the County's expanding transportation system must be designed to discourage speeding and additional roadway features must be incorporated into our existing roadway networks to promote safe behavior and protect human life. DPW has developed a Collision Geodatabase capable of mapping locations where traffic collisions have occurred and identifying hot spots experiencing high concentrations of collisions. For these reasons, strong leadership from DPW is paramount.

As the County's public health agency, DPH's mission is to protect lives and promote health. DPH staff members are trained in conducting population-level analysis and surveillance and in collaborating with a wide array of stakeholders, such as local jurisdictions, regional agencies, and community stakeholders. DPH regularly plays the role of "backbone organization" on efforts requiring multiple sectors to commit to a common agenda to solve a specific health or social problem. Effective backbone support includes guiding vision and strategy; convening, facilitating, and coordinating meetings and aligned activities; establishing shared measurement practices; building public will; advancing strategic policy; and mobilizing funding. DPH staff have extensive experience leading such cross-sector initiatives. For these reasons, strong leadership from DPH is also paramount.

DPH and DPW recommend basing the Vision Zero Initiative leadership structure on the City of San Francisco's model. In San Francisco, the transportation and public health agencies co-lead the City's Vision Zero Task Force and have worked together to identify resources to fund the

initiative's activities. San Francisco's agencies credit this partnership with providing essential leadership in breaking down silos and advancing Vision Zero programs.

Another key lesson learned from other jurisdictions is the need for a single point-person and agency to coordinate the initiative. Therefore, DPW will allocate existing engineering staff to serve as the initial County Vision Zero Coordinator. As the initiative progresses, additional resources for dedicated Vision Zero staff may be required.

Partnering with Neighboring Cities

Your Board has requested a status update on collaborative efforts with "hot-spot" cities and how we can leverage our resources in partnership with these cities.

Existing Relationships and Resources

Many County departments are currently working with our local jurisdictions in different capacities that could be leveraged for the Vision Zero initiative.

Chief Executive Office: Has general services agreements with all cities within the County except for the City of Los Angeles. These agreements provide a mechanism for the cities to contract with County departments for services

DPW: Provides traffic advisory services to some contract cities under the general services agreements. Local jurisdictions can pay DPW to provide engineering design service support for a project in their own jurisdiction. In addition, DPW often works with jurisdictions that border unincorporated communities on project development and scoping. DPW also participates in regional groups where other jurisdictions have a presence, including Metro's Streets and Freeways Committee, Subregional Councils of Governments (COGs) meetings, and others.

DPH: Provides pass-through grant funding and technical assistance to County jurisdictions for a variety of health-focused initiatives, including active transportation planning; policy efforts related to tobacco prevention, nutrition education, and access to healthy foods; and organization of emergency response and communicable disease response. DPH serves as the Public Health Department for 85 of the 88 incorporated cities in the County, excluding Long Beach, Pasadena, and Vernon, and also works regularly with community-based organizations across the County. DPH is currently working closely with the City of Los Angeles on its Vision Zero Initiative.

CHP: Provides traffic enforcement services to unincorporated area communities, but also provides services and implements educational programs targeting other Los Angeles County jurisdictions.

Sheriff's Department: Provides crime enforcement services to unincorporated areas. For certain contracted incorporated jurisdictions, the Sheriff's Department provides both crime and traffic enforcement services.

Department of Health Services: Provides hospital services for all of the County, including residents of incorporated cities.

Fire Department: Provides services for unincorporated communities, and also provides fire services to additional Los Angeles County jurisdictions on a contract basis.

Leveraging Resources and Partnering

The County already collaborates with other jurisdictions and intends to continue doing so within the Vision Zero initiative. Several Los Angeles County jurisdictions have moved ahead with their own Vision Zero initiatives and can provide lessons learned and resources, such as media campaigns and project linkages. These jurisdictions include Los Angeles, Long Beach, and Santa Monica.

In order for the County to effectively promote Vision Zero broadly and provide supportive services to other jurisdictions, it must focus initially on creating a broader understanding of Vision Zero among County departments, establishing cross-agency/departmental relationships, institutionalizing approaches, and identifying short- and long-term resources for an unincorporated area effort. Once the County has a well-articulated and understood Vision Zero plan and has built broader relationships with existing Vision Zero cities and regional agencies, it will be in a better position to support other cities in traffic safety efforts.

Future opportunities where the County could play a supportive role include:

- Providing countywide data gathering and analysis services
- Designing regional projects that traverse multiple jurisdictions
- Providing creative concept material for use by incorporated jurisdictions
- Speaking at Subregional Councils of Governments to emphasize a traffic safety lens in project identification, development, and implementation
- Hosting learning opportunities for local jurisdiction staff, such as trainings and webinars
- Coordinating enforcement efforts more closely (e.g., Driving Under the Influence (DUI) Checkpoint deployment)

Summarizing Data

Your Board requested information about further geographic breakdown of persons who have been killed or severely injured in unincorporated areas. As the County moves forward with Vision Zero, it may be useful to sort data by certain communities or geographic areas, such as Service Planning Areas, within which disproportionately high levels of collisions have occurred. Currently, the DPW's Vision Zero GIS Application includes point-specific collision data that can be grouped in a number of ways, such as primary collision factor, involved parties, mode of travel, and gender. Boundary data could be added to this application in the future, as needed, to help define next steps in program development, implementation, and resource allocation.

We will develop an annual progress report to your Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of our Vision Zero Action Plan, and a description of detailed resource needs. If you have any questions or need additional information, please let us know.

BF:ja

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors



COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO
P. O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE T-8
10040-2-1

December 2, 2019

TO: Each Supervisor

FROM: Mark Pestrella *Mark Pestrella*
Director of Public Works

- Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director of Public Health *Barbara Ferrer*

BOARD MOTION OF FEBRUARY 14, 2017, AGENDA ITEM NO. 41-B VISION ZERO ACTION PLAN AND IMPLEMENTATION PARTNERSHIP STRUCTURE

On February 14, 2017, the Board approved a motion instructing Public Works and the Department of Public Health, in collaboration with the Healthy Design Workgroup; the Departments of Sheriff, Fire, Health Services, Regional Planning; the Chief Executive Office; the California Highway Patrol; and other stakeholder agencies and nonprofit organizations to develop a Vision Zero Action Plan and partnership structure.

In accordance with the motion, attached is "Vision Zero Los Angeles County: A Plan for Safer Roadways 2020-2025," which serves as the Action Plan for unincorporated County roadways. The Action Plan focuses on the County's efforts in reducing traffic deaths and severe injuries on unincorporated County roadways over the next 5 years and sets the goal of eliminating traffic deaths by 2035. The Action Plan identifies unincorporated County roadways experiencing patterns of fatal and severe injury collisions and 63 actions to enhance traffic safety. The implementation of the proposed actions will necessitate additional resources.

The Action Plan was developed in partnership with a broad array of stakeholders. An Action Plan Advisory Committee was convened comprised of the Board offices, County departments, and the California Highway Patrol to provide guidance into plan development. Between November 2017 and February 2019, Public Works and Public Health engaged stakeholders at community events and meetings, met with community-based organizations and special interest groups, and administered a survey on traffic safety experiences and perceptions. In March 2019, a draft plan was made

Each Supervisor
December 2, 2019
Page 2

available for public review generating over 200 comments that were taken into consideration while strengthening the Action Plan.

Public outreach will continue during the implementation of the Action Plan. For example, stakeholders will be engaged during project development and demonstration projects will be conducted to pilot various traffic safety features. This will garner community input on the design and implementation of permanent enhancements. Additionally, to optimize construction opportunities, traffic safety enhancements will be coordinated with other roadway improvement projects to the greatest extent feasible, such as those related to Public Works' pavement preservation program.

As instructed by the Board, attached is the proposed partnership structure for the implementation of the Action Plan. Public Works and Public Health continue to work closely with County partners and stakeholders to enhance traffic safety on unincorporated County roadways.

If you have any questions related to Public Works, please call Mark Pestrella at (626) 458-4001 or your staff may contact Phil Doudar at (626) 458-4018 or pdoudar@pw.lacounty.gov. For questions related to Public Health, please call Barbara Ferrer at (213) 240-8117 or staff may contact Megan McClaire at (213) 288-8036 or mmcclaire@ph.lacounty.gov.

MD:la
P:\TSM\Pub\WPFILES\FILES\BOARD MOTIONS\VZ AP BRT 10040-2-1.DOCX

Attach.

cc: Chief Executive Office
Executive Office

VISION ZERO

LOS ANGELES COUNTY

A Plan for Safer Roadways
2020-2025

NOVEMBER 2019

Achieving the Vision Zero goals, objectives, and actions outlined in this Action Plan, in the time frames specified, for the Collision Concentration Corridors as defined and mapped in this Plan, is contingent upon multiple factors including, without limitation, available funding and resources. Similarly, implementation of any future engineering projects to achieve the goals and objectives of this Plan are contingent upon multiple factors including, without limitation, obtaining community support of the proposed engineering projects and securing sufficient funding to finance all phases of a project including installation, operation, on-going maintenance, appropriate environmental analysis, and engagement.

DEDICATION

This Action Plan is dedicated to the many people – mothers, fathers, sons, daughters, friends, partners, husbands, wives, grandparents – who have lost their lives or sustained life-altering injuries on unincorporated County roadways. Thanks and appreciation to all those working together to ensure safe roadways.

DIRECTORS' MESSAGE

On February 14, 2017, the County of Los Angeles Board of Supervisors instructed the Departments of Public Health and Public Works to develop a Vision Zero Action Plan to address traffic-related fatalities and severe injuries that occur throughout unincorporated County communities. Traffic deaths on unincorporated County roadways increased by 28 percent between 2013 and 2017, and we applaud the Board's leadership to address this problem.

Public Health and Public Works are pleased to present *Vision Zero Los Angeles County: A Plan for Safer Roadways 2020–2025*, to address this significant public health threat. This Action Plan identifies over 60 actions to enhance traffic safety through a comprehensive set of engineering, education, enforcement, and evaluation strategies. The Plan will leverage the power of cross-sector collaboration among community residents, Board offices, County agencies, the California Highway Patrol, and other stakeholders to implement strategies aimed at eliminating traffic-related fatalities and severe injuries on unincorporated County roadways.



A handwritten signature of Dr. Barbara Ferrer.

**Dr. Barbara Ferrer,
Ph.D., M.P.H., M.Ed.**

Public Health



A handwritten signature of Mark Pestrella.

Mark Pestrella

Public Works

CONTENTS

1	THE PURPOSE, THE APPROACH	1
	WHAT IS VISION ZERO?	1
	WHAT IS THE PURPOSE OF THIS ACTION PLAN?	1
	GUIDING PRINCIPLES	2
	WHY DO UNINCORPORATED LOS ANGELES COUNTY COMMUNITIES NEED VISION ZERO?	3
	TRAFFIC DEATHS AND SEVERE INJURIES DO NOT IMPACT ALL GROUPS EQUALLY	7
	VISION ZERO SUPPORTS MORE SUSTAINABLE AND HEALTHIER COMMUNITIES	10
2	COLLISION ANALYSIS	13
	WHAT CAUSES FATAL AND SEVERE INJURY COLLISIONS?	13
	WHERE ARE COLLISIONS HAPPENING?	18
	COLLISION CONCENTRATION CORRIDORS	18
	TOP 20 COLLISION CONCENTRATION CORRIDORS	21
3	COMMUNITY ENGAGEMENT PROCESS	57
	LOS ANGELES COUNTY TRAFFIC SAFETY SURVEY	58
	FUTURE COMMUNITY ENGAGEMENT	62

4	ROADWAY SAFETY ENHANCEMENTS	63
5	VISION ZERO ON A REGIONAL SCALE	67
	COLLABORATING ON DATA ANALYSIS	68
	PARTNERING ACROSS JURISDICTIONS	68
	COORDINATING COMMUNICATIONS FOR CULTURE CHANGE	68
6	IMPLEMENTATION ACTIONS	71
	GUIDING PRINCIPLES	71
	OBJECTIVES	73
	ACTIONS	73
7	HOW THIS PLAN WAS DEVELOPED	85
	ENDNOTES	86
	ACKNOWLEDGEMENTS	87



Re



1

THE PURPOSE, THE APPROACH

WHAT IS VISION ZERO?

Vision Zero is a traffic safety initiative to eliminate traffic-related fatalities. It is an international movement that emphasizes a new approach to traffic safety, acknowledging that people make mistakes and focusing on system-wide practices, policies, and designs to lessen the severity of collisions.¹ Agencies that adopt a Vision Zero initiative commit to the systematic elimination of traffic deaths and severe injuries for all roadway users. To achieve success, this approach requires data-driven decision making, an understanding of health equity, multi-disciplinary collaboration within and outside of government, and regular communication with the public.

1

WHAT IS THE PURPOSE OF THIS ACTION PLAN?

This Vision Zero Action Plan will focus the County's efforts over the next five years to achieve the goal of eliminating traffic-related fatalities on unincorporated County roadways by 2035. Severe injuries sustained in traffic collisions can lead to death. Therefore, efforts will also focus on eliminating severe injury collisions in the long term. This Plan defines a vision for the future and describes objectives and actions to enhance traffic safety in collaboration with government and community partners. By creating and embracing a culture of traffic safety within the County at both the regional and neighborhood level, the goal of eliminating fatal and severe injury collisions can be reached.

GUIDING PRINCIPLES

Three guiding principles will direct decision making as the County implements Vision Zero actions to eliminate deaths and severe injuries among those traveling on unincorporated County roadways.



HEALTH EQUITY

Reduce gaps in health outcomes by addressing the practices that disadvantage some populations over others and lead to health inequities.



DATA-DRIVEN PROCESS

Identify where and why traffic collisions are happening and prioritize projects and programs in these areas.



TRANSPARENCY

Maintain regular communication with the public about progress, and how the County is working to enhance traffic safety.

The County of Los Angeles is not the first jurisdiction to take action to eliminate traffic deaths and severe injuries. Municipalities around the world have seen dramatic improvements in traffic safety through Vision Zero initiatives. Since Vision Zero launched in New York City in 2014, traffic fatalities declined 28% overall and pedestrian fatalities declined 45%.² With a firm commitment, similar results in unincorporated Los Angeles County can be achieved.

WHY DO UNINCORPORATED LOS ANGELES COUNTY COMMUNITIES NEED VISION ZERO?

Traffic fatalities and severe injuries are a serious public health threat in Los Angeles County. Countywide, motor vehicle collisions are the leading cause of death for children aged 5 to 14 years, and the third leading cause of premature death overall.³ It is imperative to address this threat to public health.

Traffic collisions impact all unincorporated communities

Unincorporated communities are geographically and culturally diverse places where municipal services are provided by the Los Angeles County Board of Supervisors and County agencies. Outside of the 88 incorporated cities in Los Angeles County there are over 120 unincorporated communities that are home to over 1 million residents. These communities cover 2,600 square miles - about 65% of land in the county.⁴

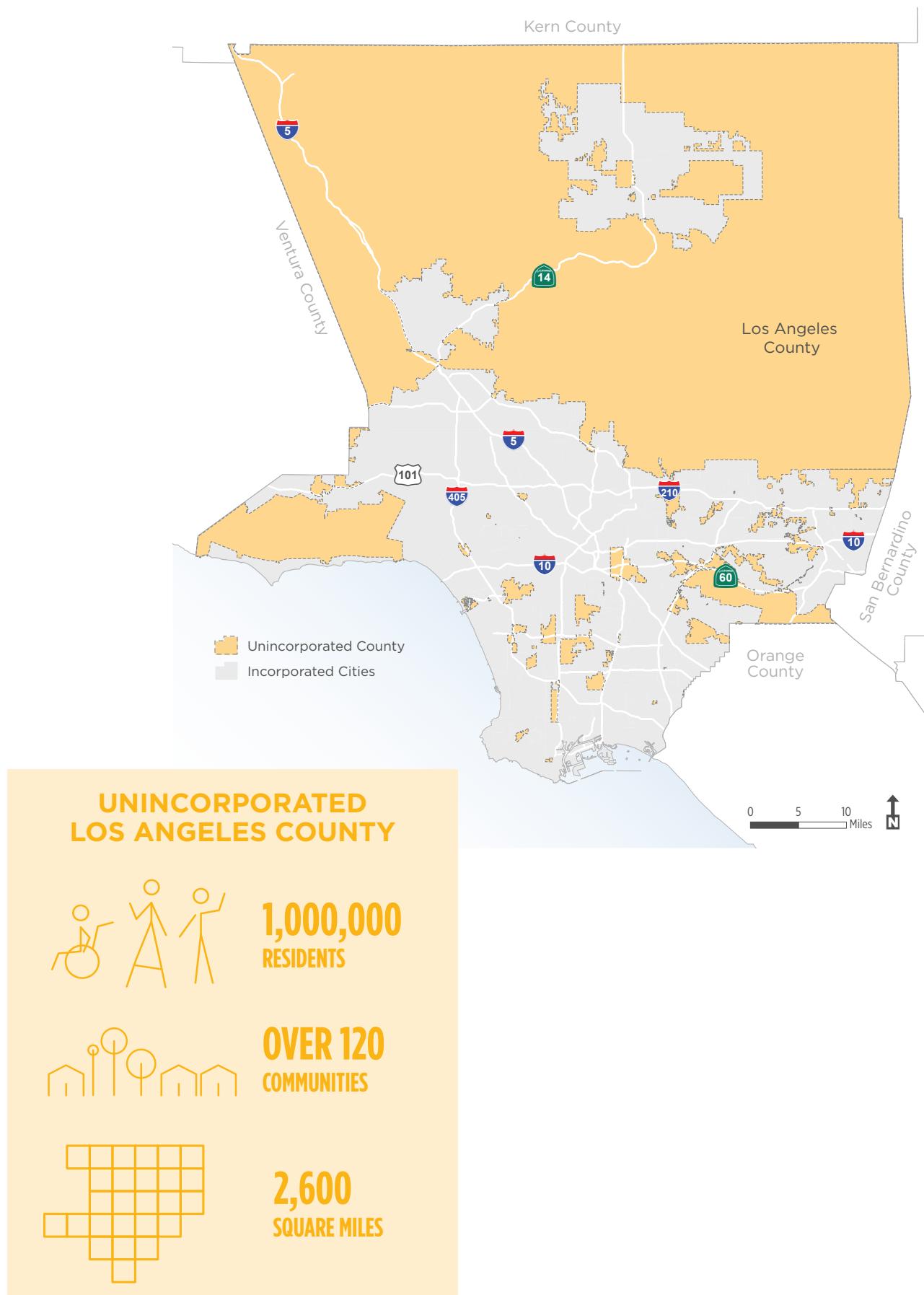
Traffic collisions are a major cause of death and severe injury throughout unincorporated Los Angeles County. From 2013-2017, on average one person lost their life every 5 days as a result of a traffic collision on unincorporated County roadways.⁵

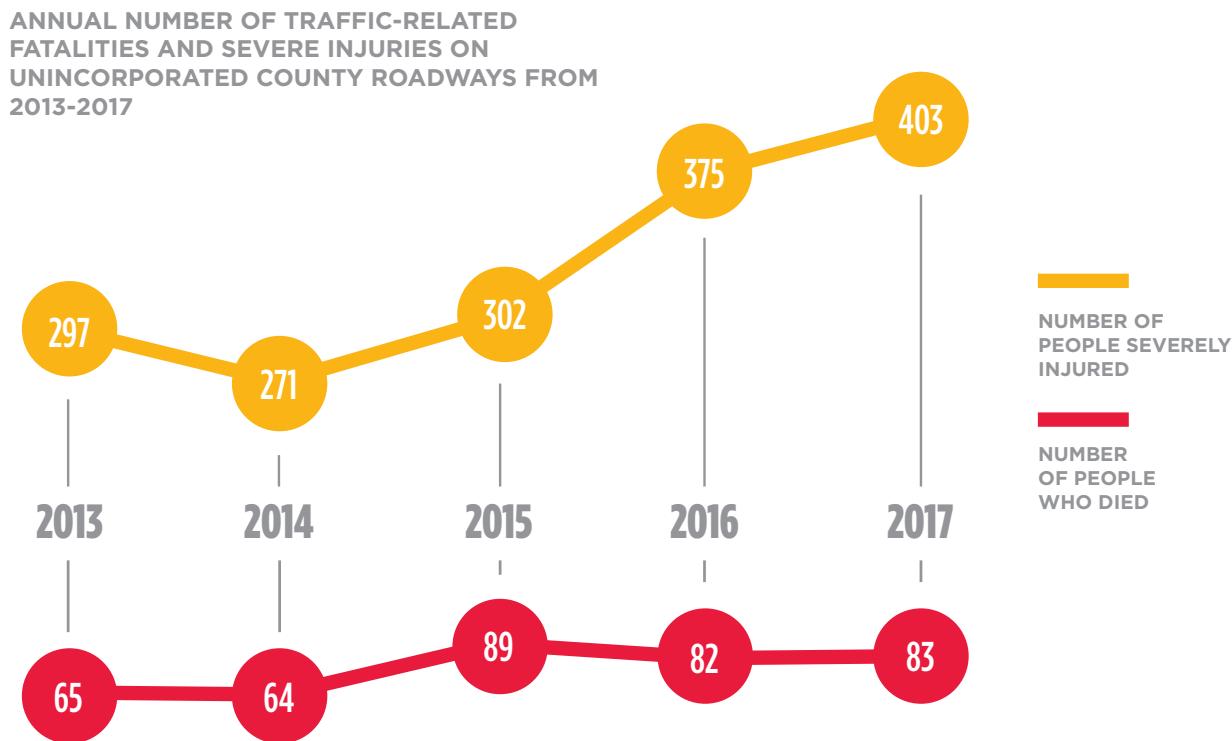
On average, someone loses their life every 5 days in a traffic collision on an unincorporated County roadway.

WHERE DOES THE COUNTY GET TRAFFIC COLLISION DATA?

The California Highway Patrol (CHP) enforces traffic laws and responds to collisions on unincorporated County roadways. They provide the County with traffic collision reports for collisions causing damage or injury. Reports include information such as the people involved, method of travel, collision severity, and the main causes. This information is maintained in a Public Works database.

Throughout the development of this Action Plan, information in the Public Works database was cross-referenced with other publicly-available information to create a comprehensive dataset of reported fatal and severe injury collisions.





Source: Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018)

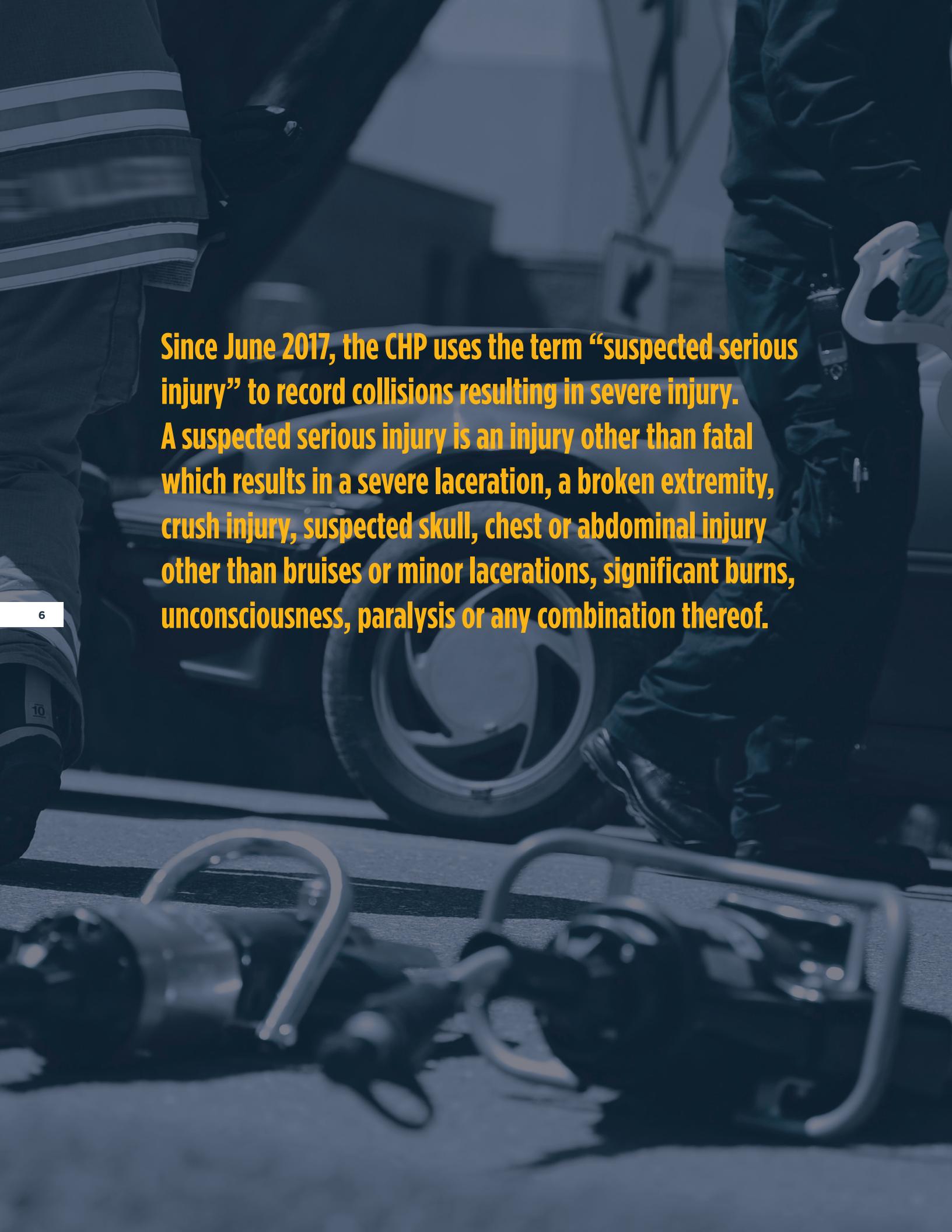
5

Traffic deaths are on the rise

From 2011 to 2016, the percentage of people who lost their lives on US roadways increased by 16.4%.⁶ In 2016 alone, more than 37,500 people lost their lives in traffic-related incidents in the US.⁷ Similar trends exist on unincorporated County roadways, where traffic fatalities increased by nearly 28% between 2013 and 2017. During this time period, 383 people lost their lives and 1,648 were severely injured on unincorporated County roadways.⁸

HIT-AND-RUN

About 10% of all fatal and severe-injury collisions on unincorporated County roadways were hit-and-run collisions, meaning that the driver did not stop or report the collision.⁹ Leaving the scene without stopping or calling for help is against the law and may delay or prevent treatment to those injured in a collision. Since unreported collisions are more likely to result in fatalities if they are not reported within 30 minutes of the crash, encouraging people to stop to help after being involved in a collision could save lives.¹⁰



Since June 2017, the CHP uses the term “suspected serious injury” to record collisions resulting in severe injury. A suspected serious injury is an injury other than fatal which results in a severe laceration, a broken extremity, crush injury, suspected skull, chest or abdominal injury other than bruises or minor lacerations, significant burns, unconsciousness, paralysis or any combination thereof.

TRAFFIC DEATHS AND SEVERE INJURIES DO NOT IMPACT ALL GROUPS EQUALLY

Data analysis shows that some unincorporated community residents and visitors are more likely to die or be severely injured in traffic collisions than others. County agencies will use this information to focus efforts towards achieving the goal of zero traffic-related fatalities by 2035.

Method of Travel

When in a collision, pedestrians, bicyclists, and motorcyclists are more likely to die or be severely injured compared to people inside a vehicle who have the extra protection of the vehicle frame. Although pedestrians were involved in 9% of all injury collisions on unincorporated County roadways (including those resulting in complaint of pain, visible injuries, severe injuries, and fatal injuries) from 2013 to 2017, they were involved in 20% of fatal

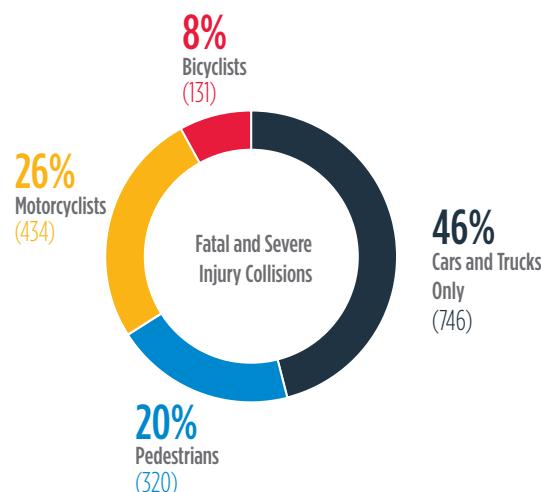
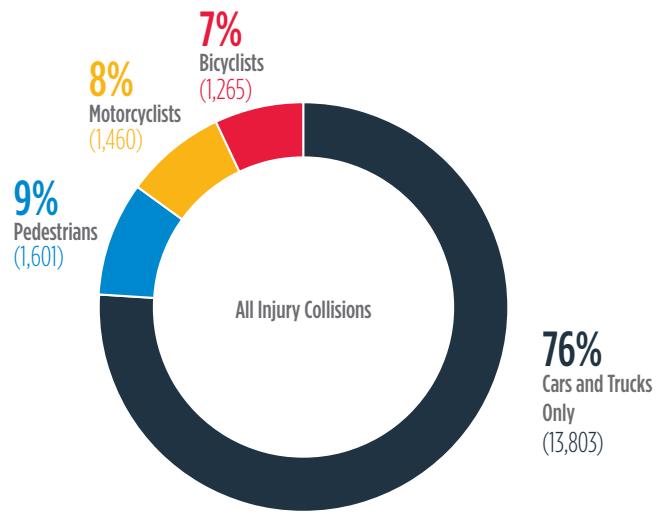


PEDESTRIANS WERE INVOLVED IN 20% OF FATAL AND SEVERE INJURY COLLISIONS.”

and severe injury collisions.¹¹ Similarly, motorcyclists were involved in 8% of all injury collisions, compared to 26% of fatal and severe injury collisions. Bicyclists were involved in 7% of all injury collisions, and 8% of fatal and severe injury collisions.¹²

Alternatively, collisions that only involved cars and trucks accounted for 76% of all injury collisions compared to 46% of fatal and severe injury collisions.¹³

UNINCORPORATED ROADWAY COLLISION VICTIMS BY MODE FROM 2013 TO 2017



*Note: A collision can involve more than one type of victim by mode (e.g., a driver and a pedestrian). Therefore totals will not add up to total number of injury collisions.

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018)

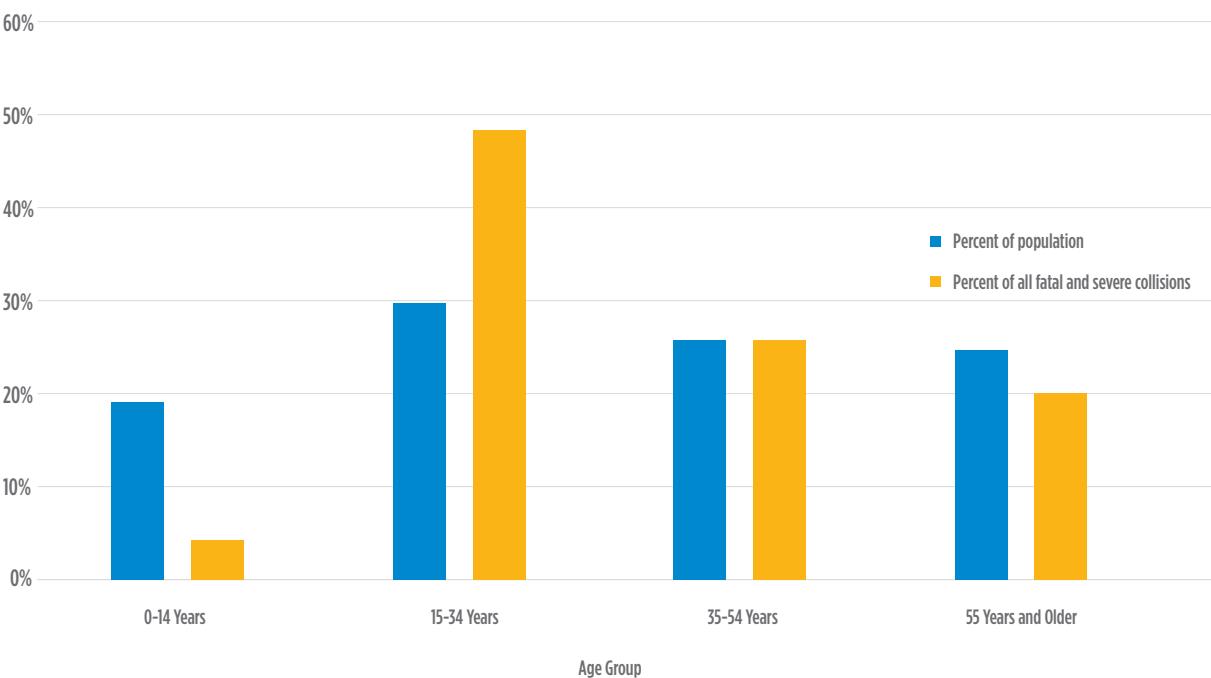
Age

Between 2013 and 2017, nearly half (48%) of those who died or were severely injured in collisions on unincorporated County roadways were 15 to 34 years old. This age group represents 30% of the unincorporated County population, which means that people in this age range are overrepresented in fatal or severe injury collisions.¹⁴ Children (aged 14 or under) are also significantly impacted; on average, a child dies or is severely injured on unincorporated County roadways nearly every 3 weeks.¹⁵



ON AVERAGE, A CHILD DIES OR IS SEVERELY INJURED ON UNINCORPORATED COUNTY ROADWAYS NEARLY EVERY 3 WEEKS.”

AGE DISTRIBUTION OF PEOPLE INVOLVED IN FATAL AND SEVERE INJURY COLLISIONS ON UNINCORPORATED COUNTY ROADWAYS BETWEEN 2013 AND 2017 COMPARED TO UNINCORPORATED COUNTY POPULATION



Sources: Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018)

Population estimates for Unincorporated Areas of Los Angeles County: Population and Poverty Estimates of Los Angeles County Tract-City Splits by Age, Race-Ethnicity and Sex, for July 1, 2017. Prepared by Hedderson Demographic Services for the Los Angeles County Internal Services Department.



Vision Zero can help create broad culture change

This Plan includes actions that are aimed at enhancing the County's processes, trainings, and practices. It outlines how County agencies will work together and with partners regionally to increase broad awareness for traffic safety throughout the County's unincorporated communities. With this Plan, the County will join forces with other jurisdictions and community partners to foster a culture of traffic safety.

What is the acceptable number of people to die on unincorporated County roadways?

How many of our own family members, friends, and neighbors should lose their lives to traffic collisions?

ZERO.

VISION ZERO SUPPORTS MORE SUSTAINABLE AND HEALTHIER COMMUNITIES

Transportation emissions from on- and off-road vehicles are the source of 42% of greenhouse gas (GHG) emissions generated in unincorporated Los Angeles County.¹⁶ One way to reduce GHG emissions is to increase the number of pedestrians and bicyclists on unincorporated County roadways.

Countywide, only 9.9% of people currently walk, bicycle, or take transit to get to work,¹⁷ though this share varies across unincorporated communities. For example, it is higher in Florence-Firestone (16.4%) and lower in Hacienda Heights (3%). Many people do not walk because of neighborhood conditions that make walking difficult. For example, results from the Department of Public Health's 2015 Los Angeles County Health Survey indicate that among adults (aged 18 and over) who are able to walk and want to walk, 20% do not walk because there are no sidewalks in their neighborhoods and 23% do not walk because there is too much traffic.¹⁸

In addition to reducing GHG emissions, traffic safety treatments can incorporate other sustainability features such as permeable pavement and landscaped buffers that can reduce the heat island effect and capture stormwater.

Safe, appealing, and reliable alternatives to driving can lead to healthier, more active, and sustainable unincorporated communities.



Vision Zero complements and helps achieve multiple County policies, plans, and actions to create healthier, sustainable, and more vibrant communities.

- [Los Angeles County Strategic Plan 2016 – 2021](#)
- [General Plan 2035 Mobility Element Policies](#)
- [Community Health Improvement Plan \(CHIP\) 2015-2020](#)
- [2019 OurCounty: Los Angeles Countywide Sustainability Plan](#)
- [2019 Step by Step Los Angeles County; Pedestrian Plans for Unincorporated Communities](#)
- [2016 Community Parks and Recreation Plans](#)
- [2015 Equitable Development Motion](#) to ensure the General Plan is implemented in a manner that promotes sustainable, healthy, and well-designed environments that enhance the quality of life and public well-being for residents of all unincorporated communities
- [2013 Healthy Design Ordinance](#) aimed at increasing levels of physical activity and access to healthy foods in unincorporated communities
- [2012 Los Angeles County Bicycle Master Plan](#)





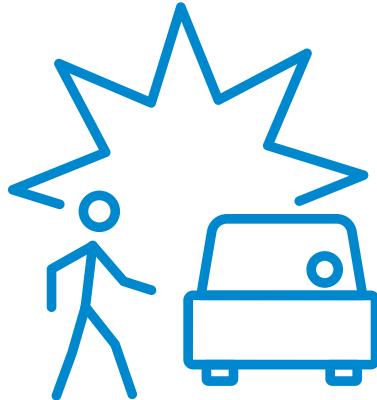
2

COLLISION ANALYSIS

WHAT CAUSES FATAL AND SEVERE INJURY COLLISIONS?

Based on collision data for 2013-2017, 85% of fatal and severe injury collisions on unincorporated County roadways were caused by six primary factors: unsafe speeds, improper turning, driving or bicycling while under the influence of drugs or alcohol, driver failing to yield to another driver, pedestrian violation, and failure to yield to traffic controls, as defined by the California Highway Patrol.¹⁹ These causes are further explained below. Actions in this plan can help eliminate the associated fatal and severe injury collisions. As Vision Zero is implemented across the County, additional community-level analysis will be conducted to better understand the factors significantly contributing to traffic deaths and severe injuries in each unincorporated community.

EIGHTY-FIVE PERCENT (85%) OF FATAL AND SEVERE INJURY COLLISIONS BETWEEN 2013 AND 2017 WERE CAUSED BY SIX PRIMARY FACTORS



13

Primary Collision Factors	Percent of Fatal and Severe Injury Collisions
Unsafe speed	19%
Improper turning	18%
Driving or bicycling under the influence of alcohol or drugs	17%
Driver failing to yield to another driver	14%
Pedestrian violation	10%
Failure to yield to traffic controls	7%
Total	85%

Source: Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018)

WHY SPEED MATTERS: A DRIVER'S FIELD OF VISION NARROWS AT HIGHER SPEEDS



14

Unsafe speeds

Higher vehicle speeds make avoiding a collision more difficult and can increase the severity of the collision. Collision avoidance at higher speeds is particularly challenging because a driver's field of vision is narrowed and the driver has less time to react. In addition, the faster a vehicle is traveling, the greater the stopping distance and the greater the force of the impact will be.

The relationship between speed and injury severity is especially critical when a collision involves a pedestrian or a bicyclist. If a pedestrian or bicyclist is struck by a vehicle traveling 40 miles per hour they have a 90% chance of death or severe injury, whereas they have a 10% chance of death or severe injury if struck by a vehicle traveling at 20 miles per hour. Slowing down is essential to eliminating traffic deaths.

WHY SPEED MATTERS: WHEN HIT AT HIGHER SPEEDS, PEDESTRIANS ARE MUCH LESS LIKELY TO SURVIVE A COLLISION



Source: AAA Foundation for Traffic Safety, Impact Speed and a Pedestrian's Risk of Severe Injury or Death, 2011

Improper turning

When drivers make unpredictable moves, there is little opportunity for others on the road to respond safely. Improper turning, or moving left or right without reasonable warning, increases the risk of collisions and can create unsafe conditions for everyone else on the road.

Driving under the influence of alcohol or drugs

Driving a vehicle under the influence of alcohol or drugs—also called “impaired driving”—is a serious concern in Los Angeles County. Countywide, 45% of motor vehicle fatalities involve either alcohol or drugs.²⁰ With the 2016 statewide legalization of recreational marijuana use, there is concern that even more traffic collisions will result from higher rates of impaired driving.



Traffic fatalities from collisions in which a driver tested positive for marijuana increased by 84% from 2004 to 2016 across Los Angeles County.²¹ Marijuana was becoming much more readily available during this period, with the establishment of the Medical Marijuana Program in 2004 and

the decriminalization of marijuana in the State of California in 2010. Impaired driving can also involve the use of prescription drugs, such as opioids. Opioid-related emergency department visits (excluding heroin) increased by 284% from 2006 to 2017.²² Fatal traffic collisions in which a driver tested positive for opioids (excluding heroin) increased by 33% from 2004 to 2016 across Los Angeles County.²³

Driver failing to yield to another driver

As with improper turning, failure to yield creates unpredictable conditions for others on the road. Drivers making a left or U-turn or entering or crossing an intersection without a clearly designated right-of-way are required to yield to all approaching vehicles.

DISTRACTED DRIVING IS A GROWING NATIONAL CONCERN

The AAA Foundation for Traffic Safety conducts an annual survey to identify drivers' attitudes and behaviors related to traffic safety. The 2018 survey found that during a 30 day period before the survey, **44.9% of drivers read a text message or email while driving and 34.6% of drivers typed or sent a text message or email while driving.** This is despite the fact that **96.8% of drivers view texting or emailing while driving as a serious threat.**

“

**SLOWING DOWN IS ESSENTIAL TO ELIMINATING
TRAFFIC DEATHS.”**





Pedestrian violation

When pedestrians suddenly walk or run into the roadway unexpectedly, they increase the likelihood of conflict with a vehicle. While the driver of a vehicle shall yield the right of way to a person crossing a roadway within any marked or unmarked crosswalk at an intersection, a pedestrian is required to yield the right-of-way to all vehicles upon a roadway at other locations.

Failure to yield to traffic controls

Roadway users are required to obey all signs and signals on a public roadway, including stopping at stop signs and not entering intersections when a traffic signal is red. Failure to obey these traffic controls is another example of unpredictable behavior.

WHERE ARE COLLISIONS HAPPENING?

The County of Los Angeles manages nearly 3,300 miles²⁴ of roads that traverse urban, suburban, rural-mountain, and desert areas. This creates a level of complexity in achieving the Vision Zero goal because unincorporated County roadways vary drastically based on the terrain and surrounding land uses.

Collision data for the five year period between 2013-2017 showed that fatal and severe injury collisions occurred in every unincorporated community with the majority having occurred in urbanized areas.

18

COLLISION CONCENTRATION CORRIDORS

Further analysis of collision data identified where there are concentrations of fatal and severe injury collisions. A Collision Concentration Corridor is defined as any half-mile roadway segment that contained three or more fatal or severe injury collisions between January 1, 2013 and December 31, 2017. The segments that met these criteria are mapped on pages 24-55. Overlapping half-mile segments were combined to create continuous corridors for evaluation purposes.

50% of fatal and severe injury collisions occurred on approximately 3.8% (125 miles) of the roadways²⁵ managed by the County.

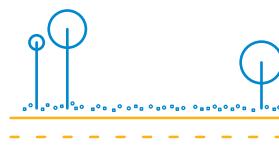
Unincorporated County roadways may be:



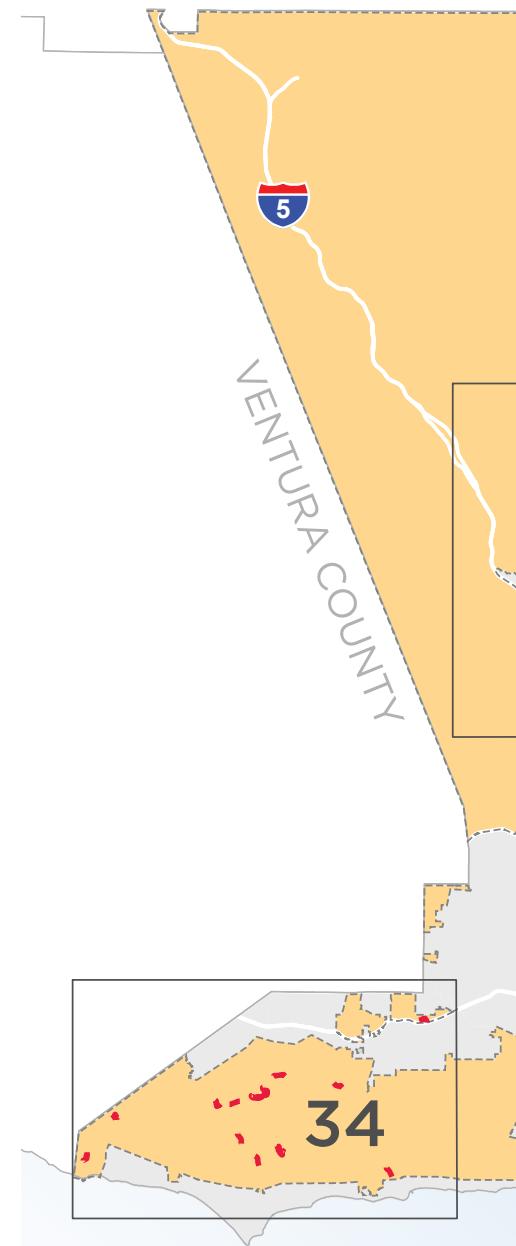
- Fully developed with concrete curbs, with or without sidewalks, in densely-populated communities;



- Narrow, winding, with two lanes, in the mountains; or



- Generally flat, straight, with gravel or sand shoulders, in the desert areas.



