



MEMORANDUM

June 18, 2025

To: Andreina Aguilar, City of Fresno

From: Josh Pilachowski, Brian Chandler, Nikki Davis, DKS Associates; Mia Candy, Ellie Gertler, Toole Design

Project: Fresno Vision Zero Action Plan

Re: Task 3.1 Policy and Procedure Gap Analysis Memo

Background and Purpose:

The City of Fresno is developing a Vision Zero Action Plan, which will lead to actionable safety programs and projects. This will help the City fulfil its commitment to eliminating fatalities and serious injury traffic collisions while simultaneously improving health, safety, and mobility for all road users including pedestrian and bicyclists. The Safe Streets and Roads for All (SS4A) program requires an assessment of the City's existing policies, plans, guidelines, and standards to identify opportunities to improve how these processes can create safe road systems. The consulting team reviewed existing policies, practices, plans, and procedures relevant to the development of the City of Fresno's Vision Zero Action Plan and to road safety in Fresno. The findings and recommendations from this memo will be incorporated into the Vision Zero Action Plan.

Key Policy and Procedure Strengths:

Before identifying gaps in the City's policies and procedures, it is important to identify strengths in the City's existing safety practices. The City can celebrate these wins and continue to invest in these strategies and approaches. The following key strengths emerged from the Policy and Procedure Gap Analysis:

- There are numerous local and regional safety-focused plans, indicating region-wide interest and investment in traffic safety. The City's efforts are part of a broader conversation and movement toward road safety in the Fresno region, which will strengthen the City's efforts, and can help ensure City policies, programs, and design solutions are aligned with regional practices.
- The City has had success implementing projects identified in the 2020 Fresno Systemic Local Roadway Safety Plan (2020), including grant application success (for example HSIP, SS4A, STPG).
- The City conducts annual speed limit studies and updates, adopted in annual City ordinances.
- The City of Fresno has an adopted Complete Streets Policy and secured funding for a Mobility Design Guide.
- The City of Fresno has a Residential Speed Hump Program that has successfully installed dozens of speed humps throughout the City in the last three years.
- The City continues to coordinate across departments and jurisdictions on capital projects to improve safety Citywide.

Key Policy and Procedure Recommendations:

The following key recommendations emerged from the Policy and Procedure Gap Analysis:

- *Planning Opportunities*
 - Leverage and coordinate with other similarly focused efforts, including the Fresno Active Transportation Plan (ATP) update (current), Fresno Unified School District Safe Streets for Students (SS4S) project (Current), and the Fresno County Vision Zero Action Plan (Upcoming). Coordination with the ATP and Fresno Unified SS4S can include developing coordinated project priority lists to strengthen future grant applications and to increase the likelihood of implementation success.
 - Regularly update City-led safety plans, including the Local Roadway Safety Plan (LRSP) to maintain eligibility for local Highway Safety Improvement Program (HSIP) funds.
 - Incorporate Systemic Safety Principles, Vision Zero goals, and focus on vulnerable roadway users into all future planning efforts and plan updates, including land use planning (neighborhood, community, and specific plans). This will require cross-department coordination and buy-in.
- *Traffic Calming Opportunities*
 - If funding continues to be available for the Residential Street Speed Hump Policy, advertise the other traffic calming options that are available to community members, such as variable speed feedback signs, speed cushions, or chicanes¹. Consider updating the project webpage and policy name to make it clear that this policy does not just apply to speed humps. Leverage the upcoming Vision Zero Major Streets Traffic Calming Toolkit as a guide for City staff to design, implement, and maintain alternative traffic calming solutions. Build on these efforts through the upcoming City of Fresno Mobility Design Guidelines project.
- *Intersection Design Opportunities*
 - Use the 2023 MUTCD update and upcoming CA MUTCD updates to inform data collection efforts at intersections in Fresno (i.e., include bicycle and pedestrian counts)
 - Incorporate Caltrans Intersection Safety and Operational Assessment Process (ISOAP) and Intersection Control Evaluation (ICE) policies for changing control types at intersections.
- *Transit Safety Opportunities*
 - Consider working with FAX and Fresno DPW to establish Safe Routes to Transit Performance Targets.
 - Consider working with FAX and Fresno DPW to conduct a transit stop facility assessment to improve safety for users at transit stops.

¹ [Traffic Calming Guide, Caltrans](#)

- *Safety Data Opportunities*
 - Explore the relationship between the City’s crash database (Crossroads), and national databases (TIMS and SWITRS) to understand how they are related, and what might be causing data discrepancies.
 - Coordinate with the City’s Crossroads administrator/ point of contact to understand the feasibility of tracking motorcycle crashes within the database.
 - Explore the feasibility of building an asset management system or road database to identify gaps, risk factors, and relevant roadway characteristics for safety. Look to FHWA resources for guidance on how to develop of a Roadway Safety Data Program.
 - Create a data dashboard to track progress towards accomplishing Vision Zero actions and meeting key metrics (as part of the Vision Zero Action Plan).

Adopted Plans

The consulting team reviewed existing and adopted plan documents to understand the extent to which they are aligned with the goals of the Vision Zero Action Plan and understand how they might be updated in the future to help reduce fatal and serious collisions in Fresno.

Active Transportation Plan *(Adopted 2017, Updated March 2021)*

The City of Fresno Active Transportation Plan (ATP) provides the City with the framework to create a safe and connected transportation network for walking and biking. The ATP also establishes a priority project list that is the guiding vision of the City for active transportation project implementation. The City ATP proposes to equitably improve the safety, accessibility, and connectivity of its active transportation network. As of December 2024, the City was in the process of updating their Active Transportation Plan. The timing of the plan update creates strong opportunities for cohesion and coordination with the Vision Zero recommendations.

