INTRODUCTION

Vision Zero is the City of Fremont’s traffic safety policy adopted in September 2015 that prioritizes safety over mobility. Vision Zero is a street safety philosophy with a core principle that all traffic deaths are preventable, and that human error should not end in severe injury or death.

Fremont, California is the 4th largest city in the San Francisco Bay Area, and in March 2016 was the seventh city in the United States to adopt a Vision Zero action plan and the first mid-sized city to do so. The Fremont Vision Zero Action Plan is a focused four year strategy to significantly reduce major crashes resulting in severe injury or fatality by 2020. In the first two years of implementing the action plan, severe injury and fatal crashes have declined 29 percent. Fremont serves as a national model for mid-sized cities on how to bring about a significant impact on traffic safety by using a data-driven approach to target interventions and reprioritizing existing programs and staff resources to implement Vision Zero with no new outside funding.

SAFER STREETS, SAFER PEOPLE, SAFER VEHICLES

Fremont Vision Zero 2020 is guided by the rigorous evaluation of traffic crash data and a comprehensive and coordinated action plan. The Vision Zero Action Plan is organized around the themes of Safer Streets, Safer People, and Safer Vehicles.

The goal of the Safer Streets actions is to re-engineer Fremont’s transportation system to safely accommodate all travel modes, ages, and abilities, and to calm traffic speeds to reduce collision frequency and severity. Under the category of Safer People, partnerships between Public Works, the Police Department, City Manager’s Office, Safe Routes to School, the Fremont Unified School District, Chabot College, and the Community Services Department play a key role in outreach to raise community awareness about traffic safety and targeted enforcement of high-risk behaviors and areas. Lastly, the continued development of Safer Vehicles has the potential to virtually eliminate traffic crashes, and the Fremont Vision Zero 2020 plan encourages the purchase and use of crash avoidance technology available in vehicles.

Data-Driven Countermeasures

City staff conducted an in-depth evaluation of 2015 crash data to identify safety priority corridors and identify the most prevalent types of collisions. Data
indicated that 46% of crash victims were people who were walking, and that many of these were seniors. The time period with the greatest frequency of severe crashes and fatalities was between 6 p.m. and 10 p.m. when visibility is limited. Finally, data showed a significant correlation of severe injuries and fatalities with high speed roadways, with all eight fatal traffic crashes occurring on major streets with posted speed limits of 40 miles per hour or greater with 50% of the fatalities occurring on segments of Fremont Boulevard, one of the city’s main thoroughfares. Based on these findings, Fremont implemented three countermeasures specifically targeting these types of collisions.

Citywide Pedestrian Countdown Signals
Data showed that many seniors were being hit in signalized intersections likely because they lacked information about available pedestrian crossing time. The city re-prioritized part of its Capital Improvement Program to increase the number of pedestrian countdown signals from 23% to 100% of the City’s 220 traffic signals.

Improve Nighttime Visibility
In partnership with the Community Development Department as part of the City’s overall energy savings plan, the City accelerated an ongoing effort to retrofit all 16,000 of its streetlights to LED in 2016. Financing for the project was through bond issuance which is anticipated to be paid off from energy savings within 10 years. Major crashes occurring in the dark decreased by 21%, with pedestrian involved crashes in the dark dropping from 10 (2015) to 6 (2016) to 2 (2017).

Lower speed limits on major arterial roads - As a low-cost way to redesign streets for lower speeds and greater safety, Fremont used its pavement maintenance program to restripe streets with narrower lanes (10 feet), using width gained to add buffered bike lanes, and striping high visibility or continental style crosswalks. Subsequent traffic speed surveys have shown reduction in the operating speeds on 11 major street segments that enabled posted speed limits to be reduced. The City also prioritized traffic safety enforcement efforts on safety priority streets – the 10% of Fremont streets where 90% of fatal collisions occur. Major crashes involving speeding on streets with speed limits of 40 mph or higher are down by 55%.

IN CONCLUSION
As countermeasures to address major crash types from 2015 have been implemented, new issues have emerged. In 2017, major crashes involving motorcycles increased by 43% and fatal and severe injury crashes involving persons between the ages of 16-29 were up by 11%. By continuously analyzing crash data to detect trends and prioritizing capital projects, enforcement, and education efforts based on this information, the City of Fremont has demonstrated how a mid-sized city can make a significant impact on traffic safety with existing staff and resources.

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