Denotes Inset Page N



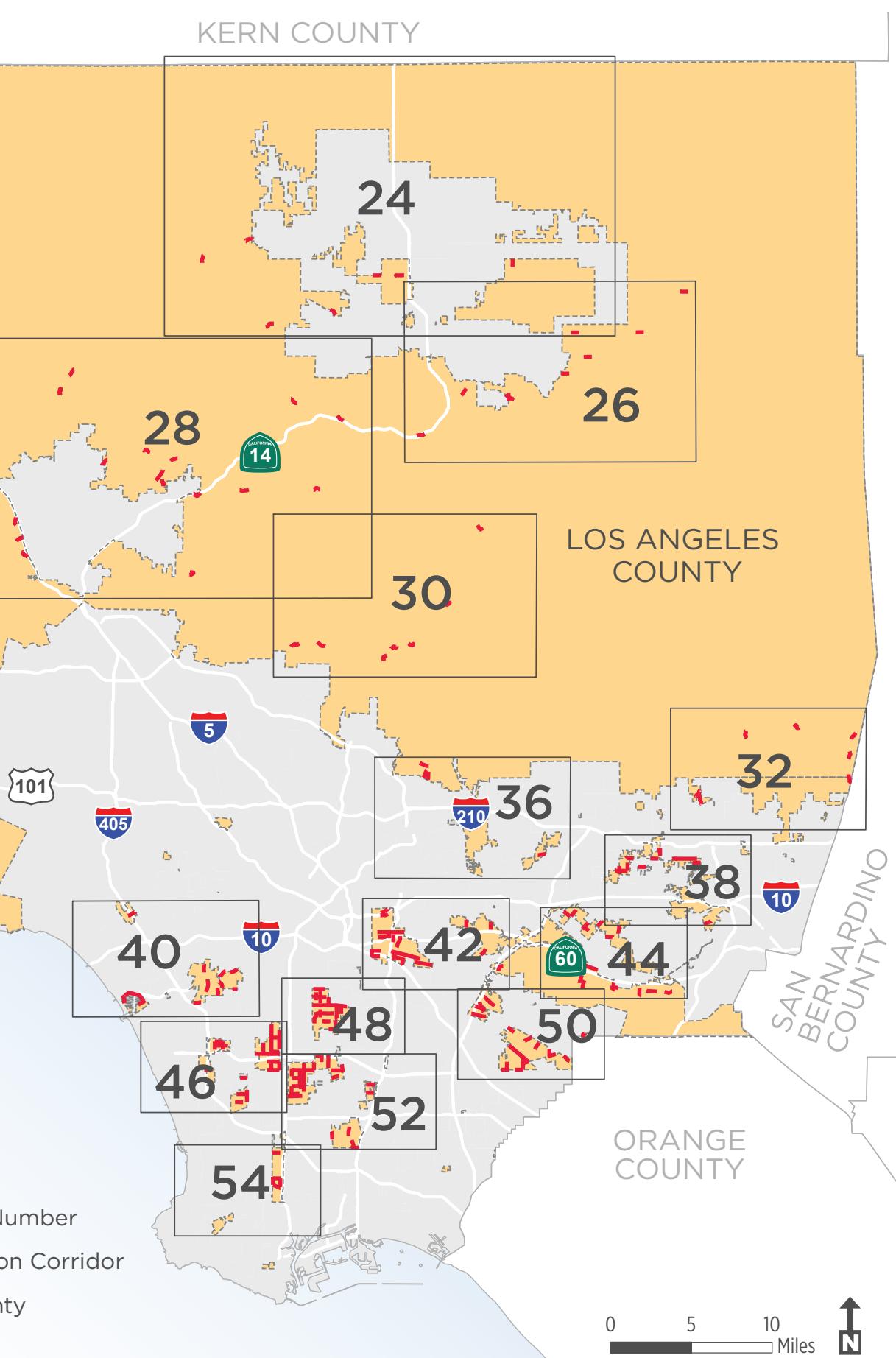
Collision Concentration



Unincorporated County



Incorporated Cities



“

**50% OF FATAL AND SEVERE
INJURY COLLISIONS OCCURRED ON
APPROXIMATELY 3.8% (125 MILES)
OF THE ROADWAYS MANAGED BY THE
COUNTY.”**



TOP 20 COLLISION CONCENTRATION CORRIDORS

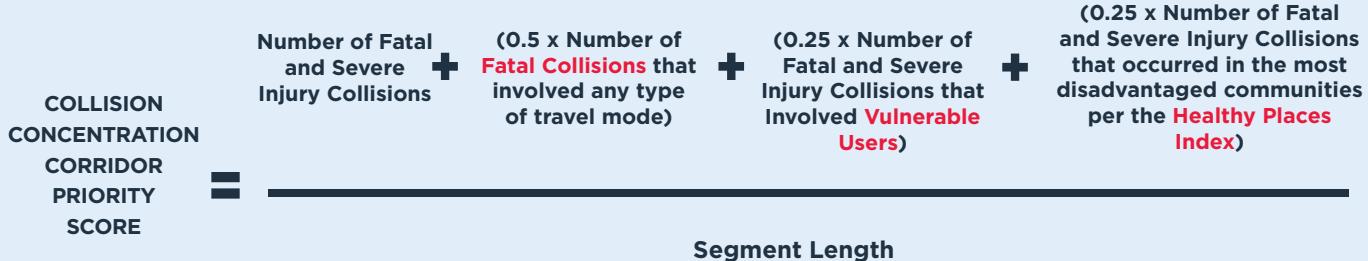
A priority score was developed for each segment by first totaling the number of fatal and severe injury collisions that occurred on that segment, and then accounting for fatal collisions, pedestrian or bicycle-involved collisions, and collisions occurring in disadvantaged areas. Each segment was then divided by its length to compare the Collision Concentration Corridors.

Over the next five years, the County will look for opportunities to implement traffic safety infrastructure enhancements and programs on all Collision Concentration Corridors, with a goal of enhancing traffic safety on the Top 20. To achieve zero deaths, Vision Zero will need to be thought of as a lens through which to make decisions. Therefore, in addition to specific projects on the Collision Concentration Corridors, the County will consider Vision Zero treatments as part of ongoing roadways projects as opportunities become available.

21

The prioritization score formula is shown below and its components are further described on the next page.

Prioritization Score Formula



Note: The minimum segment length for any location experiencing three or more fatal and/or severe injury collisions was assumed to be 0.5 miles. Overlapping half-mile segments were combined to create continuous corridors for evaluation purposes.



22

Fatal Collisions

Additional weight was given to fatal collisions since addressing locations with a history of fatal collisions should have the greatest impact towards the County's goal of zero traffic deaths by 2035.

Vulnerable Users

Pedestrians and bicyclists are at greater risk of death or severe injury in traffic collisions. Additionally, building infrastructure that encourages walking and bicycling can reduce the number of miles that people drive each day, thereby furthering the County's commitment to reduce GHG emissions from the transportation sector.²⁶ Therefore, fatal or severe injury collisions involving a pedestrian or bicyclist were given additional weight.

Health Equity

Transportation has a large impact on community health outcomes. Access to pedestrian and bicycle facilities increases opportunities for physical activity, which helps reduce obesity and chronic diseases. Some unincorporated Los Angeles County communities have worse health outcomes and lower life expectancy than others. Vision Zero projects provide an opportunity to address health equity by focusing resources in these areas. Fatal and severe injury collisions that occurred in the most disadvantaged communities (the lowest scoring 25% as identified by the California Healthy Places Index (HPI) tool), were given additional weight.

WHAT IS THE CALIFORNIA HEALTHY PLACES INDEX (HPI)?

The HPI is an online, health data-mapping tool developed by the Public Health Alliance of Southern California that provides overall scores based on a variety of data areas that shape health outcomes, including housing, transportation, income, and education. Learn more about the HPI at <https://healthyplacesindex.org/>

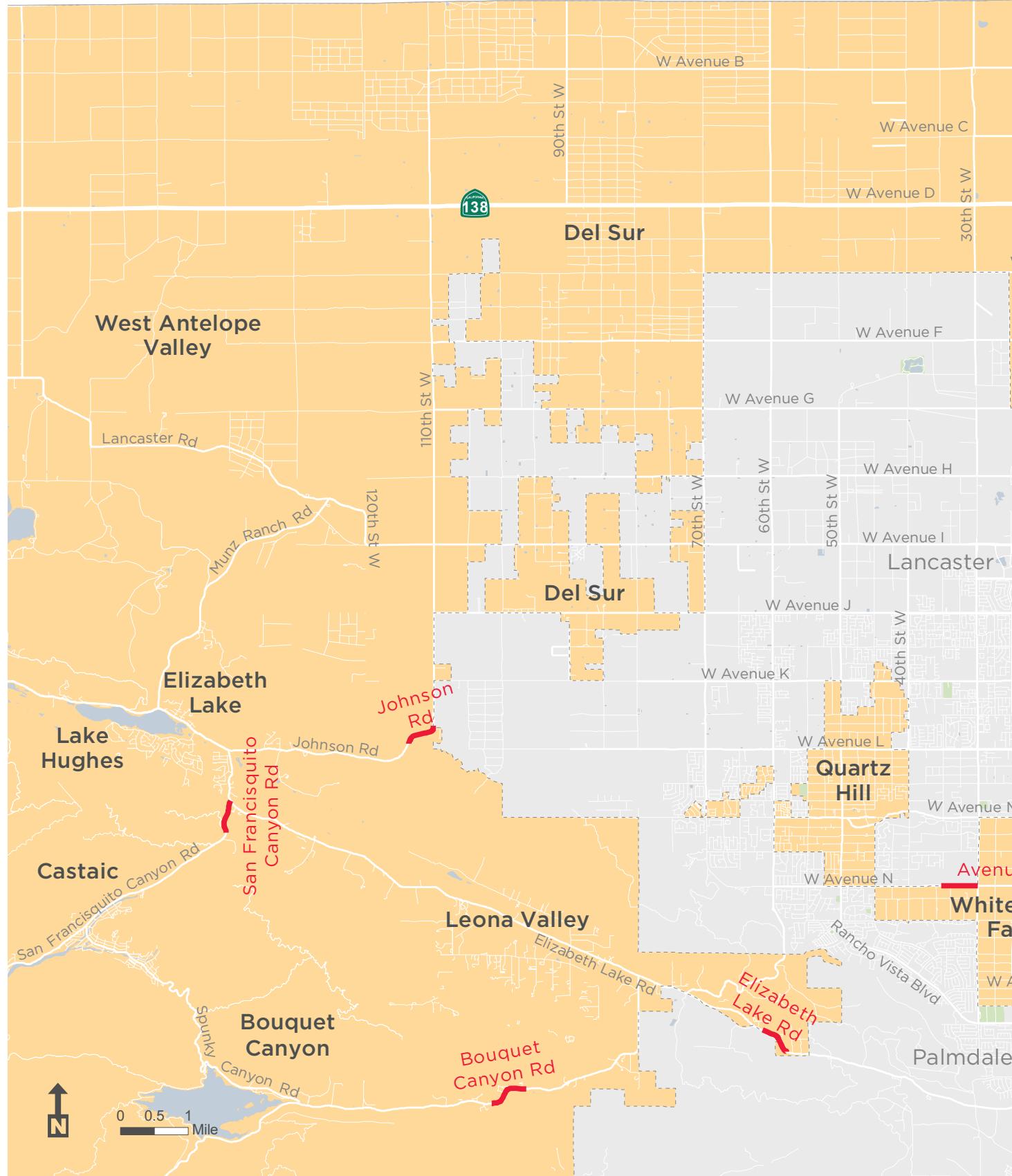
TOP 20 COLLISION CONCENTRATION CORRIDORS

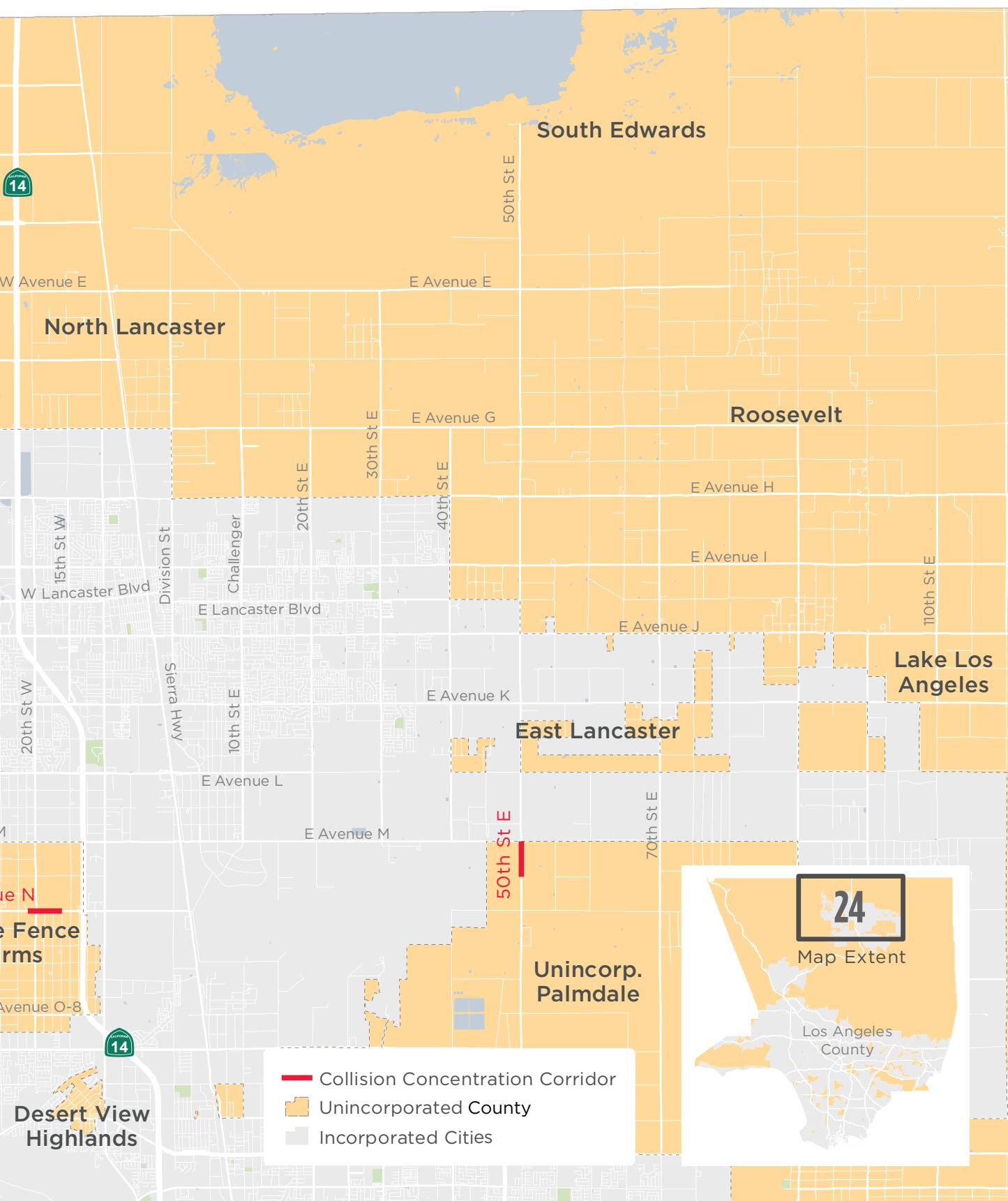
Community Name	Roadway	Approximate Limits	Reported Fatal and Severe Injury Collisions (2013-2017)	Length (miles)*	Priority Score (per mile)
Angeles National Forest	Angeles Forest Hwy	0.5 mile north of Upper Big Tujunga Canyon Rd to 1 mile north of Upper Big Tujunga Canyon Rd	13	0.5	28
East Los Angeles	Whittier Blvd	Indiana St to Record Ave	6	0.55	16.7
East Rancho Dominguez	Compton Blvd	Butler Ave to Williams Ave	7	0.5	21.5
El Camino Village	Crenshaw Blvd	147th St to Manhattan Beach Blvd	10	0.75	21
Florence-Firestone	Firestone Blvd	Miramonte Blvd to Grape St	10	0.5	33.5
	Alameda St	83rd St to 94th St	10	0.64	22.2
	92nd St	Elm St to Alameda St	6	0.5	17
Lennox	Hawthorne Blvd	104th St to 111th St	6	0.5	16.9
Rancho Dominguez	Del Amo Blvd	Santa Fe Ave to Long Beach Fwy	6	0.5	18.5
Unincorporated Palmdale	50th St East	Ave M to 2800 feet south of Ave M	7	0.52	17.8
Walnut Park	Pacific Blvd	Florence Ave to Broadway	6	0.5	17.5
Westmont / West Athens	El Segundo Blvd	Denker Ave to Vermont Ave	12	0.74	20.8
	Vermont Ave	93rd St to 110th St	15	1.15	19.7
	Western Ave	105th St to Imperial Hwy	9	0.69	19.5
	Normandie Ave	88th Pl to Imperial Hwy	24	1.83	19
	Century Blvd	Normandie Ave to Vermont Ave	7	0.52	18.8
Whittier Narrows	Rosemead Blvd	South El Monte City Boundary to Pomona Fwy	5	0.5	19
Willowbrook	Central Ave	120th St to El Segundo Blvd	6	0.5	21
	El Segundo Blvd	Broadway to Avalon Blvd	8	0.66	18.2
	Wilmington Ave	Imperial Hwy to 126th St	8	0.77	16.5

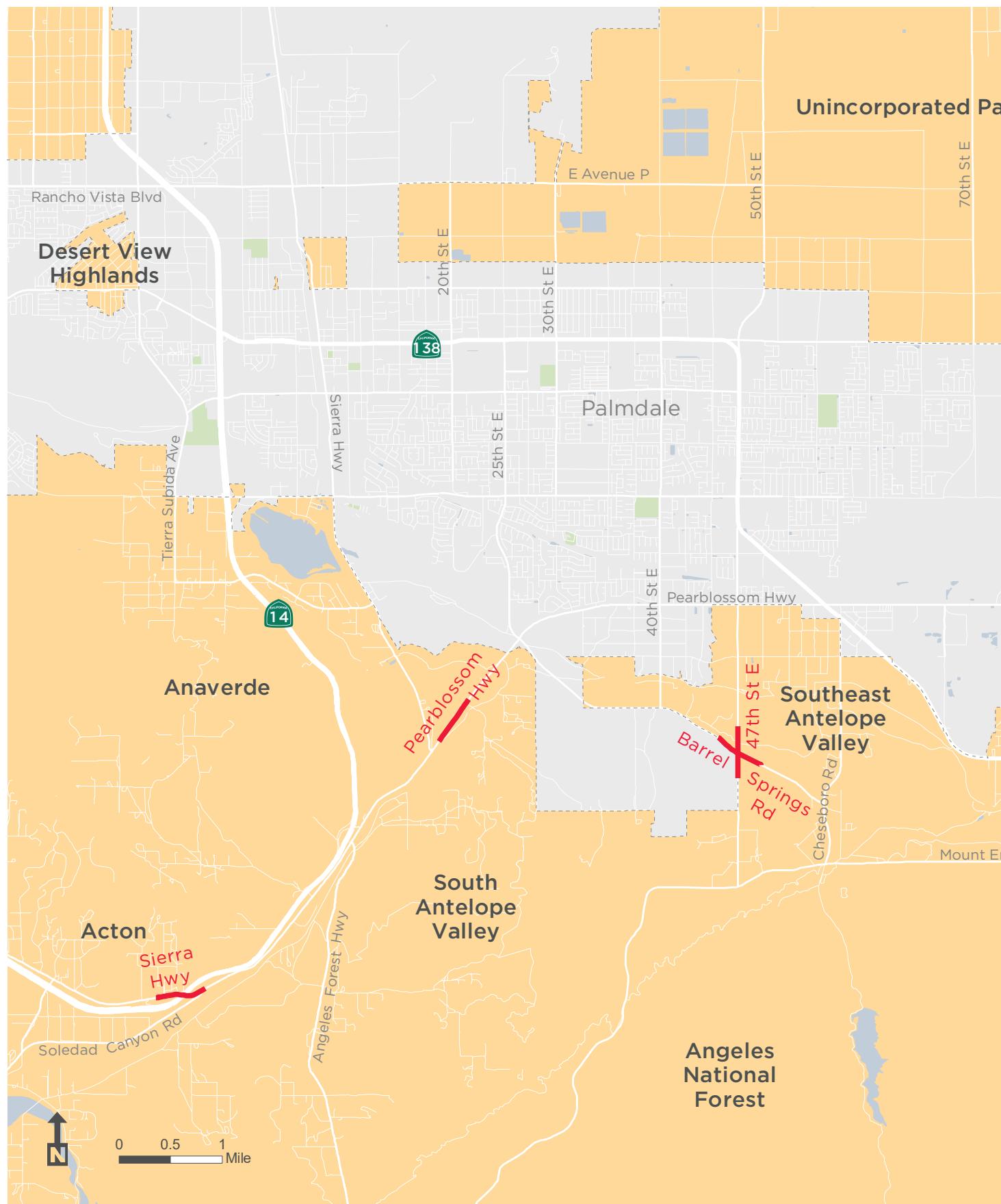
*Note: Overlapping half-mile Collision Concentration Corridors were combined for clarity.

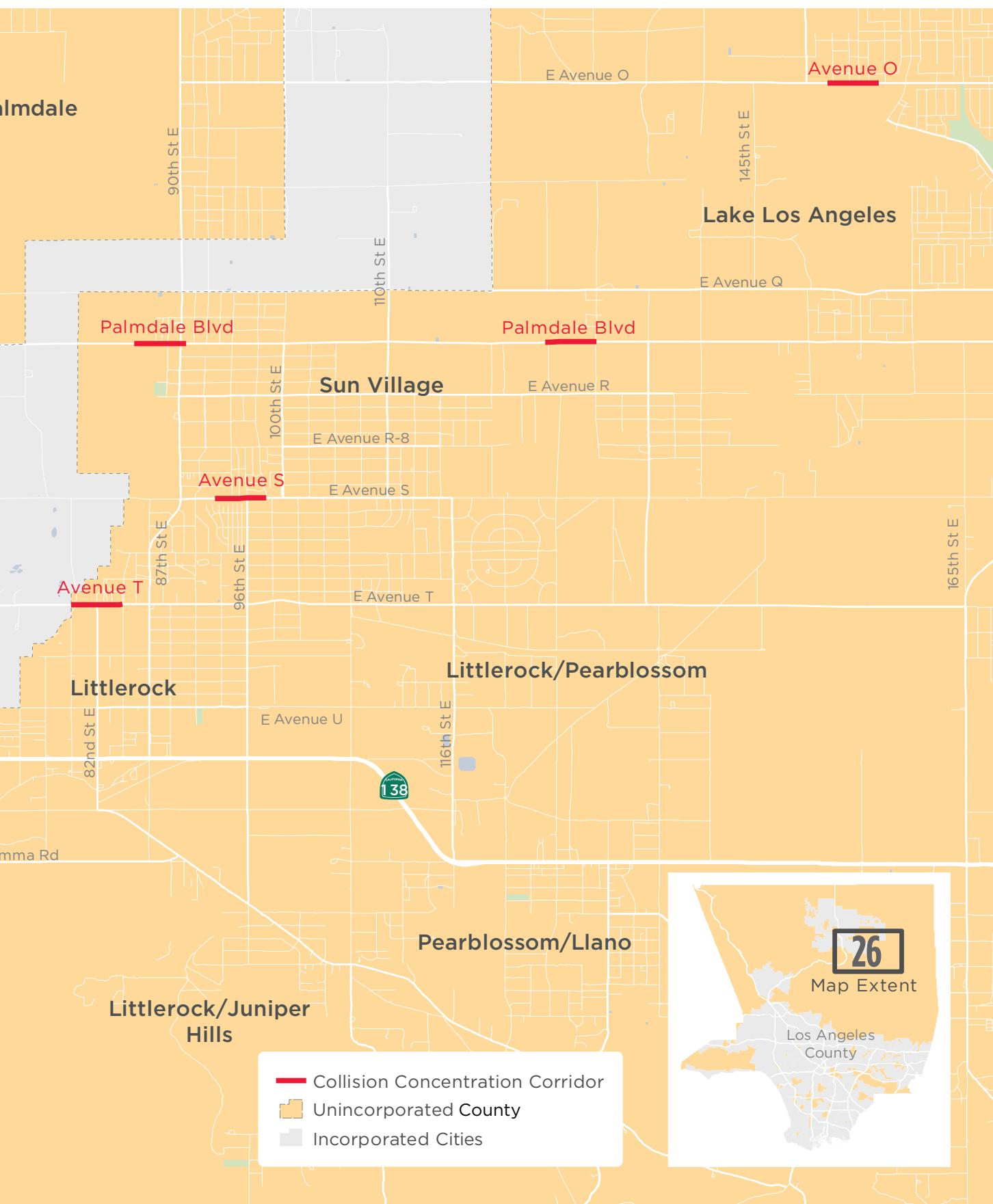
COLLISION CONCENTRATION CORRIDORS - INSET 24

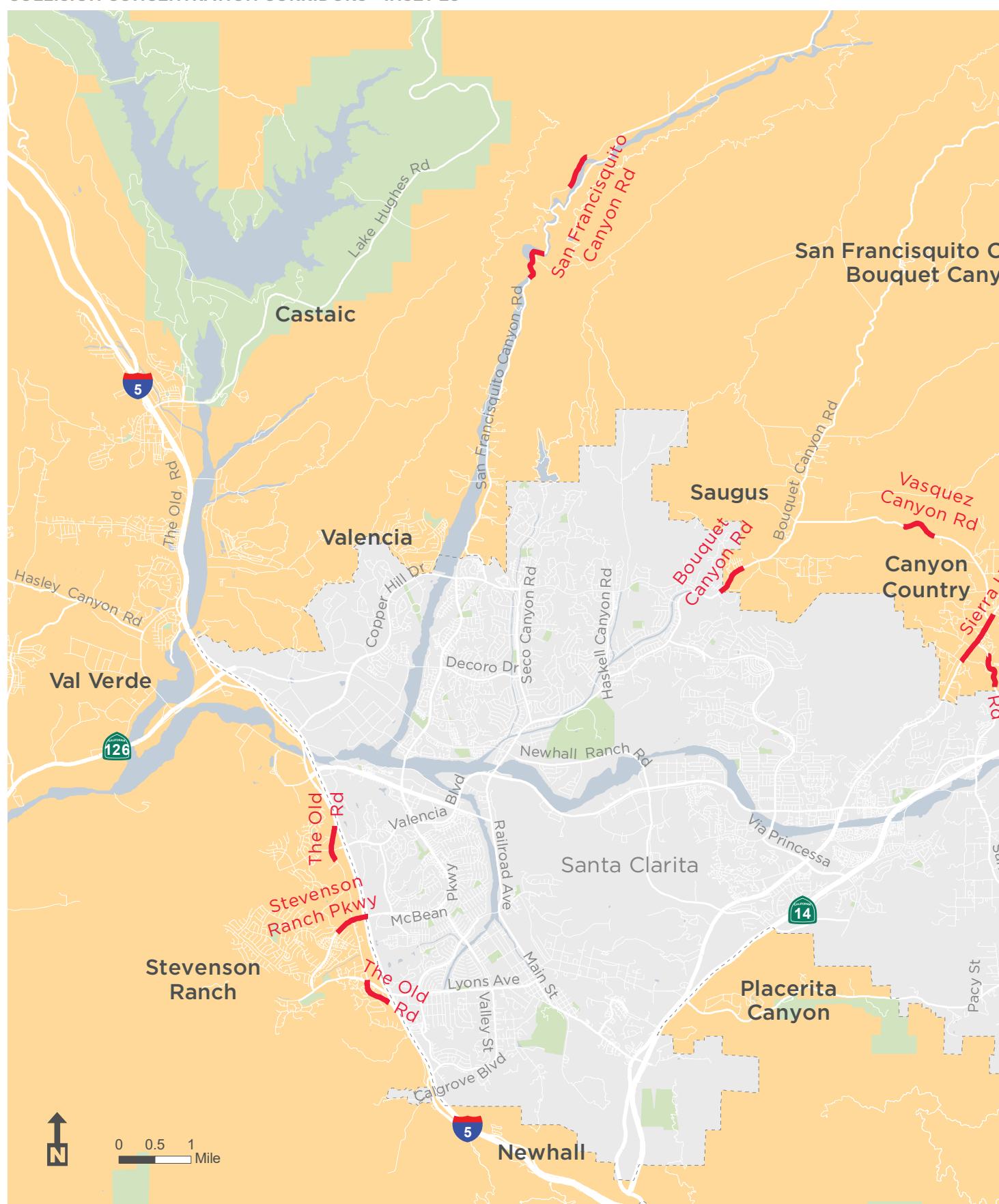
KERN COUNTY





COLLISION CONCENTRATION CORRIDORS - INSET 26

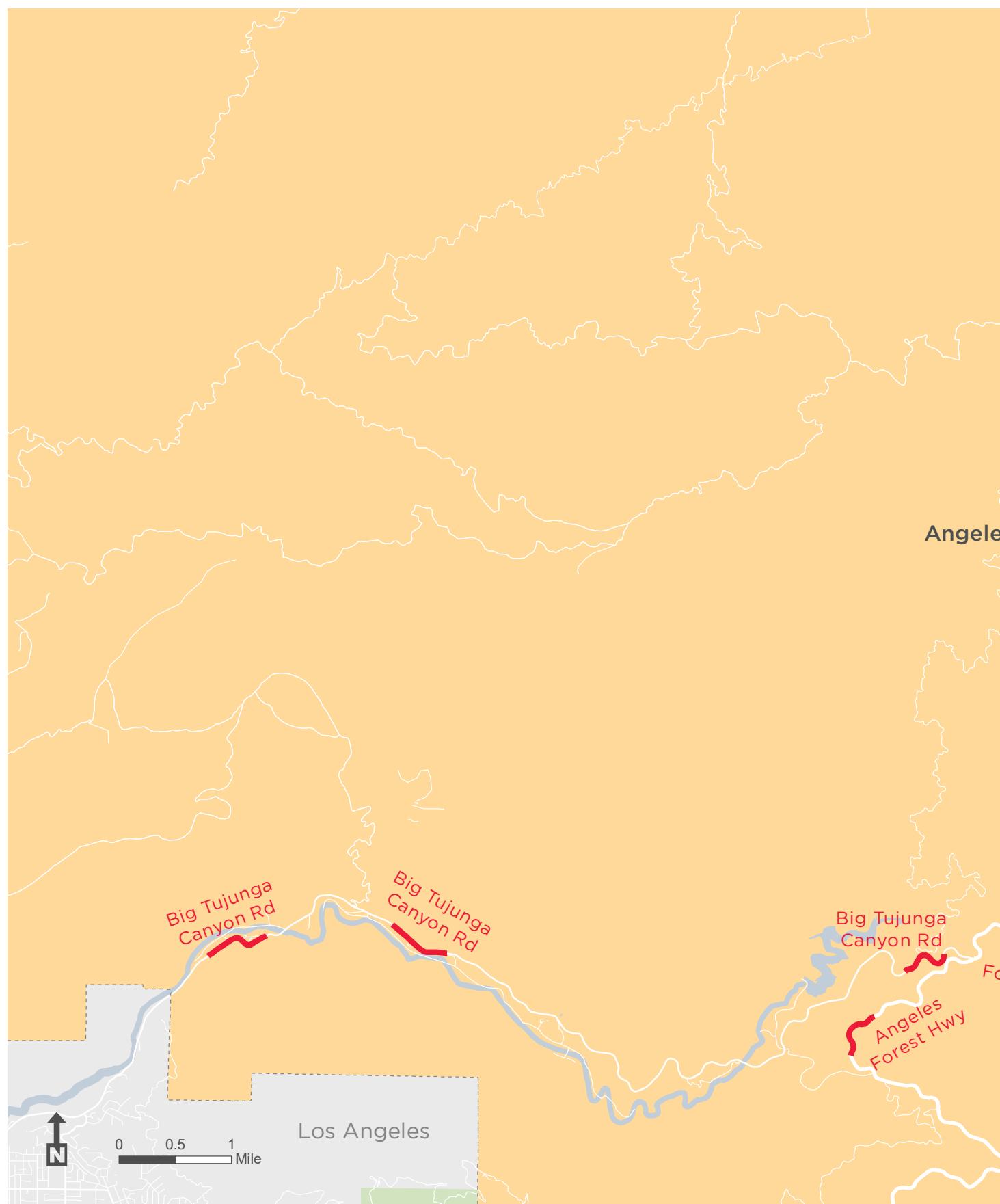


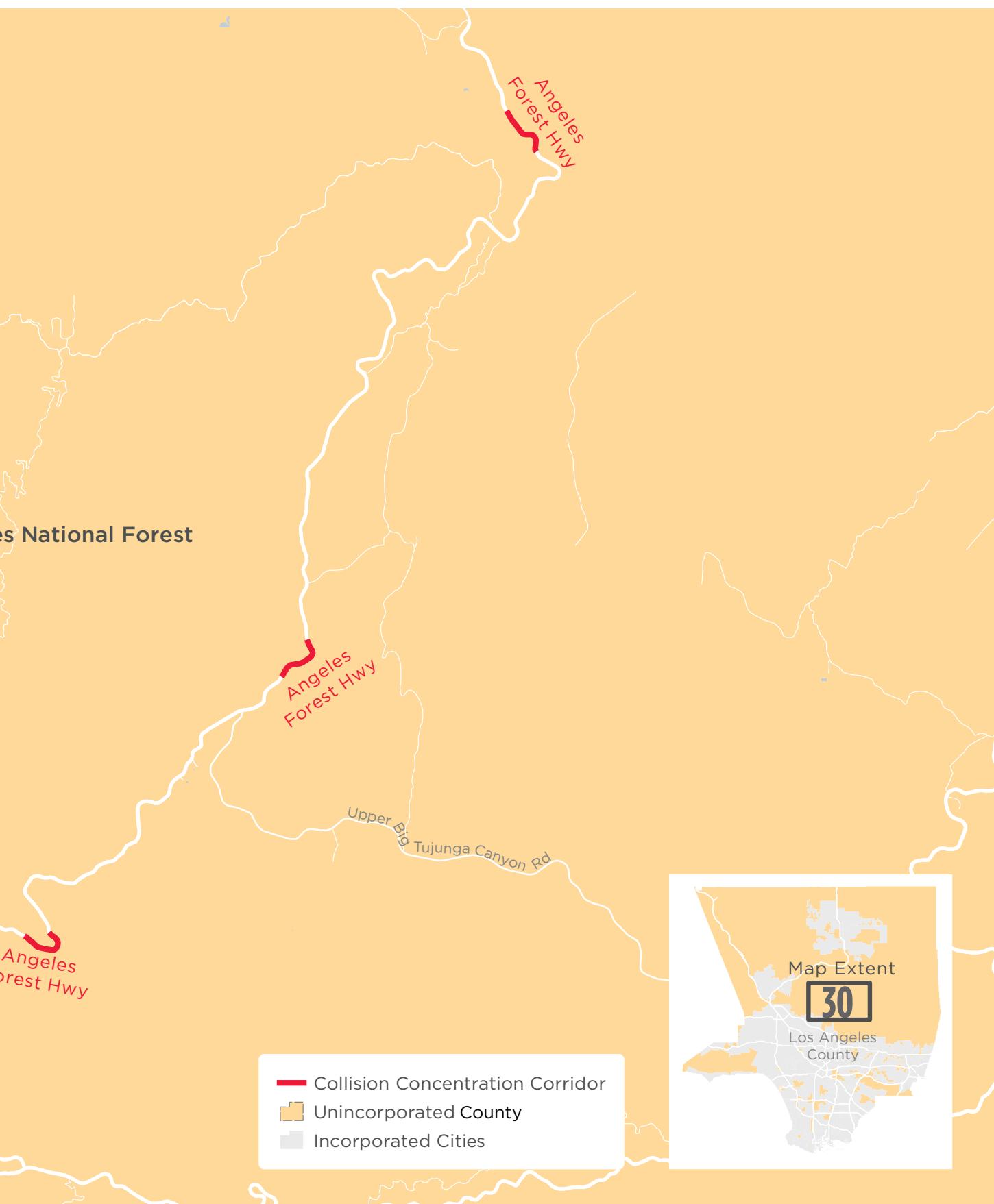
COLLISION CONCENTRATION CORRIDORS - INSET 28

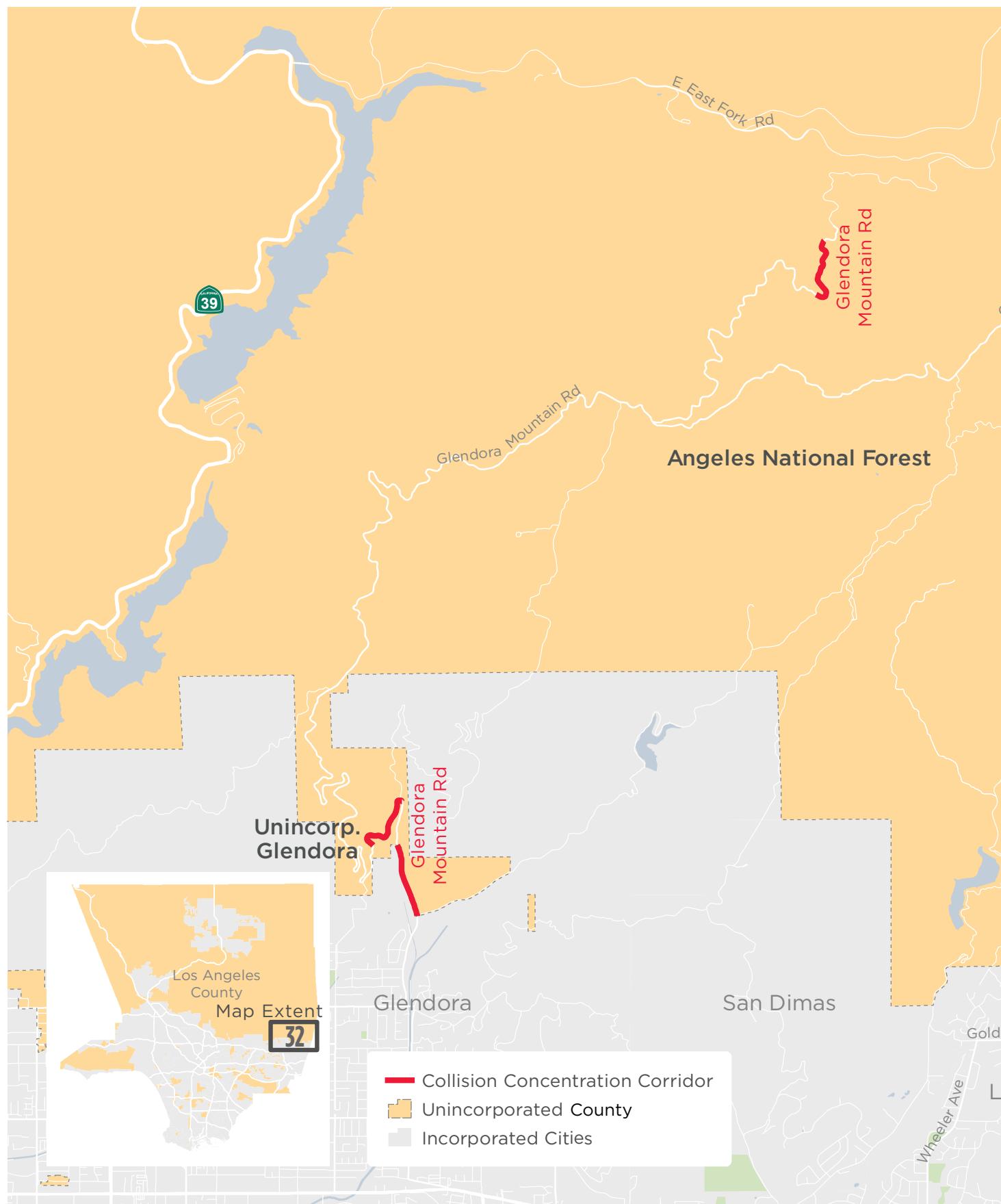


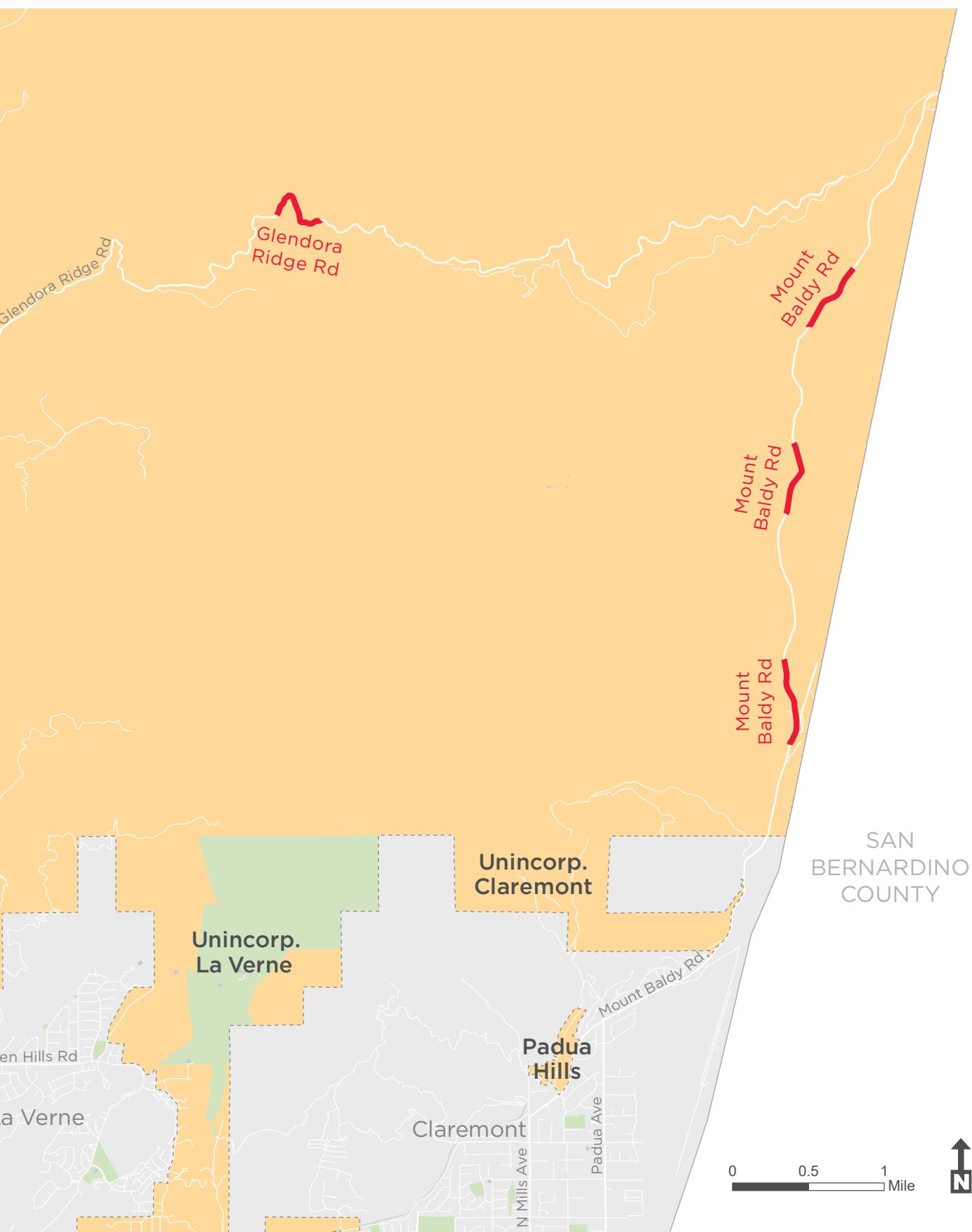
COLLISION CONCENTRATION CORRIDORS - INSET 30

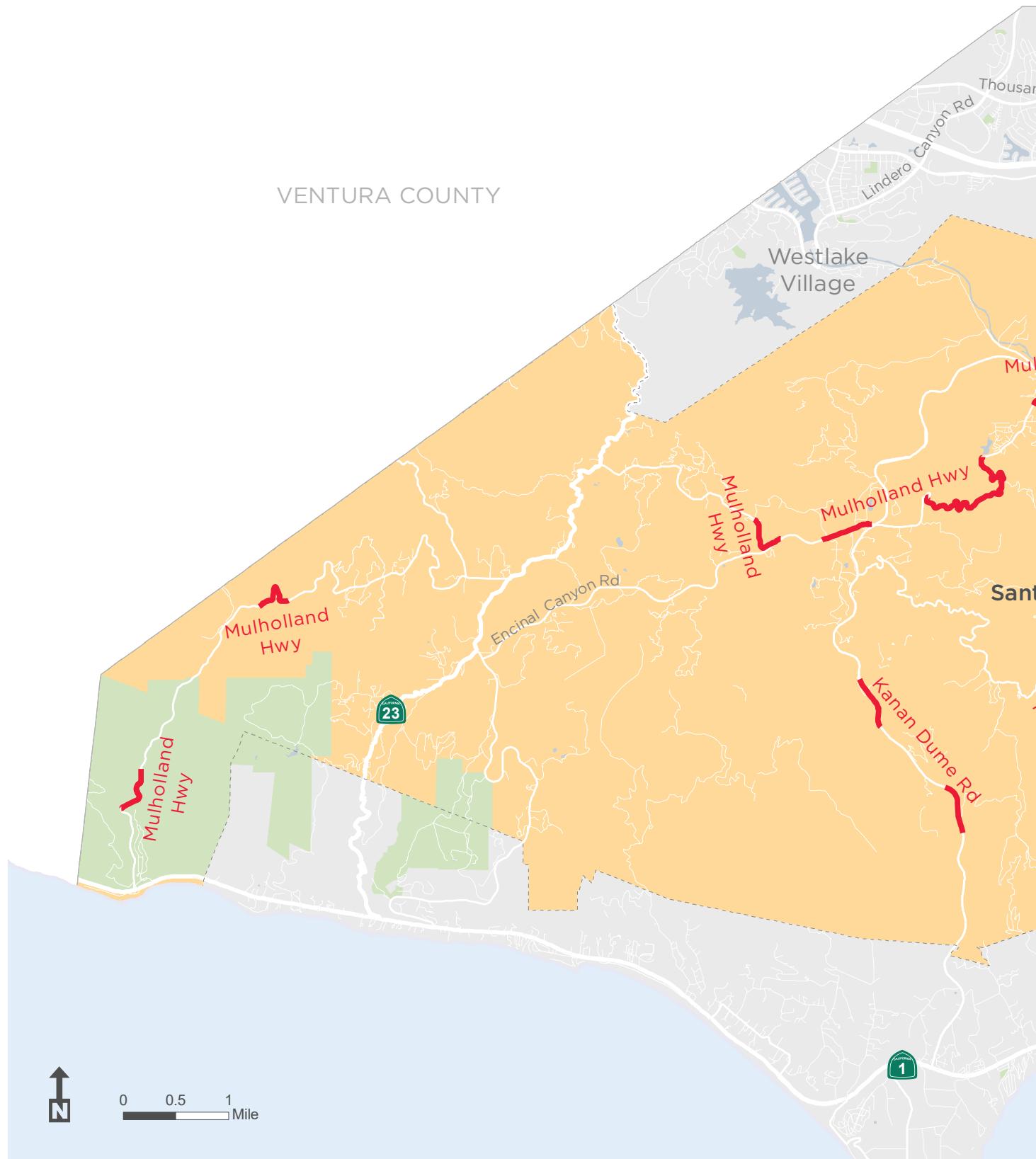
30

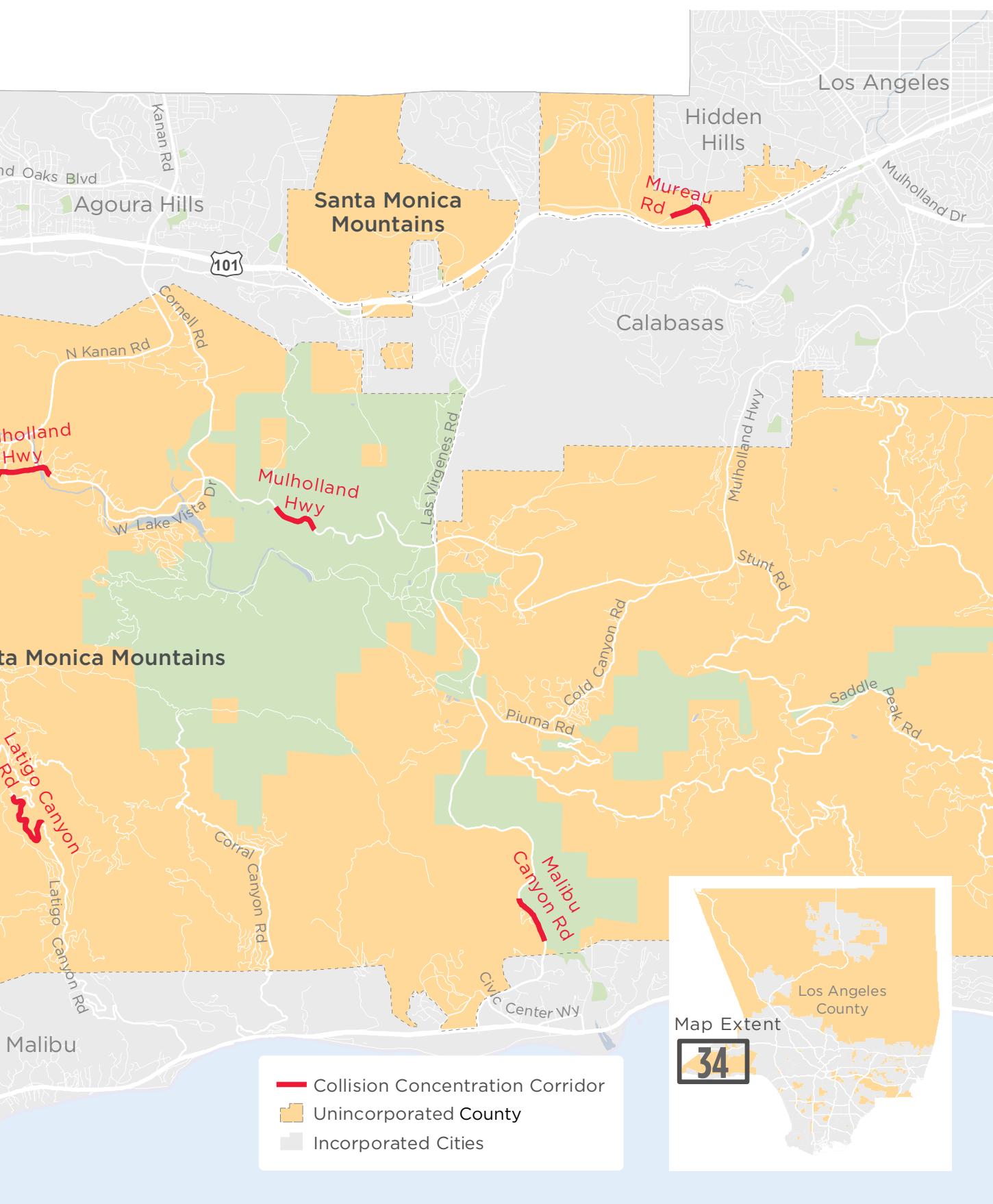


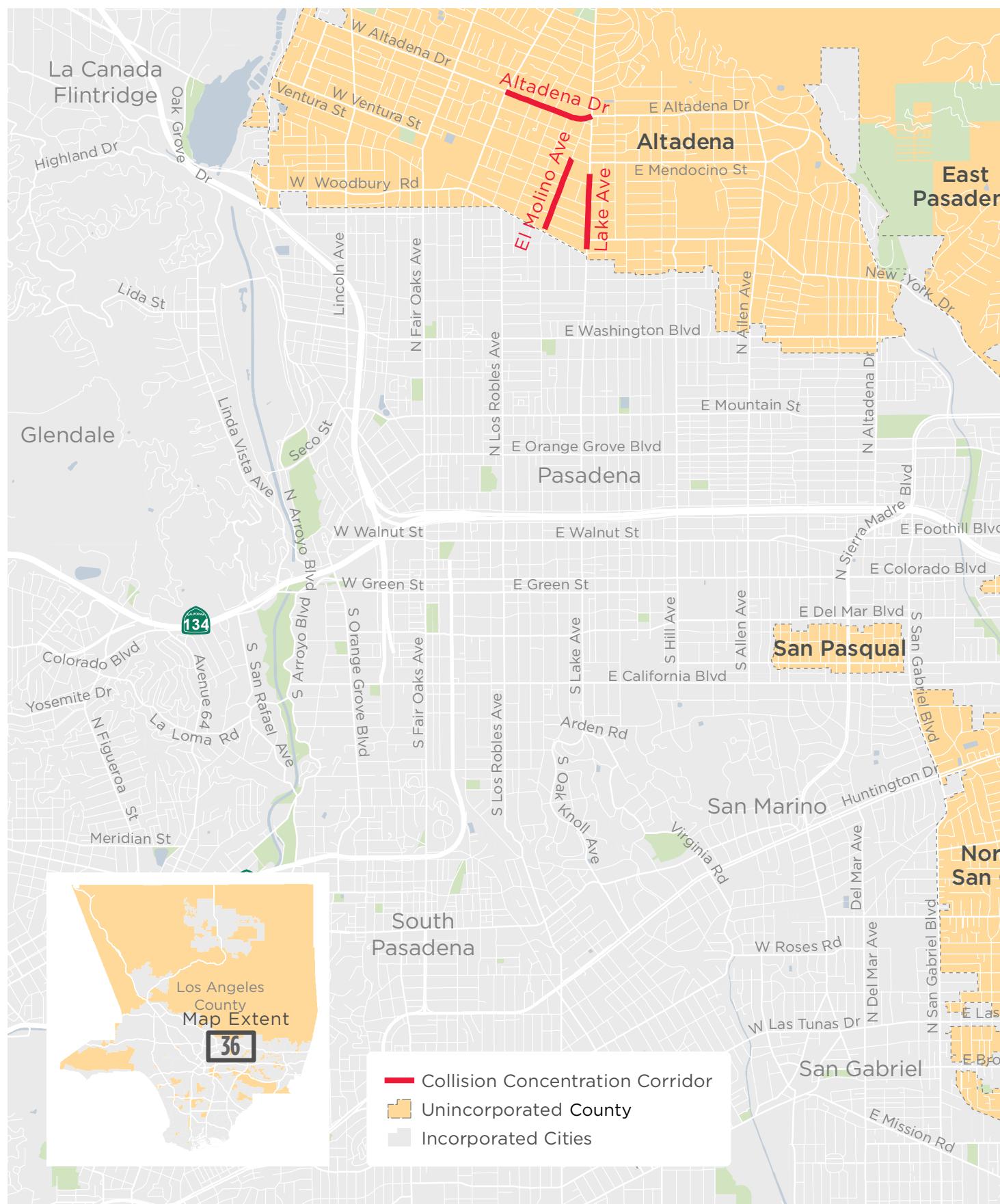


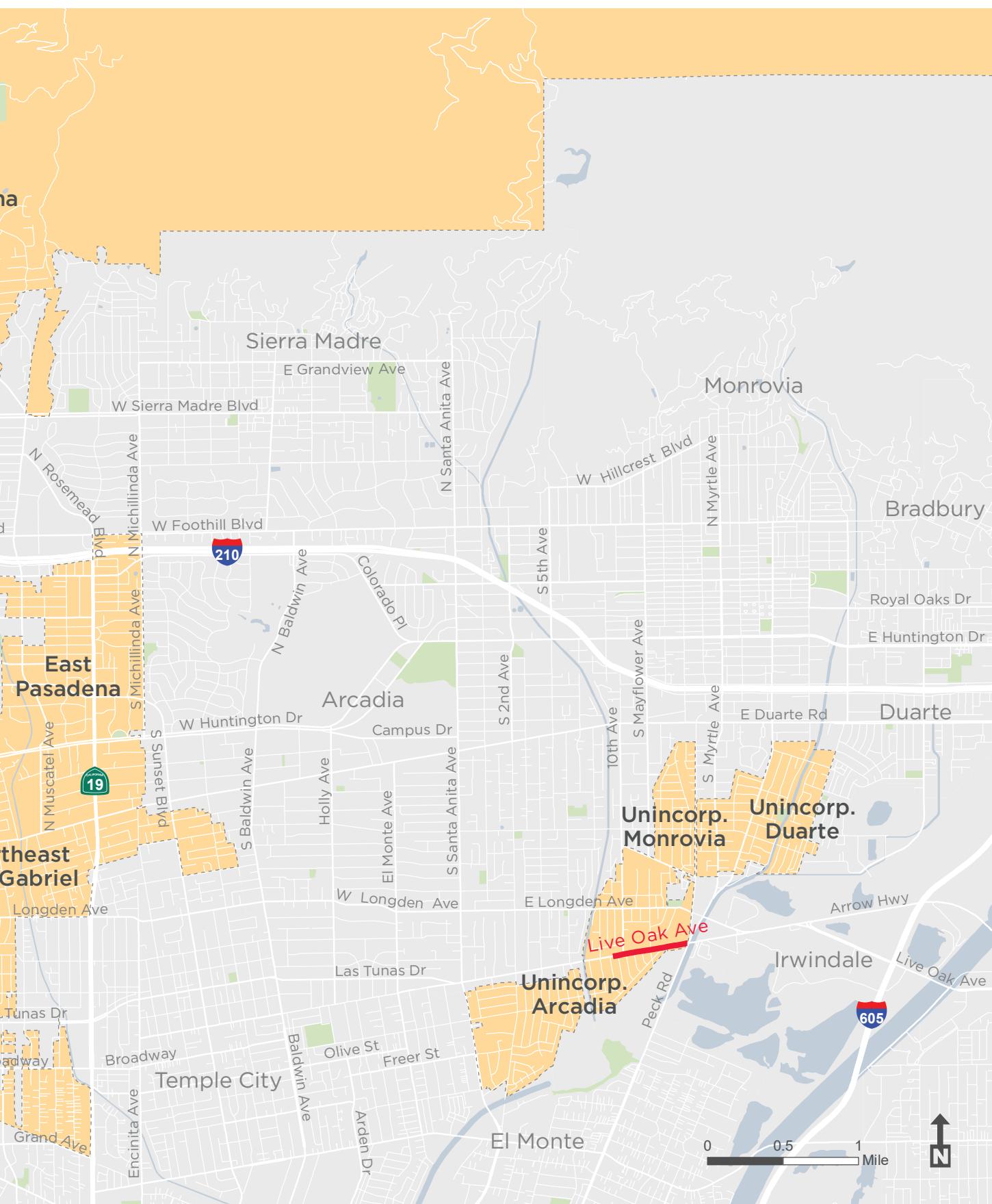
COLLISION CONCENTRATION CORRIDORS - INSET 32

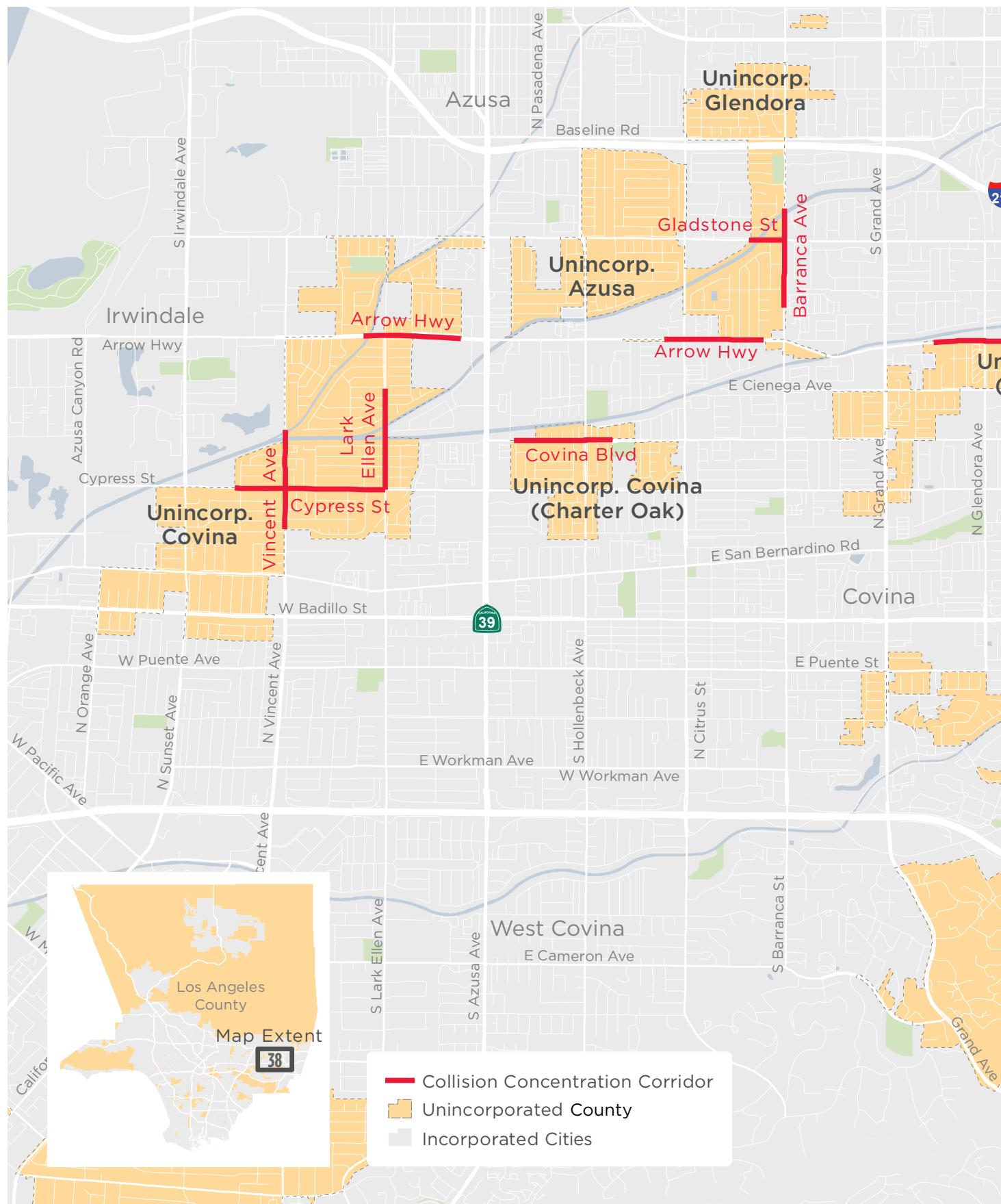


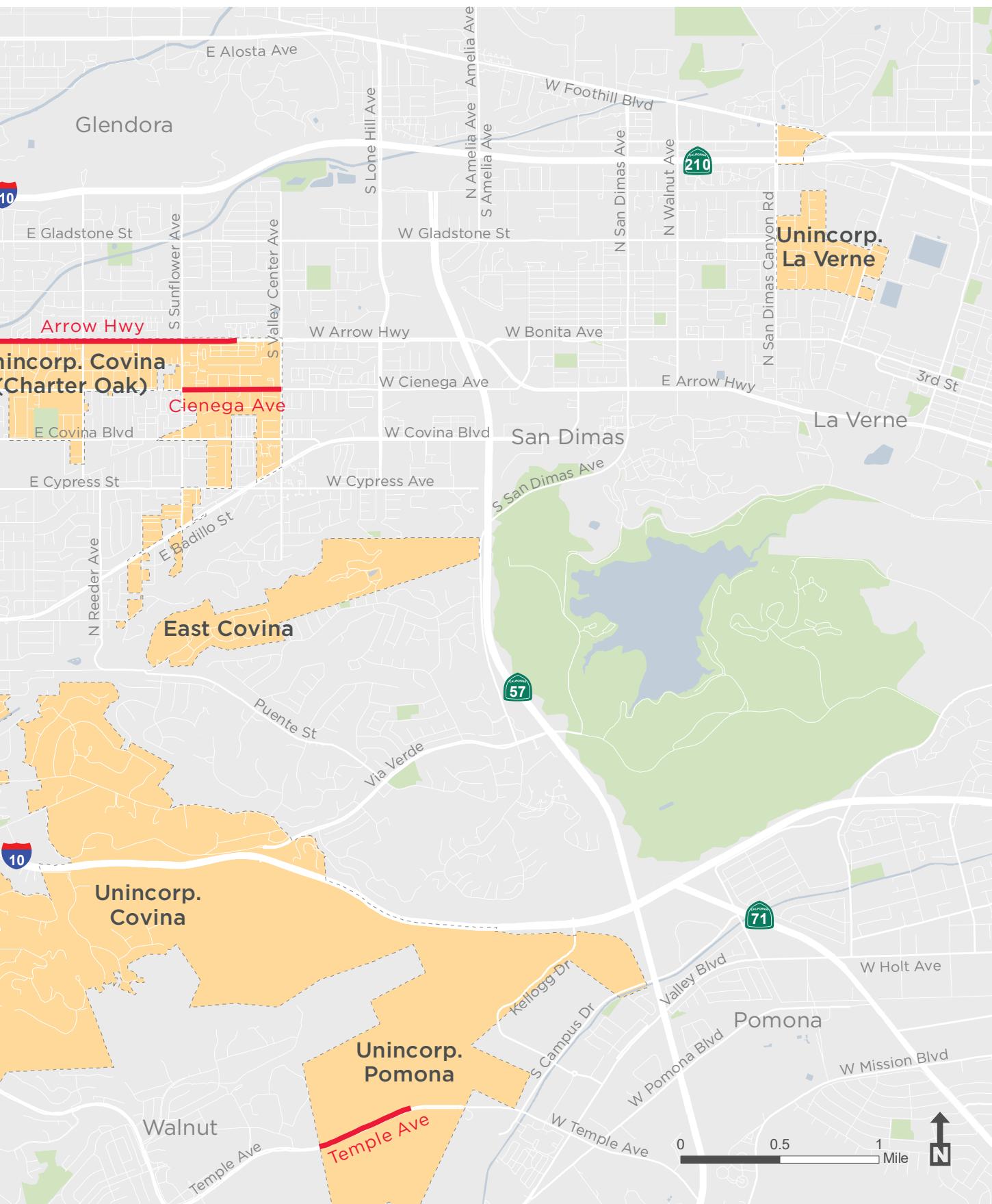
COLLISION CONCENTRATION CORRIDORS - INSET 34

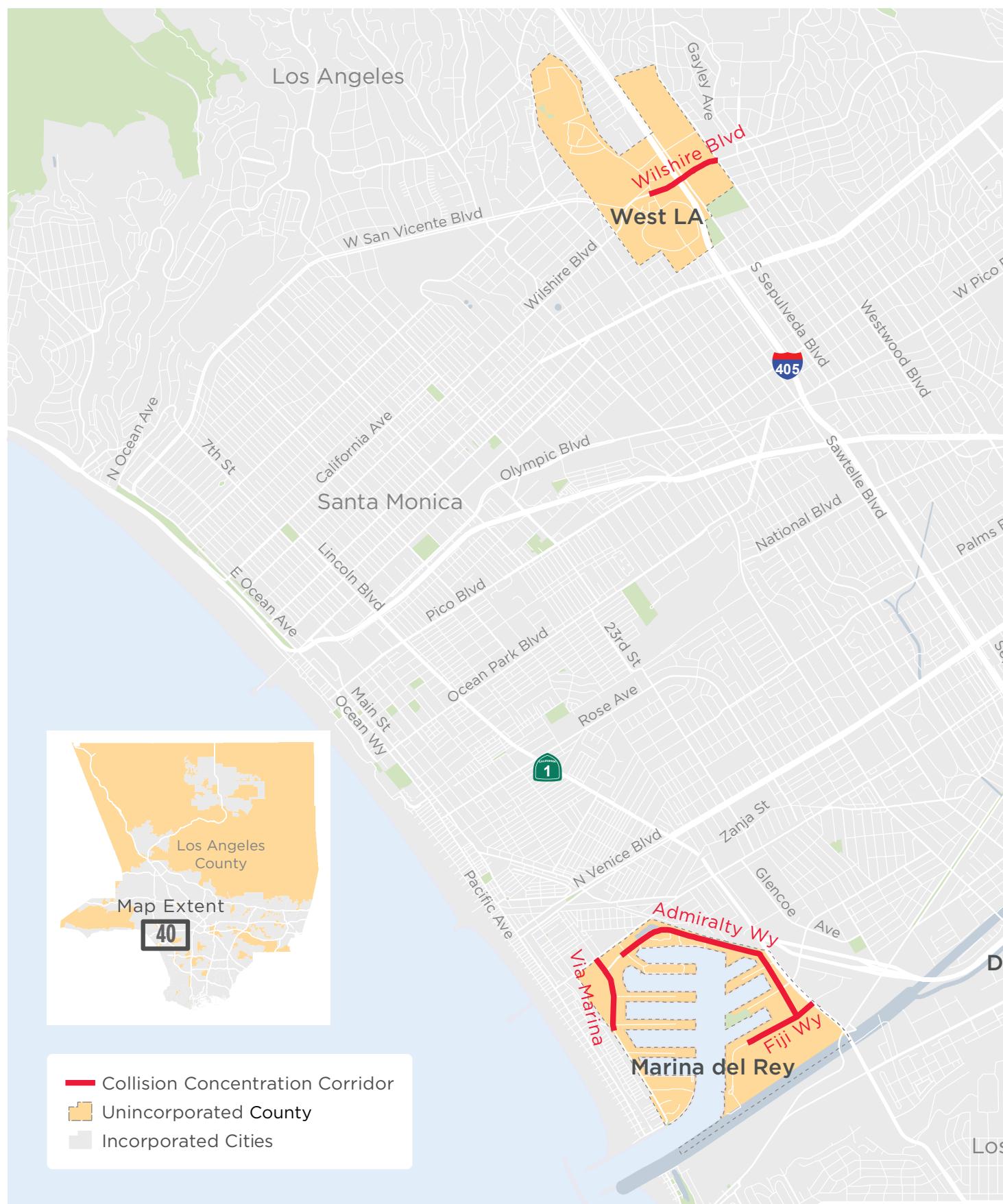


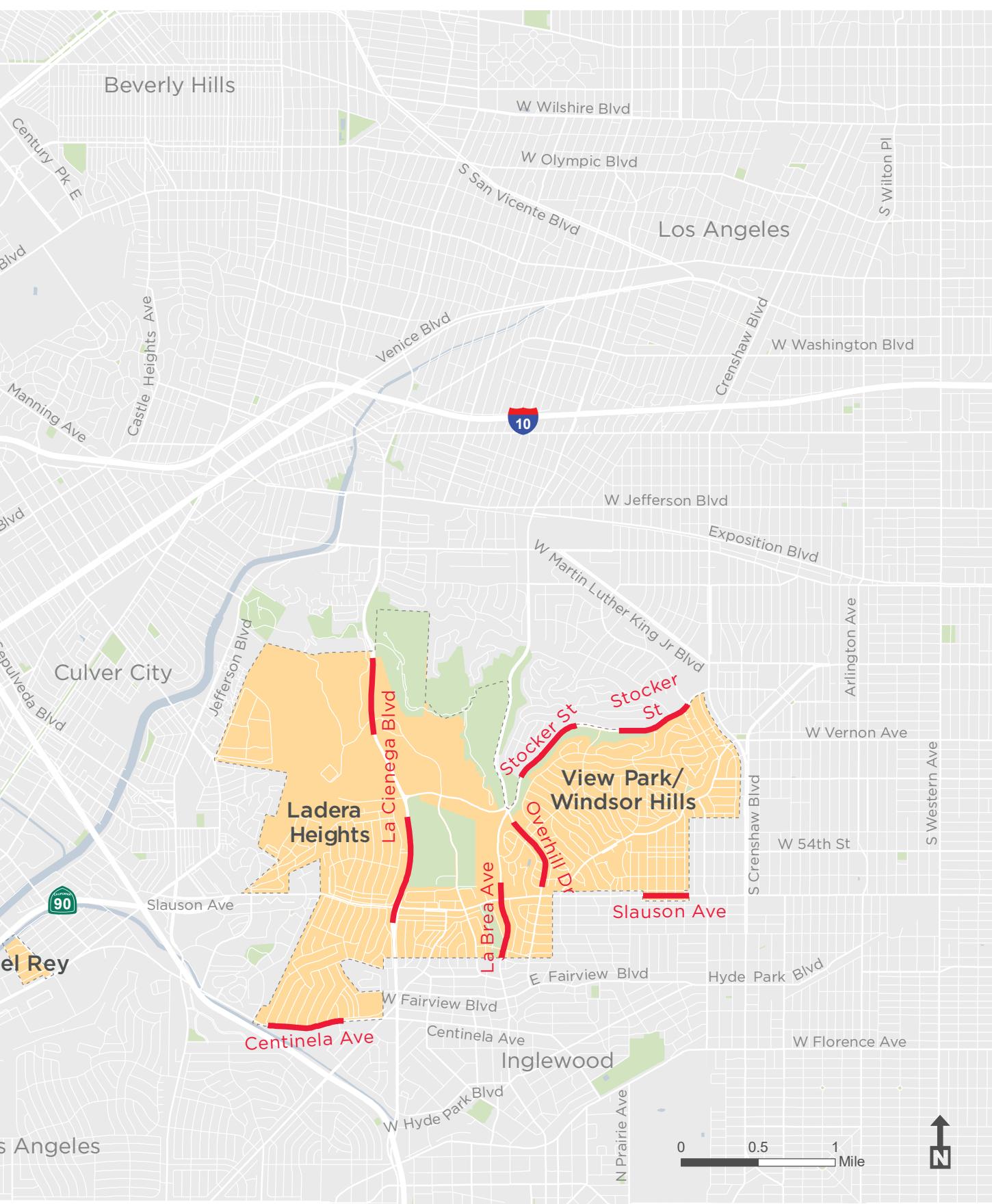
COLLISION CONCENTRATION CORRIDORS - INSET 36

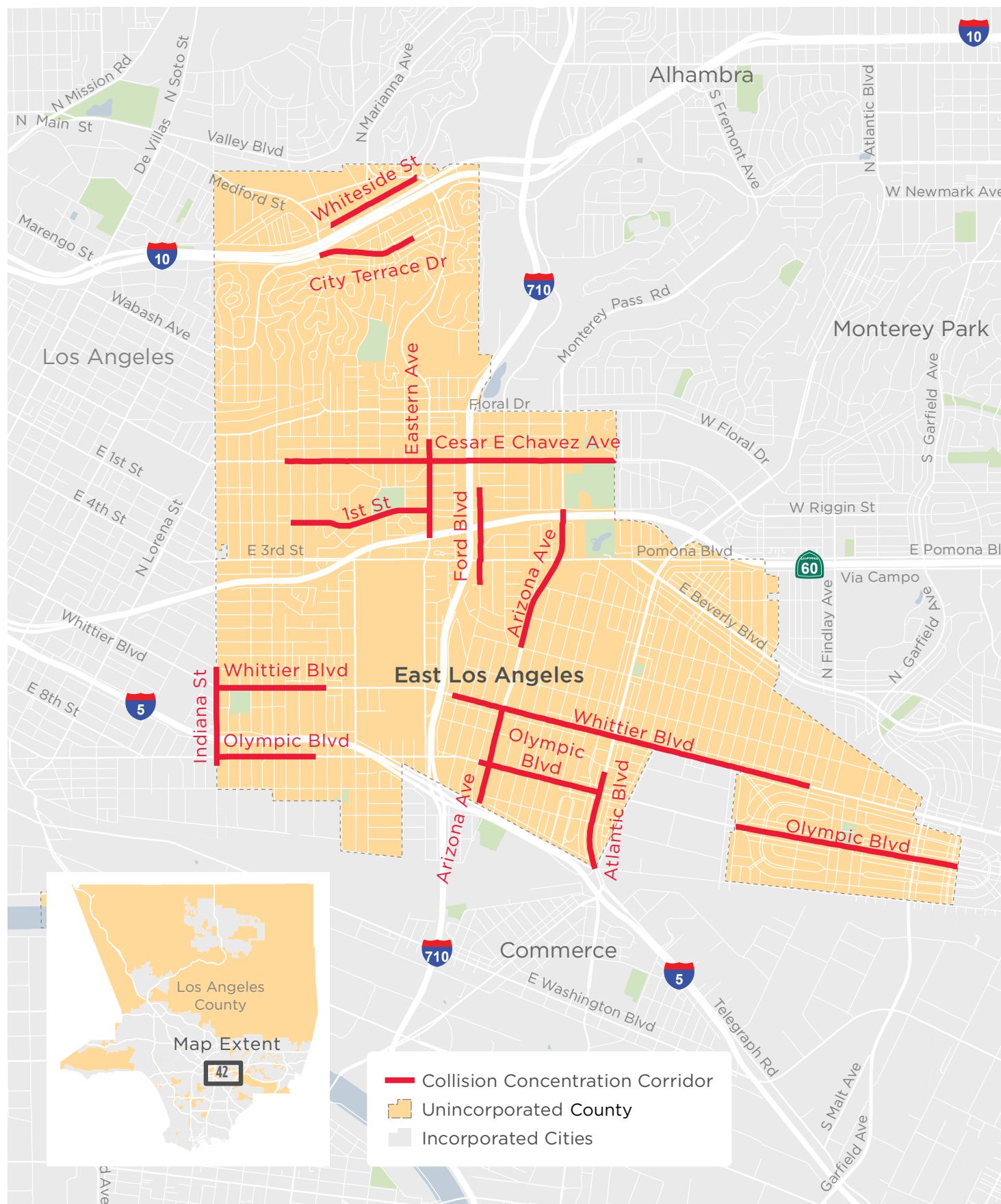


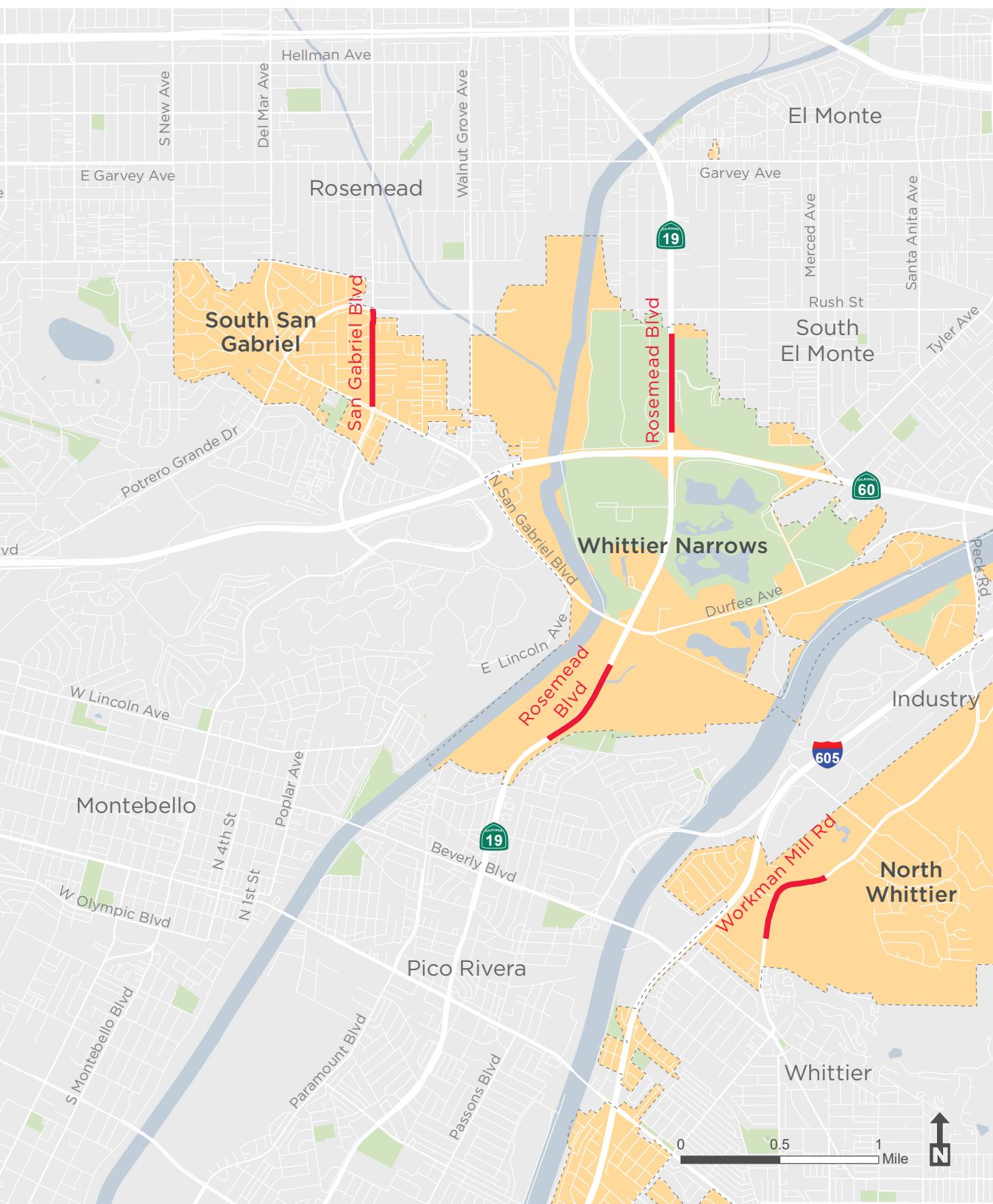
COLLISION CONCENTRATION CORRIDORS - INSERT 38

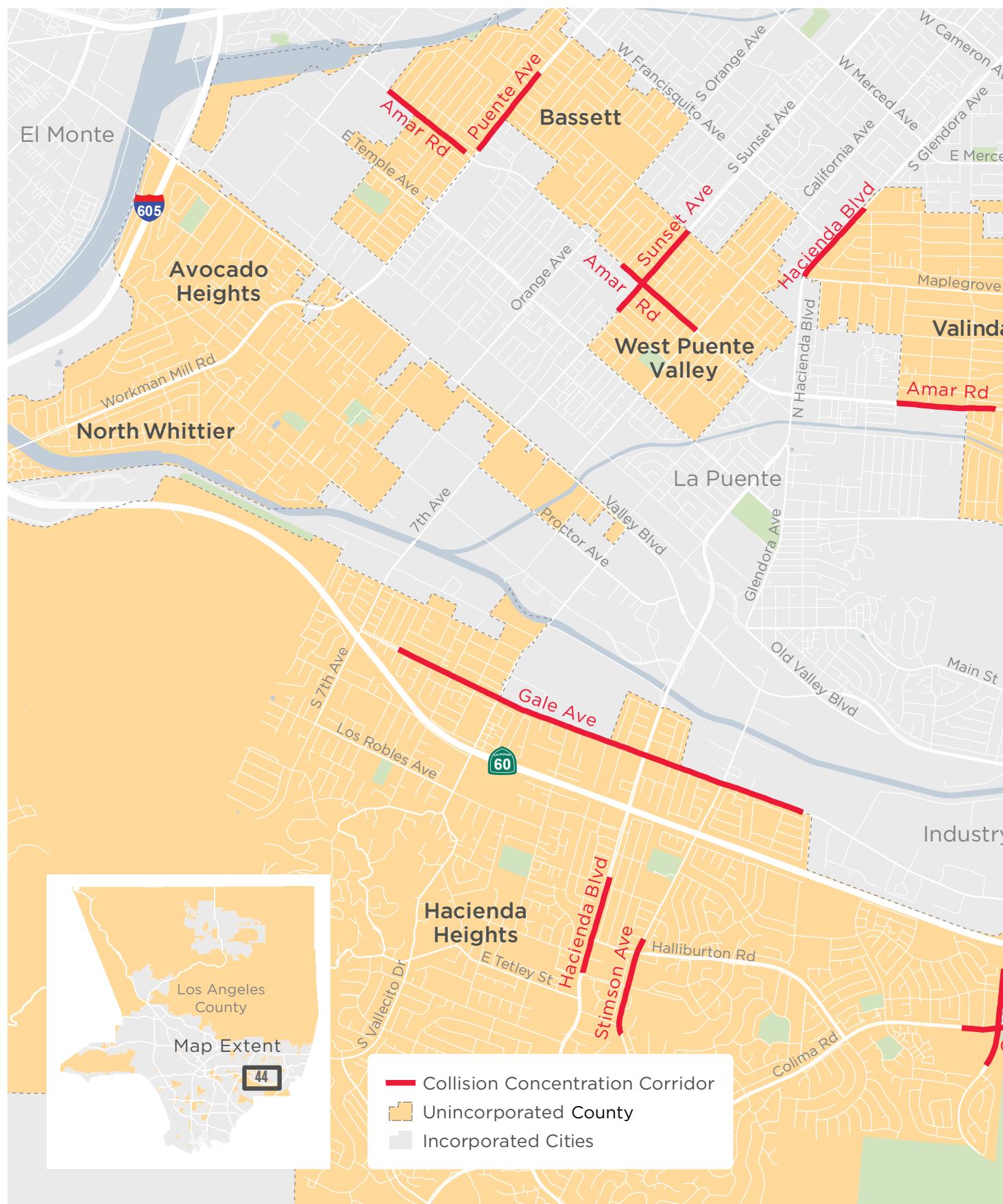


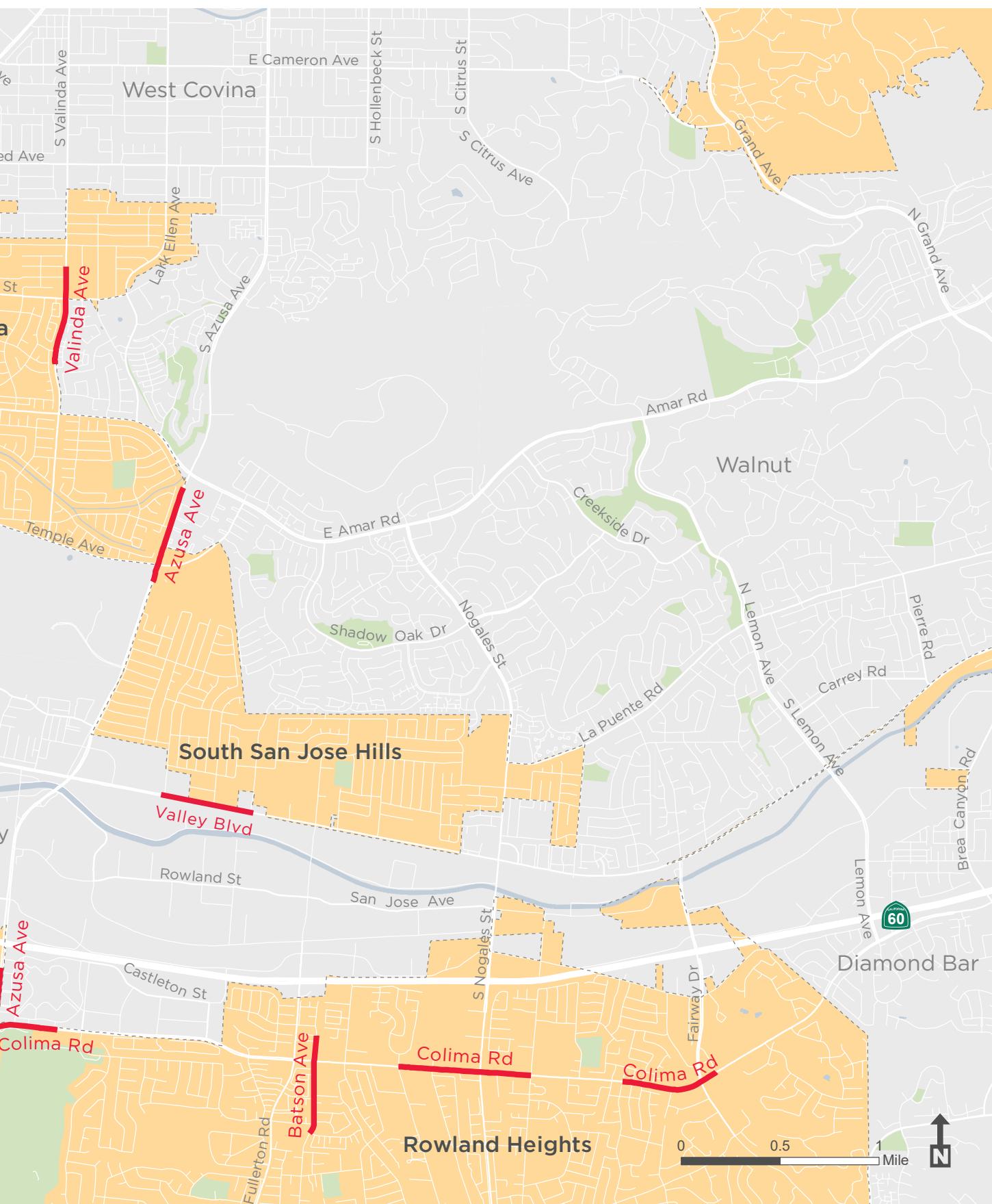
COLLISION CONCENTRATION CORRIDORS - INSET 40

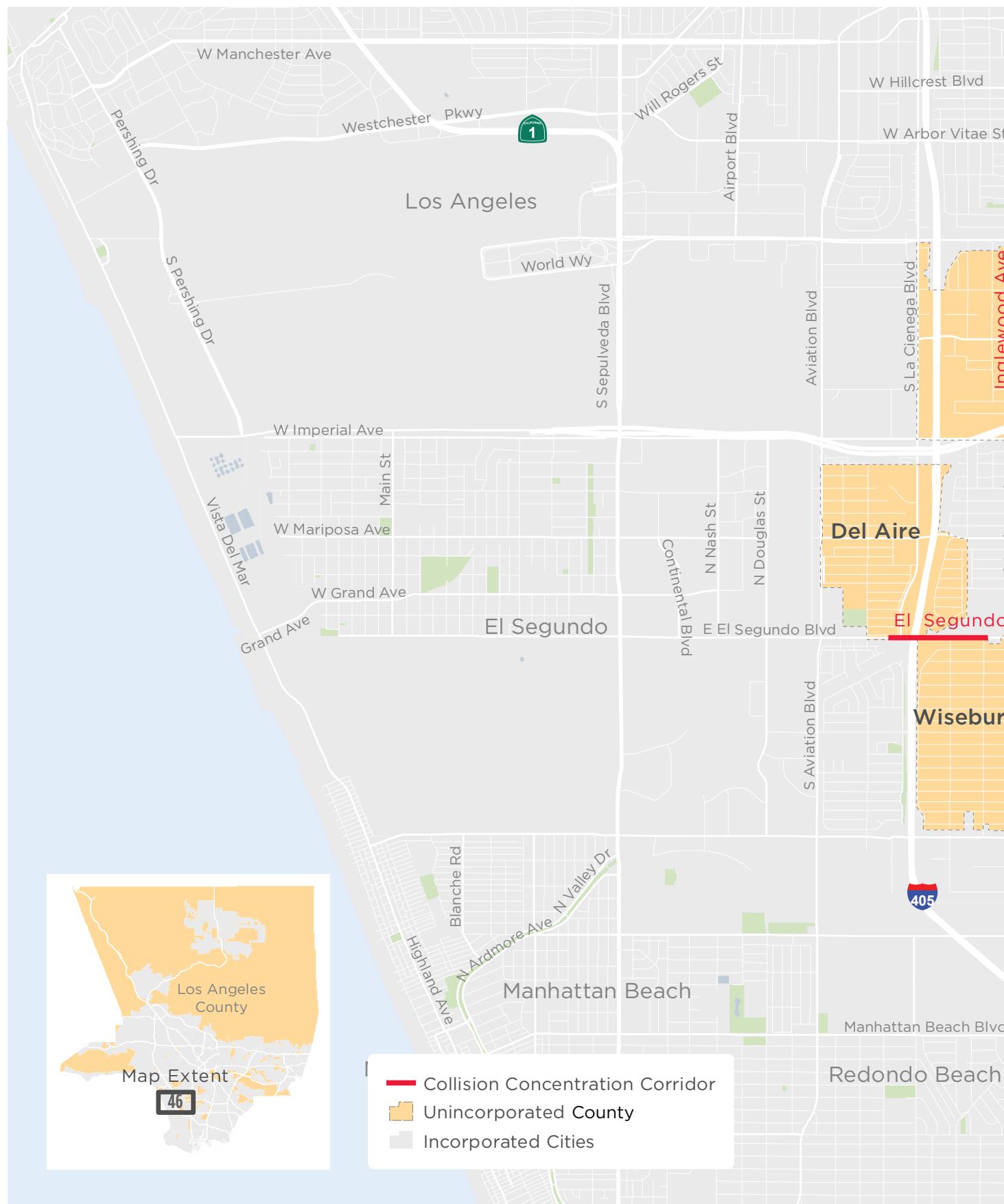


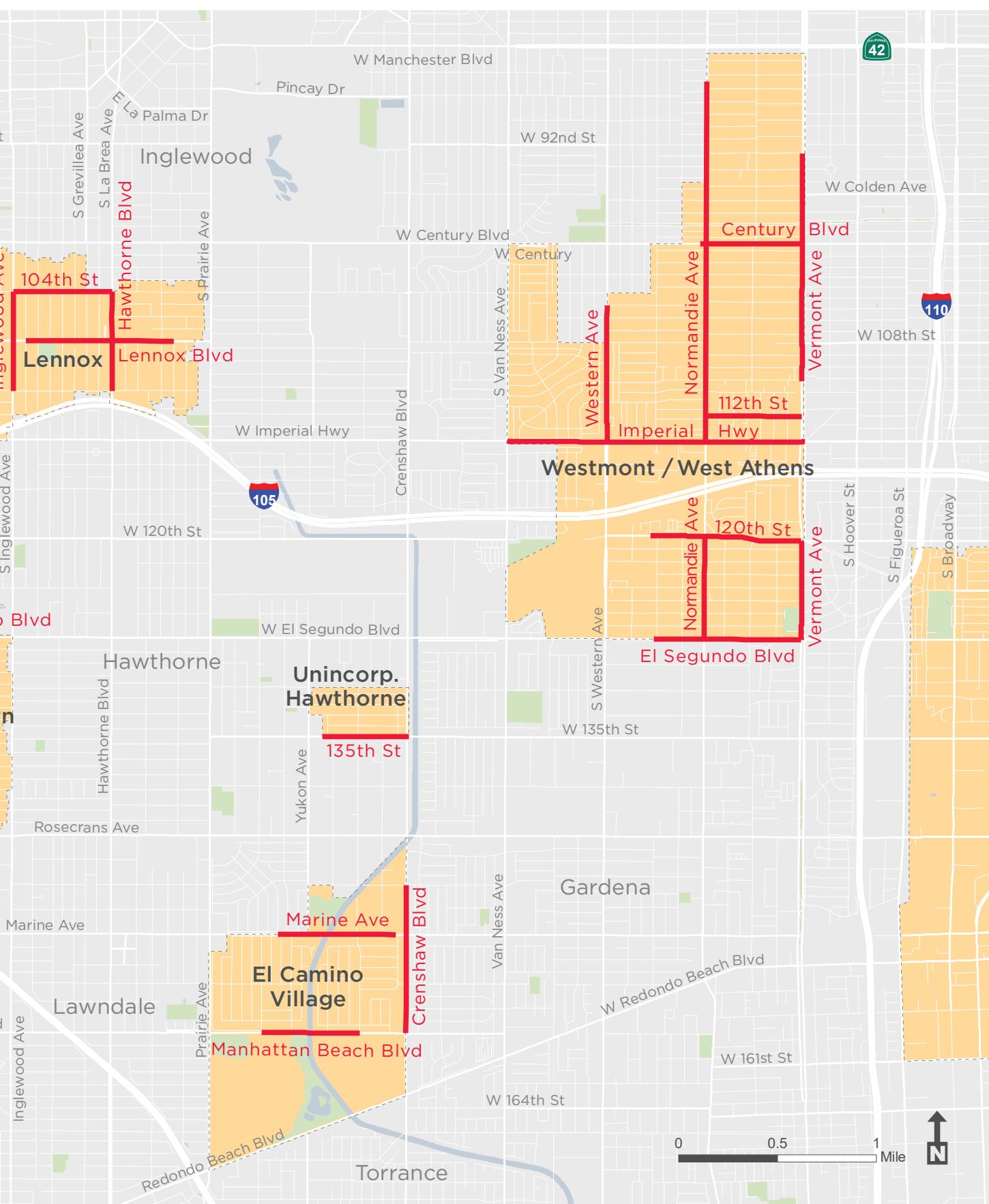
COLLISION CONCENTRATION CORRIDORS - INSET 42

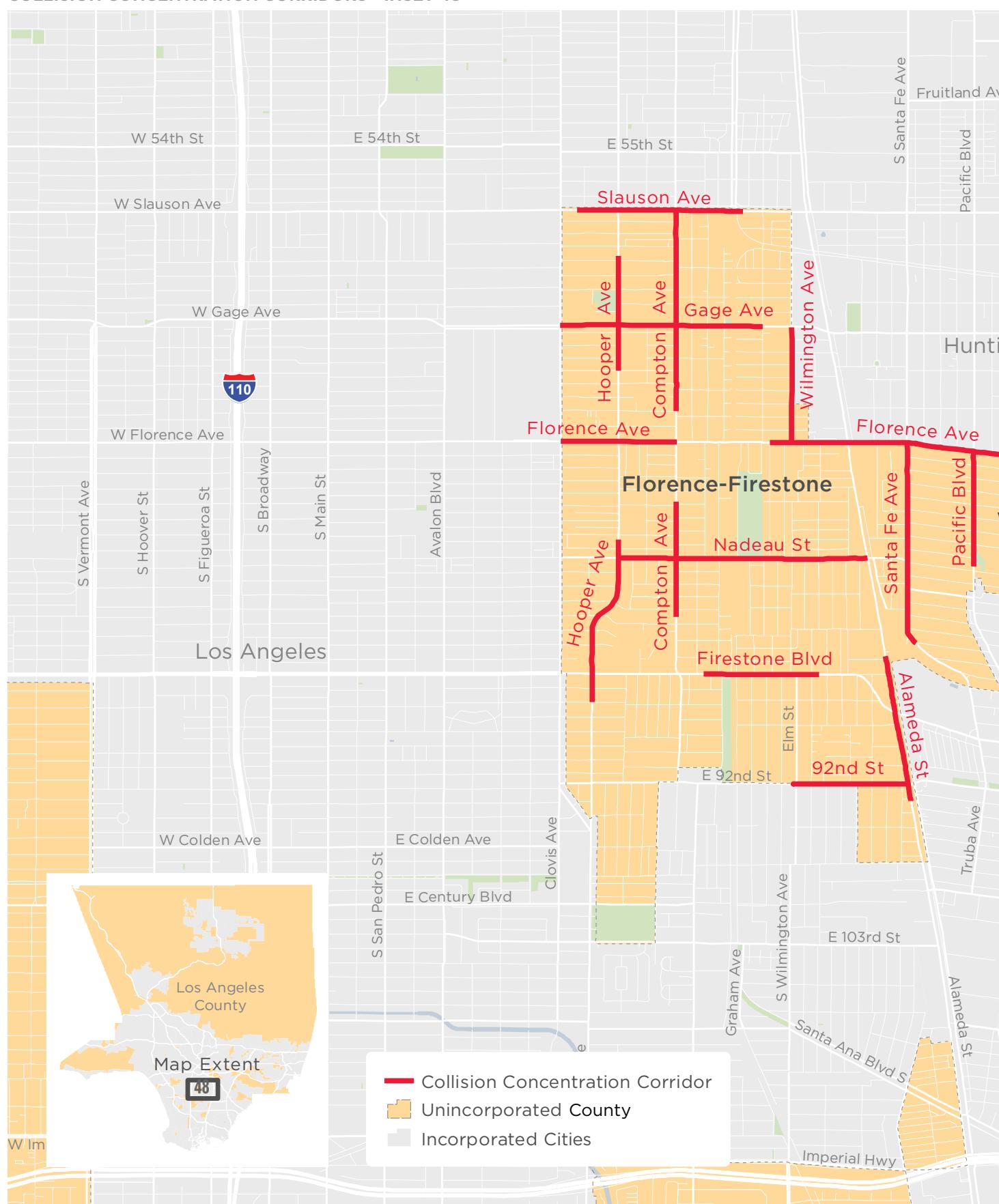


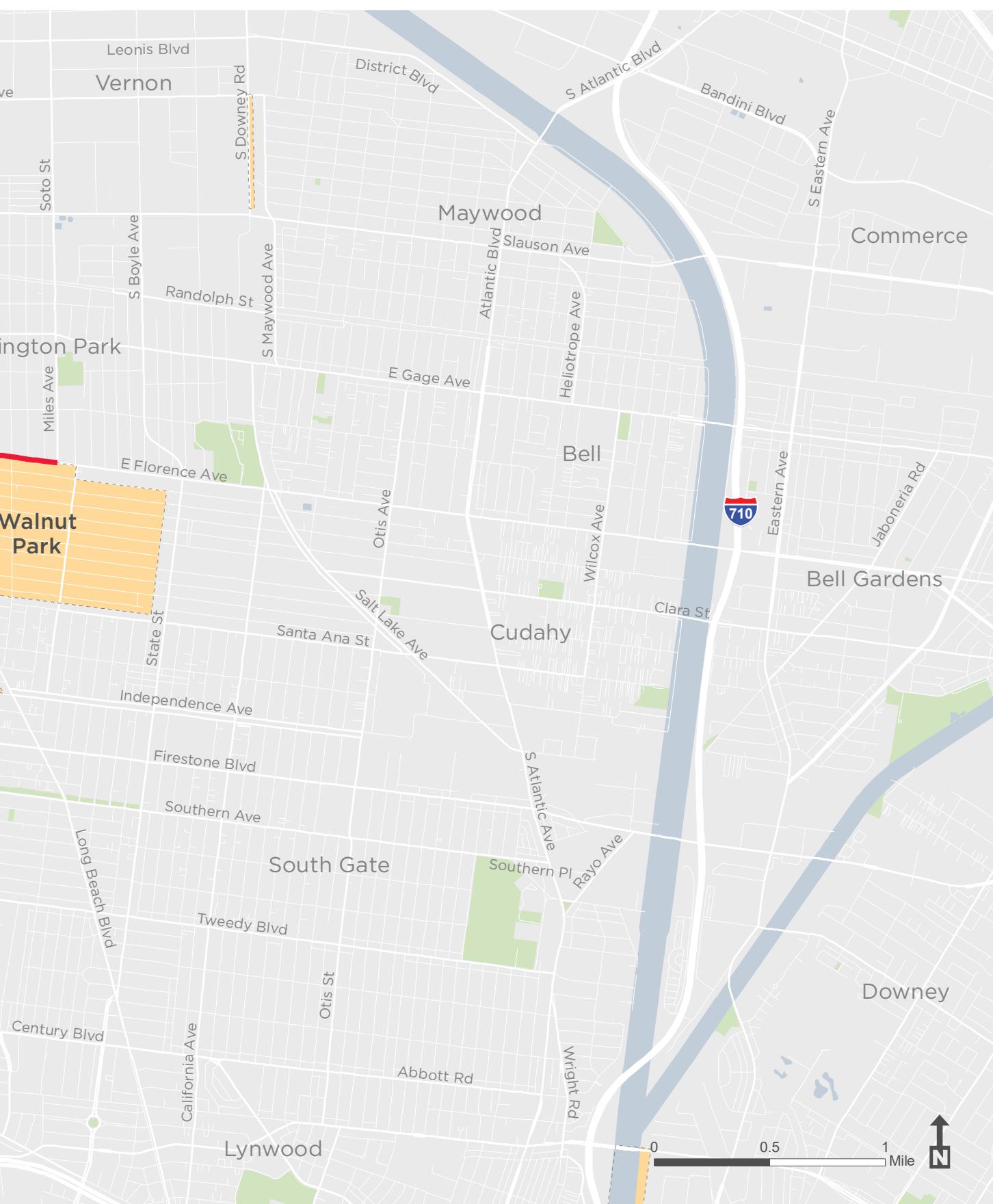
COLLISION CONCENTRATION CORRIDORS - INSET 44



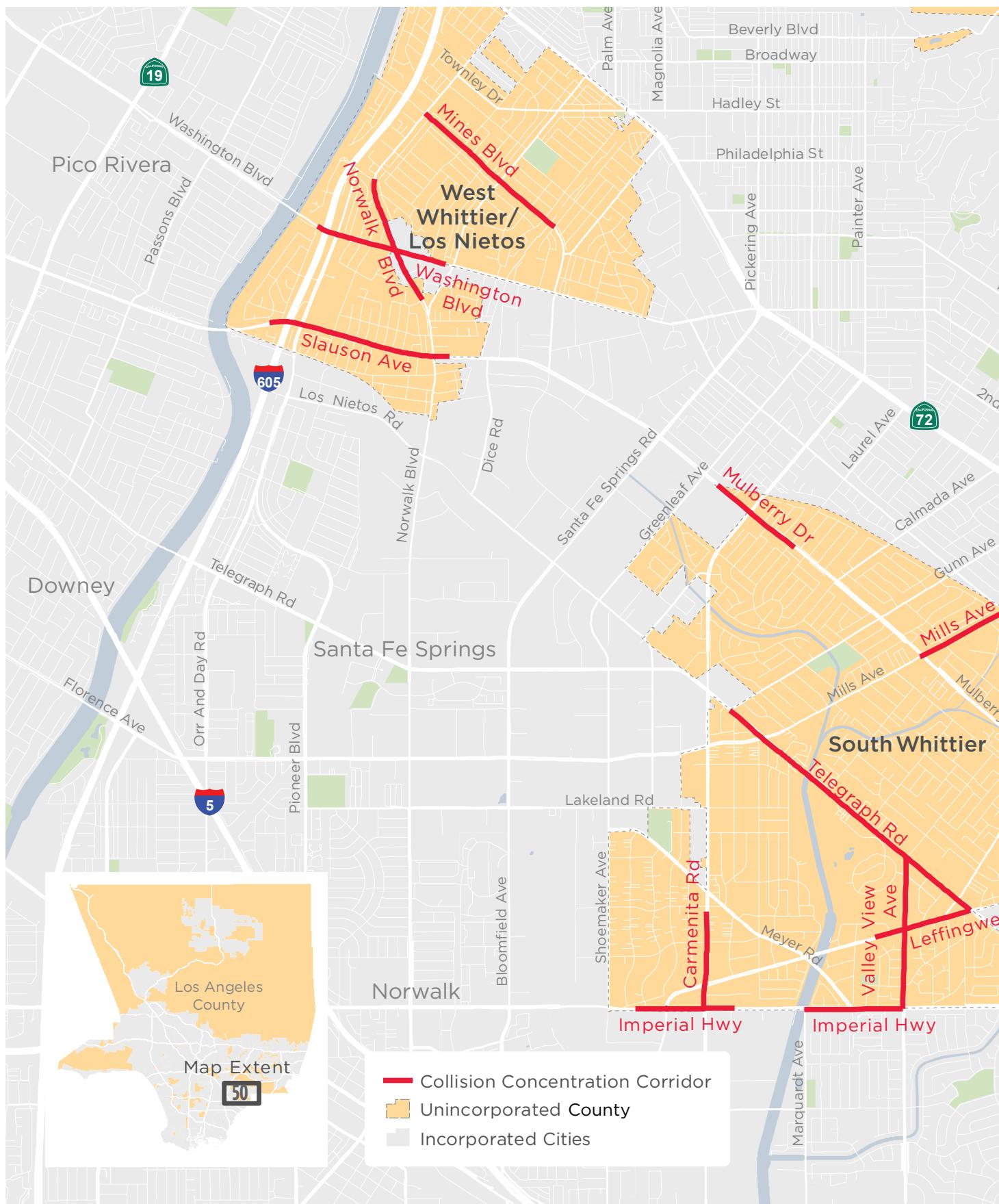
COLLISION CONCENTRATION CORRIDORS - INSET 46

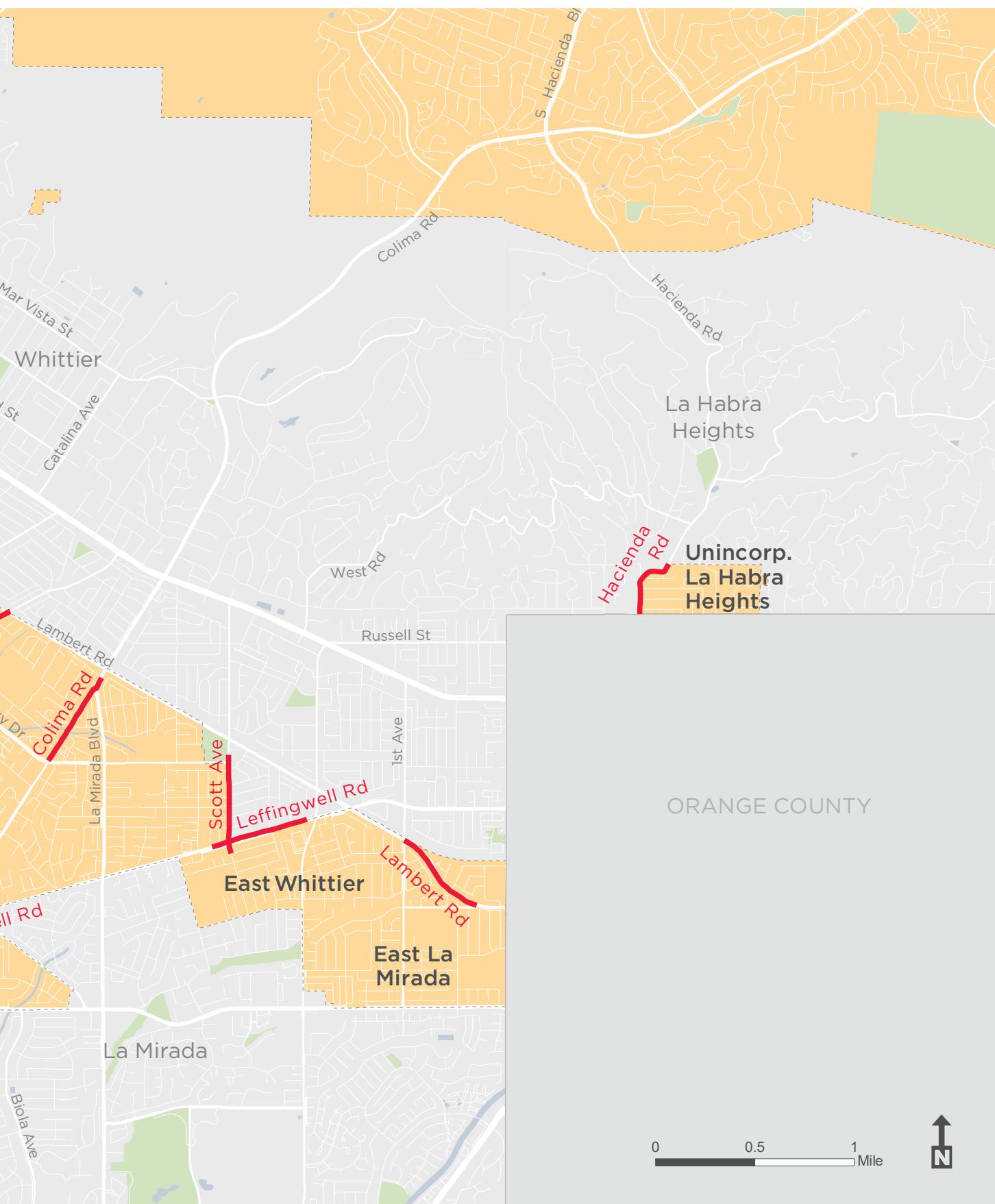


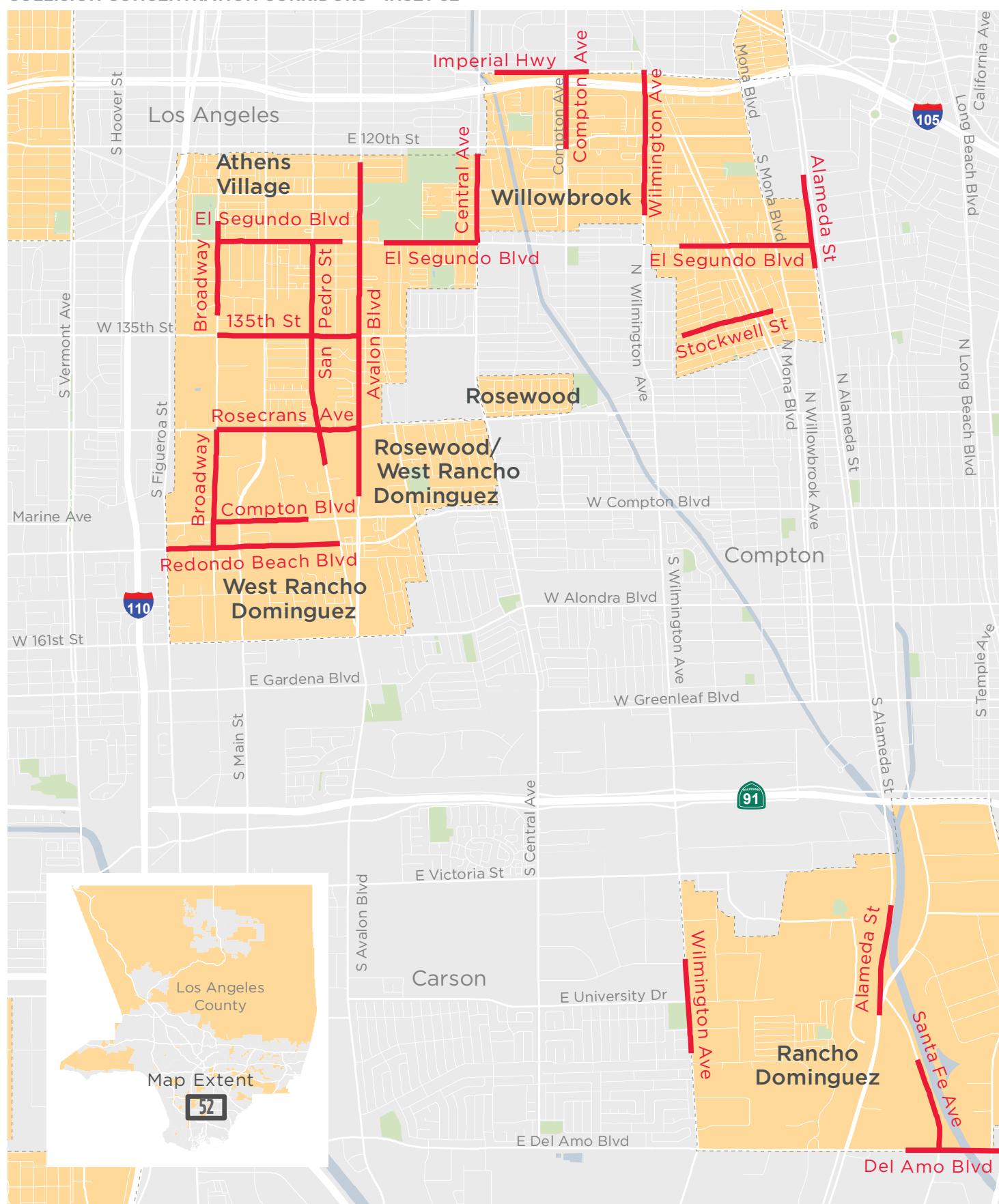
COLLISION CONCENTRATION CORRIDORS - INSET 48

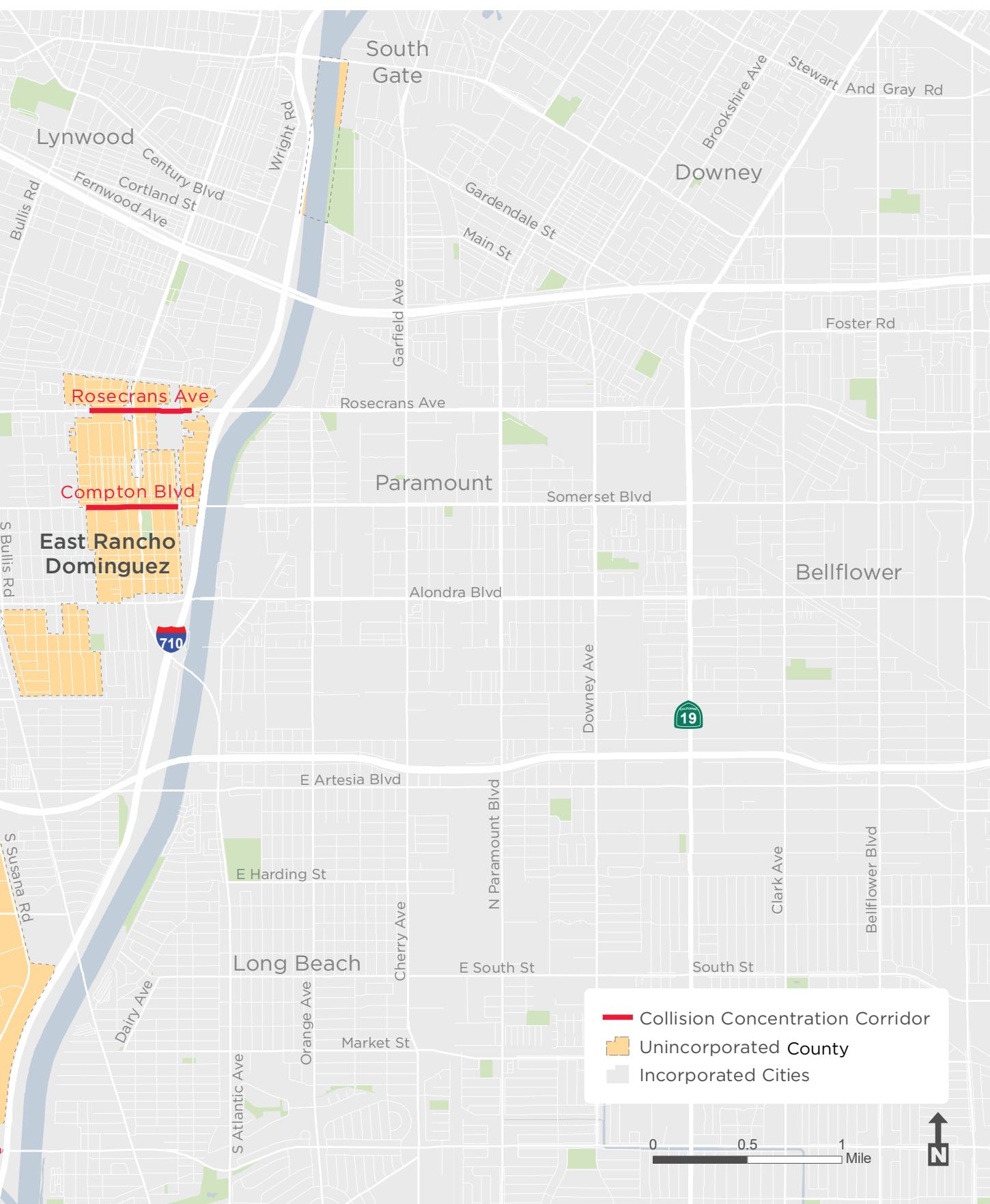


COLLISION CONCENTRATION CORRIDORS - INSET 50

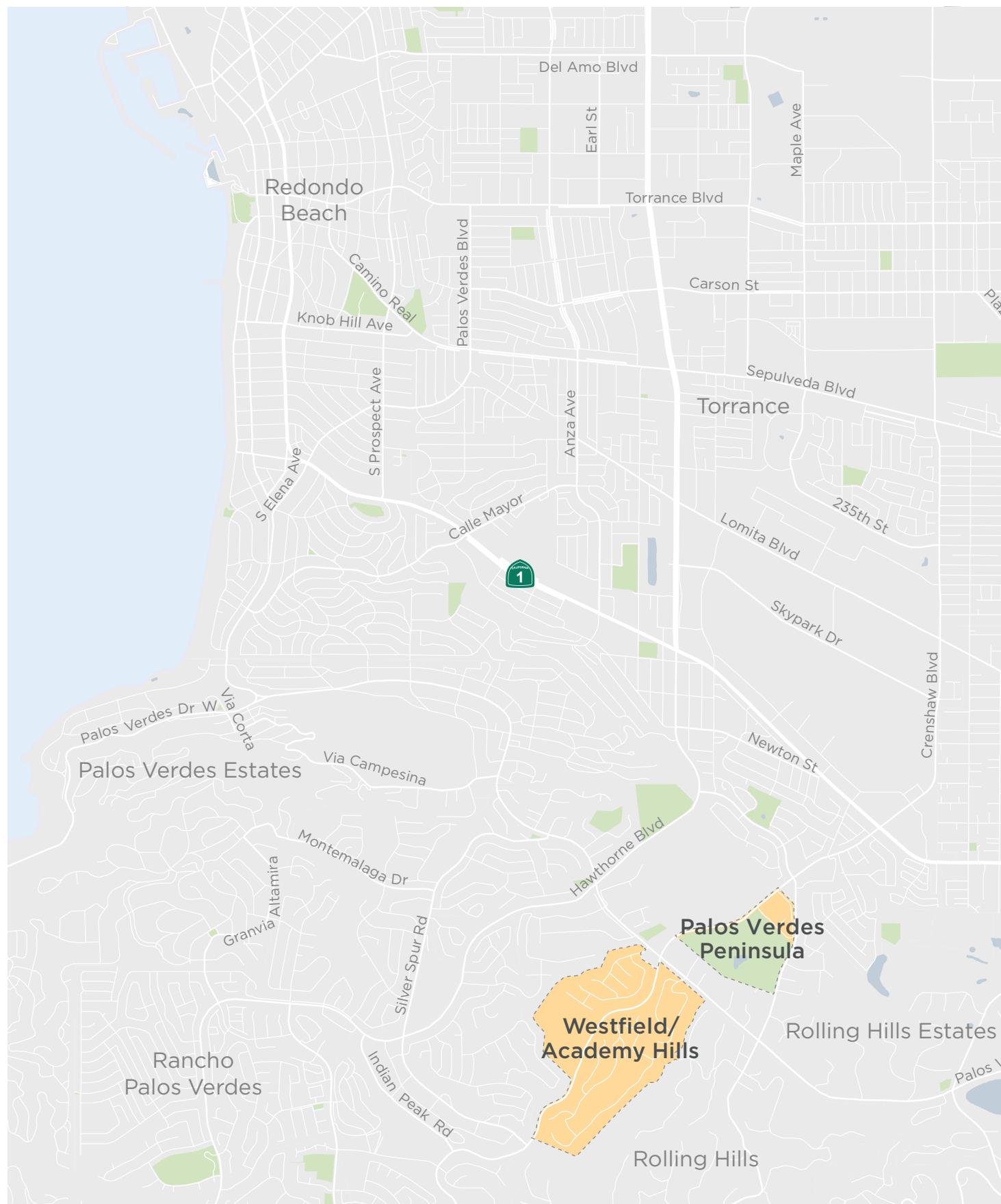


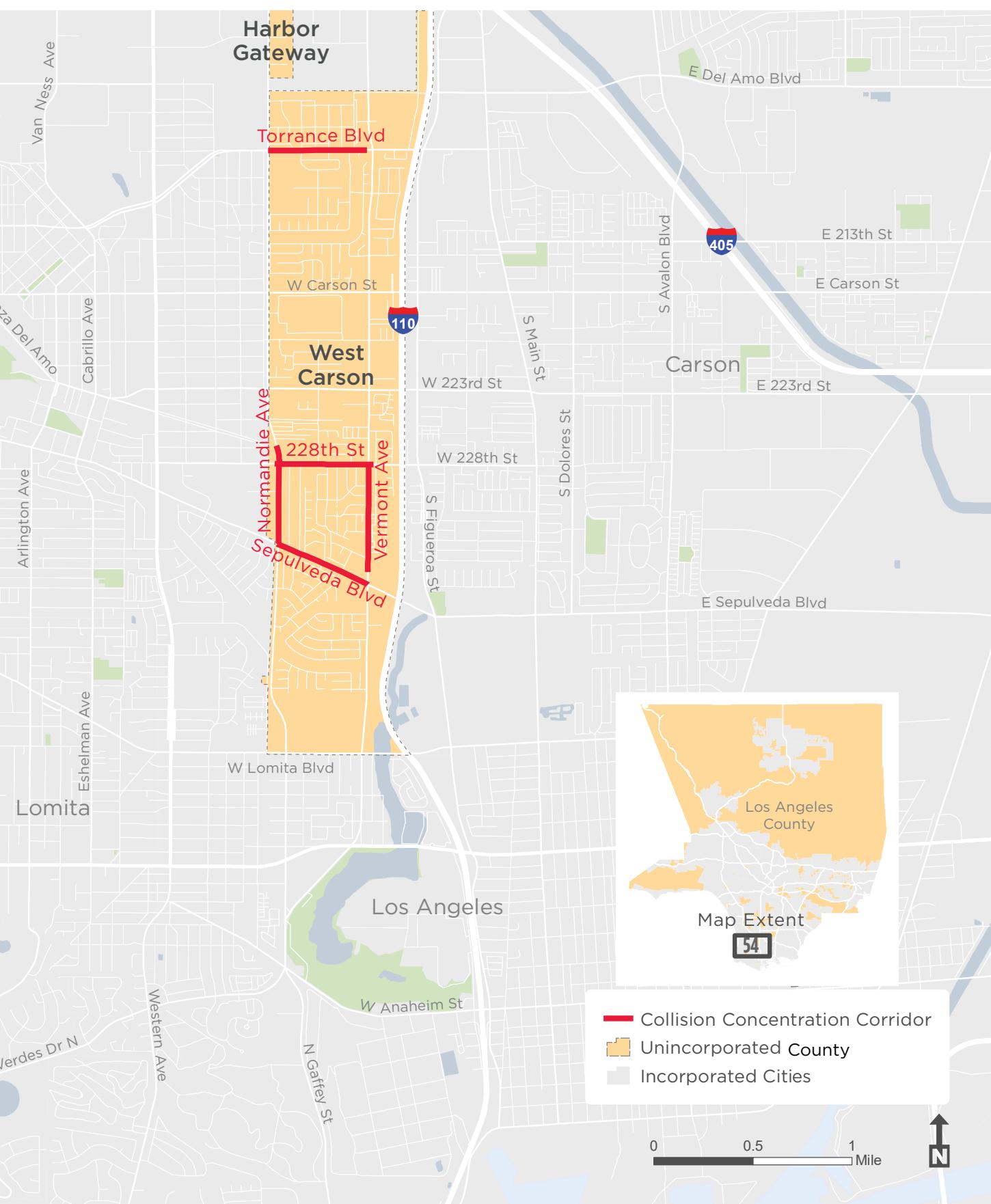


COLLISION CONCENTRATION CORRIDORS - INSET 52



COLLISION CONCENTRATION CORRIDORS - INSET 54







3

COMMUNITY ENGAGEMENT PROCESS

The County of Los Angeles understands that traffic safety is important to residents of unincorporated communities. Various concerns are regularly reported to Los Angeles County Public Works (Public Works) by community members and other County departments. Public Works responds to approximately 1,200 traffic study requests each year, addressing a variety of issues such as speeding, school crossings, and requests for traffic signals.

57

Between November 2017 and February 2019, Public Health and Public Works engaged stakeholders on the topic of traffic safety. Staff attended community events and meetings; met with community-based organizations, special interest groups, and non-profit agencies; and administered a survey on traffic safety experiences and perceptions.

Between March 1 and March 31, 2019, a draft Vision Zero Action Plan was made available for the public's review at www.VisionZeroLACounty.com and all unincorporated County libraries (printed copies). During that time, County staff attended various community meetings to inform the public of the release. The review period was announced through social media, a press release, and flyers. Over 200 comments were received, which were utilized to strengthen the Action Plan.

LOS ANGELES COUNTY TRAFFIC SAFETY SURVEY

From August 2018 through January 2019, 757 people over the age of 13 completed the Los Angeles County Traffic Safety Survey at 49 meetings and events across the unincorporated communities, including at County parks, schools, town council meetings, and meetings convened by community partners. It aimed to better understand traffic safety concerns and experiences in unincorporated communities. The survey was conducted in person by County staff and was available in Spanish, English and Mandarin. Key survey results are summarized below; full survey results will be available on the County's Vision Zero website, www.VisionZeroLACounty.com.



81%

Eighty-one percent of respondents rated **traffic deaths and severe injuries in Los Angeles County as a severe to very severe problem**. (41% rated them a very severe problem, 40% rated them a severe problem)

91%

Ninety-one percent of respondents strongly support or somewhat support **efforts to implement roadway projects to enhance traffic safety**. (72% strongly support, 19% somewhat support)

69%

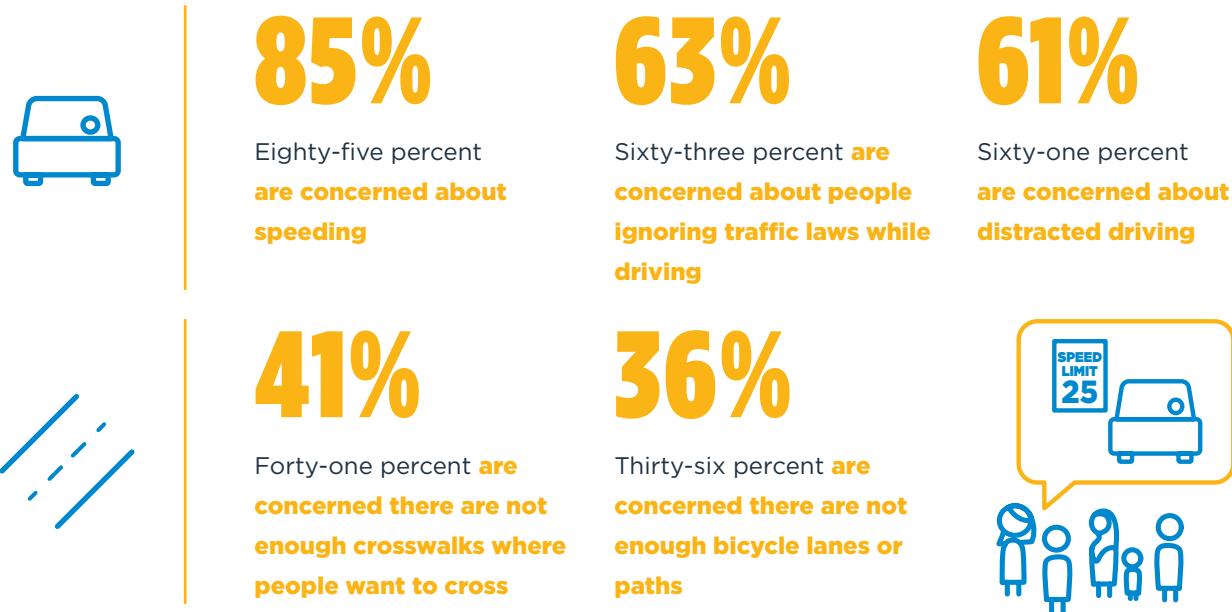
Sixty-nine percent of respondents are willing to **add 5 or more minutes to their one-way commute time for projects that would slow traffic to reduce traffic crashes, injuries, and deaths in their community**. (44% would be willing to add 5 to 10 minutes, 13% would be willing to add 11 to 15 minutes, and 12% would be willing to add over fifteen minutes)

74%

Seventy-four percent of respondents think that **people driving are in the most need of traffic safety education**.

Respondents' greatest traffic safety concerns on unincorporated County roadways

Respondents were provided a list of common traffic safety concerns and asked to identify any shared concerns.



59

How respondents felt about traffic related education and enforcement.

Respondents were also asked to express their level of agreement with potential solutions to their traffic safety concerns.

85%

Eighty-five percent **support law enforcement ticketing people who speed while driving.**

(58% strongly agree, 27% agree)

87%

Eighty-seven percent of respondents **support law enforcement ticketing people who run red lights while driving.** (62% strongly agree, 25% agree)

LAW ENFORCEMENT & COMMUNITY

While respondents largely support speeding and red light running enforcement, about half had concerns about impacts to their community.

"I am concerned about the cost of ticketing people with limited incomes."



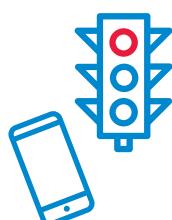
(29% strongly agree, 19% agree, for a total of 48%)



RESPONDENTS' DRIVING BEHAVIOR – PHONE USE AND SPEEDING

Many respondents admitted to engaging in risky behavior while driving.

60



42%*

Forty-two percent of respondents **text at traffic signals or stop signs at least some of the time**



24%*

Twenty-four percent of respondents **text while driving at least some of the time**



30%*

Thirty percent of respondents **do not use a hands-free device while talking on the phone and driving at least some of the time**



50%*

Fifty percent of respondents **drive 10 miles per hour or more over the speed limit on neighborhood roadways at least some of the time**

*'Some of the time' includes all responses marked greater than "Never" in response to the questions "When driving a car, how often do you do the following?" Survey responses included: "Always", "Most of the time" (51-99% of the time), "Sometimes" (5-50% of the time), "Rarely" (1-5% of the time), and "Never."



FUTURE COMMUNITY ENGAGEMENT

Community members are the most knowledgeable about what is happening on the roadways in their community and where traffic safety is a concern. These insights, paired with traffic collision data and sound engineering principles and judgment, will guide efforts to implement roadway enhancement projects, conduct educational outreach, and provide focused enforcement.

As part of implementing the Action Plan, the County will assess its current approach to community outreach. Enhanced two-way communication will begin during planning and design and continue through implementation and evaluation. The result will be an outreach, engagement, and education process that is tailored to the unique context of each neighborhood and unincorporated community.

The following are examples of potential ways the County will enhance the community engagement process:

- Develop and scope Vision Zero driven infrastructure projects through community-based participation.
- Use existing community meetings and events to have community conversations regarding traffic safety needs and desired enhancements.
- Partner with schools, neighborhood block clubs, homeowner associations, town councils, senior centers, and community-based organizations to share information.
- Seek additional grant funding and increase funding for outreach when planning for projects.
- Host demonstration projects to provide communities with interactive opportunities to experience possible enhancements.
- Partner with artists and incorporate the arts into the community engagement process.
- Create culturally relevant and inclusive engagement materials available in predominant languages



4

ROADWAY SAFETY ENHANCEMENTS

The County will use sound engineering principles and judgment and work closely with communities to identify and implement a variety of roadway enhancements proven to reduce fatal and severe injury collisions. Roadway enhancements aim to manage vehicle speeds, enhance visibility, and provide separation for travel modes. Some examples are shown on the following pages, which may be applied in rural or urban settings based on community needs.

63



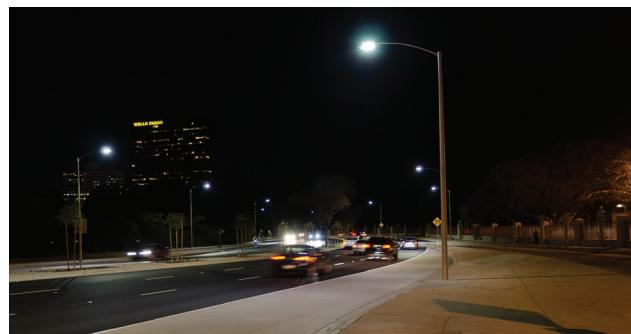
Pedestrian Activated Warning Beacons are flashing yellow lights that provide additional warning to drivers that a pedestrian is crossing the roadway.



Left Turn Signal Phasing provides a green arrow for left turning vehicles while stopping conflicting vehicles and pedestrians.



Separated Bikeways provide physical separation between bicyclists and traveling motorists.



Roadway Lighting can make it easier for drivers to see their surroundings and improve the feeling of security for pedestrians.



High Visibility Crosswalks are easier to see and alert drivers that they are approaching a crossing.



Temporary Roadway Enhancements such as paint and flexible posts/bollards are typically less expensive than concrete and may be installed to enhance traffic safety.



Curb Extensions (also known as bulb-outs) shorten the crossing distance for pedestrians, slow turning vehicles, and enhance the ability for pedestrians and motorists to see each other. Curb extensions can consist of paint and flexible posts or bollards and/or curb and gutter.



Pedestrian Signal Timing prioritizes pedestrians at signalized intersections.

- **Leading Pedestrian Intervals** give pedestrians a walk signal several seconds before the vehicle signal turns green. This gives pedestrians a head start to cross the roadway to be more visible to drivers.
- **Pedestrian Scrambles** stop all motorists and allow pedestrians to cross in all directions, including diagonally.
- **Semi-Exclusive Pedestrian Operation** allows pedestrians to cross the roadway with non-conflicting vehicle movements.



Refuge Islands provide a space within a median, midway through a crosswalk, for people to wait for a gap in traffic before continuing to cross a wide roadway.



Speed Humps (also referred to as Speed Bumps or Speed Cushions) installed on local residential roadways can be effective in slowing down drivers.



Guardrail is installed to reduce the severity of run-off road collisions. However, guardrail can reduce crash severity only for those conditions where striking the guardrail is less severe than going down an embankment or striking a fixed object.



Roadway Reconfigurations typically reduce the number of vehicular travel lanes and may reallocate space to pedestrians and bicyclists and allow room for vehicle turning lanes. Narrower traffic lanes may also contribute to slower speeds while the addition of roadway trees along corridors can have a traffic calming effect.



A **traffic circle** is a raised island located in the center of an intersection around which traffic must circulate. They may be used to lower vehicle speeds and conflicts at the intersection of two roadways. They are typically operated as two-way or all-way stop-controlled intersections.



Roundabouts are intersections where traffic travels around a central island in a counterclockwise direction. Vehicles entering or exiting the roundabout must yield to other vehicles, bicyclists, and pedestrians.



Curve Warning Signs provide emphasis and guidance for a change in horizontal alignment. Advisory speed signs may be used to supplement warning signs.



3rd St

EDWARD R. ROYBAL
COMPREHENSIVE HEALTH CENTER

5

VISION ZERO ON A REGIONAL SCALE

Los Angeles County is the most populous county in the United States and is comprised of 88 cities in addition to over 120 unincorporated communities. At this scale, regional coordination is imperative to achieving zero deaths on unincorporated County roadways because people traveling by all modes cross between cities and unincorporated communities on a frequent basis.

Eliminating fatal and severe injury collisions on unincorporated County roadways will require close coordination with neighboring cities and State agencies, such as the California Department of Transportation (Caltrans), to share and analyze data, implement infrastructure projects and other education and enforcement efforts, and regionally create a culture of traffic safety.

COLLABORATING ON DATA ANALYSIS

Sharing data between County departments and cities will create a collective understanding of where collisions are happening, who is impacted, and what factors contribute to fatal and severe injury collisions. To maximize the value of existing data, there is also a need for more complete data analysis to understand the full picture of traffic collisions in Los Angeles County as a whole. The County will convene partners to link and compile data from law enforcement, emergency first responders, trauma centers, and hospitals to better understand where collisions are occurring and who is impacted.

PARTNERING ACROSS JURISDICTIONS

Public Works provides roadway engineering, construction, and maintenance services to many incorporated cities. In addition, the Sheriff's Department provides traffic enforcement in 42 of the County's 88 incorporated cities. These relationships could create a unique opportunity for the County to build partnerships that promote traffic safety through engineering, education, and enforcement, which can save lives across the region.

COORDINATING COMMUNICATIONS FOR CULTURE CHANGE

Culture change - or a shift in how traveling on public roads is perceived - is critical in a county and region where traffic fatalities, speeding, and congestion are major concerns. To achieve the goal of zero traffic deaths, it is important that everyone recognize and respect those who are utilizing the shared space of public roadways.

WIDESPREAD MARKETING CAMPAIGNS LEAD TO CULTURE CHANGE

The public health field led the successful change of public perceptions about smoking in California. Through policy change and impactful marketing campaigns, public health activities helped reduce smoking by 51% between 1988 and 2014. Today California has the second lowest adult smoking prevalence rate in the United States at just under 12%.

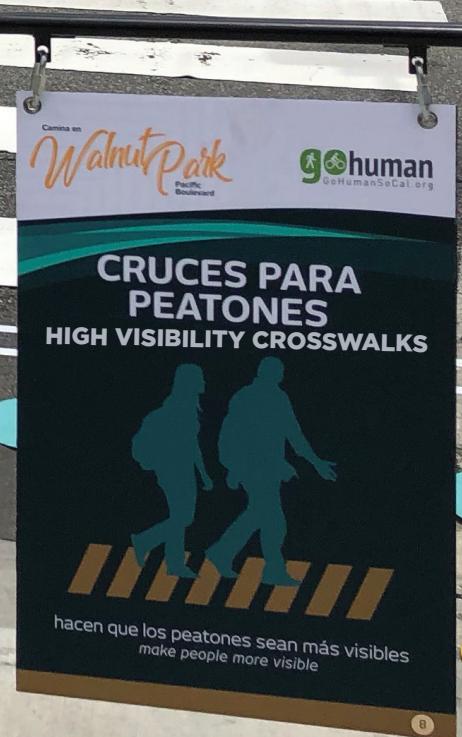
<http://tobaccofreeca.com/health/2016-california-tobacco-facts-figures/>

Widespread culture change is possible, as demonstrated by the many initiatives led by those in the public health field. A critical strategy for creating widespread culture change will be using multi-media marketing campaigns to emphasize traffic safety values and increase compassion towards all people who are traveling on the roadway.

The Southern California Association of Governments (SCAG), the Automobile Club of Southern California (AAA), and the City of Los Angeles, have campaigns underway that the County can build upon, such as SCAG's *Go Human* campaign. The County will engage these and additional partners to develop traffic safety campaigns that are aligned with regional messaging.



Collisions involving pedestrians and bicyclists are not always reported to law enforcement agencies, therefore these types of collisions are underreported.²⁷ The City of San Francisco linked trauma center data with law enforcement data, providing a clear picture of where collisions are happening and who they impact. Their analysis has shown that **55% of bicycle injuries and 21% of pedestrian injuries treated at San Francisco General Hospital were not reported in law enforcement records.**^{28,29}



6

IMPLEMENTATION ACTIONS

The County will act to eliminate deaths and severe injuries among those traveling on unincorporated County roadways by applying the principles below and taking the actions described in this section.

GUIDING PRINCIPLES

Three guiding principles will direct decision making as the County implements Vision Zero actions:

- **Health Equity:** Reduce gaps in health outcomes by addressing the practices that disadvantage some populations over others and lead to health inequities.
- **Data-driven process:** Identify where and why traffic collisions are happening and prioritize projects and programs in these areas.
- **Transparency:** Maintain regular communication with the public about progress, and how the County is working to enhance traffic safety.

71



Health Equity

In Los Angeles County, the health of communities differs by geography, race, and ethnicity. For example, average life expectancy in Los Angeles County varies by as much as 11.6 years based on where people live, and there is a nearly 12-year difference in life expectancy between African American and Asian communities (75.7 vs. 87.3 years respectively).³⁰

The physical environment where people live has a profound impact on health outcomes and access to opportunities. For example, roadways that have sidewalks, marked crosswalks, and bicycle lanes increase opportunities for physical activity and enhance safety for pedestrians and bicyclists. Factors like these are associated with better health outcomes. However, infrastructure varies greatly throughout the



county. By defining health equity as a principle that guides decision making for this Vision Zero Action Plan, disparities can be addressed in the transportation system. Through its Vision Zero Initiative, the County of Los Angeles commits to working with the most burdened communities to eliminate traffic deaths and severe injuries.

Data-driven



Data-driven decision making is at the core of Vision Zero. Data analysis is used to identify where collisions happen and allocate resources to prevent them. The County will use data analysis to prioritize infrastructure enhancements and educational programs where fatalities and severe injuries are occurring.

Traffic collision reports completed by the California Highway Patrol are the primary source of data that will inform decisions. However, other data sources can be used for planning and decision making, such as hospital records and first responder reports. Through this effort, the County will strive for new and improved ways to link and analyze important datasets to enhance the understanding of where safety concerns exist. The personal experiences of community members are also a valuable source of data, and therefore incorporating community experience and needs into the decision making process is important.

Transparency



Transparency leads to trust and success in achieving zero traffic deaths by 2035. The County commits to sharing accomplishments and shortcomings by communicating plans, progress, and lessons learned of the Vision Zero initiative to communities clearly and quickly. Communication methods may include the use of websites, social media, printed reports, and meetings.

OBJECTIVES

Based on meetings with community members, County departments, and partner agencies, a clear set of actions has been developed for the next five years to move closer to the goal of eliminating traffic fatalities and severe injuries. These actions include efforts to update, expand, and establish new processes, policies, trainings, projects, and programs.

The actions are organized into five objectives. These objectives represent the County's priorities and help put the guiding principles into action.

- A. Enhance County Processes and Collaboration
- B. Address Health Inequities and Protect Vulnerable Users
- C. Collaborate with Communities to Enhance Roadway Safety
- D. Foster a Culture of Traffic Safety
- E. Be Transparent, Responsive, and Accountable

ACTIONS

Each action includes details on the benchmarks and/or metrics for evaluating success; and identifies which agency will lead implementation. The County will report on each of these actions annually and revise them as necessary if objectives are not being met.

Achieving the Vision Zero goals and objectives through these actions in the time frames specified, for the Collision Concentration Corridors as defined and mapped in this Plan, is contingent upon multiple factors including, without limitation, available funding and resources. Similarly, implementation of any future engineering projects to achieve the goals and objectives of this Plan are contingent upon multiple factors including, without limitation, obtaining community support of the proposed engineering projects and securing sufficient funding to finance all phases of a project including installation, operation, on-going maintenance, appropriate environmental analysis, and engagement. Furthermore, achieving the goals of this plan largely depends on community support of future proposed engineering projects.

ACRONYMS

AAA: Automobile Club of Southern California
Arts: Department of Arts and Culture
LACDA: Los Angeles County Development Authority
CEO: Chief Executive Office
CHP: California Highway Patrol
CIO: Chief Information Office
DBH: Department of Beaches and Harbors
DHS: Department of Health Services
DPR: Department of Parks and Recreation
DPH: Department of Public Health
DRP: Department of Regional Planning
LACFD: Los Angeles County Fire Department
ISD: Internal Services Department
LASD: Sheriff's Department
TTC: Treasurer-Tax Collector

A. Enhance County Processes and Collaboration

Business as usual will not lead to zero fatalities. The County of Los Angeles commits to a fundamental shift in the way departments and partner agencies

function and collaborate to create a transportation system that prioritizes human life.

Action	Partners	Year 1	Years 2-5
Establish a Vision Zero Program within the County			
A-1: Create an organizational structure to oversee implementation of the Vision Zero Action Plan including: a Steering Committee, Subcommittees, and Work Groups comprised of County staff, and a Regional Stakeholder Committee with appropriate community representation.	Lead: DPH/ Public Works Support: LACFD, CHP, LASD, DHS, DBH, CEO, CIO, ISD, Arts, DPR, County Counsel, DRP, Community	Committees/ Subcommittees/ Work Groups established	Committee/ Subcommittee/ Work Group Meetings
A-2: Establish a permanent funding source for the Vision Zero program.	Lead: CEO Support: Public Works, DPH	Initiate action	Dedicate ongoing funding for Vision Zero
Enact policy changes to enhance traffic safety			
A-3: Continue to support legislative efforts related to setting and enforcing speed limits.	Lead: Public Works Support: DPH, CEO	Ongoing	Ongoing
A-4: Coordinate regionally to develop policies for connected and autonomous vehicle technology that protect vulnerable road users, considering existing mobility related County policies, programs, and plans.	Lead: Public Works Support: County Counsel, CEO, CHP	Initiate action, secure funding	Ongoing where funding has been secured
A-5: Develop a policy for mobility devices that have shared use technology such as electric scooters.	Lead: Public Works Support: LASD, CHP, DPR, DBH, DPH, County Counsel, CEO, TTC	Initiate action, secure funding	Complete action where funding has been secured

Action	Partners	Year 1	Years 2-5
Update infrastructure processes, guidelines, and manuals to facilitate project designs aimed at preventing traffic fatalities and severe injuries			
A-6: Evaluate the County Master Plan of Highways, and the development and roadway design standards stipulated in the Los Angeles County Code to ensure consistency with Vision Zero goals.	Lead: Public Works Support: DRP, DPH, County Counsel	-	Complete evaluation where funding has been secured
A-7: Update, as necessary, the County's guidelines for recommending roadway safety enhancements.	Lead: Public Works Support: DPH, LACFD, CHP, LASD, County Counsel	Initiate action, secure funding	Roadway safety enhancement guidelines updated, as necessary, where funding has been secured
A-8: Update the Public Works' Highway Design Manual to consider available tools and design standards, including those recommended by the Los Angeles County Model Design Manual for Living Streets, National Association of City and Transportation Officials (NACTO) Guides, and other best practices to enhance safety for both motorized and non-motorized users.	Lead: Public Works Support: DPH, LACFD, CHP, LASD, DPR	Initiate action, secure funding	Complete Highway Design Manual update where funding has been secured
A-9: Incorporate traffic safety enhancements into Public Works projects along the Collision Concentration Corridors where feasible and appropriate.	Lead: Public Works	Initiate action, secure funding	Number of projects on CCCs that include traffic safety enhancements where funding has been secured
A-10: Update the project management processes and tracking method of traffic safety projects to ensure expeditious implementation.	Lead: Public Works	Identify preferred system and secure funding	Complete system and train staff where funding has been secured
A-11: Finalize the Livable Communities Design Guidelines, which incorporate multi-modal safety design measures, and hold trainings to educate staff and the public.	Lead: DRP Support: Public Works, LACFD	Finalize Livable Communities Design Guidelines and present for approval, as recommended by County Counsel	Train 100% of applicable staff Hold trainings for the public
A-12: Utilize the Collision Concentration Corridors list when seeking funding from local, regional, state, and federal roadway infrastructure and planning grant opportunities.	Lead: Public Works Support: DPH, DPR	Initiate action, secure funding	Ongoing action where funding has been secured

B. Address Health Inequities and Protect Vulnerable Users

Data has shown that severe injury and fatal collisions disproportionately impact vulnerable roadway users (i.e. pedestrians and bicyclists). With health equity as a guiding principle, the County

is committed to leveraging Vision Zero actions to help address current health inequities in the transportation system.

Action	Partners	Year 1	Years 2-5
Implement programs and amend existing County policies to ensure certain populations are not unduly burdened			
B-1: Create a coordinated approach to law enforcement and community engagement in unincorporated communities.	Lead: DPH Support: CHP, LASD, Public Works	Convene partners	Ongoing action
B-2: Identify process and partners for establishing a diversion program for persons cited for infractions related to walking and bicycling.	Lead: DPH Support: LACDA	Initiate action	Establish program
B-3: Identify process and partners to consider revising the Los Angeles County Municipal Code to allow the operation of bicycles on sidewalks.	Lead: DPH Support: Public Works, County Counsel, LASD	Initiate action	Complete action and report findings
Implement programs focused on eliminating fatal and severe injury collisions involving youth and older adults			
B-4: Establish a Safe Routes to School Program to provide traffic safety education to students, identify safety enhancements around schools, and promote walking and bicycling.	Lead: Public Works Support: DPH, CHP, LASD, DPR	Develop prioritized list of schools and secure funding	10 schools participating where funding has been secured
B-5: Establish a Safe Routes to Parks Program to support safe and equitable access to parks through community engagement and education, park design, signage and wayfinding, and other strategies in the National Recreation and Park Association's Safe Routes to Parks Action Framework	Lead: DPR Support: DPH, Public Works	Create a plan consistent with the "10-Minute Walk" campaign to increase the percentage of residents in West Athens-Westmont that are within a 10-minute walk of a park.	Number of County Parks where strategies from the Safe Routes to Parks Action Framework were incorporated into the design, siting, and improvements of the park
B-6: Establish a Safe Routes for Seniors program that provides traffic safety education to seniors, identifies traffic safety enhancements in areas populated or frequented by older adults, and promotes walking, bicycling, and transit use.	Lead: DPH Support: LACFD, CHP, DPR, Public Works	Initiate action, secure funding	Conduct program at 4 locations impacting older adults (for example, County Workforce Development Aging and Community Service Centers)

Action	Partners	Year 1	Years 2-5
B-7: Build County and community capacity to implement the Child Passenger Safety (CPS) program (which provides car seats, educates caregivers, and provides car seat checks); identify partners and resources to expand the program; and explore ways to increase awareness and messaging.	Lead: DPH Support: CHP, LASD, LACFD	Number of CPS trainings by area Number of CPS training participants by area	Number of CPS trainings by area Number of CPS training participants by area
B-8: Outreach to and develop relationships with hospitals, clinics and health centers to distribute child passenger safety video and educational materials to patients; invite hospital staff to participate in DPH car seat installation certification trainings.	Lead: DPH Support: DHS, CHP, LASD	Initiate outreach to hospitals	25% of hospitals offer child passenger safety education
B-9: Coordinate across relevant County entities that offer car seat installations, car seat classes, and other relevant courses to ensure that resources are made easily available to the public via an online portal, printed materials, etc.	Lead: DPH Support: CHP, LASD, LACFD, DPR	Complete action	Update website quarterly
Implement traffic safety enhancements to reduce fatal and severe injury collisions involving pedestrians and bicyclists			
B-10: Install high visibility crosswalks on the Collision Concentration Corridors.	Lead: Public Works	Initiate action, secure funding	Install 225 high-visibility crosswalks where funding has been secured
B-11: Implement leading pedestrian intervals (LPI) at intersections along the Collision Concentration Corridors to allow pedestrians to begin crossing the roadway before the vehicle signal turns green where feasible and appropriate.	Lead: Public Works	Initiate action, secure funding	Implement LPIs at 50 intersections where funding has been secured
B-12: Implement a semi-exclusive pedestrian or exclusive pedestrian (i.e. pedestrian scramble) operation in unincorporated Los Angeles County at an intersection with high pedestrian traffic and/or vehicle-pedestrian conflicts.	Lead: Public Works	Initiate action, secure funding	Implement 1 semi-exclusive pedestrian or exclusive pedestrian (i.e. pedestrian scramble) operation where funding has been secured
B-13: Implement curb extensions (paint and flexible posts or bollards and/or curb and gutter) on Collision Concentration Corridors where feasible and appropriate.	Lead: Public Works	Initiate action, secure funding	Implement curb extensions* where funding has been secured
B-14: Implement left turn phasing at intersections along Collision Concentration Corridors where feasible and appropriate.	Lead: Public Works	Initiate action, secure funding	Implement left turn phasing at 20 intersections where funding has been secured
B-15: Implement bike paths/separated bikeways along Collision Concentration Corridors where feasible and appropriate.	Lead: Public Works	Initiate action, secure funding	Implement 4 miles of bike paths/ separated bikeways where funding has been secured

*Each intersection corner may result in 1 curb extension

C. Collaborate with Communities to Enhance Roadway Safety

Roadway designs that calm vehicle speeds, separate vehicle traffic from pedestrians or bicyclists, and make people more visible, enhance the overall safety of roadways. Roadway designs that incorporate traffic safety enhancements also provide an opportunity to include additional features such as trees and landscaping, stormwater quality features, and smart city technologies like electric vehicle infrastructure that can improve the sustainability of communities. Enhancing access to

housing, grocery stores, medical centers, and other community destinations can also encourage more people to walk and ride a bicycle.

The County commits to working closely with residents and other stakeholders to identify challenges and develop enhancements aimed at eliminating fatal collisions in unincorporated communities.

Action	Partners	Year 1	Years 2-5
Increase community engagement for traffic safety projects			
C-1: Work with stakeholders to establish a community engagement process that involves the public throughout all phases of traffic safety projects.	Lead: Public Works Support: DPH, CHP, Arts, DRP	Establish process secure funding	Implement process where funding has been secured
C-2: Conduct demonstration projects to pilot innovative traffic safety features, which may include using evolving technology, on a semi-permanent basis and obtain community input on the design and implementation before permanent enhancements are implemented.	Lead: Public Works Support: DPH, DPR, CHP, LASD	At least one annually, secure funding	At least one annually where funding has been secured
C-3: Identify strategies for integrating art and culture into Vision Zero outreach and projects.	Lead: Arts, DPH Support: Public Works	Identify art strategies and begin implementation	Ongoing
C-4: Assess environmental conditions associated with impaired driving and promote policies and programs for prevention.	Lead: DPH	-	Initiate action
Strengthen public knowledge of traffic safety best practices			
C-5: Update traffic calming informational materials that highlight the benefits and implementation guidelines of various features.	Lead: Public Works	Materials updated and translated into dominant languages of unincorporated communities, secure funding	Materials updated as needed where funding has been secured
C-6: Educate community members about Vision Zero during community and area planning efforts and encourage the use of Vision Zero concepts in the planning process.	Lead: DRP Support: Public Works, DPH, DPR	Initiate action	Ongoing action

D. Foster a Culture of Traffic Safety

A shared culture of traffic safety that emphasizes respect for all road users and safe travel behaviors throughout the region is a core element of success.

Outreach and engagement, community education, regional media campaigns, and focused enforcement are tools to foster this type of culture change, especially where physical changes to roadways may not be sufficient. Law enforcement will focus on enhancing public trust through community outreach, education, and community-based policing efforts.

Focused enforcement activities will take place only after engagement and education have occurred and will place emphasis on the infractions that are most likely to lead to a deadly collision, such as speeding and driving under the influence.

Action	Partners	Year 1	Years 2-5
Implement a communications campaign to heighten awareness and understanding of traffic safety among the public, agencies, and the media			
D-1: Explore partnerships with other entities to coordinate traffic safety communications regionally.	Lead: Public Works Support: DPH, LACFD, CHP, LASD, DRP	Initiate action, secure funding	Ongoing action where funding has been secured
D-2: Implement a media and public education campaign that includes a social media toolkit, website content, and digital messaging focused on the prevention of driving while high, drunk, or distracted.	Lead: DPH Support: Public Works, CHP, LASD	Initiate action, secure funding	Ongoing action, measure reach and awareness of campaigns
D-3: Collaborate with Trauma Centers and other healthcare providers to raise awareness of traffic safety and the Vision Zero initiative.	Lead: DPH Support: DHS	Initiate action	Ongoing action
D-4: Participate in National Impaired Driving Prevention Month activities annually to promote safe driving during the holiday season and distribute educational resources throughout the year regarding the dangers of impaired and distracted driving.	Lead: DPH Support: CHP, LASD, Public Works	Initiate action	Ongoing action

Action	Partners	Year 1	Years 2-5
Strengthen traffic safety enforcement policies and practices			
D-5: Develop a series of traffic safety trainings for the Sheriff's Department regular shift briefings.	Lead: LASD	Develop trainings	100% implementation at all stations
D-6: Update the Sheriff Department's Field Training course to include traffic enforcement and investigation content.	Lead: LASD	Complete update of Field Training course	Percentage of staff complete training
D-7: Increase the number of CHP and Sheriff's deputies trained as Drug Recognition Experts (DREs).	Lead: CHP & LASD	Initiate action	Increase number of CHP DREs by 5% Increase number of LASD DREs by 50%
D-8: Focus checkpoints to unincorporated County roadways with high incidents of collisions involving impaired driving.	Lead: CHP Support: Public Works, DPH	Complete analysis, begin conducting checkpoints	Continue conducting checkpoints (Number of DUI checkpoints)
D-9: Focus the Special Enforcement Unit (SEU) at locations with the highest prevalence of moving violations that lead to fatal and severe injury collisions.	Lead: CHP Support: Public Works, DPH	Complete analysis, begin annual deployment of SEU	Deploy SEU 4 times a year
D-10: Continue leading the Impaired Driving Task Force (IDTF); focus deployments in areas with the highest prevalence of Driving Under the Influence (DUI) collisions.	Lead: CHP	Annually deploy the IDTF to 2 additional areas based on data analysis Number of DUI citations per deployment	Annually deploy the IDTF to 2 additional areas based on data analysis Number of DUI citations per deployment
D-11: Continue leading the Street Racing Task Force aimed at reducing roadway racing regionally by coordinating among law enforcement agencies and the community.	Lead: CHP Support: LASD	Train at least 200 additional Officers Conduct at least 10 Task Force deployments Conduct driver safety and awareness presentations to a minimum of 3,000 high school students	Ongoing action
Implement traffic safety training to promote culture change among County staff and the public			
D-12: Train Public Works staff on traffic calming features.	Lead: Public Works	Establish traffic safety design training program, secure funding	Update training materials as necessary where funding has been secured

Action	Partners	Year 1	Years 2-5
D-13: Expand driver safety training to all employees who drive for County business.	Lead: CEO Support: Public Works, DPH, LACFD, LASD, DRP, DPR, County Counsel, ISD	Initiate action	100% of departments require training 100% of staff complete training biannually
D-14: Focus CHP community-centered traffic safety education programs through data analysis and relationship building.	Lead: CHP Support: Public Works, DPH	Number of people trained Number of trainings provided Number of areas served	Ongoing action

E. Be Transparent, Responsive, and Accountable

Ongoing evaluation of Vision Zero Actions will allow the County to measure the impact of its efforts and will help the County recognize where adjustments are needed. The County commits to collecting more data, reporting findings regularly,

and incorporating evaluation into the actions. By doing so, unincorporated community stakeholders will be able to understand how decisions are made and funds are allocated with regard to projects and programs.

Action	Partners	Year 1	Years 2-5
Enhance data collection, management, analysis, and surveillance			
E-1: Make relevant Vision Zero data available for use by departments and the public to ensure consistency with reporting, analysis, and research.	Lead: Public Works Support: DPH, LACFD, CHP, LASD, DHS, County Counsel, ISD, DRP, CEO, CIO	Provide public access to relevant data, secure funding	Update regularly where funding has been secured
E-2: Conduct regular data analysis on motor vehicle collision injuries and deaths to identify populations impacted and trends.	Lead: DPH	Identify indicators, begin analysis	Ongoing analysis
E-3: Establish a Transportation Injury Surveillance System (TISS) that links CHP collision records with Emergency Medical Services, Trauma Center and Hospital records, to understand full scope of collisions in Los Angeles County and track trends in pedestrian and bicycle injuries and deaths by sociodemographic characteristics and geography.	Lead: DPH Support: DHS, LACFD, CHP, Public Works	Annually report trends	Establish preliminary TISS
E-4: Implement data collection events, such as Friday Night Live's Road Watch survey, to document distracted driver behavior, create a snapshot of local data, and draw media attention to the issue of distracted driving.	Lead: DPH	Initiate action	Continue action
E-5: Implement the Office of Traffic Safety's "Place of Last Drink Survey" to track where DUI offenders last obtained alcohol before their arrest and analyze data to promote responsible business practices in the sale of alcoholic beverages.	Lead: DPH Support: DRP, CHP	Initiate action	Implement survey
E-6: Enhance the existing database of traffic safety infrastructure to include geocoding to evaluate the effectiveness for reducing fatal and severe injury collisions.	Lead: Public Works	Initiate action, secure funding	Ongoing updates where funding has been secured
Conduct routine evaluation, research, and analysis to understand traffic safety trends and impacts to Vision Zero projects			
E-7: Evaluate traffic safety projects implemented on the Collision Concentration Corridors to track progress and make any necessary modifications as needed.	Lead: Public Works Support: DPH	Develop evaluation framework, begin data collection, secure funding	Continue evaluation where funding has been secured
E-8: Identify and implement an evaluation plan and conduct special studies to understand the impact and extent of traffic collisions countywide, with a focus on disadvantaged communities.	Lead: DPH Support: LACFD, CHP, DHS	Develop evaluation plan and determine special studies for year 2	Continue conducting at least 1 study a year

Action	Partners	Year 1	Years 2-5
E-9: Establish a process to conduct regular bicycle and pedestrian counts and identify count locations.	Lead: Public Works Support: DPH	Identify locations and complete first count, secure funding	Continue counts biannually where funding has been secured
E-10: Prepare and distribute reports summarizing data, trends, and research related to motor vehicle collisions.	Lead: DPH	Prepare schedule of reports	Publish reports
Regularly report back to the community about Vision Zero progress			
E-11: Launch a Vision Zero website that shows progress on implementing the Action Plan.	Lead: Public Works Support: DPH, CHP, LASD, DRP, ISD, CEO, CIO	Launch website, secure funding	Ongoing updates where funding has been secured
E-12: Report on the progress of all Vision Zero activities annually and distribute findings publicly.	Lead: Public Works Support: DPH, CHP, LASD, LACFD, DRP, ISD, CEO	Yearly reports, secure funding	Yearly reports where funding has been secured
E-13: Create a publicly available data dashboard to visually communicate traffic safety metrics, trends, and maps.	Lead: ISD Support: CIO, DPH, Public Works, CHP, LACFD, DHS, LASD, DRP	Complete dashboard	Ongoing updates
Implement policies and programs to reduce the potential for County vehicles to be involved in severe injury and fatal collisions			
E-14: Increase compliance of County departments with the specified maintenance schedule for County vehicles.	Lead: ISD	Initiate action	100% employees in compliance
E-15: Evaluate the feasibility of implementing safety enhancing technology on Public Works' vehicle fleet.	Lead: Public Works Support: ISD	Initiate evaluation, secure funding	Pilot and evaluate technologies where funding has been secured
E-16: Complete centralized Risk Management Information System (RMIS) that includes fields to better track and analyze traffic collisions involving County employees on County business.	Lead: CEO Support: ISD, County Counsel	Initiate action	Complete RMIS 2.0 system, train relevant staff on system



MARTIN LUTHER KING JR.
FITNESS GARDEN
CITY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

MARK RIDLEY-THOMAS
SUPERVISOR, SECOND DISTRICT



7

HOW THIS PLAN WAS DEVELOPED

To reflect the on-the-ground experience of government agencies and foster a sense of shared responsibility, various committees worked on gathering information and making decisions.

- Key Staff from Public Works and Public Health (Policies for Livable Active Communities and Environments (PLACE) Program in the Division of Chronic Disease and Injury Prevention) formed a **Coordinating Team** that led the day-to-day operations involved in developing the Vision Zero Action Plan. These efforts included project management; best practices research; gathering, cleaning, and reviewing data; meeting individually with key departments; convening stakeholders; drafting and editing the Action Plan; and securing grant funding to support efforts. In addition to convening County and California Highway Patrol staff, the Coordinating Team also reached out to partners working on Vision Zero initiatives in other jurisdictions to understand their lessons learned.
- The **Core Team** included leadership and staff from Public Works and Public Health. This team served as a sounding board for the Coordinating Team at key decision making points and advised on data analysis, development of actions, engagement with key agencies, and funding opportunities.
- The **Action Plan Advisory Committee** (APAC) advised on the overall direction of this Vision Zero Action Plan. The APAC representatives included staff from the California Highway Patrol, Public Health, Public Works, Regional Planning, Parks and Recreation, Sheriff, Fire, Health Services, Internal Services, County Counsel, Chief Executive Office, Chief Information Office, and County Board of Supervisors.

ENDNOTES

1. https://visionzeronetwork.org/wp-content/uploads/2018/11/VZN_CoreElements_FINAL.pdf.
2. City of New York. Vision Zero Year Four Report. March 2018. P.5. Available at: <https://www1.nyc.gov/assets/visionzero/downloads/pdf/vision-zero-year-4-report.pdf> (Accessed October 10, 2018).
3. Mortality in Los Angeles County 2013, Figures 1 and 9: <http://publichealth.lacounty.gov/dca/data/documents/mortality rpt13.pdf>.
4. Unincorporated Areas on County of Los Angeles website - <https://www.lacounty.gov/government/about-la-county/unincorporated-areas/>.
5. Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018).
6. US Department of Transportation, FHWA, Roadway Safety Data Dashboard - <https://rspcb.safety.fhwa.dot.gov/Dashboard/Default.aspx> percentage calculation between 2011 and 2016.
7. US Department of Transportation, FHWA, Roadway Safety Data Dashboard - <https://rspcb.safety.fhwa.dot.gov/Dashboard/Default.aspx>.
8. Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018).
9. Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018).
10. Clark, D. E., & Cushing, B. M. (2002). Predicted effect of automatic crash notification on traffic mortality. *Accident Analysis & Prevention*, 34(4), 507-513. cited in McCarron, R. (2016). Fleeing the Scene: Hit and Run Collisions in Los Angeles. UCLA Luskin School of Public Affairs. June 2016.
11. Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018).
12. Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018).
13. Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018).
14. Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018).
Population estimates for Unincorporated Areas of Los Angeles County: Population and Poverty Estimates of Los Angeles County Tract-City Splits by Age, Race-Ethnicity and Sex, for July 1, 2017. Prepared by Hedderson Demographic Services for the Los Angeles County Internal Services Department.
15. Data set compiled from Los Angeles County Public Works' Collision Database, collisions occurring between January 1, 2013 through December 31, 2017 for Unincorporated County roadways; Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 15, 2018).
16. Unincorporated LA County Community Climate Action Plan 2020.
17. U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates.
18. U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table S0801.
19. Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center, University of California, Berkeley. 2018. Data query from January 1, 2013 through December 31, 2017 for Unincorporated Los Angeles County, excluding State Highways - <https://tims.berkeley.edu/> (Accessed October 1, 2018).
20. Los Angeles County Department of Public Health, Substance Abuse Prevention and Control Medical Director's Brief: Excessive Drinking and Consequences. March 2019. Available at: <http://publichealth.lacounty.gov/sapc/MDU/MDBrief/AlcoholBriefFinal.pdf> (Accessed June 6, 2019).
21. Los Angeles County Department of Public Health, Substance Abuse Prevention and Control. Analysis of the Fatality Analysis Reporting System (FARS) data by the Heath Outcomes and Data Analytics Unit. June 2019.
22. Los Angeles County Department of Public Health, Substance Abuse Prevention and Control. SAPC Data Brief: Prescription (Rx) Opioid Misuse Abuse and Consequences. March 2019. Available at: <http://ph.lacounty.gov/sapc/MDU/MDBrief/OpioidBriefFinal.pdf> (Accessed June 6, 2019).
23. Los Angeles County Department of Public Health, Substance Abuse Prevention and Control. Analysis of the Fatality Analysis Reporting System (FARS) data by the Heath Outcomes and Data Analytics Unit. June 2019.
24. Los Angeles County Public Works' Maintenance Management System.
25. Los Angeles County Public Works' Collision Database, data for collisions occurring between 1/1/2013 and 12/31/2017 for unincorporated County roadways.
26. 2016 US Greenhouse Gas Emissions <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.
27. Stutts, J., et al., 1998, Police-Reporting of Pedestrian and Bicyclists Treated on Hospital Emergency Rooms.
28. Lopez, Dahianna S., et al. "Using Trauma Center Data to Identify Missed Bicycle Injuries and Their Associated Costs." *Journal of Trauma and Acute Care Surgery*, vol. 73, no. 6, 2012, pp. 1602-1606.
29. Sciortino, Stanley, et al. "San Francisco Pedestrian Injury Surveillance: Mapping, Under-Reporting, and Injury Severity in Police and Hospital Records." *Accident Analysis & Prevention*, vol. 37, no. 6, 2005, pp. 1102-1113.
30. Death records: Linked 2016 California DPH Death Statistical Master Files for Los Angeles County Residents. Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. Population estimates: July 1, 2016 Population Estimates, Los Angeles County ISD (Internal Services Department).

ACKNOWLEDGEMENTS

We thank the many contributors to this report from the Board of Supervisors, Public Health, Public Works, Regional Planning, Parks and Recreation, Health Services, County Counsel, Chief Executive Office, Chief Information Office, Internal Services Department, Sheriff's Department, Fire Department, Department of Arts and Culture, and California Highway Patrol.

We are fortunate to have many Vision Zero partners in the region. In particular, we wish to thank the Los Angeles Department of Transportation for their partnership and generosity in sharing time and lessons learned with us. We look forward to a continued partnership to eliminate traffic fatalities and severe injuries in the region.

We also would like to thank the following partners for leading the way and sharing their time to help shape this effort.

Jurisdictions

- City of Boston
- City of Chicago
- City of Denver
- City of Los Angeles
- City of New York
- City of Philadelphia
- City of Portland
- City of San Francisco
- City of Santa Ana
- City of Seattle
- Washington D.C.

Organizations and Reports

- The Vision Zero Network
- Los Angeles' Vision Zero Alliance
- America Walks' Road to Justice Webinar Series
- The California Highway Patrol Strategic Plan (2015 – 2019)
- The Road to Zero: A Vision for Achieving Zero Roadway Deaths by 2050
- A Vision for Transportation Safety: A Framework for Identifying Best Practice Strategies to Advance Vision Zero

County of Los Angeles. Vision Zero Los Angeles County - A Plan for Safer Roadways, 2020 to 2025; November 2019. Available at VisionZeroLACounty.com.

For more information or questions related to Los Angeles County's Vision Zero Initiative, please call toll-free 1-833-VZ4-LACO (1-833-894-5226).

Report preparation funding provided by the Southern California Association of Governments' (SCAG) Sustainability Program. SCAG's Sustainability Program assists Southern California cities and other organizations in evaluating planning options and stimulating development consistent with the region's goals. Sustainability Program tools support visioning efforts, infill analyses, economic and policy analyses, and marketing and communication programs.

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) through the U.S. Department of Transportation (DOT) in accordance with the provisions under the Metropolitan Planning Program as set forth in Section 104(f) of Title 23 of the U.S. Code. The contents of this report reflect the views of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of SCAG, DOT or the State of California. This report does not constitute a standard, specification or regulation. SCAG shall not be responsible for the use or adaptation of the report.



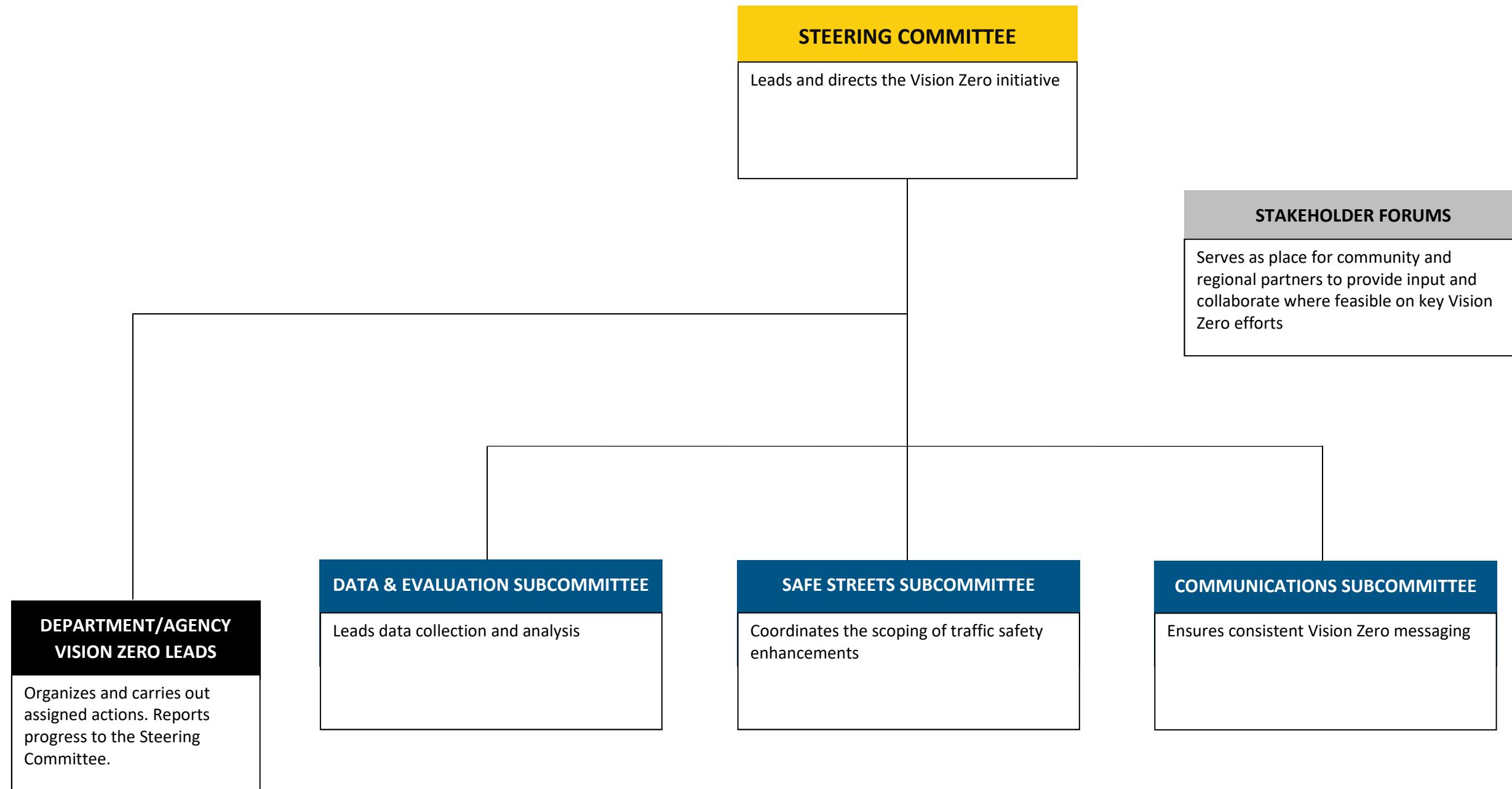
VISION ZERO

LOS ANGELES COUNTY

A Plan for Safer Roadways
2020-2025



Vision Zero Los Angeles County Implementation Partnership Structure



AGN NO. ____

MOTION BY SUPERVISOR HILDA L. SOLIS

February 14, 2017

Implementing Vision Zero

On October 4, 2016, the Board of Supervisors unanimously adopted my motion to direct the Interim Director of the Department of Public Health, in consultation with the Healthy Design Workgroup, and in coordination with the Department of Public Works, Sheriff's Department, Fire Department, and Department of Health Services, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero Initiative for the County unincorporated areas.

Public Health recently submitted the requested Vision Zero Report to our Board, noting that traffic collisions are a significant public health issue and that jurisdictions across the country are implementing Vision Zero initiatives to address rising traffic-related fatalities. Based on preliminary data analyses on unincorporated roadways, the Report also identified a number of Challenge Areas to reduce fatalities and injuries cause by traffic collisions, including:

- Unsafe Speeds
- Impaired / Distracted Driving
- Hit-and-Runs
- Pedestrians
- Motorcyclists

The draft report concludes with a number of recommended actions for the County to consider, such as to:

- Develop a Vision Zero Steering Committee and Partnership Structure
- Develop a Vision Zero Action Plan
- Develop a Communications Plan

HOA.101525862.1 -MORE-

MOTION

SOLIS	_____
KUEHL	_____
HAHN	_____
BARGER	_____
RIDLEY-THOMAS	_____

MOTION BY SUPERVISOR HILDA SOLIS

February 14, 2017

PAGE 2

Moving forward with these recommendations will protect lives, help reduce the severity of injuries, and improve the quality of life for our unincorporated communities. Partnering with local cities that have already adopted similar initiatives or are in the process of doing so will enable us to grow these benefits and more effectively outreach to our residents.

I, THEREFORE, MOVE THAT THE BOARD OF SUPERVISORS:

1. Instruct the Departments of Public Health and Public Works, in collaboration with the Healthy Design Workgroup; the Departments of Sheriff's, Fire, Health Services, Regional Planning, and Chief Executive Office; the California Highway Patrol; and other stakeholder agencies and nonprofit organizations, to implement the recommended strategies and actions described in the Vision Zero Report and Board Memo.
2. Direct Public Health and Public Works to work with representatives from each department and agency named above; create a broad partnership structure that includes regional and community partners; and to work with the Board and CEO to identify opportunities to secure long term funding to sustain the Vision Zero initiative, including funding for a Countywide Vision Zero Coordinator and for implementation of the Vision Zero Action Plan and Communications Plan.
3. Develop a Vision Zero Action Plan for unincorporated Los Angeles County that identifies specific engineering, enforcement, education, engagement and evaluation strategies and timelines, and describes the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries. The Action Plan will include a detailed Communications Plan outlining strategies for ongoing public education and outreach.
4. Instruct the CEO to work with Public Health to allocate an appropriate level position to serve as a Countywide Vision Zero Coordinator. The individual in this position will be located in Public Health, will facilitate directive No. 2, and will coordinate activities across County, regional, and community partners.

HLS/tv

#



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

MUNTU DAVIS, M.D., M.P.H.
County Health Officer

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 288-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

February 6, 2020

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director of Public Health *bawt*
Mark Pestrella *M. Pestrella*
Director of Public Works

**SUBJECT: 2019 ANNUAL REPORT BOARD MOTION OF FEBRUARY 14, 2017
AGENDA ITEM 4-1B IMPLEMENTING VISION ZERO**

On February 14, 2017, the Board approved the attached motion instructing Public Works (PW) and the Department of Public Health (DPH), in collaboration with other County departments, stakeholder agencies, and nonprofit organizations to:

- Implement the recommended strategies and actions described in the Report on Vision Zero in Los Angeles County memo dated February 10, 2017 (attached).
- Develop a Vision Zero Steering Committee and partnership structure.
- Develop a Vision Zero Action Plan for the unincorporated County communities.
- Identify opportunities to secure long-term funding to sustain the Vision Zero initiative.

The motion was approved as amended to include responses to the Board's questions that were provided in the attached Board memo dated March 16, 2017. The memo states that an annual progress report will be submitted to the Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of the action plan, and a description of detailed resource needs.

Based on the California Highway Patrol collision data that PW received through January 15, 2020, 70 fatal collisions occurred on County-maintained roadways in 2019. This represents a 10 percent decrease from 78 overall fatal collisions in 2018. Fatal collisions involving pedestrians increased from 20 collisions in 2018 to 24 collisions in 2019. These numbers may change as additional collisions are reported to PW.

This report provides an overview of the Vision Zero efforts in 2019.

ORGANIZATIONAL STRUCTURE

The Vision Zero teams and committees outlined in our previous annual report continued to focus on finalizing the action plan.

Vision Zero Coordinating Team

The Vision Zero Coordinating Team comprised of staff from PW and DPH oversaw the development and implementation of the action plan. Staff activities included project management; research to identify best practices; gathering, cleaning, and analyzing data; meeting individually with County departments; convening stakeholders; drafting and editing the action plan; and securing grant funding to support efforts.

Vision Zero Core Team

The Vision Zero Core Team comprised of staff and administration from PW and DPH guided the coordinating team at decision-making points and advised on community outreach, development and implementation of actions, engagement with other agencies, and funding opportunities. The core team assisted with finalizing the draft action plan and began reviewing funding needs for implementation.

Vision Zero Action Plan Advisory Committee

The Vision Zero Action Plan Advisory Committee (APAC) is co-led by PW and DPH to advise on the overall direction of the action plan. The Vision Zero APAC is comprised of representatives from PW, DPH, Fire, Sheriff's, Health Services, Regional Planning, Parks and Recreation, Beaches and Harbors, and Internal Services Departments, as well as the Chief Executive Office, California Highway Patrol, the Board, and County Counsel.

In 2019 the Vision Zero Coordinating Team worked with the Vision Zero APAC to disseminate Vision Zero messaging during the draft action plan review period and address public comments received. Additionally, the Vision Zero APAC assisted with the development of the attached Vision Zero Los Angeles County Implementation Partnership Structure that was submitted to the Board on December 2, 2019. These efforts concluded the work of the Vision Zero APAC, and appropriate members will transition to the Vision Zero Steering Committee to begin implementation.

Vision Zero Steering Committee

A Vision Zero Steering Committee will lead and direct the overall Vision Zero APAC initiative and is anticipated to convene its first meeting in early 2020. The steering committee will be comprised of representatives from PW, DPH, and other Vision Zero partners and agencies. The purpose of the steering committee is to track progress and ensure routine coordination and accountability among County departments and agencies during implementation of the action plan.

ACTION PLAN

In 2019 PW and DPH in collaboration with the California Highway Patrol and other County departments finalized the action plan titled Vision Zero Los Angeles County – A Plan for Safer Roadways, 2020 to 2025 that was transmitted to the Board on December 2, 2019. The Plan identifies multidisciplinary actions aimed at enhancing traffic safety, including engineering enhancements, policy changes, education opportunities, and focused enforcement of unsafe behaviors, such as speeding and impaired driving. The Plan describes the importance of data-driven processes, health equity and transparency, emphasizes the importance of tailoring traffic safety outreach, engagement, and education to the unique context of each community.

As part of the development of the Plan, the project team analyzed collision data and identified collision concentration corridors throughout the unincorporated County communities. The Plan defines a collision concentration corridor as any half-mile roadway segment that contained three or more fatal or severe injury collisions between January 1, 2013, and December 31, 2017. Half of the fatal and severe injury collisions during this timeframe occurred on approximately 3.8 percent (125 miles) of the roadways maintained by the County. These locations were prioritized to focus Vision Zero efforts based on several factors, including health equity, severity and concentration of collisions, and whether pedestrians or bicyclists were involved in the collision.

While the Plan was being developed, implementation of various actions in the Plan commenced. For example, PW began scoping pilot projects along collision concentration corridors and identified opportunities to incorporate traffic safety enhancements into existing projects.

COMMUNITY OUTREACH AND ENGAGEMENT STRATEGY

The Plan was developed in partnership with a broad array of government and community stakeholders. PW and DPH continued to attend community events, meetings, and

engage with community-based organizations during plan development. DPH administered a traffic safety survey to better understand the concerns and experiences of residents in the unincorporated County communities. The survey was completed by 757 people, administered at 49 events, and was available in English, Spanish, and Mandarin.

In March 2019 a draft action plan was made available to the public for review at VisionZeroLACounty.com and County libraries. The Vision Zero website allowed the public to provide feedback on the draft plan through an online form. Additionally, community members and stakeholder groups could provide input on the draft plan through telephone, e-mail, and in person events. PW and DPH attended 24 events throughout various unincorporated County communities during the public review period to advertise the plan and solicit feedback. Various social media platforms were also utilized to promote the Vision Zero initiative. Over 200 comments were received and taken into consideration to strengthen the Plan. Furthermore, a communications guide was provided to County staff to ensure consistent communications regarding the Vision Zero initiative.

Additionally, PW utilized existing community events and outreach opportunities throughout the County to promote traffic safety and safe roadway behavior. PW participated in existing community events, such as the 626 Golden Streets, Valinda National Night Out, and Rowland Heights National Night Out. At the beginning of the school year, PW and DPH leveraged the Southern California Association of Governments' Go Human campaign by installing multilingual safety messaging at 35 bus shelters throughout 12 unincorporated County communities of East Los Angeles, Quartz Hill, Walnut Park, and Willowbrook and distributing traffic safety materials to 9 schools. PW also onboarded a communications consultant to inform future Vision Zero messaging both regionally and at the community level as well as shape how the County will conduct Vision Zero project outreach.

Finally, PW collaborated with Public Matters agency to work with students at the East Los Angeles Renaissance Academy to scope traffic safety infrastructure on various streets in their community. The 5-day interactive workshop culminated with a presentation to County staff on their vision for mobility in East Los Angeles. This experience will inform how the County implements future Safe Routes to School efforts.

CROSS-AGENCY LEGISLATIVE AND POLICY STRATEGY

Strategies to address traffic safety issues may require changes in State law. In September 2019 representatives from PW and DPH participated in an advisory

Each Supervisor
February 6, 2020
Page 5

committee to the Zero Traffic Fatalities Task Force that is tasked with analyzing the existing process for establishing speed limits in California and recommending whether to consider an alternate method. The Task Force was convened in response to State Assembly Bill 2363, which the County supported. PW and DPH have continued to monitor and provide updates on legislation consistent with the County's legislative priorities.

FUNDING

In 2019 PW and DPH applied for and were awarded various grants to support the planning and implementation of traffic safety programs and infrastructure.

DPH was awarded an estimated amount of \$1,550,000 from the State of California Department of Transportation to support the development of pedestrian plans for the East Los Angeles, East Rancho Dominguez, Florence-Firestone, and Willowbrook/West Rancho Dominguez-Victoria communities. PW secured Measure M funding for the implementation of past pedestrian plan efforts in the unincorporated County communities of Lake Los Angeles and Westmont/West Athens. PW was also awarded funding as part of the Caltrans Highway Safety Improvement Program for traffic safety enhancements, such as left-turn phasing and high visibility crosswalks at various intersections in Florence-Firestone and East Rancho Dominguez. The County in coordination with the City of Los Angeles was awarded grant funding from the California Strategic Growth Council's Affordable Housing and Sustainable Communities Program to implement traffic safety enhancements in Westmont. Finally, PW secured funding from the Southern California Association of Governments to study the impacts of a potential traffic calming project on Pacific Boulevard in Walnut Park.

Although PW and DPH will continue to apply for grant opportunities, additional resources will be necessary to implement the various actions within the Plan.

If you have any further questions related to PW, please call Mark Pestrella at (626) 458-4001 or your staff may contact Phil Doudar at (626) 458-4014 or pdoudar@pw.lacounty.gov. For questions related to DPH, please contact Dr. Barbara Ferrer at (213) 240-8117 or Megan McClaire at (213) 288-8036 or mmcclaire@ph.lacounty.gov.

EMD:pr
C200219
P:\TPPPUB\VZCS\2020-01-09 2019 VISION ZERO ANNUAL REPORT

Attach.

AGN NO. _____

MOTION BY SUPERVISOR HILDA L. SOLIS

February 14, 2017

Implementing Vision Zero

On October 4, 2016, the Board of Supervisors unanimously adopted my motion to direct the Interim Director of the Department of Public Health, in consultation with the Healthy Design Workgroup, and in coordination with the Department of Public Works, Sheriff's Department, Fire Department, and Department of Health Services, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero Initiative for the County unincorporated areas.

Public Health recently submitted the requested Vision Zero Report to our Board, noting that traffic collisions are a significant public health issue and that jurisdictions across the country are implementing Vision Zero initiatives to address rising traffic-related fatalities. Based on preliminary data analyses on unincorporated roadways, the Report also identified a number of Challenge Areas to reduce fatalities and injuries cause by traffic collisions, including:

- Unsafe Speeds
- Impaired / Distracted Driving
- Hit-and-Runs
- Pedestrians
- Motorcyclists

The draft report concludes with a number of recommended actions for the County to consider, such as to:

- Develop a Vision Zero Steering Committee and Partnership Structure
- Develop a Vision Zero Action Plan
- Develop a Communications Plan

HOA.101525862.1 -MORE-

MOTION

SOLIS	_____
KUEHL	_____
HAHN	_____
BARGER	_____
RIDLEY-THOMAS	_____

MOTION BY SUPERVISOR HILDA SOLIS

February 14, 2017

PAGE 2

Moving forward with these recommendations will protect lives, help reduce the severity of injuries, and improve the quality of life for our unincorporated communities. Partnering with local cities that have already adopted similar initiatives or are in the process of doing so will enable us to grow these benefits and more effectively outreach to our residents.

I, THEREFORE, MOVE THAT THE BOARD OF SUPERVISORS:

1. Instruct the Departments of Public Health and Public Works, in collaboration with the Healthy Design Workgroup; the Departments of Sheriff's, Fire, Health Services, Regional Planning, and Chief Executive Office; the California Highway Patrol; and other stakeholder agencies and nonprofit organizations, to implement the recommended strategies and actions described in the Vision Zero Report and Board Memo.
2. Direct Public Health and Public Works to work with representatives from each department and agency named above; create a broad partnership structure that includes regional and community partners; and to work with the Board and CEO to identify opportunities to secure long term funding to sustain the Vision Zero initiative, including funding for a Countywide Vision Zero Coordinator and for implementation of the Vision Zero Action Plan and Communications Plan.
3. Develop a Vision Zero Action Plan for unincorporated Los Angeles County that identifies specific engineering, enforcement, education, engagement and evaluation strategies and timelines, and describes the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries. The Action Plan will include a detailed Communications Plan outlining strategies for ongoing public education and outreach.
4. Instruct the CEO to work with Public Health to allocate an appropriate level position to serve as a Countywide Vision Zero Coordinator. The individual in this position will be located in Public Health, will facilitate directive No. 2, and will coordinate activities across County, regional, and community partners.

HLS/tv

#



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

February 10, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed. *Barbara Ferrer*
Director

SUBJECT: REPORT ON VISION ZERO IN LOS ANGELES COUNTY

On October 4, 2016, your Board directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County Departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas. The attached report details the strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas. It is the product of collaborative efforts of the Departments of Public Health, Public Works (DPW), Regional Planning, and Health Services; Fire Department; Sheriff's Department, Chief Executive Office, and the California Highway Patrol (CHP). Below is a summary of the report.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths, 10.3 traffic deaths per 100,000 population. The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero sees traffic deaths and injuries as predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement, and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement, and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were 63,067 distinct collisions, with 1,429 involving at least one severe injury and 300 causing a fatality. 1,566 people were severely injured (six percent of victims) and 333 were killed (one percent of victims). Collision heat maps show a concentration of pedestrian-involved fatal and severe collisions in the southern part of the County in dense urban centers, motorcycle-involved fatal and severe collisions along rural mountain roads, and both bicycle- and vehicle-involved fatal and severe collisions throughout unincorporated areas.

The report identifies key challenge areas requiring additional data analysis that will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements as Vision Zero is implemented. Key issues include: unsafe speeds, impaired driving, distracted driving, hit and runs, young males, motorcyclists, and pedestrians. For example, if speeding is found to be a primary issue on a corridor, traffic calming strategies such as roadway reconfigurations, traffic signals, curb extensions, and enhanced speed enforcement, may be possible solutions.

Recommended Strategies and Actions

Implementation of the strategies and actions described in the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas. Actions include: developing a steering committee and partnership structure to implement the program; creating a Vision Zero Action plan to identify specific engineering, enforcement, engagement, education, and evaluation strategies; and working to secure funding to implement Vision Zero strategies and actions.

If you have any questions or need additional information, please let me know.

BF:ja

Attachment

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors

Report to the Board of Supervisors

County Vision Zero Opportunities

Prepared by the Department of Public Health

February 10, 2017

CONTENTS

Acknowledgments.....	3
Executive Summary.....	4
Background	4
Preliminary Data Analysis and Challenge Areas.....	4
Recommended Strategies and Actions	5
Introduction	8
Report Development Process	8
Part I – Background and Opportunities	9
Motor Vehicle Crashes	9
Vision Zero and Related Traffic Safety Initiatives	10
Known Challenge Areas.....	11
Developing an Effective Approach	11
Alignment with Existing Plans and Policies	13
Part II: Preliminary Data Analysis.....	16
Background	16
Approach to Initial Analysis.....	17
Findings	19
Big Picture.....	19
Temporal, Modal, and Demographic	21
Contributing Factors.....	33
Summary of Challenge Areas	36
Part III: Current Traffic Safety Efforts.....	37
Education	37
Enforcement.....	40
Engagement (Community Outreach & Communications)	41
Engineering	42
Evaluation & Data	42
Part IV: Recommended Strategies and Actions	43
Appendix A - Funding Opportunities	47

ACKNOWLEDGMENTS

Chief Executive Office

Mark Greninger

California Highway Patrol

Chris O'Quinn
Heather Hoglund
Jose Nunez
Scott Poyner

Los Angeles County Department of Health Services

Gregory Polk
Richard Tadeo

Los Angeles County Department of Public Health

Alexis Lantz
Andrea Welsing
Angelo Bellomo
Chanda Singh
Christine Li
Cindy Harding
Doug Morales
Elizabeth Rhoades
Isabelle Sternfeld
Jean Armbruster
Jennifer Osborn
Kimberly Porter
Natalie Jimenez
Rachel Tyree
Tony Kuo
Wesley Ford
Lisa Tse

Los Angeles County Sheriff's Department

Dana Chemnitzer
Darren Harris
Jim McDonnell
Robert Hill
Scott Johnson

Los Angeles Department of Transportation

Jacqui Swartz
Michael Manalo
Nat Gale
Tim Fremaux

Los Angeles County Department of Public Works

Alan Fong
Arnel Dulay
Coby Skye
Dean Lehman
Emiko Thompson
Gilbert Tsoi
John Calas
John Halaka
John Ickis
John Walker
Khoa Nguyen
Mary Reyes
Pat Proano
Patrick Anderson
Pete Flores
Rudy Lee
Shari Afshari
Youn Sim

Los Angeles County Department of Regional Planning

Connie Chung
Daniel Hoffman
Nick Franchino
Richard Bruckner
Susan Tae
Svetha Ambati

Los Angeles County Fire Department

Daryl Osby
Debbie Aguirre
Janna Masi
John Todd
Keith Mora
Mark Savage
Philip Cocker
Ricky Lewis
Tim Smith
Wally Collins

EXECUTIVE SUMMARY

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD), Health Services (DHS), Regional Planning (DRP), Chief Executive Office (CEO), and the California Highway Patrol (CHP). DPH and DPW collaborated in conducting preliminary data analysis. DPH took the lead in preparing this report, which provides strategies, actions, and next steps that would strengthen the County's ability to prevent traffic deaths and severe injuries in unincorporated areas.

Background

Motor vehicle crashes (MVC) are a serious public health problem in the U.S. Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). The problem is getting worse; traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015. Early estimates of traffic deaths for 2016 indicate a continued increase.

"Vision Zero" is a strategy that aims to reduce traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. Vision Zero assumes that traffic deaths and injuries are predictable and preventable, and creates goals, measurable objectives, and timelines for eliminating them. These strategies include engineering, enforcement, education, engagement and evaluation approaches, which require collaboration between sectors including public health, public works, communications, law enforcement and community stakeholders. The cities of Los Angeles, San Francisco, New York, Portland, Seattle, and Chicago have established Vision Zero initiatives during the past five years.

Preliminary Data Analysis and Challenge Areas

The report provides preliminary analysis of collisions occurring on unincorporated County roadways during a five-year-eight-month period (January 1, 2011 to August 31, 2016). Analysis was based on DPW's Collision Geodatabase, which includes CHP collision data. During this period there were:

- 63,067 distinct collisions involving 27,786 victims
- 1,429 collisions involved at least one severe injury

- 1,566 people severely injured (six percent of victims)
- 300 collisions involving at least one fatality
- 333 people killed (one percent of victims)

The report also identifies key challenge areas that warrant additional data analysis. Additional analysis will further pinpoint causes and patterns associated with severe injury and fatal collisions, and help prioritize programs and needed infrastructure enhancements. Challenge areas include:

- *Unsafe Speeds.* Speed was listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- *Impaired driving.* Driving under the influence of alcohol or drugs is involved in only eight percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes.
- *Distracted driving.* Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores a need for a coordinated approach to capture information on and to prevent distraction.
- *Hit and runs.* Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for behavior changes by motorists.
- *Young males.* Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions.
- *Motorcyclists.* 20 percent of fatal and severe collisions involved a motorcyclist. Concentrations of fatal and severe collisions were found on rural / mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- *Pedestrians.* 17 percent of fatal and severe collisions involved pedestrians; youth under age 19 and people 55 years and over were overrepresented as victims. Concentrations of fatal and severe collisions were found in both urban and rural areas.

Recommended Strategies and Actions

The County team recommends the strategies, actions, and timelines outlined below.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with your Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County is needed to identify specific engineering, enforcement, education, engagement and evaluation strategies and timelines. Further, the plan will communicate the strategies and actions the County will prioritize to reduce traffic deaths and severe injuries.

Prioritize interventions and identify future data analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context-sensitive solutions for specific problems. Action steps include engaging community partners to “ground truth” safety issues; developing a project prioritization process; and identifying additional long-term data collection and analysis needs.

Develop metrics and targets (June 2017). To gauge the success of this initiative, develop measurable metrics and targets for the County similar to those utilized by the California Strategic Highway Safety Plan which is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan that describes innovative and culturally appropriate communication techniques to change behavior around traffic safety is needed. This would include the development of a website, public service announcements, branding, fact sheets, social and digital media, press kits, and would include strategies for ongoing public education and outreach.

Hold a press event to launch Vision Zero (June 2018). A Vision Zero press event would bring attention to the County’s multi-sector campaign to reduce traffic deaths and severe injuries and highlight what the County does and plans to do to address the problem of traffic safety.

Develop a regional approach to messaging and strategy implementation (February 2017 – ongoing). Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, Southern California Association of Governments, City of Los Angeles, and other jurisdictions would have the greatest impact in creating behavior change.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address traffic safety problems may require changes in State legislation, such as automated speed enforcement. The County should coordinate with agencies regionally to explore common legislative and policy solutions.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). The County should help to promote choices that prioritize traffic safety through messaging aimed at the County workforce including messages in County newsletters, on department websites, and on County vehicles.

Secure funding to implement Vision Zero strategies and actions (February 2017 – ongoing). A single County point-person is needed to convene the Steering Committee and to coordinate with community and regional stakeholders. Funding will also be needed to develop and implement a Vision Zero Action Plan, communications strategy, and expand traffic safety efforts.

Conclusions and Next Steps

Implementing the strategies and actions described above and further in Part IV of the attached report would establish a process, structure, and timeline for launching a County Vision Zero initiative to prevent traffic deaths and injuries in unincorporated areas.

INTRODUCTION

On October 4, 2016, the Board of Supervisors directed the Department of Public Health (DPH), in consultation with the County's Healthy Design Workgroup and in coordination with several County departments, to analyze data related to traffic collisions for unincorporated County areas and report back in 120 days on potential strategies and actions to implement a Vision Zero initiative for the County unincorporated areas.

This "County Vision Zero Opportunities" Report examines how Vision Zero could be implemented within County unincorporated communities. The report is organized into four parts:

Part I: Background and Opportunities: Provides an overview of traffic-related fatalities, severe injuries, and key approaches for addressing the problem.

Part II: Preliminary Data Analysis: Describes sources of data that could support a County Vision Zero Initiative and includes preliminary findings analyzing 5-years-8 months of collision data.

Part III: Current County Traffic Safety Efforts: Provides an overview of engineering, education, engagement, enforcement, and evaluation/data programs administered by County agencies and their partners that support traffic safety in unincorporated Los Angeles County.

Part IV: Recommended Strategies and Actions: Based on County staff and partner expertise, this section describes recommended strategies and actions for a County Vision Zero initiative.

Report Development Process

To develop this report, DPH convened four partner meetings with representatives from the Departments of Public Works (DPW), Fire (LACFD), Sheriff (LASD, Health Services (DHS), Regional Planning (DRP), California Highway Patrol (CHP), and the Chief Executive Office (CEO). The goals of these meetings were to: 1) learn about the County's existing traffic safety education and enforcement programs; 2) learn about the County's existing communications resources and best practices; 3) tap County staff knowledge about how to design an effective Vision Zero initiative for unincorporated areas; and 4) get departmental input into this Board report. DPH and DPW also formed a "Core Team," which met every two weeks to prepare for the larger partner meetings and to develop this Board report.

PART I – BACKGROUND AND OPPORTUNITIES

Motor Vehicle Crashes

Motor vehicle crashes (MVC) are a serious public health problem in the United States (U.S.). Compared with 19 other high-income countries, the U.S. has the highest rate of motor vehicle crash deaths (10.3 traffic deaths per 100,000 population). More than three times as many people die in traffic crashes in the U.S. as in the United Kingdom (2.8 traffic deaths per 100,000 population). If the U.S.' MVC death rate was equivalent to the best performing country (Sweden, 2.7 per 100,000 population), an estimated 24,000 lives could be saved annually and an estimated \$281 million in direct medical costs averted.¹

There has been a general downward trend in traffic fatalities in the U.S. over the last decade. This could be related to fluctuations in gas prices and unemployment rates (when gas prices and unemployment are high, people tend to drive less) and vehicle technology that better protects passengers in the event of a collision. Unfortunately, this trend is now reversing. Traffic deaths increased 7.2 percent nationwide and 2.4 percent in California between 2014 and 2015.² Early estimates of traffic deaths for 2016 indicate a continued increase.³

In Los Angeles County as a whole, motor vehicle crashes are the leading cause of death for children five to 14 years old and the second leading cause of death for children one to four years old; young people 15 to 24 years old; and adults 25 to 44 years old. Between January 1, 2011 and August 31, 2016, at least 333 people lost their lives on roadways in County unincorporated areas and another 1,566 were severely injured.⁴ In addition to the tragic human costs, the economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion dollars.⁵

¹ Sauber-Schatz EK, Ederer DJ, Dellinger AM, Baldwin GT. Vital Signs: Motor Vehicle Injury Prevention — United States and 19 Comparison Countries. MMWR Morb Mortal Wkly Rep 2016;65. DOI: <http://dx.doi.org/10.15585/mmwr.mm6526e1>.

² National Center for Statistics and Analysis. (2016, August). 2015 motor vehicle crashes; Overview. (Traffic Safety Facts Research Note. Report No. DOT HS 812 318) Washington, DC: National Highway Traffic Safety Administration.

³ National Center for Statistics and Analysis. (2016, September). *Early estimate of motor vehicle traffic fatalities for the first half (Jan-Jun) of 2016*. Crash Stats Brief Statistical Summary. Report No. DOT HS 812 332). Washington, DC: National Highway Traffic Safety Administration.

⁴ Data from Department of Public Works' Collision Geodatabase, based on California Highway Patrol records from 1/1/11 to 8/31/16 (analyzed 12/13/16)

⁵ California Department of Transportation. California Strategic Highway Safety Plan 2015 - 2019.

Vision Zero and Related Traffic Safety Initiatives

Vision Zero is a strategy that aims to reduce or eliminate traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all. First implemented in Sweden in the 1990s, Vision Zero has been adopted widely across Europe and is now gaining momentum in many American cities. Vision Zero creates a new vision for prioritizing street safety. Traffic deaths and severe injuries are viewed as predictable and preventable, and goals, measurable objectives, and timelines for eliminating them are created. These strategies include engineering, enforcement, education, and evaluation approaches, which require collaboration across a wide variety of sectors including public health, public works, communications, and law enforcement. In addition, community engagement and equity are important overarching approaches to successful implementation of Vision Zero.

In August 2015, the City of Los Angeles launched a Vision Zero Initiative as the result of a Mayoral Directive that set a city goal of eliminating all traffic deaths by 2025 and reducing deaths by 20 percent by 2017. The Los Angeles County Public Health Department has worked closely with the City to launch and implement this initiative, including helping to develop Los Angeles' Vision Zero Action Plan, which outlines specific implementation strategies and timelines. The cities of San Francisco, New York, Portland, Seattle, and Chicago have also established Vision Zero initiatives in the past five years. In Los Angeles County, a number of our 88 local jurisdictions have adopted Vision Zero goals, including Long Beach and Santa Monica.

Similarly, "Toward Zero Deaths" is a traffic safety initiative in the United States related to Vision Zero. Spearheaded primarily by state and federal government agencies, such as the Federal Highway Administration (FHWA), this approach shares a strategic vision of eliminating fatalities and serious injuries through a data-driven, interdisciplinary approach of education, enforcement, engineering, and emergency services.

In California, the California Department of Transportation (Caltrans) regularly develops and updates the California Strategic Highway Safety Plan (SHSP), a statewide data-driven plan that coordinates the efforts of a wide range of organizations to reduce traffic fatalities and severe injuries. The SHSP affects all public roads (State, local, and Tribal) and all users (motorists, pedestrians, bicyclists, and motorcyclists). The goal of the SHSP is to move toward zero deaths; measurable objectives include a three percent annual reduction in the number and rate of fatalities and a 1.5 percent annual reduction in the number and rate of severe injuries.

Known Challenge Areas

Factors that influence fatality rates vary from place to place; however, a number of “challenge areas” have been identified nationally, statewide, and regionally. For example, the California Strategic Highway Safety Plan identifies alcohol and drug impairment; speeding and aggressive driving; distracted driving; pedestrians; bicyclists; motorcyclists; young drivers; and aging drivers, among others, as challenge areas to be addressed statewide. As the County conducts data analysis for the unincorporated areas to design programs and infrastructure that support traffic safety, it will be beneficial to examine best practices developed by other jurisdictions.

Developing an Effective Approach

Vision Zero has been effective in other jurisdictions and countries due to the multidisciplinary approach that brings together multiple government sectors with community leaders and stakeholders to identify solutions. Strategies are implemented and then evaluated in an iterative process to identify whether they are having the desired effect of saving lives. Summarized below are key approaches behind effective Vision Zero initiatives.

Safe streets are livable streets. Vision Zero is typically well-aligned with jurisdictions’ goals of making communities livable, walkable, economically vibrant, and sustainable. This allows for Vision Zero strategies to be seamlessly incorporated into existing work programs, and to allow for new projects and programs where human life and safety are the explicit highest priorities.

Vision Zero strategies are data-driven. Essential to the Vision Zero approach is that safety improvements and programs must be based on robust, longitudinal data analysis that identifies patterns of traffic deaths and severe injuries, as well as the primary crash factors associated with these crashes, such as speeding, left turns, lack of marked crosswalks, and red light running. This allows for targeted improvements and programs that address the specific problem(s) causing fatal and severe injury crashes.

Roadways can be designed to save lives. Once specific factors associated with crashes are understood, engineers can identify potential life-saving improvements to address the problems, i.e. engineering solutions that are known to be effective for specific crash patterns. A principle of Vision Zero is that humans will always make mistakes, but corridors can be designed and re-engineered to minimize deadly mistakes and make it challenging to engage in dangerous behavior, such as speeding. Vehicle speed is a particularly important factor to consider in roadway design because it is a fundamental predictor of

crash survival. If a pedestrian is hit by a car going 20 miles per hour (MPH), the pedestrian's risk of death is five percent; if the car is traveling at 40 MPH, the pedestrian's risk of death is 80 percent.⁶

Evaluation is essential. Tracking progress over time makes it possible to identify whether a program or infrastructure improvement is working to address the safety concern. For example, once engineering improvements have been installed along a corridor or at priority locations, engineers can continue to collect data to assess whether the improvements are addressing the identified crash factors. Similarly, evaluating specific enforcement efforts over time can help enhance programs. With a goal of zero traffic deaths, new issues may emerge over time, requiring consistent data collection and evaluation to monitor traffic safety.

Communications can drive culture change. Reducing traffic deaths requires a shift in public perception from accepting traffic deaths as unavoidable to an awareness that saving human lives is everyone's responsibility. A widespread communications campaign coupled with education strategies that target key audiences can create this shift within the general population, as well as help drive culture change within institutions.

Community engagement and an equitable approach are fundamental. Analysis done by the City of Los Angeles indicates that many of the areas with the poorest health outcomes also have a disproportionate number of severe and fatal injuries from traffic collisions. Furthermore, these communities may have other more pressing needs beyond traffic safety and/or may distrust government. An effective Vision Zero initiative considers these factors, and engages residents in developing strategies that will be effective in their communities. It is also imperative to continually re-engage the community to ensure that strategies are working as planned.

Enforcement supports policy approaches. In addition to designing safe streets and creating education and awareness campaigns, enforcement can help ensure that traffic laws are followed. Because low-income communities and communities of color may have high rates of traffic deaths and injuries, Enforcement approaches should be context sensitive, especially when working in high-burdened communities. For example, enforcement could include warnings rather than tickets to avoid disproportionate burden of traffic violation fines on low-income residents. Though not currently legal in California, tools like automated speed enforcement can be effective at reducing crashes.⁷

⁶ US Department of Transportation, National Highway Traffic Safety Administration. Literature Review on Vehicle Speeds and Pedestrian Injuries. DOT HS 809 021. October 1999. Available at: <https://one.nhtsa.gov/people/injury/research/pub/HS809012.html> (Accessed 1/6/17)

⁷ Other jurisdictions have reported declines in speeding and/or collisions due to ASE. Available at: <https://www.sfmta.com/sites/default/files/projects/2016/ASE%20Fact%20Sheet%202.5.16.pdf> (Accessed 1/9/17)

Alignment with Existing Plans and Policies

Adopting a Vision Zero approach would be consistent with County plans, policies, and goals and represents an opportunity to implement established County priorities.

Community Health Improvement Plan (CHIP), 2015 - 2020: DPH's CHIP is a strategic plan for improving health in Los Angeles County. CHIP establishes a health improvement agenda for DPH in collaboration with partners from different sectors. A primary goal of CHIP is to reduce the number of deaths and severe injuries resulting from traffic collisions through the implementation of policies and programs that promote safety.

Healthy Design Ordinance, 2012: This ordinance, developed by the Department of Regional Planning (DRP), changed the County's zoning and subdivision regulations to increase levels of physical activity and reduce obesity rates. To effectively promote physical activity, the Healthy Design Ordinance promotes safe, convenient, and pleasant places for people walking and bicycling.

Los Angeles County General Plan, 2035: Developed by DRP and adopted by the Board of Supervisors in 2015, the County's General Plan includes a number of elements that promote an increase in walking and biking and a reduction in vehicle miles traveled, including:

- **Mobility Element:** The California Complete Streets Act of 2008 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, public transit users, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible and more convenient to walk, ride a bicycle, or take transit.
- **Bicycle Master Plan:** A sub-element of the Mobility Element, the Bicycle Master Plan guides the implementation of proposed bikeways, bicycle-friendly policies, and programs to promote bike ridership across all ages and skill sets. The Plan's implementation program prioritizes projects based on various factors including both crash data and obesity rates.
- **Air Quality Element:** Air pollution and climate change pose serious threats to the environment, economy, and public health. The Air Quality Element summarizes air quality issues and outlines the goals and policies in the General Plan that will improve air quality and reduce greenhouse gas emissions. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the goals of the Air Quality Element.
- **Community Climate Action Plan (CCAP):** A sub-element of the Air Quality Element, the Community Climate Action Plan establishes actions for reaching the County's goals to reduce

greenhouse gas (GHG) emissions in the unincorporated areas. The County set a target to reduce GHG emissions from community activities in the unincorporated areas by at least 11 percent below 2010 levels by 2020. The CCAP includes specific strategy areas for each major emission sector and quantifies the 2010 and projected 2020 emissions in the unincorporated areas. Like most California communities, a significant portion of the County's emissions are from on-road transportation sources and point to a clear need to reduce vehicle trips and vehicle miles traveled. Vision Zero strategies that promote safety for people walking, bicycling, and using transit, could further enhance and support the CCAP's goals.

- **General Plan Implementation Programs:** Several General Plan work programs are well aligned with Vision Zero, including: 1) Livable Communities Guidelines – DRP is developing specific design measures that will be used by staff, developers and decision makers to develop projects that encourage walking, bicycling, outdoor physical activity, public transit use, and access to healthy foods. 2) Pedestrian planning – DPH and DPW are collaborating on the development of pedestrian plans in four unincorporated communities: Westmont-West Athens, West Whittier-Los Nietos, Lake Los Angeles and Walnut Park. 3) Equitable Development – DRP is preparing affordable housing and environmental justice ordinances to advance equity objectives in the General Plan, along with the development of an equity indicators toolbox.

Los Angeles County Initiatives: Vision Zero is consistent with several Board mandated initiatives, including:

- **Purposeful Aging Los Angeles Initiative:** A countywide, multi-year effort that will unite public and private leadership, resources, ideas, and strategies to improve the lives of older adults and Los Angeles County residents of all ages. The initiative includes the formulation of a three-year, Age-Friendly Action Plan, which will outline a comprehensive set of proposed strategies to enhance the County's age-friendliness across eight domains of livability, including transportation.
- **Trauma Prevention Initiative (TPI):** The Trauma Prevention Initiative targets regions of the County that experience a disproportionately high incidence of violence-related trauma visits, injuries and deaths. TPI develops and coordinates program strategies that focus on evidence-based and practice-tested interventions to reduce trauma. Traffic collisions account for many trauma visits, injuries, and deaths, and preventing them could contribute significantly to reducing the burden of trauma in the County.

County Strategic Plan, 2016 - 2021: Vision Zero is consistent with several strategies in the County's newly adopted Strategic Plan, including:

- II.2.4 Promote Active and Healthy Lifestyles: Conduct outreach to high need, traditionally underserved populations within the County by supporting safe and comfortable built environments that encourage physical activity and access to healthy food.
- II.3.3 Address the serious threat of global climate change: Create and implement policies and programs to: reduce the emission of greenhouse gases from all sectors of our community; ensure that community climate resilience is integrated into our programs and plans; and inspire others to take action.

California Strategic Highway Safety Plan (SHSP): The SHSP is a statewide, coordinated safety plan that provides a comprehensive framework for reducing fatalities and severe injuries on all public roads. The SHSP – and the accompanying SHSP Implementation Plan – are multi-disciplinary efforts involving Federal, State, and local representatives from the four “Es” (education, evaluation, engineering, and enforcement) of safety. The SHSP identifies safety needs and guides investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries.

PART II: PRELIMINARY DATA ANALYSIS

Background

When a collision occurs in unincorporated areas, multiple agencies are involved in responding to the scene, identifying collision factors, and treating victims. This results in many sources of data, which can then inform a Vision Zero approach and provide background on the collision landscape in unincorporated Los Angeles County. The following section briefly describes key agencies involved, their respective roles, and sources of data.

California Highway Patrol (CHP): CHP is responsible for traffic enforcement on unincorporated County roadways and is responsible for responding to the scene of a collision. CHP collects data for all collisions it responds to and retains this data for all municipalities. Additionally, data for all reported collisions in California available via the Statewide Integrated Traffic Records System (SWITRS). CHP also has citation data, which can provide additional information about safety concerns such as speeding and driving under the influence. Citation data is available to County departments, but requires additional staff time to clean and geocode for use.

Los Angeles County Department of Public Works (DPW): DPW requests collision reports directly from CHP as collisions occur within the unincorporated County area and enters this data into its geodatabase. DPW is also the primary agency involved in unincorporated County roadway design and maintenance. DPW does not have jurisdiction on designated State highways, such as the Pacific Coast Highway (CA-1), even if they fall within unincorporated County areas.

Los Angeles County Fire Department (LACFD): LACFD serves as the primary first-responder for suspected injury or fatal collisions in unincorporated County areas, as well as for some incorporated cities. LACFD retains records of all of its responses and services, including those related to collisions. Records typically span the time beginning when LACFD staff and/or vehicle(s) are deployed to the scene of an incident to when LACFD drops the victim off at a hospital or trauma center. LACFD also serves as a first-responder for some incorporated cities in Los Angeles County.

Los Angeles County Department of Health Services' Emergency Medical Services (EMS): EMS collects data from all emergency medical providers in Los Angeles County, including from LACFD, when transport to a hospital is involved. EMS also collects data directly from all 14 trauma centers, but not all hospitals. These trauma centers serve both unincorporated and incorporated areas. In severe injury collisions, victims are likely to be transported to a trauma center by the emergency services provider. However, victims of collisions can also transport themselves to a trauma center (or hospital); therefore transport data does not include these cases. Collision location is only available for records involving EMS

transport. Neither trauma data nor emergency service transport data is currently linked to CHP collision record data.

Los Angeles County Sheriff's Department (LASD): LASD is not a primary responder to collisions in unincorporated areas; this is the responsibility of CHP. However, in some cases, LASD will respond to a collision due to proximity. LASD is responsible for all other law enforcement in unincorporated areas and is more likely to be present in an unincorporated community for other enforcement duties.

Los Angeles County Department of Public Health (DPH): DPH is the primary recipient of Office of Statewide Health Planning and Development (OSHPD) data, which includes patient-level data from licensed health care facilities such as hospitals and emergency departments. This data includes health-related collision information, such as injury levels, outcomes, race/ethnicity, and financial costs. The data does not provide information on collision location.

Approach to Initial Analysis

To determine an approach to data analysis, traffic safety programs in other jurisdictions, including San Francisco, Seattle, and the City of Los Angeles, were reviewed to identify common categories. Most jurisdictions first analyzed collision data only, and then conducted analyses in later phases incorporating demographic data, geographic information, roadway design, and other areas. Data is typically analyzed and categorized as:

- *Big Picture* : Overview of jurisdiction as a whole, including breakdowns by collision severity and calculated fields such as “annual collision death rate.”
- *Temporal, Modal, & Demographic*: Analysis of collision data by indicators such as age, gender, or mode of victim and party. This provides more clarity about the type of person involved in severe and fatal collisions, and if there is an obvious overrepresentation of certain victim or party types.
- *Contributing Factors*: Further analysis of collision data to understand potential contributing factors to severe and fatal collisions, such as time of day, use of safety equipment, and primary collision factor.
- *Prioritization* – Analysis incorporating built environment, land use, or citation data. This information can be used to create a prioritized network of streets, such as Los Angeles’ High Injury Network, and also to provide a data-driven justification for future project prioritization.

In addition to research on efforts in other jurisdictions, three meetings were also convened with experts from various County Departments and the Los Angeles Department of Transportation to discuss common problems, past analysis on collisions in unincorporated Los Angeles County, and high-priority approaches to future analysis.

As described in the section above, no single source of data provides a comprehensive picture of where severe and fatal collisions are occurring in unincorporated areas, who is involved, injuries sustained, and costs incurred. The wide range of data available from County partners provides an excellent opportunity to further understand factors associated with traffic deaths and severe injuries on unincorporated area roadways. Due to the challenges associated with joining disparate data sources, the preliminary collision analysis contained in this report is based only on DPW's Collision Geodatabase. DPW's database includes California Highway Patrol collision records (SWITRS) data through August 31, 2016. SWITRS data is commonly used by jurisdictions throughout California, including other Vision Zero cities, such as Los Angeles and San Francisco.

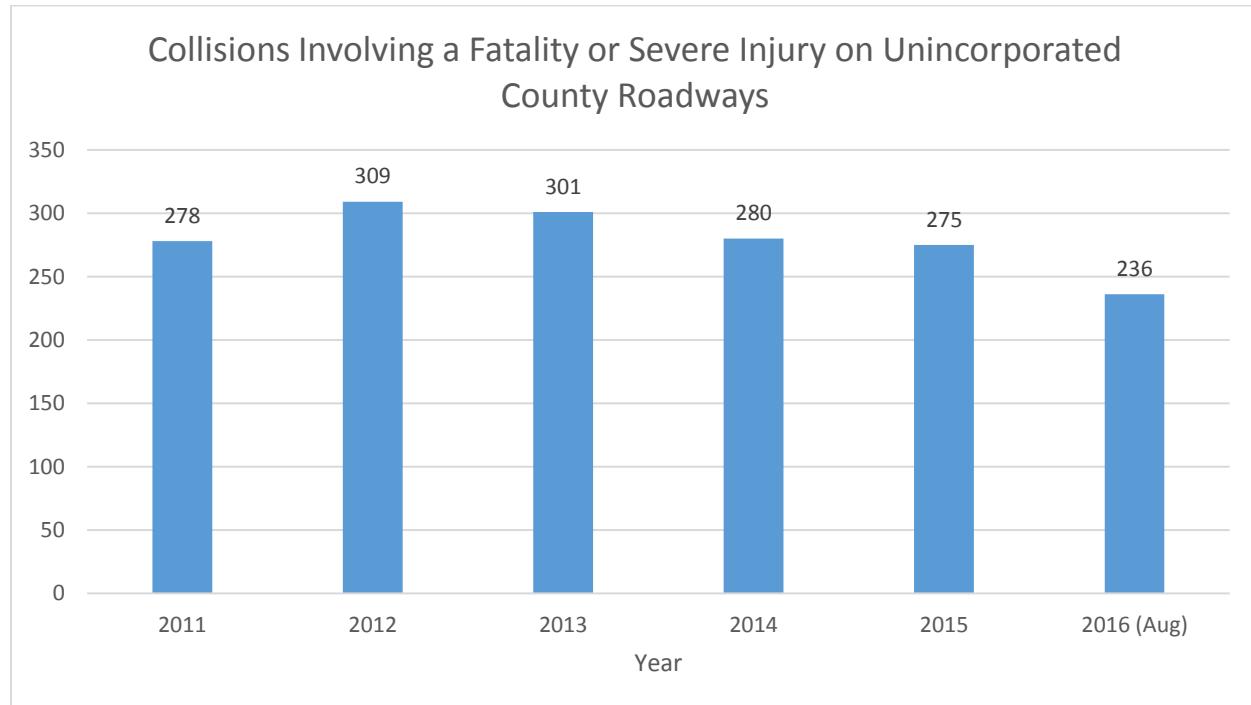
Findings

The data below summarizes information using CHP collision records data, housed in DPW's Collision Geodatabase. Unless otherwise stated, summary data is for the five-year, eight-month period beginning January 1, 2011 and ending August 31, 2016.

BIG PICTURE

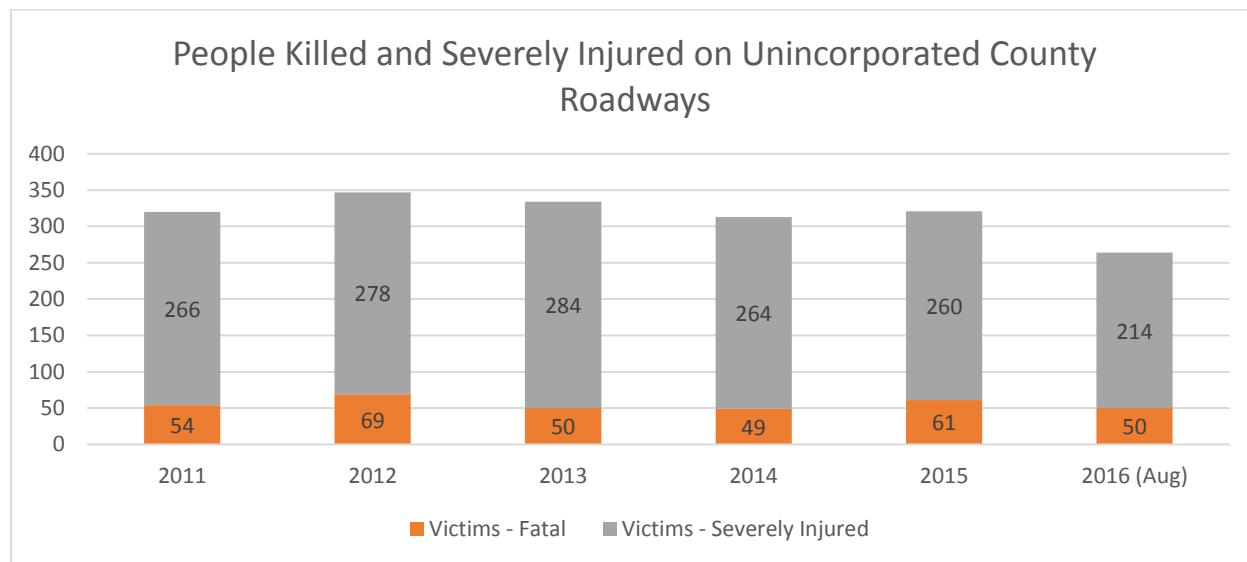
Collisions

There were 63,067 distinct collisions on unincorporated County roadways over the five-year, eight-month period. Of these collisions, 1,429 involved at least one severe injury and there were 300 with at least one fatality. A total of 1,679 collisions involved severe injuries or fatalities. Taking an average from January 1, 2011 to December 31, 2015, there are 10,917 annual collisions on unincorporated County roadways with 288 involving a fatality or severe injury. The number of collisions involving a fatality or severe injury has remained relatively constant since 2011.

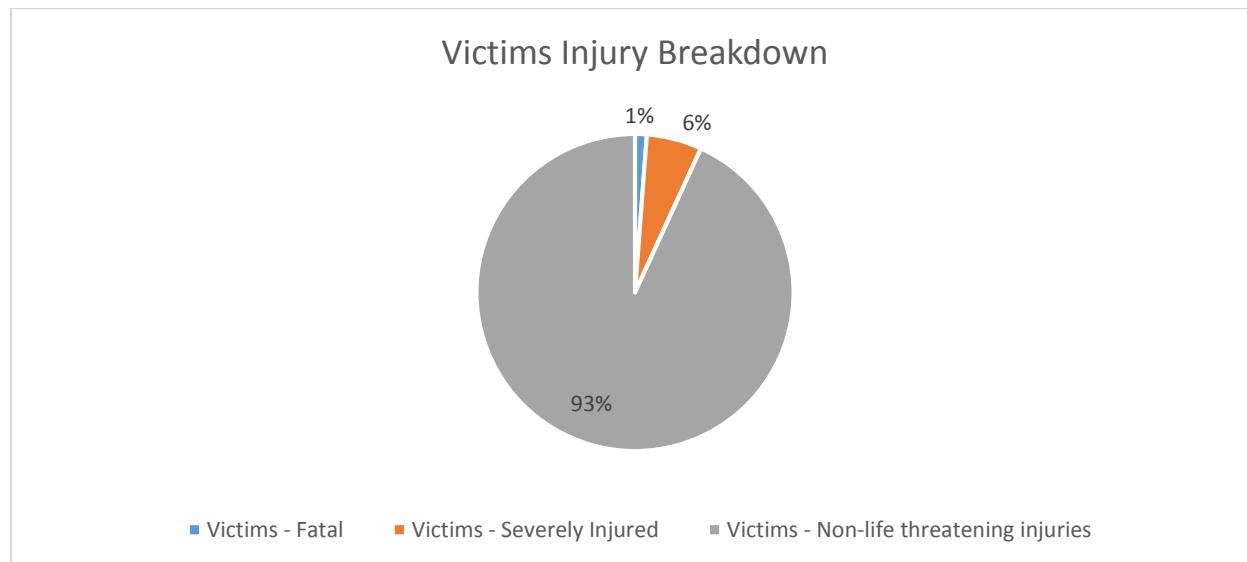


Victims

There were 27,786 victims involved in collisions on unincorporated County roadways during the five-year, eight-month period. Victims include fatalities and individuals with severe injuries, other visible injuries, or complaints of pain. Of these victims, 1,566 were severely injured and 333 incurred fatalities.



Among all victims of traffic collisions, approximately one percent died and six percent sustained severe injuries, but the vast majority (93 percent) did not suffer life-threatening injuries.



Rates

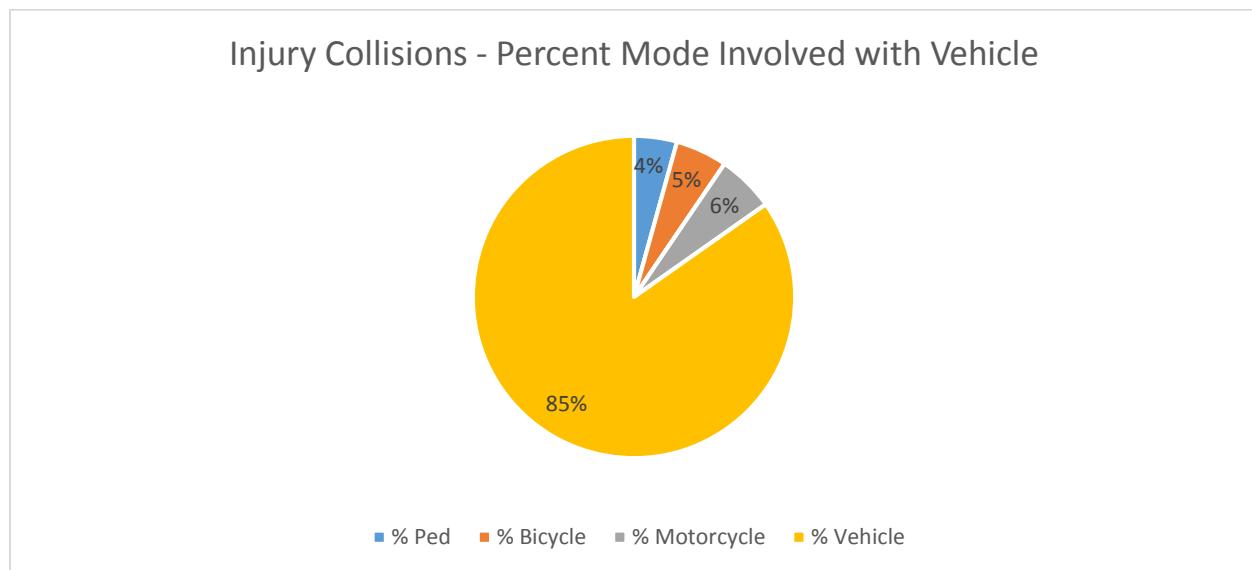
The County maintains approximately 1,188 miles of rural roads and an additional 1,998 miles of urbanized roads (total of 3,187 miles), with a daily vehicle miles travelled rate (DVMT) of 11.85 million.⁸ The following rates contextualize collisions and victims. All rates are based on averages from January 1, 2011 to December 31, 2015.

- There are approximately 3.4 collisions per roadway mile annually, with 0.09 collisions involving a fatality or severe injury per roadway mile
- There are approximately 27.4 collisions involving a fatality or severe injury per 100,000 population in the unincorporated Los Angeles County annually.⁹

TEMPORAL, MODAL, AND DEMOGRAPHIC

Mode

As shown in the chart below, among all collisions involving an injury, vehicle to vehicle injury collisions are the most common, representing approximately 85 percent of all injury collisions.

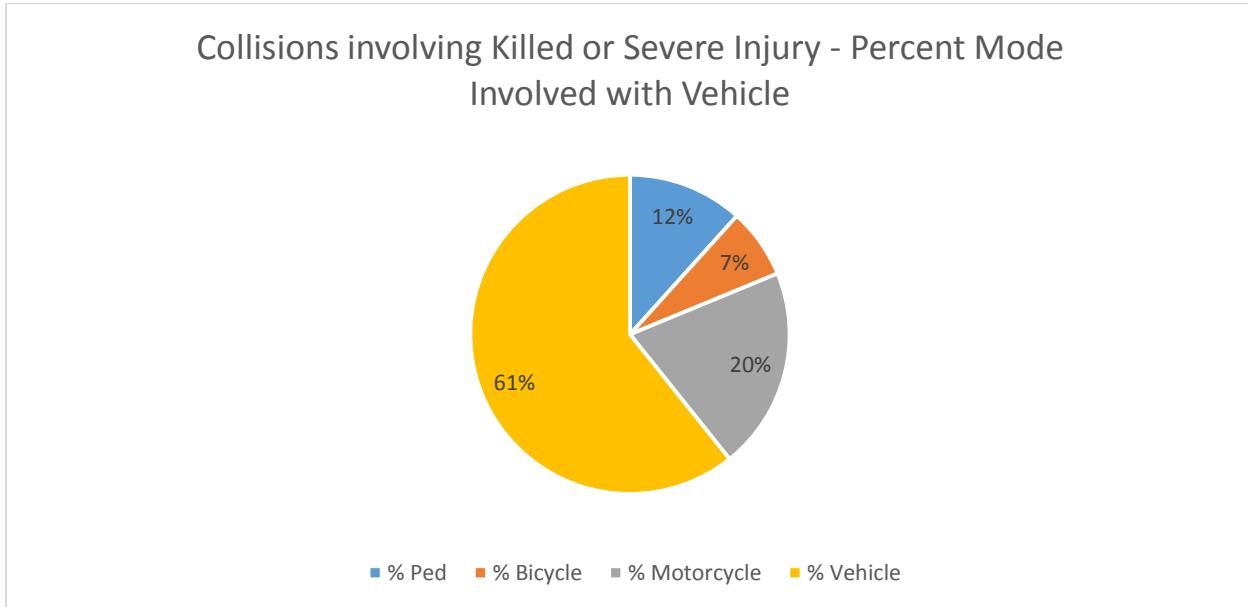


⁸ 2014 California Public Road Data Estimate, Table 6

⁹ Unincorporated area population is approximately 1,050,000 people based on estimates from the Southern California Association of Governments. Available at:

<http://www.scag.ca.gov/documents/unincarealosangelescounty.pdf> (Accessed December 27, 2016)

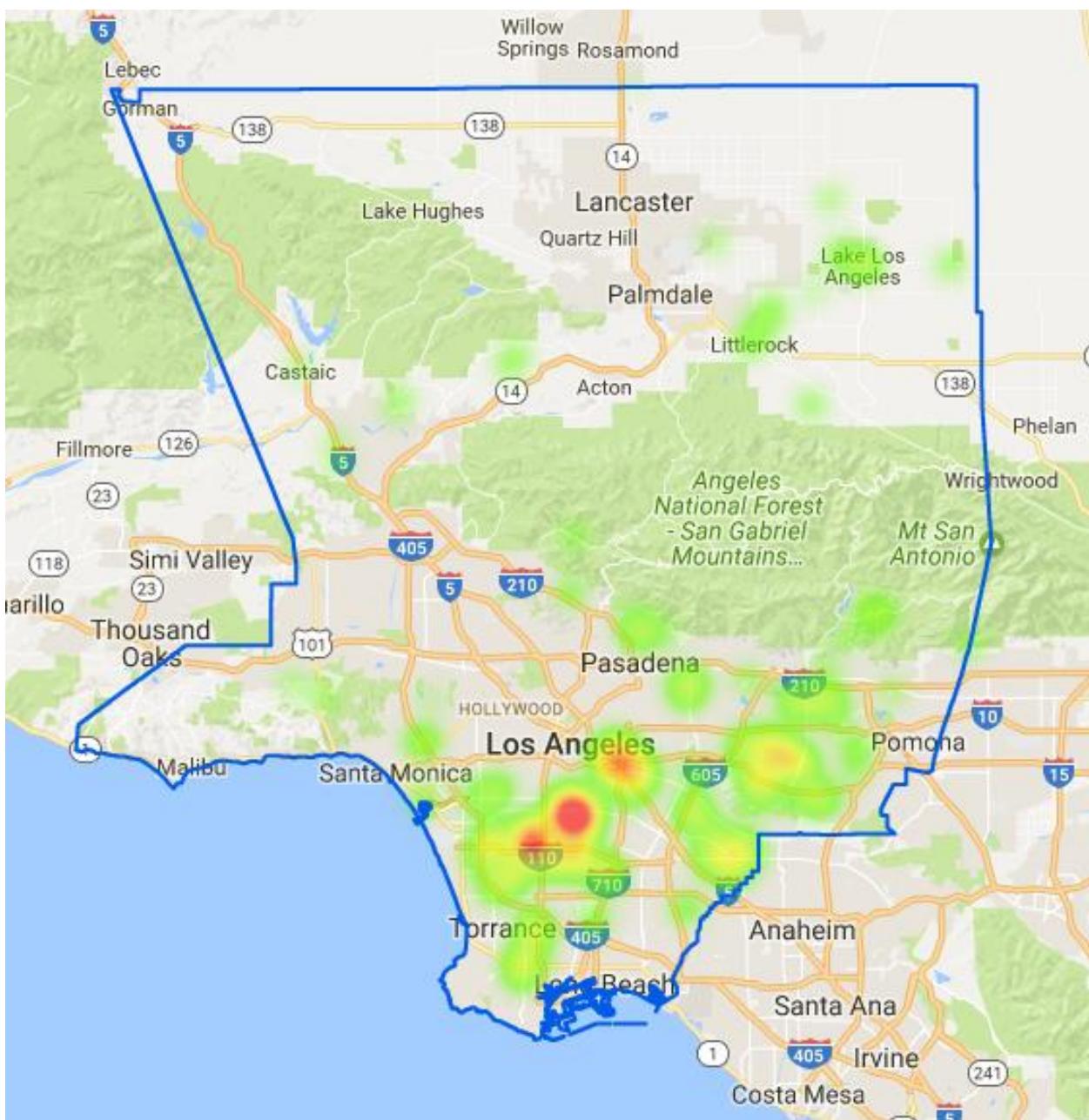
However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injury and fatality-involved collisions. For example, although pedestrians are only involved in four percent of injury collisions, they represent 12 percent of the collisions with severe injuries or fatalities. Similarly, motorcycle-involved collisions represent 20 percent of the severe and fatal collisions, but only six percent of all injury collisions.



The following heat map series shows the concentration of collisions involving killed and severely injured victims by mode. A heat map is a representation of the concentration of incidents; red areas indicate the highest concentration of incidents; yellow areas indicate a moderate concentration; and green areas indicate the lowest concentration of incidents.

Pedestrian-Involved Fatal and Severe Injury Collisions

Pedestrian-involved fatal and severe injury collisions are concentrated in the southern part of the County, largely in dense urban centers. There is also a concentration of collisions in the Antelope Valley, where community main streets are often rural, high-speed roads.

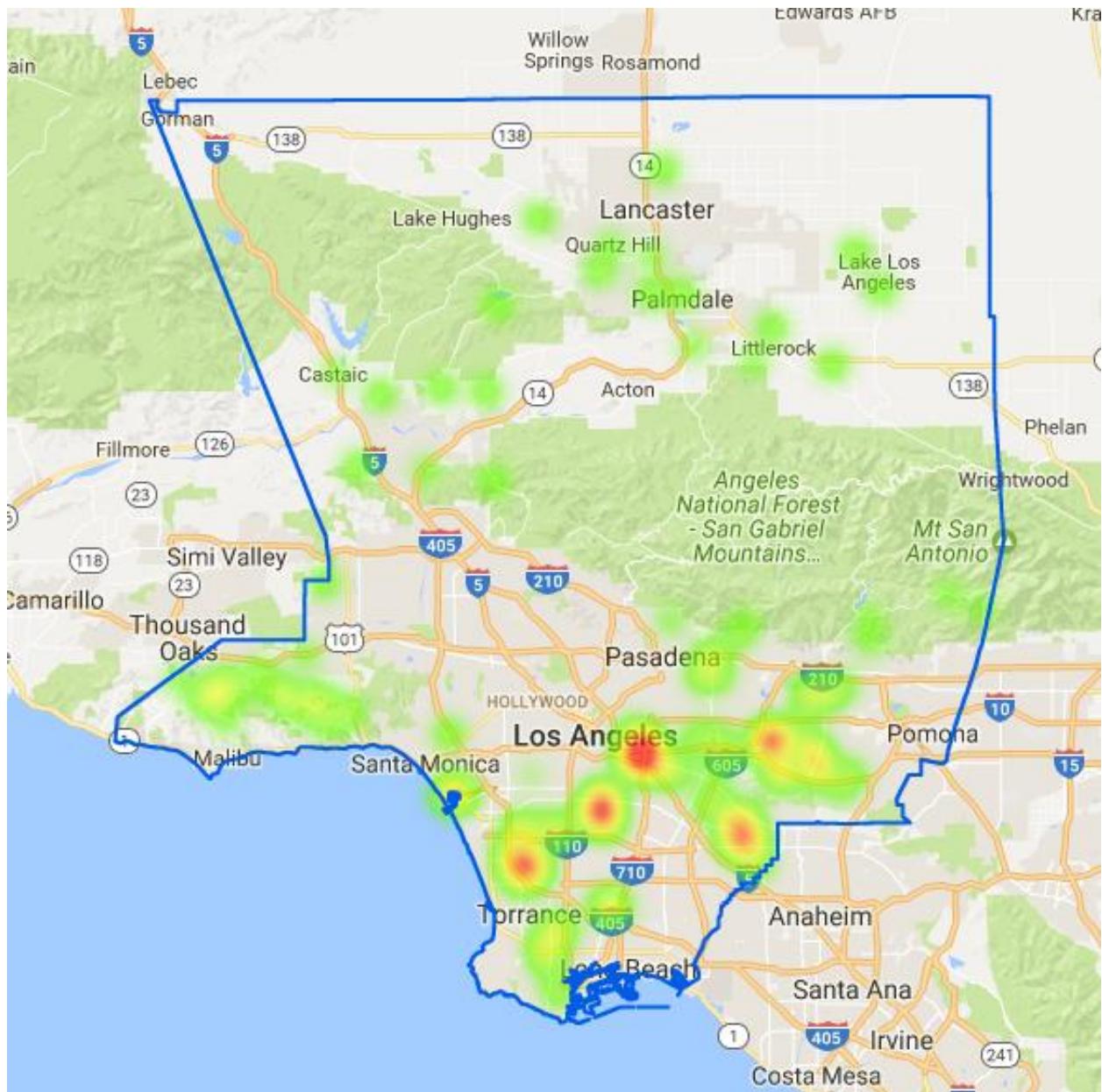


Pedestrian-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Bicycle-Involved Fatal and Severe Injury Collisions

While bicycle-involved fatal and severe injury collisions are spread throughout the County, they are more concentrated in urban areas, with some additional fatal and severe injury collisions occurring in the Antelope Valley and along County mountain roads.

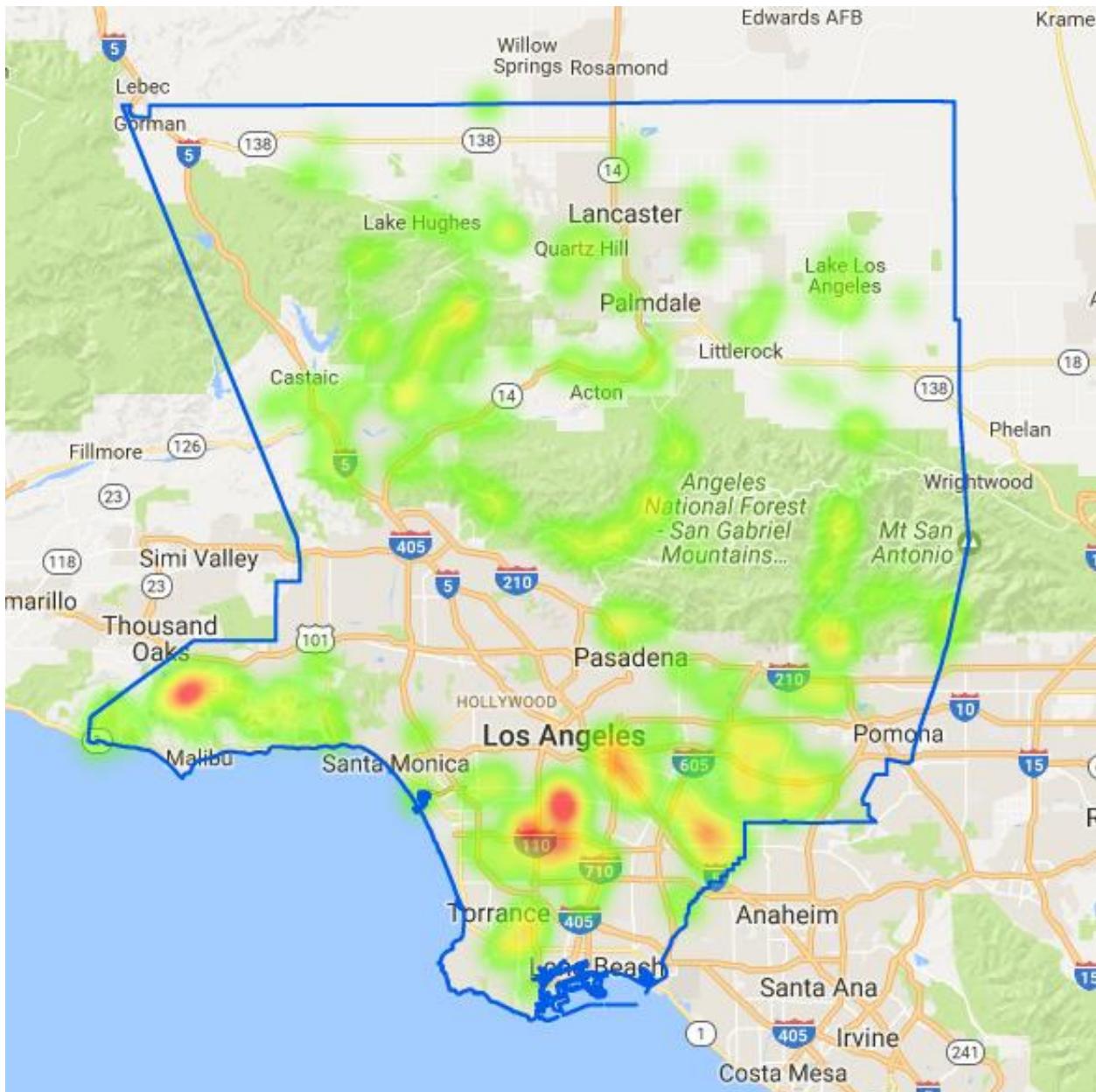


Bicycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Motorcycle-Involved Fatal and Severe Injury Collisions

Motorcycle-involved fatal and severe injury collisions are spread throughout the County. There are higher concentrations along County rural mountain roads, as well as in dense urban areas.

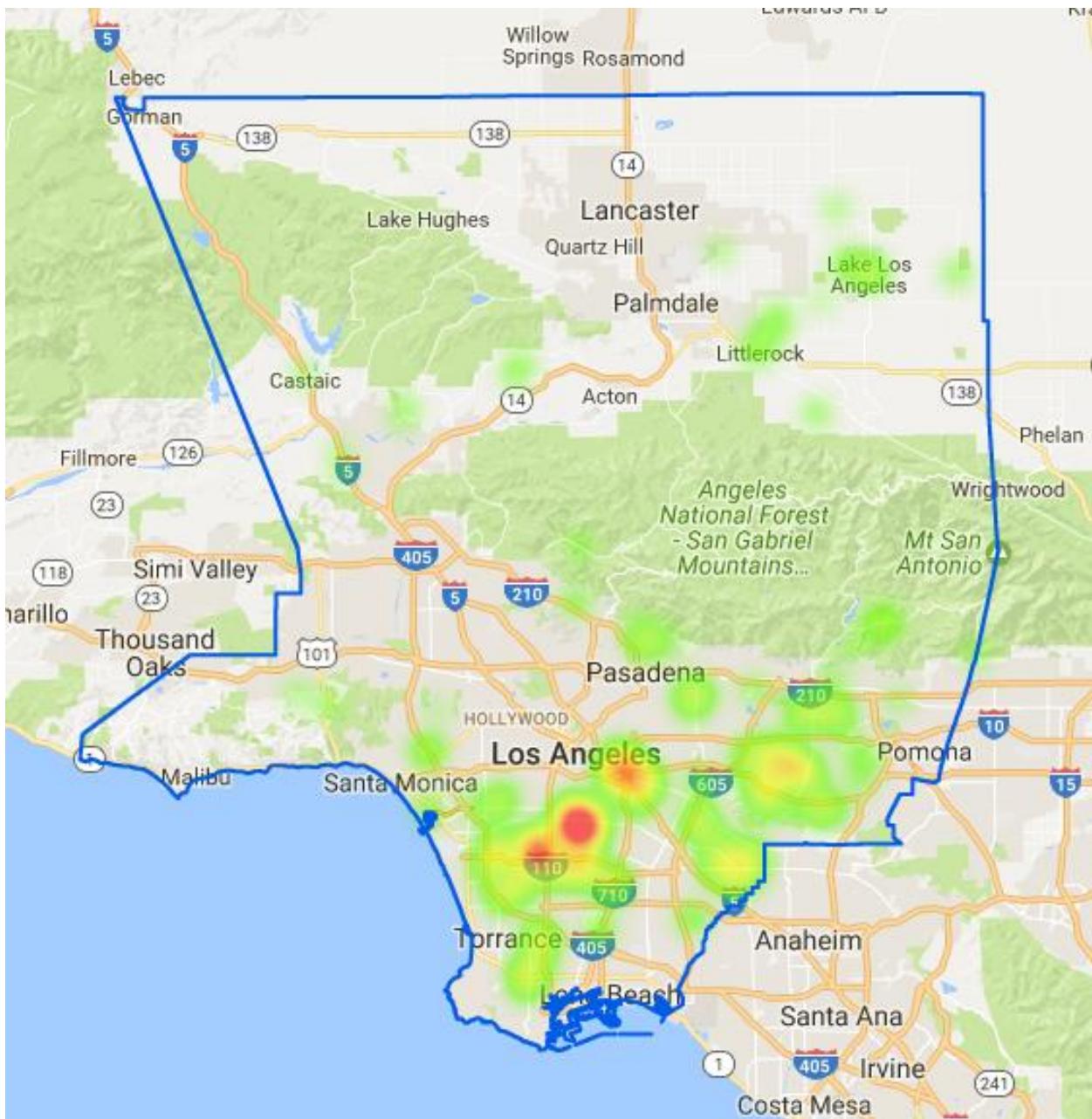


Motorcycle-related collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

Vehicle to vehicle-Involved Fatal and Severe Injury Collisions

Vehicle to vehicle-involved fatal and severe collisions happen everywhere, but there is a concentration in the southern part of the County in our urbanized communities.

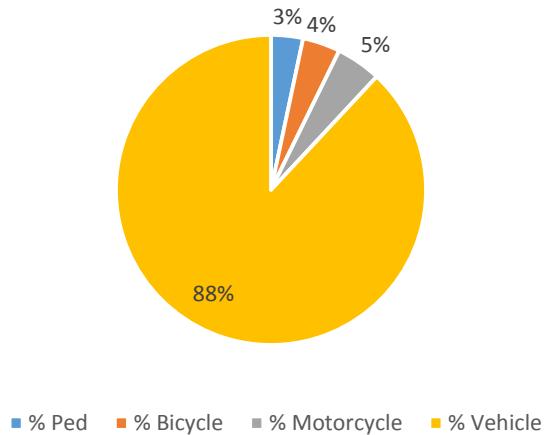


Vehicle to vehicle collisions involving severe injuries or fatalities in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

Map data ©2017 Google, INEGI

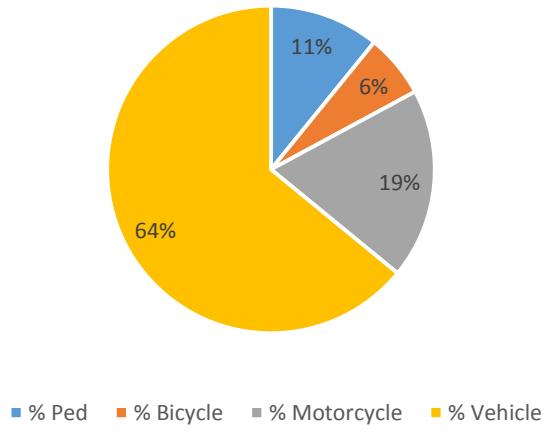
The vast majority of victims injured as a result of traffic collisions on unincorporated County roadways were in vehicles.

Collision Victims by Mode



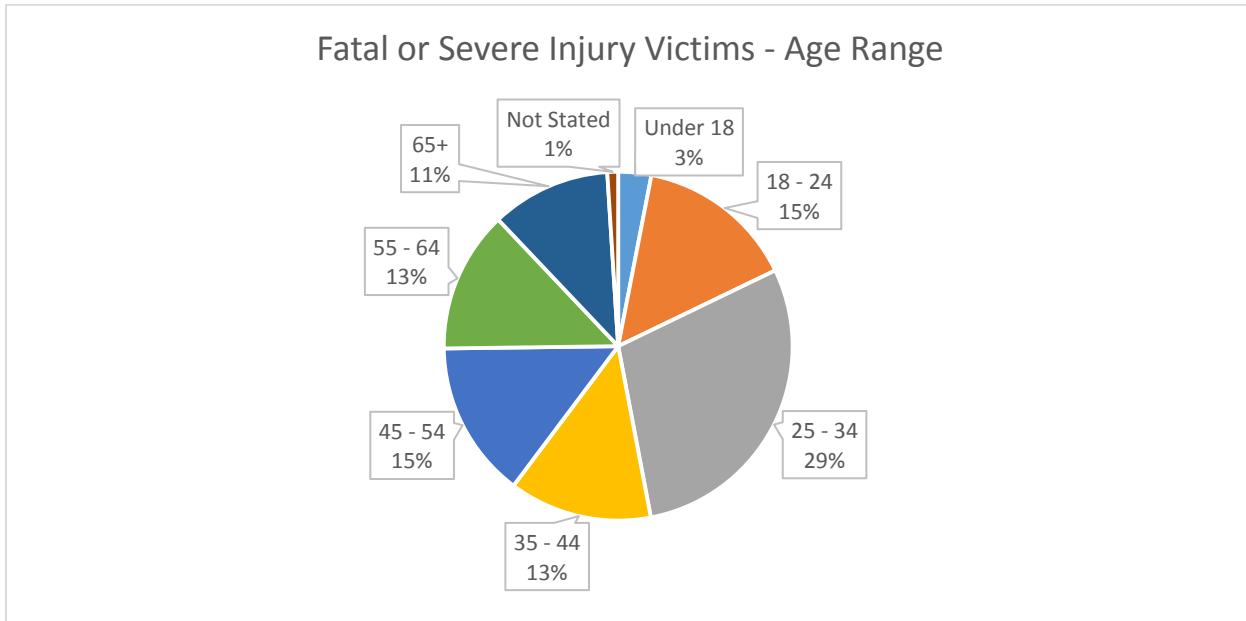
However, pedestrians, bicyclists, and motorcyclists are overrepresented in severe injuries and fatalities. Approximately 11 percent of fatal and severe injury victims are people walking, six percent are people bicycling, and 19 percent are people using a motorcycle.

Collision Victims that are Killed or Severely Injured

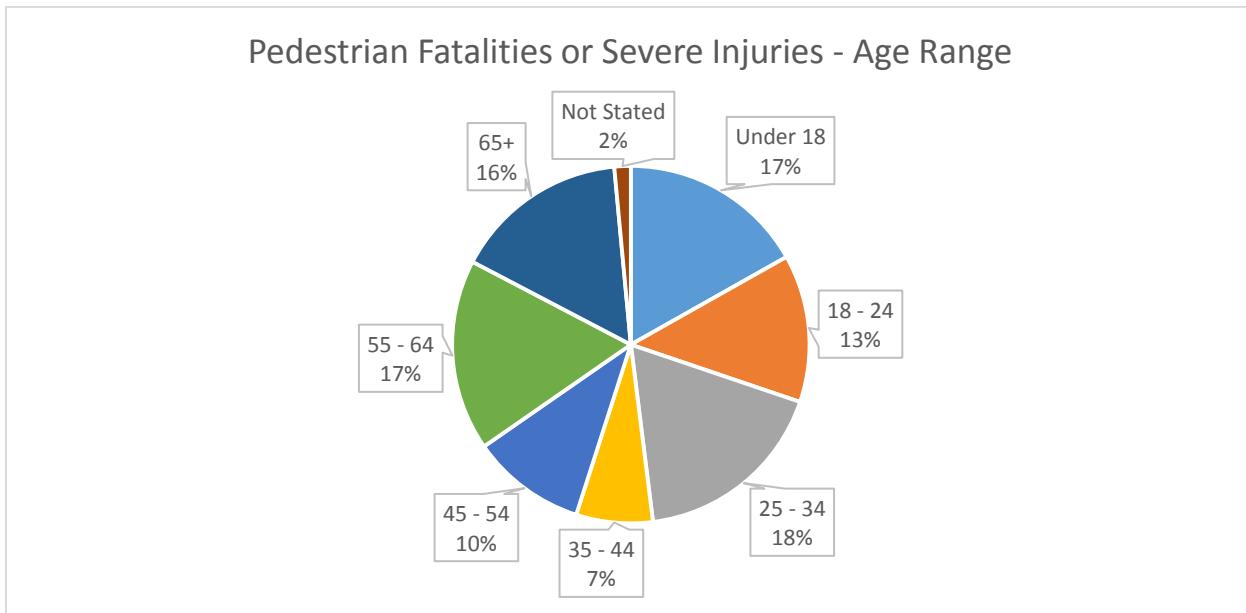


Demographics

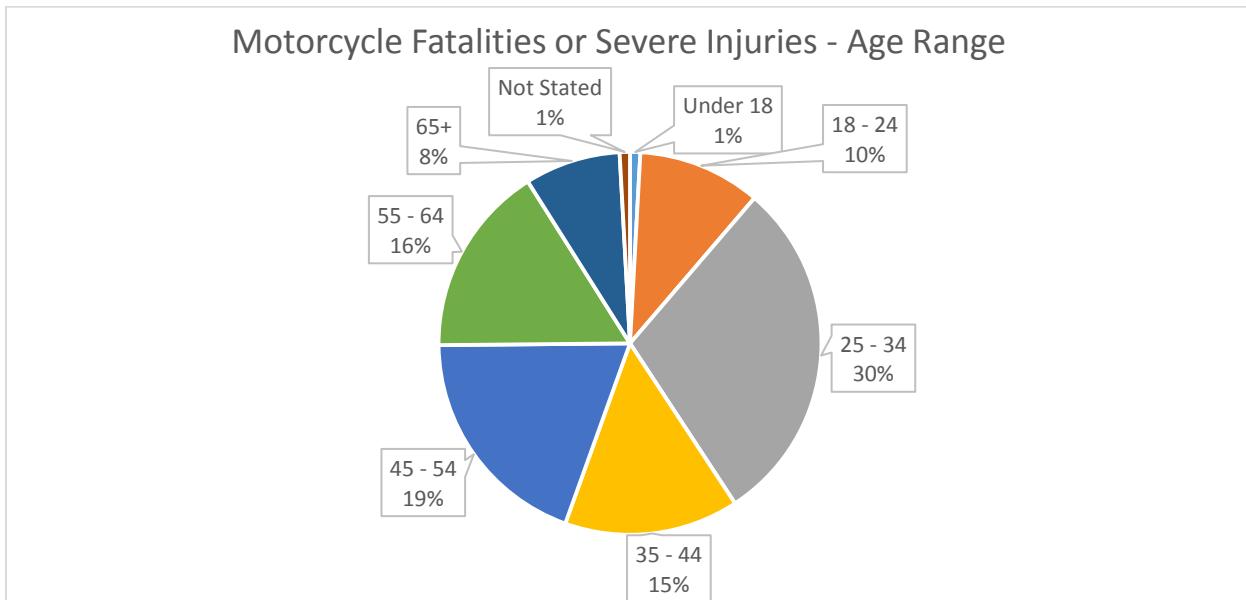
Regardless of mode, across all killed and severely injured victims there is a higher proportion of male victims (approximately 78 percent male and 22 percent female) and victims 25 to 34 years old (across both genders), for the entire time period. The chart below shows the age breakdown across all victims killed or severely injured, regardless of mode. Nearly a third of victims (29 percent) are between the ages of 25 and 34.



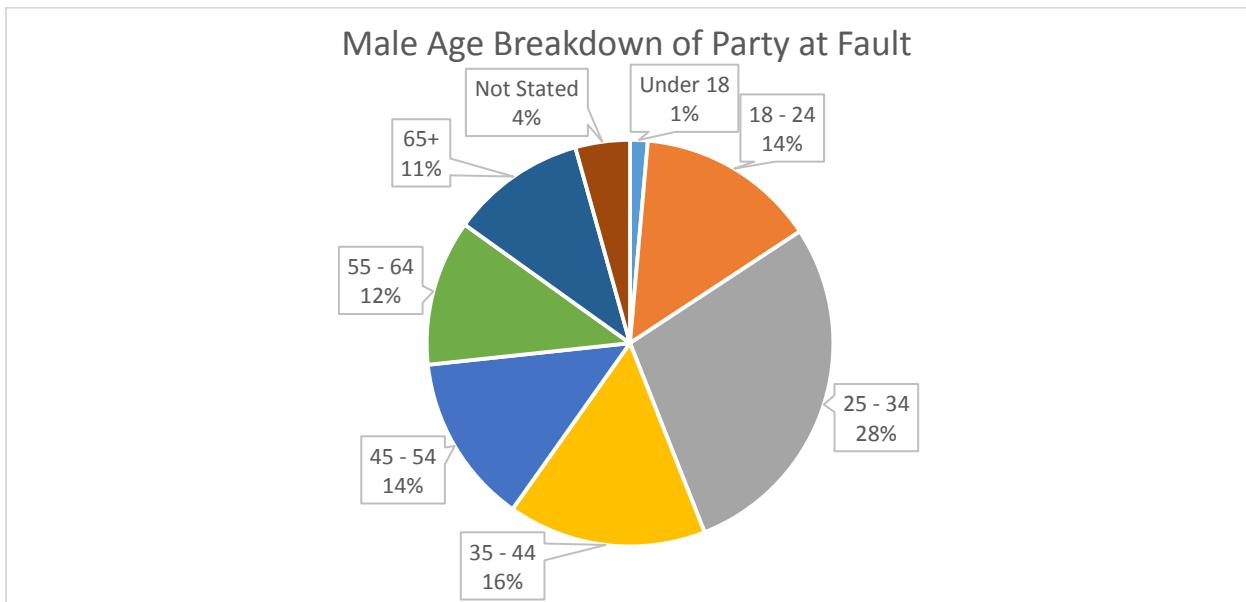
Among pedestrians killed or severely injured, victims are concentrated in both older and younger age groups. 17 percent are young people 18, 13 percent are between 18 and 25, and 33 percent are 55 and over.



The chart below shows the age breakdown for all motorcycle victims, male and female. Motorcycle victims were overwhelmingly young males: 94 percent are men, 40 percent under the age of 34.

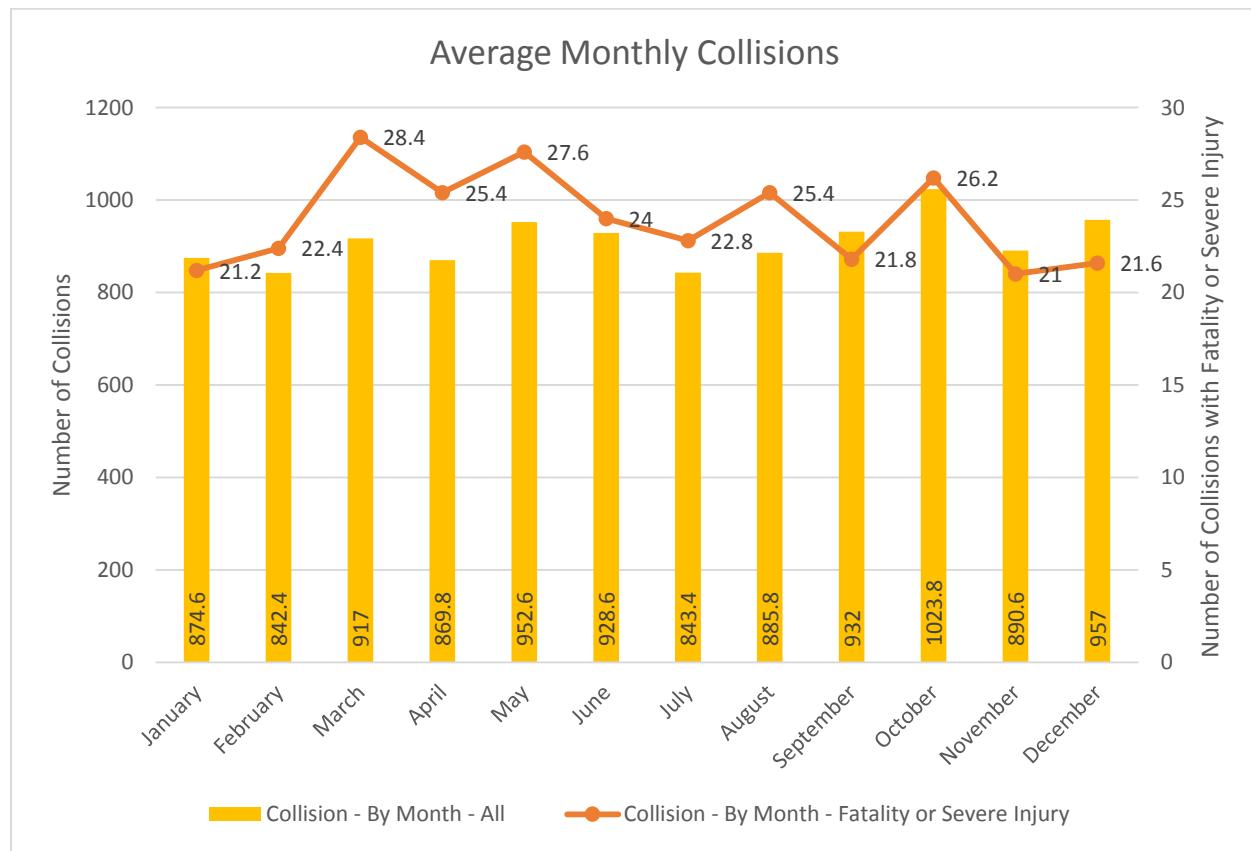


Men represented 64 percent of at-fault parties, while females represented 36 percent. Young men (under the age of 35) and older men (over the age of 55) were more likely to be labeled as “at-fault” in all collisions (no injury, complaint of pain, visible injury, severe injury, fatal) across the entire time period.

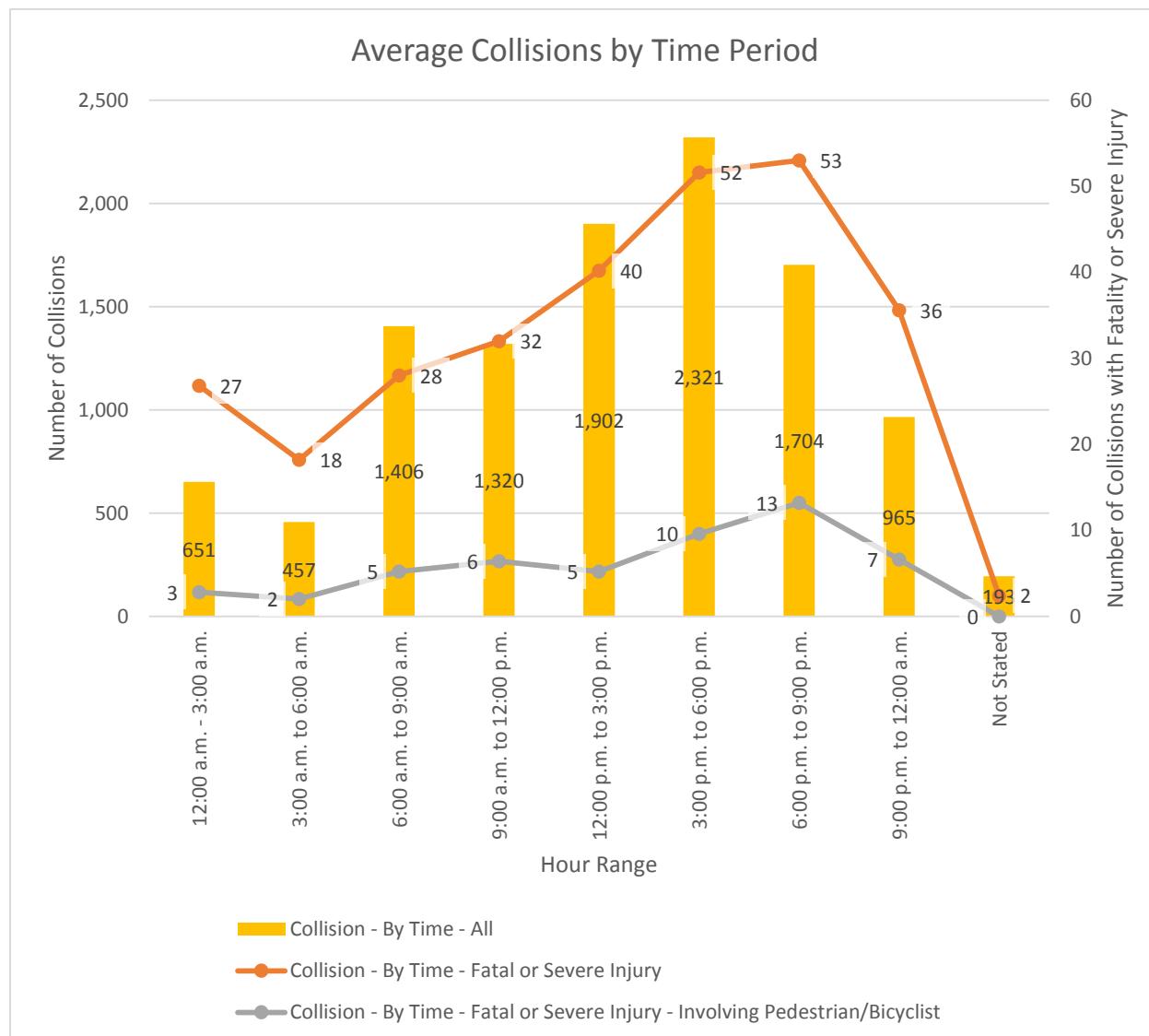


Temporal

On average from January 1, 2011 to December 31, 2015, October was found to have the highest number of collisions. Additionally, there are peaks in fatal and severe injury collisions during the months of March and May.



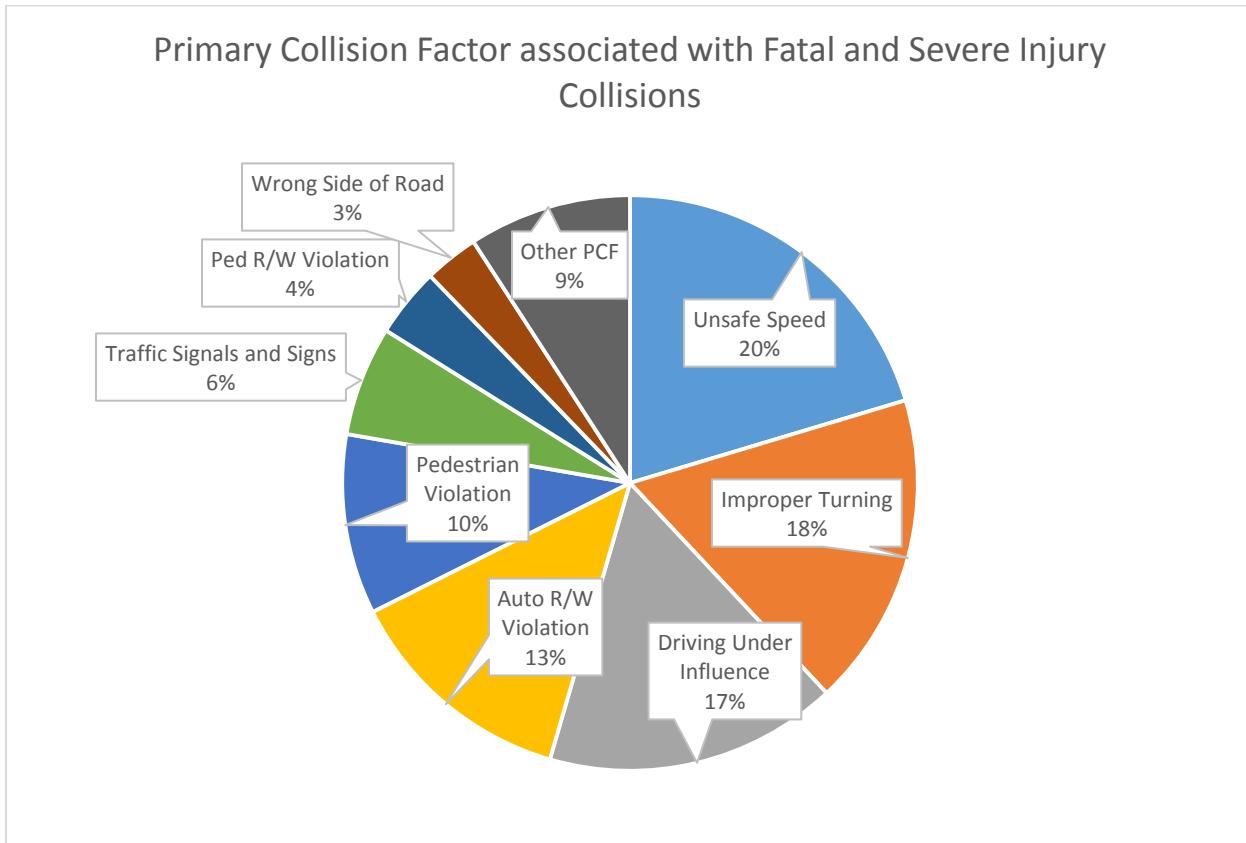
On average across all reported collisions (no injury, complaint of pain, visible injury, severe injury, fatal) during the period January 1, 2011 through December 31, 2015, most occurred between the hours of 3:00 p.m. to 6:00 p.m. High numbers of fatal and severe collisions also occurred during this period. Although there were fewer collisions overall from 6:00 p.m. to 9:00 p.m., there were high numbers of fatal and severe collisions during this time period, indicating a disproportionately high rate of fatal and severe collisions. This is also the peak time period when people walking and bicycling are involved in a fatal or severe collision, indicating that although more collisions occur during the 3:00 p.m. to 6:00 p.m. time period, the most dangerous time is from 6:00 p.m. to 9:00 p.m.



CONTRIBUTING FACTORS

Primary Collision Factor

CHP lists a single “Primary Collision Factor” (PCF) when it creates a collision report. This indicates the an officer’s determination of the primary cause of the collision. Other contributing factors may or may not exist. Unsafe speed was found to be the greatest primary collision factor, comprising 20 percent of the primary collision factors, with improper turning and driving under the influence comprising 18 percent and 17 percent, respectively.

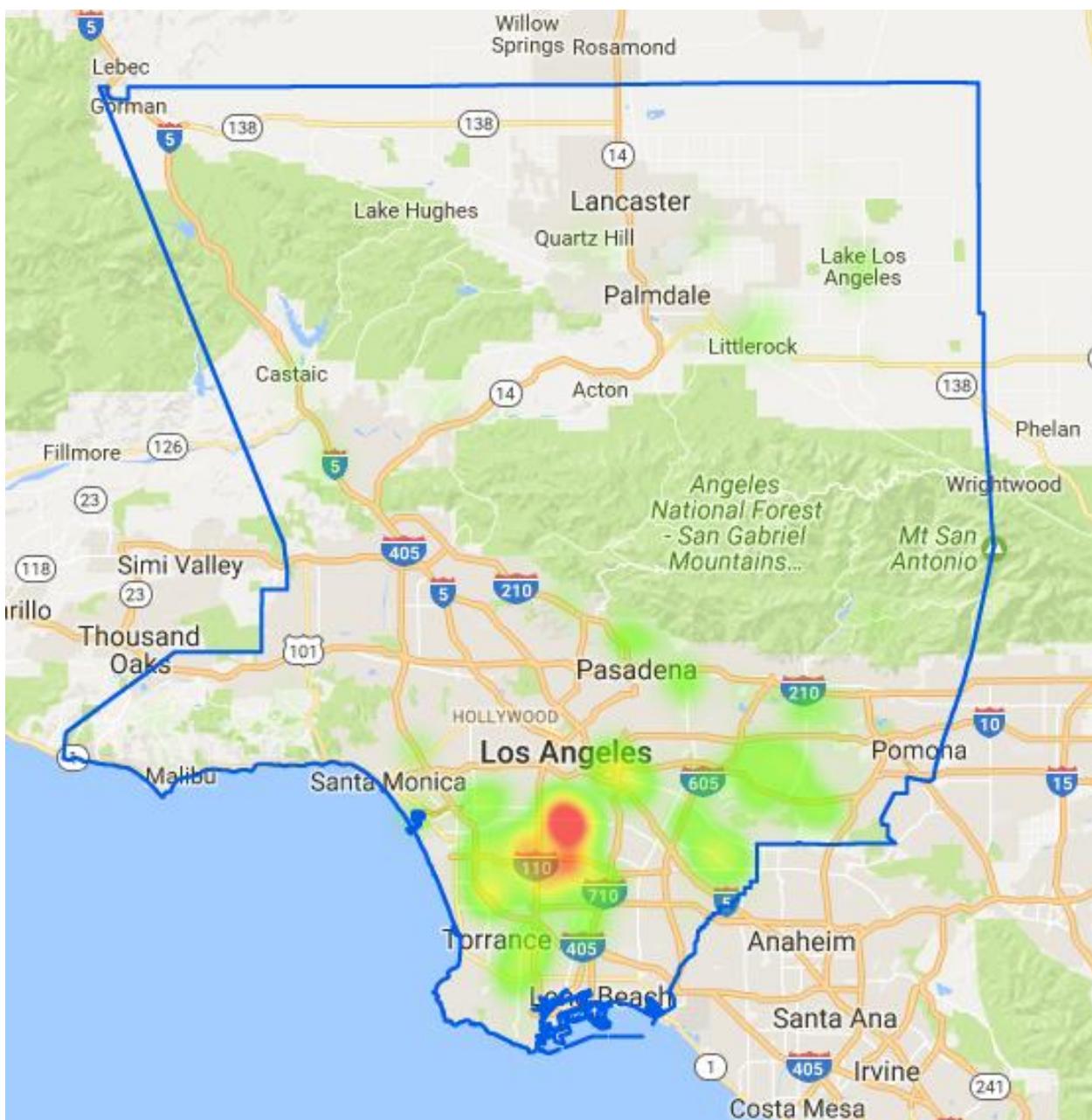


Hit and Run

Approximately 25 percent of all collisions involve hit and runs and there were 15,692, 133 involving a person killed or severely injured, during the period analyzed. This number has remained relatively constant over the past five years.

Felony Hit and Run Collisions

The heat map below shows the concentration of felony hit and run collisions. There is a concentration in the southern part of the County in urban areas. A felony hit and run involves a fatality. Among bike-involved and pedestrian-involved felony hit and run collisions, the same concentration pattern is seen.



Felony hit-and-run collisions in the unincorporated County areas, from January 1, 2011 through August 31, 2016.

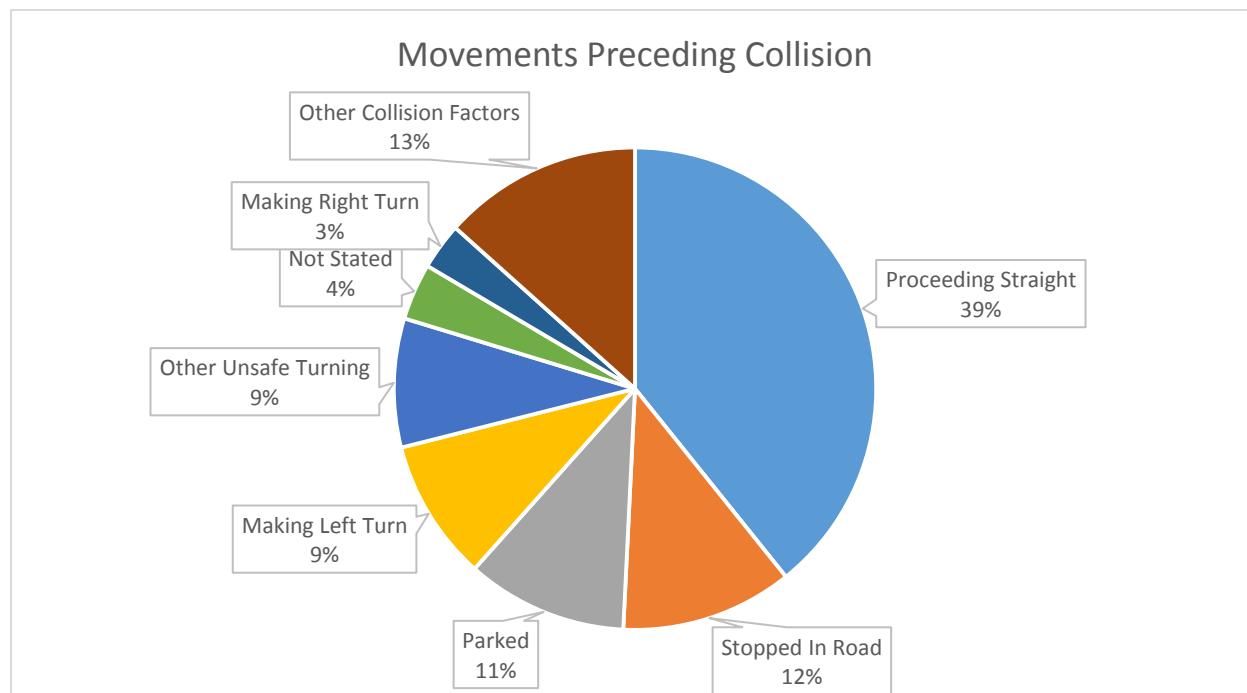
Map data ©2017 Google, INEGI

Driving Under the Influence (DUI)

For this section, “Driving Under the Influence” is defined as “Under Alcohol Influence” or “Under Drug Influence” while driving. Approximately eight percent of all crashes involve driving under the influence of alcohol or drugs; this percentage has remained relatively steady over the past five years. However, nearly 17 percent of fatal and severe injury collisions involve DUI, and 25 percent of vehicle-to-vehicle fatal collisions involve DUI.

Movement Preceding the Collision

CHP also reports vehicular movements in collisions prior to impact. Most collisions involve proceeding straight (39 percent), a turning movement (right turn, unsafe turning, left turn combined for 21 percent), stopping in the road (12 percent), and parked vehicles (11 percent).



Other Factors

Most collisions involving a fatality or severe injury occur in clear weather conditions (89 percent) and dry roadway surface conditions (96 percent). Roadway conditions (e.g., obstructions, flooding, holes), are listed as “no unusual conditions” in 97 percent of fatal and severe injury collisions.

66 percent of all collisions occur during daylight, with another 30 percent during the dark. However, collisions in the dark and during dusk are overrepresented among collisions involving a severe injury or fatality, with 52 percent occur during daylight, 43 percent in the dark, and five percent at dusk.

SUMMARY OF CHALLENGE AREAS

Based on the preliminary data analysis, the following challenge areas have been identified as warranting additional data analysis to further pinpoint causes and patterns associated with severe injury and fatal collisions, and to target programs, resources, and infrastructure enhancements.

- ***Unsafe Speeds:*** Vehicle speed can be the difference between life and death in a collision. Speed is listed as a primary collision factor in 20 percent of fatal and severe collisions on unincorporated County roadways.
- ***Impaired and distracted driving:*** Driving under the influence of alcohol or drugs is involved in 8 percent of crashes, yet is involved in 25 percent of fatal vehicle-to-vehicle collisions and 17 percent of fatal or severe injury collisions across all modes. Most parties involved in a collision do not admit to distraction, however the State reports that anecdotal information indicates the number is high. This underscores the need for a coordinated approach to capture information on and to prevent distraction.
- ***Hit and runs:*** Approximately 25 percent of all crashes involved hit and runs. Although most do not result in severe injuries or fatalities, this indicates a need for outreach to spur behavior changes by motorists.
- ***Young males:*** Young males comprised a disproportionately high percentage of the party at fault in severe and fatal collisions. For example, the percentage of collisions involving young males on motorcycles suggests young males represent a critical demographic to target for programs and messaging.
- ***Motorcyclists:*** Twenty percent of fatal and severe collisions involved a motorcyclist. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found to occur on rural or mountain roads, as well as in urban areas where a greater probability of conflicts exist due to higher vehicular densities.
- ***Pedestrians:*** Seventeen percent of fatal and severe collisions involved pedestrians. Young people (under age 19) and older people (55 years and over) were overrepresented in pedestrian-involved fatalities and severe injuries. Based on preliminary County heat maps, concentrations of fatal and severe collisions were found in urban areas where a greater probability of conflicts exist due to higher vehicular densities, as well as in rural areas, where higher vehicular speeds may be a factor.

To further pinpoint any significant factors and patterns that may be associated with collision types, additional analysis will need to be conducted, including community demographics, existing infrastructure (e.g., presence of bikeway, walkway, prevailing speed limit), traffic controls, and others.

PART III: CURRENT TRAFFIC SAFETY EFFORTS

The County and its partners currently administer various programs that support traffic safety through education, enforcement, engagement, engineering, and evaluation. CHP, the agency responsible for traffic enforcement in unincorporated areas, is currently providing the majority of the County's traffic safety programs in unincorporated communities. The Sheriff's Department, DHS Trauma Hospitals, DPH, DPW, and the Los Angeles County Office of Education are all involved in injury prevention efforts as well. The process of developing this report increased awareness about opportunities for collaboration between departments. Despite current efforts, it is clear that more can be done to prevent traffic deaths and severe injuries on unincorporated area roadways. Strategically focusing best-practice programs on key challenge areas, leveraging resources across agencies, and identifying new injury prevention resources will help the County reach its traffic safety goals.

Education

General Safety Tips

County departments and partners, such as CHP and DPH, have readily available educational materials such as pamphlets, flyers, and safety items (e.g. bicycle helmets, lights) that can be distributed during community events. CHP has educational materials that target different audiences and behaviors, including pedestrian safety, bicyclist safety, skateboard safety, motorcycle safety and helmet laws, distracted driving, and others.

Distracted Driving

Distracted driving, such as looking at a phone or texting while driving, continues to be a challenge area locally and statewide. CHP targets high school aged children through its "Teen Distracted Drivers Education and Enforcement" program, conducting focused safety presentations and press events. CHP's "Impact Teen Driver" program is designed to educate high school student drivers on the dangers of distracted driving. CHP also has an "Adult Distracted Drivers" program that targets all non-teen drivers to minimize distracted driving through public service announcements, public presentations, and direct community engagement at local events. DHS Trauma Hospitals have injury prevention programs designed to reduce trauma visits, many of which are focused on reducing distracted driving. These include presentations to community groups, safe driver pledges, and "Don't Text and Drive" campaigns.

Impaired (Driving Under the Influence Alcohol or Drugged) Driving

CHP and some DHS Trauma Hospitals conduct presentations to engage high school-aged students and their parents about driving under the influence through its "Every 15 Minutes" program. The program includes fatal driving under the influence (DUI) simulations and designated driver education. CHP also chairs an Intoxicated Driver Task Force, which brings community partners such as Mothers Against

Drunk Driving and law enforcement together. This program is largely supported through grant funds. Injury prevention activities at some DHS Trauma Hospitals include educational programs wherein participants visit a Trauma Hospital and morgue to learn from emergency healthcare providers and see the wreckage and carnage of crashes involving DUI.

Speed and Aggressive Driving

CHP recently received a federal traffic safety grant to develop and implement the Regulate Aggressive Driving and Reduce Speed (RADARS) program to educate motorists about the dangers of aggressive driving and actively enforce related laws. The main goal of RADARS is to reduce the number of fatal and injury traffic collisions in which speed, improper turning, and driving on the wrong side of the road are primary collision factors. The RADARS program will also focus on street racing and sideshows through enhanced enforcement paired with an active public awareness campaign.

Teenage Drivers

At the State level, young drivers are disproportionately represented in collisions. CHP has several programs that target this age group including, “Start Smart” classes that help newly licensed and soon-to-be licensed teenage drivers understand the critical responsibilities of driving and that “at-fault” collisions are 100 percent preventable. The classes create an open dialogue between law enforcement, teenage drivers, and parents or guardians.

Older Adults

Through the “Age Well, Drive Smart” program, CHP aims to reduce motor vehicle collisions and pedestrian fatalities experienced by older adults and increase seniors’ alternate transportation options. “Age Well, Drive Smart” is a free, two-hour senior driver safety/mobility class. Individuals can register for the course by contacting their local CHP office. The program is funded through a “Keeping Everyone Safe” (KEYS) grant.

Bicycle and Pedestrian Safety Education

CHP, Sheriff’s Department, DPH, DPW, and DHS Trauma Hospitals are involved in promoting safe walking and bicycling. CHP conducts safety presentations, bicycle rodeos (on-road bike classes), and gives away incentives (such as bike helmets and lights) to promote safe walking and bicycling. These activities are funded through an Office of Traffic Safety grant for the 2016-2017 period. The Sheriff’s Department, through a new grant from the Office of Traffic Safety, will be conducting additional bicycle and pedestrian safety skills classes at elementary schools. This program will be available in 17 incorporated cities during 2017-2018. DPH conducts bicycle safety education workshops as part of Parks After Dark programming and distributes bicycle helmets, lights, and locks, as part of a grant from Caltrans. DPW has in the past been awarded Safe Routes to Schools grant funds for bicycle and pedestrian encouragement

programs. Although not an ongoing program, future grant opportunities may be available to support an educational program. Several DHS Trauma Hospitals offer pedestrian safety classes for students, and distribute incentive safety items such as helmets and reflective back packs.

Suggested Routes to School

School-aged children are particularly vulnerable in the case of a collision. To enhance the safety of school-aged children and their parents, DPW has maps of suggested walking routes to schools that identify suggested crossings and prioritize routes that include traffic controls. These maps are updated periodically with changes, such as new crossing guard locations.

Motorcycle Riders

CHP works to reduce the number of motorcycle-involved collision deaths and injuries through a combination of increased enforcement in areas with high incident numbers and motorcycle education and awareness. Through the grant funded “Have a Good Ride” program, CHP conducts motorcycle education classes, training approximately 60,000 riders per year across California at over 100 training sites. CHP also conducts public safety announcements via Internet, radio, and movie theaters during Motorcycle Safety Awareness Month (May), other motorcycle-heavy holidays (Memorial Day and Fourth of July), and designated motorcycle events. Messages focus on speeding, improper turning, and driving under the influence of alcohol and/or drugs.

Child Passenger Safety

Ensuring children are properly restrained can reduce injuries and fatalities during a collision. DPH funds agencies to host two-hour child passenger safety workshops on how to correctly install a car seat. The workshops are available in English and Spanish every month, and free or low-cost car seats are given to families that show proof of hardship. Funding for this program is based on citation fines. DPH intends to pursue Office of Traffic Safety grants to expand the program. DPH has also highlighted a need to provide ongoing child passenger safety education to the County workforce, especially those that transport children. DPH staff recently started collaborating with the Department of Children and Family Services to ensure staff that transport children are trained on best practices in child passenger safety. Since January 2016, approximately 500 newly hired social workers and human service aides have been trained.

CHP also has a Child Passenger Safety Program which includes child passenger safety check-up events to promote correct usage of child restraint systems; inspection of child passenger safety seats; educational classes at daycare centers, preschools, and elementary schools; and distribution of child passenger safety seats to people in need. In addition, CHP certifies personnel as child passenger safety technicians through training courses. Additionally, DHS Trauma Hospitals also provide child passenger safety classes and checks on a quarterly basis.

Enforcement

Directed Traffic Enforcement

CHP is responsible for traffic enforcement on unincorporated Los Angeles County roadways; the Sheriff's Department is responsible for traffic enforcement in 42 contract cities within Los Angeles County, many of which border unincorporated areas. The Sheriff's Department and CHP work collaboratively to conduct targeted traffic enforcement based on community concerns and data analysis identified by County departments, such as DPW.

Impaired Driving

Both CHP and Sheriff's Department target impaired driving as part of regular traffic enforcement duties. The Sheriff's Department conducts DUI checkpoints, locations where officers stop vehicles at designated locations to ascertain whether drivers may be under the influence of drugs or alcohol. This program is typically funded through grants and/or local jurisdiction funds. In 2017-2018, the Sheriff's Department has funding to do checkpoints, saturation patrols, and additional DUI enforcement in 17 contract jurisdictions. The Sheriff's Department has found DUI checkpoints to be an effective enforcement and education approach. Compliance rates have increased over time, and anecdotally, officers have observed an increase in use of rideshare services like Uber and Lyft. Using grant funding, CHP is currently conducting DUI/Driver's License Check Points throughout Los Angeles County communities, as well as traffic safety presentations at public venues in unincorporated areas that focus on the dangers of impaired driving.

Seatbelt Use

Increasing seatbelt use among all passengers in a vehicle can help reduce the likelihood of an injury or fatality in a collision scenario. The Sheriff's Department engages in "Click it or Ticket" enforcement in contracted incorporated cities. If the driver or passengers in a vehicle are not wearing seatbelts, officers can issue a citation. Enforcement of seatbelt use is conducted as part of general traffic enforcement duties. The "Click it or Ticket" campaign has a statewide and national presence. CHP plans to participate in the "Click it or Ticket" campaign by conducting a well-publicized statewide seat belt enforcement from May 22 to June 4, 2017, focusing enforcement in low compliance areas throughout California.

Collision Response

CHP responds to collisions on unincorporated County roadways. CHP Officers are responsible for completing incident reports, coordinating with other agencies, and clearing the scene of a collision.

Automated Red Light Photo Enforcement

DPW operates automated red light photo enforcement at several signalized intersections in unincorporated areas that have high rates of collisions caused by red-light running. DPW continues to

monitor and identify signalized intersections to identify those that no longer need photo enforcement and also those may benefit from it. CHP plays a key role in the success of the Automated Red Light Photo Enforcement Program, as it is responsible for the review of photos, approval of citations, checking time and speed charts, and appearances in court.

Adult Crossing Guard Program

The County's Office of Education operates an Adult Crossing Guard Program, which assigns crossing guards for elementary and middle school-aged pedestrians at locations that meet Board-approved criteria. DPW conducts traffic studies based on requests by local school districts and other entities within the unincorporated areas to determine whether crossing guard services meet the minimum criteria. Currently, there are approximately 220 locations in County unincorporated areas that are serviced by crossing guards.

Speed Enforcement

DPW conducts Engineering and Traffic Surveys for unincorporated roads. According to the California Vehicle Code, there must be a current Engineering and Traffic Survey in order to legally use radar for speed enforcement. These surveys establish the appropriate speed limit and must be updated every seven years. Currently, nearly 200 radar routes exist to assist CHP in speed enforcement. In addition, DPW has several radar speed trailers that build driver awareness of the speeds at which they are traveling in order to discourage speeding. These are deployed temporarily at key locations throughout unincorporated areas of the County.

Engagement (Community Outreach & Communications)

Monthly Awareness Campaigns

CHP conducts awareness campaigns on a different topic each month; for example, April is Distracted Driving Month. CHP broadly distributes messaging through press releases, television and radio media interviews, video public safety announcements, and social media.

Freeway and Highway Changeable Message Signs

Transportation Management Centers (TMC) are control centers for California's urban freeway and highway systems and are operated in partnership with CHP and the California Department of Transportation. Real-time traffic information is gathered 24 hours a day from several sources, including electronic sensors in the pavement, freeway call boxes, and video cameras. TMCs operate changeable message signs along the freeways and highways. These signs provide helpful information, including road closures due to traffic collisions, inclement weather advisories, and traffic safety messages. In 2015, messages focused on speeding included: "Slow Down and Save a Life," "Slow for the Cone Zone," "Move Over or Slow for Workers - It's the Law," and "Fines Increased in Work Zones - Slow Down".

Community-based Law Enforcement

Officers from CHP and the Sheriff's Department participate in various community events and programs. These events serve as a way to build trust between law enforcement and the community, and as an opportunity to distribute educational materials. The Sheriff's Department participates in the Los Angeles County Bicycle Coalition's "Ask an Officer" events, where bicyclists can engage directly with Officers about bicycle safety and the rules of the road. CHP, Sheriff's Department, and local school police participate in events, such as International Walk to School Day, a day where students are encouraged to walk to school, and National Night Out, an annual community-building campaign that promotes police-community partnerships through block parties and festivals.

Engineering

Traffic Investigation Studies

Each year, DPW reviews approximately 1,200 locations in the unincorporated areas to ensure proper traffic signs, roadway markings, and signals are in place. These traffic studies are generated by requests from constituents who are concerned about traffic safety in their neighborhoods. After collecting and analyzing data, DPW's traffic engineers design and implement traffic controls, such as signs, speed humps, and traffic signals to facilitate traffic safety.

Evaluation & Data

As described in Part II, various County departments collect data on traffic safety and use this data in their own programs to guide implementation.

PART IV: RECOMMENDED STRATEGIES AND ACTIONS

A County Vision Zero initiative would draw upon the collective expertise and resources of multiple departments to address this major public health concern. The initiative would employ a data-driven approach, proven and innovative practices, and the synergistic alignment of efforts between departments. It would engage community stakeholders to develop targeted solutions and implement strategies for traffic safety education, engineering, and enforcement. The initiative would also evaluate results to gauge success and modify programs as necessary to optimize impact.

A successful initiative will require additional resources. Since the Board motion directing the development of this report, County departments collaborated on two grant proposals that, if awarded, would help fund several of the initiative's immediate strategies and actions listed below. DPW submitted a grant proposal to Southern California Association of Governments (SCAG) on November 18, 2016 requesting support for the development of a Vision Zero Action Plan. DPH submitted a grant proposal to SCAG on the same date requesting support for the development of a Vision Zero Communications Plan, as well as support for a press event to launch a Vision Zero initiative. If SCAG awards these grants, funding will begin in July 2017. Additionally, DPW has already been selected for a Highway Safety Improvement Program grant to conduct additional collisions analysis. County departments will continue to collaborate on opportunities to seek grant funding for traffic safety initiatives, such as those described in Appendix A. However, dedicated funding will be necessary to expand traffic safety efforts and project implementation beyond current County and partner efforts.

The strategies and actions below describe specific next steps that would support the County in moving forward with an effective Vision Zero initiative.

Develop a Vision Zero Steering Committee and partnership structure (February – May 2017). A Vision Zero Steering Committee is needed to guide the implementation of Vision Zero programs and work with the Board to secure long-term funding to achieve Vision Zero objectives. This steering committee should convene under the joint direction of DPH and DPW, and include LACFD, LASD, DHS, DRP, CEO, and CHP. A broader partnership structure should be created that includes regional stakeholders and community partners.

Collaboration with internal and external partners will help ensure a successful Vision Zero initiative. A first step will be to create a partnership structure that can guide the development and implementation of Vision Zero programs and help identify and leverage resources. Regional partners may include SCAG, the Los Angeles County Metropolitan Transportation Authority, and the City of Los Angeles. State partners may include CHP, Office of Traffic Safety, Caltrans, and the Department of Motor Vehicles. Key community partners may include trauma hospitals, the American Automobile Association (AAA),

Mothers Against Drunk Driving (MADD), the Los Angeles County Bicycle Coalition (LACBC), and other community based organizations. A key lesson learned from the City of Los Angeles is the need for a single point-person and agency to provide coordinate a broad group of stakeholders.

Develop a Vision Zero Action Plan (May 2017 – May 2018). A Vision Zero Action Plan for unincorporated Los Angeles County would identify specific engineering, enforcement, education, evaluation, and engagement strategies, along with timelines for implementation. Best practices from other jurisdictions indicate that having a completed Action Plan prepared before Vision Zero is publicly launched is critical. This allows for clear communication on the strategies and actions that will be prioritized to reduce traffic deaths and severe injuries. The Action Plan would be based on a literature and best practice reviews to identify effective strategies used by other jurisdictions. The Action Plan would target specific challenge areas (e.g. speeding), geographic areas (e.g. dense, urban areas) and demographic groups (e.g. young males) associated with concentrations of collisions involving fatalities and severe injuries in unincorporated areas. Development of the Action Plan would include outreach and engagement with community partners, County departments, partner agencies, and other stakeholders to seek input about the most effective strategies for reducing traffic deaths and severe injuries in unincorporated areas.

Prioritize interventions to address traffic fatalities; identify future analysis needs (February 2017 – ongoing).

Vision Zero programs are data-driven and aim to implement context sensitive solutions for specific problems. This requires a holistic picture that goes beyond collision records and incorporates additional quantitative and qualitative data. For example, engaging with community members may indicate that collisions are being underreported in a certain neighborhood, which may be further confirmed by reviewing hospital intake data and conducting additional community surveys. Without a multi-pronged data analysis approach, areas experiencing severe and fatal collisions may be left out inadvertently or proposed solutions may not be in line with other community goals. This points to several data needs:

- Incorporate data from other County departments and regional partners to develop a more complete picture of traffic safety. This could also include data models to further understand appropriate engineering or program countermeasures.
- Engage community partners to understand and “ground truth” traffic safety issues and collect qualitative data. This process will help validate existing data, identify additional data sources, and implement community-driven projects.
- Bring data experts and community experts together to prioritize types of analysis and an implementation approach. This involves a joint conversation among many partners to identify how data can be used creatively and applied to problem-solving.
- Consider long-term data collection needs for all modes of travel, such as bicycle and pedestrian volumes.

Develop metrics and targets (June 2017). To gauge the success of this initiative, measurable metrics and targets can be developed for the County, similar to those utilized by the California Strategic Highway Safety (CSHS). CSHS is a government-led statewide safety plan for reducing traffic fatalities and severe injuries on all public roads. The County should establish metrics and a monitoring system to ensure progress toward achieving these objectives.

Develop and implement a Vision Zero Communications Plan (July 2017 – December 2018). A comprehensive Vision Zero Communications Plan would position the County to effectively use a variety of innovative and culturally appropriate communication techniques aimed at behavior change around traffic safety. This Communications Plan would include the development of a Vision Zero website, public service announcements, branding, fact sheets, social and digital media, press kits, and talking points, and would include strategies for ongoing public education and outreach. Communications strategies could include leveraging existing media materials (e.g. from City of Los Angeles), as well as low-cost advertisement space on County bus shelters and bus circulars. The communications approach should reflect the diverse populations of Los Angeles County and address ways to reach audiences in a wide variety of geographies and languages.

Hold a press event to launch Vision Zero (June 2018). Once an Action Plan and Communications Plan are prepared and a website has been launched, a Vision Zero press event would help bring attention to the County's multi-sector campaign to reduce traffic deaths and severe injuries, and highlight future traffic safety initiatives. The event could feature elected officials, department and agency directors, community-based organizations, and survivors of traffic crashes.

Develop a regional approach to Vision Zero messaging and strategy implementation (February 2017 – ongoing). The unincorporated areas are disparate “islands” that vary in geography, climate, demographics, and land uses. A campaign to reduce traffic deaths would be most effective if behavior change messages were well-aligned and coordinated across the region, especially given that unincorporated area residents travel widely as part of their daily lives. Coordinating the County’s Vision Zero messaging with those of the Los Angeles County Metropolitan Transportation Authority, SCAG, the City of Los Angeles, and other jurisdictions, would have the greatest influence on social norms and encourage behavior change. Similarly, the County’s engineering, enforcement, and education strategies should be implemented in close coordination with regional partners to increase success.

Develop a cross-agency legislative and policy strategy (January 2018 – ongoing). Strategies to address several traffic safety problems may require changes in State legislation. For example, automated speed enforcement, cameras that capture speeding and issue an automated citation, is not legal in California but has been shown to be effective in other states. The County could coordinate with other jurisdictions

and agencies to explore common legislative and policy solutions that would enhance traffic safety regionally.

Promote a culture of traffic safety within the County family (June 2018 – ongoing). Reducing traffic deaths and severe injuries requires community-wide awareness and behavior change, as well as an institutional focus on traffic safety. People driving, walking, bicycling, and riding motorcycles face choices every day, such as whether to speed while driving or use their cell phones while in a crosswalk. Likewise, County staff make choices that impact traffic safety when planning and designing communities, and when developing education and enforcement programs. The County could help to promote choices that prioritize traffic safety through messaging aimed at the County workforce in County newsletters and on department websites. Similarly, a broad, shared policy direction would help ensure all County Departments have the opportunity to promote traffic safety.

APPENDIX A - FUNDING OPPORTUNITIES

Jurisdictions typically fund their efforts through a combination of grant resources, general funds, and changing existing internal processes or programs to align more closely with the Vision Zero program. The summary below highlights potential sources of funding and their uses that the County could pursue to support a Vision Zero effort. The County already pursues these sources for other transportation and safety projects.

State Highway Users Tax

The State Highway Users Tax, commonly referred to as the gasoline tax, is the primary source of funds DPW uses for ongoing operation and maintenance of roadways, safety projects and programs, and transportation improvement projects. The County's gasoline tax revenues have dropped from about \$190 million in fiscal year (FY) 2014-15 to about \$150 million in FY 2015-16, and are projected to be only about \$144 million in FY 2016-17 and FY 2017-18. This downward trend is expected to continue without State legislative action.

Measure R Local Return

Measure R is a half-cent County transportation sales tax, passed in 2008. The County receives approximately \$13 million annually. The funds, which are administered by the Los Angeles County Metropolitan Transportation Authority, can be used for all types of roadway projects and some non-infrastructure programs, including those that promote traffic safety.

Measure M Local Return

Measure M was passed by voters in November 2016 and is another half-cent County transportation sales tax that will begin July 1, 2017. The funds will be administered by the Los Angeles County Metropolitan Transportation Authority. There is a local return portion of Measure M that will distribute a percentage of the sales tax collected to Los Angeles County starting September 2017. The County expects to receive approximately \$14 million annually. Allocations and eligible projects have not yet been specified in detail. The County expects traffic safety projects to be an eligible use of funds.

Highway Safety Improvement Program (HSIP)

This Federally-funded program is a component of the "Moving Ahead for Progress in the 21st Century Act (MAP-21)" and funds safety improvements. The program is administered by the State of California Department of Transportation on behalf of the Federal Highway Administration. DPW regularly applies for engineering projects through this source. Competitive projects are those that show high safety benefits (e.g. high crash reduction or modification factors) compared to project cost.

Office of Traffic Safety (OTS) Grants

The State's Office of Traffic Safety (OTS) offers grants to address distracted driving, alcohol impaired driving, motorcycle safety, and pedestrian and bicycle safety. OTS grants are a primary source of funding for the programs administered by CHP and Sheriff's Department, which are described within the report. OTS grants are on a two-year cycle, and can be challenging to administer.

Active Transportation Program

The Active Transportation Program (ATP) is administered by the California Department of Transportation (Caltrans). The purpose of the ATP is to encourage increased use of active modes of transportation (walking and bicycling), among all ages, and aims to increase the safety and mobility of non-motorized users through non-infrastructure programs and engineering projects. To date, this grant has been administered annually. DPW and DPH have applied for this grant in the past, and DPW applies for it regularly to build projects that promote safety.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) administers a Sustainability Planning Grant program, which funds planning and media campaigns related to active transportation, integrated land use, and green region initiatives (e.g. climate action plans, GHG reduction programs). The program provides direct technical assistance, rather than funds, which reduces the County's administrative burden. DPW applied for this program in November 2016 to support a media campaign and a Vision Zero Action Plan.



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

JEFFREY D. GUNZENHAUSER, M.D., M.P.H.
Interim Health Officer

CYNTHIA A. HARDING, M.P.H.
Chief Deputy Director

313 North Figueroa Street, Room 806
Los Angeles, California 90012
TEL (213) 240-8117 • FAX (213) 975-1273

www.publichealth.lacounty.gov

BOARD OF SUPERVISORS

Hilda L. Solis
First District
Mark Ridley-Thomas
Second District
Sheila Kuehl
Third District
Janice Hahn
Fourth District
Kathryn Barger
Fifth District

March 16, 2017

TO: Each Supervisor

FROM: Barbara Ferrer, Ph.D., M.P.H., M.Ed.
Director, Public Health *Barbara Ferrer*

Mark Pestrella, PE
Director of Public Works
Mark Pestrella

SUBJECT: REPORT BACK ON VISION ZERO MOTION (Item 41-B)

On February 14, 2017, your Board approved a motion instructing the Departments of Public Health (DPH) and Public Works (DPW), in collaboration with other County departments and stakeholder agencies and nonprofit organizations, to: (1) implement the recommended strategies and actions described in the Vision Zero Report dated February 10, 2017, (2) establish a Vision Zero Steering Committee to coordinate and implement the initiative, (3) develop a Vision Zero Action Plan for unincorporated Los Angeles County, and (4) identify opportunities to secure long-term funding to sustain the Vision Zero initiative. The motion was approved as amended to include a report back with responses to questions from your Board.

To ensure that responses are based on best practices from other jurisdictions, as requested, meetings were conducted with representatives from the following organizations: City of Los Angeles Department of Transportation (LADOT), City of San Francisco Department of Public Health, and the national non-profit Vision Zero Network (VZN), which publishes briefs on best practices in Vision Zero implementation.

Prioritizing Safety with Existing Resources

Adopting a Vision Zero approach means acknowledging that business as usual is not enough and that systemic changes are needed in our traffic safety efforts to make meaningful progress. Central to this approach is the identification of potential safety problems on roadways and subsequent use of resources in a proactive and data-driven manner to implement solutions.

For transportation departments, this means using available resources to implement a capital improvement program that implements specific, data-driven safety improvements. For law enforcement agencies, enforcement efforts need to focus on the most dangerous traffic behaviors, such as speeding and driving under the influence. For education efforts, communication strategies need to target behaviors and populations most associated with collisions. Taken together, a new Vision Zero initiative can be initiated by shifting and better coordinating available resources for a more intentional safety focus.

Vision Zero Program Scope

Your Board requested information about the scope of the County's Vision Zero program and the total budget being allocated in terms of staff, communication plan, and corrective actions. A description of the program's general framework scope and resource needs are provided below. Because the County's Vision Zero effort is still in its preliminary stages, precise resource needs are not yet fully identified. Strategies prioritized in the Action Plan described below will inform the long-term budget needed. While departments will pursue every opportunity for grant funding, achieving reductions in traffic deaths and severe injuries may require additional County investments over the long term. It is likely that these costs will be offset by savings to the County associated with the prevention of traffic deaths and injuries, such as savings in medical costs, emergency services, legal and court costs, and congestion costs. According to the California Strategic Highway Safety Plan 2015-2019, the annual economic cost of fatalities and severe injuries in Los Angeles County as a whole is estimated at \$1.3 billion.

Vision Zero Action Plan: The Action Plan will prioritize engineering, education, engagement, enforcement, and evaluation strategies and identify responsible parties, benchmarks, and timelines for achieving progress. County departments have secured grant funding to assist in developing the Action Plan. In addition, relevant departments will be dedicating staff to participate in the planning effort.

Vision Zero Communications Plan, Public Launch, and Media: Crafting an effective communications campaign that leads to real behavior change is complicated and requires a deep understanding of the steps people and communities will need to take to shift perceptions and actions. The Vision Zero Communications Plan will include innovative and culturally appropriate communication techniques and will position the County to launch Vision Zero publicly. A continuous online and media presence will help build awareness of Vision Zero and support culture change. A successful communications strategy will coordinate the campaign and messaging with other regional traffic safety partners such as the California Highway Patrol (CHP), Los Angeles County Metropolitan Transit Authority (Metro), Southern California Association of Governments (SCAG), the City of Los Angeles, and others.

Data Analysis for Project and Program Prioritization: Vision Zero is a data-driven initiative. Many sources of data must be combined (including CHP, hospital, and emergency medical services data) and considered to develop effective programs and projects and to achieve a more complete picture of traffic safety issues. As the region continues to change, collision patterns and concentrations will change. Consistent and iterative data analysis will be imperative to ensure we are allocating resources effectively.

Infrastructure Improvement Identification, Design, Implementation, and Maintenance: Dwindling dedicated resources for infrastructure projects present challenges to implementing existing projects, much less new Vision Zero projects. Dedicated funding for infrastructure project identification, design, implementation, and long-term operations and maintenance would allow the County to set realistic targets for safety improvements (e.g., implement a certain number of traffic safety projects annually).

Community Engagement and Community-Based Organization Support: Behavior change can only be achieved by building awareness among residents. Investments in long-term community outreach and engagement will allow us to develop more authentic relationships and culturally relevant materials. Furthermore, effective engagement and buy-in from community partners will allow safety projects, such as infrastructure improvements, to be promoted and more effectively implemented.

Program Expansion and/or Development and Implementation: Currently, the County and its partners have education, enforcement, and evaluation programs that support traffic safety goals. Some are implemented through competitive grant funds and others have dedicated funding. Through best practices research, the County and its partners will identify opportunities to expand the reach of our most effective programs and, as needed, develop new programs.

Dedicated Staff in Departments and Partner Agencies: Lead staff from each partner department or agency will be necessary to implement the Vision Zero Action Plan and sustain the initiative. Staff are needed to convene, facilitate, and organize meetings; coordinate County staff and regional and community partners; oversee communications efforts; develop and implement programs and action plans; identify, design, and implement infrastructure improvements; collect, analyze, and maintain high-quality data and communicate this information across a diverse body of stakeholders; and engage in and oversee community outreach.

Grant Writing and Administration: County departments have and will continue to seek grant funding sources to support traffic safety efforts, public education and outreach, and enhanced enforcement. This requires dedicated staff time to pursue and administer grants to support all program activities.

Potential Revenue Streams to Support Vision Zero

Your Board requested information about potential ongoing revenue sources for the County's Vision Zero initiative. DPW has identified the following opportunities for financing the County's Vision Zero efforts.

Senate Bill 1: If enacted, the bill would provide an additional \$200 million in annual funding to the County for the first 3 years for the repair and preservation of streets and roads, safety enhancement projects, active transportation, and other general transportation infrastructure needs. This is the most promising opportunity for continuing long-term financing for staffing and implementation of Vision Zero initiatives.

Measure M: This measure is the new half-cent transportation sales tax approved by Los Angeles County voters in November 2016, which allocates approximately \$3.5 billion over 40 years to Metro and the County's subregions for various active transportation, first/last mile, complete

streets, and modal connectivity programs and projects. Measure M does not provide for a specific formula allocation of these funds to the County or cities. However, through its presence and participation in essentially all of the subregions, the County will be well-positioned to advocate for funding of eligible projects that incorporate Vision Zero initiatives.

Grant Funds: The County will continue to apply for various competitive grant programs to support Vision Zero, such as those offered by the State's Highway Safety Improvement and Active Transportation Programs. Grant funds are available for public education and outreach efforts, and potential sources include the State Office of Traffic Safety and SCAG. General funds may be needed for any local matches required by these grants. In addition, grant funds will be sought to support ongoing coordination of the Vision Zero initiative within the County.

County Transportation Funds: Ongoing funds eligible to staff to implement Vision Zero initiatives include Road funds (gas tax), Proposition C Local Return (with nexus to transit), Measure R Local Return, and Measure M Local Return for which revenue begins in FY 2017-18.

The County's Road funds, Proposition C Local Return, and Measure R Local Return funds are currently fully committed to ongoing operation, maintenance, and safety programs critical to the quality of life in unincorporated communities and to Supervisorial District Transportation Improvement Program (TIP) projects. Due to the steady decline of the County's gasoline tax revenues from \$190 million in FY 2014-15 to a projected \$143 million in FY 2017-18, DPW has had to defer \$74 million in previously planned TIP projects and place a heavier burden of TIP financing on the limited Proposition C and Measure R Local Return funds and future Measure M Local Return proceeds. Further, Measure M has a requirement that local agencies contribute 3 percent of the cost of the new Measure M transit lines in their jurisdictions. The County's obligation for this is estimated to exceed \$62 million through year 2029.

Vision Zero Budget Allocations in the City of Los Angeles

Vision Zero jurisdictions take a combination of approaches for funding, including both dedicated annual funding and grant funding. Approaches to start-up costs vary across jurisdictions.

In the City of Los Angeles, the LADOT initially assigned Vision Zero to existing engineering staff, but soon after hired a Principal Project Coordinator to lead the initiative full-time. The Principal Project Coordinator previously led the Mayor's Great Streets Initiative, had experience leading cross-departmental efforts, and was given authority to work with other department directors to incorporate Vision Zero into their existing work.

The City of Los Angeles 2016-2017 budget dedicates \$3.6 million for Vision Zero projects, programs, and staff salaries. These funds were allocated through an innovative inter-departmental budget process within several months of publicly launching Vision Zero.

The City of Los Angeles 2016-2017 Vision Zero funds are being distributed as follows:

- \$2.5 million to LADOT: Continuous funding for six Vision Zero staff, street maintenance, safety improvement projects, and speed zone survey work on the City's high-injury network.
- \$264,000 to Bureau of Engineering (BOE): Engineering design and survey work and staff to manage safety projects on the high-injury network.

- \$316,000 to Bureau of Street Lighting (BSL): Staff and street lighting projects along the high-injury network and at top 50 schools in the Safe Routes to Schools Program.
- \$500,000 to Bureau of Street Services (BSS): Construction of safety improvements, such as pedestrian refuge islands, and installation of curb ramps.

The City's current Vision Zero budget is also supplemented by the following grant funds:

- \$500,000 from the California Office of Traffic Safety for Vision Zero Education and Outreach
- \$1 million from the California Active Transportation Program for a Vision Zero Education Campaign, which is part of a larger \$2.2 million Safe Routes to School Education Programs grant
- \$400,000 from SCAG for ongoing education and outreach campaign activities

Location of County Vision Zero Efforts

Your Board sought information on where the County's Vision Zero initiative would be located, within DPW or DPH, and how other jurisdictions have approached this issue. Vision Zero requires multiple sectors to come together to share and use data consistently, define clear responsibilities, break down silos, participate in joint decision making, develop shared objectives, and unite behind common goals. Fostering a sense of shared ownership for Vision Zero outcomes is necessary for success. In this sense, each involved agency must play a lead role.

As the County's transportation agency responsible for building and maintaining unincorporated area roadways, DPW must play a leading role in this initiative. Vision Zero is based on the understanding that the speed at which pedestrians, bicyclists, or vehicle occupants are struck is the fundamental factor in the severity of injuries sustained. As current law prohibits agencies from arbitrarily setting or lowering speed limits, the County's expanding transportation system must be designed to discourage speeding and additional roadway features must be incorporated into our existing roadway networks to promote safe behavior and protect human life. DPW has developed a Collision Geodatabase capable of mapping locations where traffic collisions have occurred and identifying hot spots experiencing high concentrations of collisions. For these reasons, strong leadership from DPW is paramount.

As the County's public health agency, DPH's mission is to protect lives and promote health. DPH staff members are trained in conducting population-level analysis and surveillance and in collaborating with a wide array of stakeholders, such as local jurisdictions, regional agencies, and community stakeholders. DPH regularly plays the role of "backbone organization" on efforts requiring multiple sectors to commit to a common agenda to solve a specific health or social problem. Effective backbone support includes guiding vision and strategy; convening, facilitating, and coordinating meetings and aligned activities; establishing shared measurement practices; building public will; advancing strategic policy; and mobilizing funding. DPH staff have extensive experience leading such cross-sector initiatives. For these reasons, strong leadership from DPH is also paramount.

DPH and DPW recommend basing the Vision Zero Initiative leadership structure on the City of San Francisco's model. In San Francisco, the transportation and public health agencies co-lead the City's Vision Zero Task Force and have worked together to identify resources to fund the

initiative's activities. San Francisco's agencies credit this partnership with providing essential leadership in breaking down silos and advancing Vision Zero programs.

Another key lesson learned from other jurisdictions is the need for a single point-person and agency to coordinate the initiative. Therefore, DPW will allocate existing engineering staff to serve as the initial County Vision Zero Coordinator. As the initiative progresses, additional resources for dedicated Vision Zero staff may be required.

Partnering with Neighboring Cities

Your Board has requested a status update on collaborative efforts with "hot-spot" cities and how we can leverage our resources in partnership with these cities.

Existing Relationships and Resources

Many County departments are currently working with our local jurisdictions in different capacities that could be leveraged for the Vision Zero initiative.

Chief Executive Office: Has general services agreements with all cities within the County except for the City of Los Angeles. These agreements provide a mechanism for the cities to contract with County departments for services

DPW: Provides traffic advisory services to some contract cities under the general services agreements. Local jurisdictions can pay DPW to provide engineering design service support for a project in their own jurisdiction. In addition, DPW often works with jurisdictions that border unincorporated communities on project development and scoping. DPW also participates in regional groups where other jurisdictions have a presence, including Metro's Streets and Freeways Committee, Subregional Councils of Governments (COGs) meetings, and others.

DPH: Provides pass-through grant funding and technical assistance to County jurisdictions for a variety of health-focused initiatives, including active transportation planning; policy efforts related to tobacco prevention, nutrition education, and access to healthy foods; and organization of emergency response and communicable disease response. DPH serves as the Public Health Department for 85 of the 88 incorporated cities in the County, excluding Long Beach, Pasadena, and Vernon, and also works regularly with community-based organizations across the County. DPH is currently working closely with the City of Los Angeles on its Vision Zero Initiative.

CHP: Provides traffic enforcement services to unincorporated area communities, but also provides services and implements educational programs targeting other Los Angeles County jurisdictions.

Sheriff's Department: Provides crime enforcement services to unincorporated areas. For certain contracted incorporated jurisdictions, the Sheriff's Department provides both crime and traffic enforcement services.

Department of Health Services: Provides hospital services for all of the County, including residents of incorporated cities.

Fire Department: Provides services for unincorporated communities, and also provides fire services to additional Los Angeles County jurisdictions on a contract basis.

Leveraging Resources and Partnering

The County already collaborates with other jurisdictions and intends to continue doing so within the Vision Zero initiative. Several Los Angeles County jurisdictions have moved ahead with their own Vision Zero initiatives and can provide lessons learned and resources, such as media campaigns and project linkages. These jurisdictions include Los Angeles, Long Beach, and Santa Monica.

In order for the County to effectively promote Vision Zero broadly and provide supportive services to other jurisdictions, it must focus initially on creating a broader understanding of Vision Zero among County departments, establishing cross-agency/departmental relationships, institutionalizing approaches, and identifying short- and long-term resources for an unincorporated area effort. Once the County has a well-articulated and understood Vision Zero plan and has built broader relationships with existing Vision Zero cities and regional agencies, it will be in a better position to support other cities in traffic safety efforts.

Future opportunities where the County could play a supportive role include:

- Providing countywide data gathering and analysis services
- Designing regional projects that traverse multiple jurisdictions
- Providing creative concept material for use by incorporated jurisdictions
- Speaking at Subregional Councils of Governments to emphasize a traffic safety lens in project identification, development, and implementation
- Hosting learning opportunities for local jurisdiction staff, such as trainings and webinars
- Coordinating enforcement efforts more closely (e.g., Driving Under the Influence (DUI) Checkpoint deployment)

Summarizing Data

Your Board requested information about further geographic breakdown of persons who have been killed or severely injured in unincorporated areas. As the County moves forward with Vision Zero, it may be useful to sort data by certain communities or geographic areas, such as Service Planning Areas, within which disproportionately high levels of collisions have occurred. Currently, the DPW's Vision Zero GIS Application includes point-specific collision data that can be grouped in a number of ways, such as primary collision factor, involved parties, mode of travel, and gender. Boundary data could be added to this application in the future, as needed, to help define next steps in program development, implementation, and resource allocation.

We will develop an annual progress report to your Board on Vision Zero implementation, including trends in traffic deaths and severe injuries, the status of our Vision Zero Action Plan, and a description of detailed resource needs. If you have any questions or need additional information, please let us know.

BF:ja

c: Chief Executive Officer
County Counsel
Executive Officer, Board of Supervisors



Vision Zero Los Angeles County Implementation Partnership Structure