Department of Transportation – Fresno Area Express (FAX) Public Transit Agency Safety Plan *(May 2020)*

The City of Fresno’s Department of Transportation, having received Federal Transit Administration (FTA) grants, is subject to FTA oversight regarding safety. This oversight mandates that the City develop and implement a Public Transit Agency Safety Plan (PTASP), which addresses performance measures, strategies, and staff training opportunities. The PTASP draws upon the Safety Management Systems (SMS) method, a comprehensive approach incorporating policies, processes, and behaviors to proactively identify, assess, and control safety risks, increasing transit system safety.

To ensure operational safety, Fresno Area Express (FAX) employs a Safety Risk Management (SRM) process, overseen by a Chief Safety Officer. This process involves identifying hazards through various channels, including an Employee Safety Reporting Program (ESRP), vehicle camera footage, and maintenance reports. Identified risks are assessed using a Safety Risk Matrix, which categorizes them into High, Medium, or Low levels based on likelihood and severity, facilitating prioritization for mitigation. Mitigation measures, designed to reduce the likelihood and/or severity of potential consequences, are documented and tracked in a Safety Risk Database. The effectiveness of these measures is continuously monitored through methods such as performance observations and metric tracking. The Chief Safety Officer and a Safety Committee regularly review safety data and investigation reports to identify ineffective mitigations and implement necessary modifications or further actions.

Fresno Systemic Local Roadway Safety Plan (LRSP) (September 2020)

The Fresno Systemic Local Roadway Safety Plan (LRSP) is guided by the City’s primary vision of enhancing roadway safety by reducing the number of fatal and severe injury crashes and implementing safety countermeasures in areas of concern. The LRSP was funded by the Caltrans Systemic Safety Analysis Report (SSAR) Program. The LRSP’s comprehensive approach analyzes the more recent five years of collision data and identifies high-priority corridors and intersections to consider for safety improvement implementation.

The LRSP evaluated patterns, behaviors, and contributing factors that have led to collisions (e.g., identifying pedestrians as the most at-risk road users based on collision data and identified risk factors). The LRSP aims to foster a culture of transportation safety amongst various local, regional, and educational agencies to educate, enforce and generate support for improved citywide traffic safety. The LRSP provides the city with identified corridors and intersections for safety improvements as well as performance measures to evaluate the success of future safety measures that are implemented.

City of Fresno Trail Network Expansion Feasibility Plan (February 2020)

The network expansion plan builds off the city’s efforts to develop a Class I bikeway, adopted under the 2017 Fresno Active Transportation Plan, with a goal to prioritize planned, but not funded trail projects. The Active Transportation Prioritization Tool is utilized to prioritize projects ranking each project based on access, equity/benefits to disadvantaged communities, connectivity, safety, user comfort and potential mode shift resulting in greenhouse gas reduction. Additionally, the plan looks to community input, consistent goals, and strategies of the State of California Transportation 2024 Sustainable Communities and the Caltrans’ Smart Mobility Framework

Fresno Unified Safe Routes for Students Plan (June 2024, Ongoing)

In 2023, Fresno Unified School District initiated “Safe Streets for Students”, a pilot project to evaluate traffic safety conditions around 15 Fresno Unified schools. The outcome of the pilot was an action-oriented safe routes to school (SRTS) plan. The plan recommends engineering, policy, and program strategies to improve traffic safety around each of the 15 pilot schools, and systemic recommendations for schools across Fresno. In 2024, Fresno Unified expanded the pilot to another 18 schools which are receiving site assessments and engineering recommendations during 2024-2025. The project will also include the rollout of pilot programs including education, encouragement, and engagement programs and Fresno Unified Schools.

Community, Neighborhood, and Specific Plans (Dates Vary)

The City of Fresno is divided into eight plan areas. Community Plans establish policies and standards to guide development and direct physical growth of the area. They provide objectives and policies to improve circulation, including sections on transit and bikeways. The eight community plans include:

- Fresno High-Roeding Community Plan (1977)
- McLane Community Plan (1979)
- Hoover Community Plan (1980)
- Bullard Community Plan (1988)
- Woodward Park Community Plan (1989)
- Roosevelt Community Plan (1992)
- West Area Community Plan (2002)
- Downtown Neighborhoods Community Plan (2016)

The City of Fresno has two Neighborhood Plans which are components of the City’s Community Plans. The El Dorado Park Neighborhood Plan (2009) is a component of the Bullard Community Plan, and the Pinedale Neighborhood Plan (2007) is a component of the Hoover Community Plan. Neighborhood Plans outline goals, policies, and objectives for specific neighborhoods, focusing primarily on land use and zoning, public facilities and open space, circulation, infrastructure, and implementation and funding sources.

The City of Fresno’s Specific Plans focus on neighborhoods that contain certain characteristics that are deemed desirable or reflect a certain planning trend. The purpose of a Specific Plans is to expand upon and refine the broad policy recommendation set forth in the Fresno General Plan and the Community Plans. Specific Plans provide the City and residents with a comprehensive structure for managing neighborhood resources in the face of future change and development. The Plans set forth goals and policies for neighborhood quality, economic development and reinvestment, and fiscal responsibility. In Fresno, these specific areas include:

- North Avenue Industrial Triangle (Date not specified)
- Sun Garden Acres Specific Plan (1968)
- Butler-Willow Specific Plan (1971)
- Yosemite Specific Plan (1988)
- Tower District Specific Plan (1991)
- Highway City Neighborhood Specific Plan (1998)
- Tower District Design Guidelines (2004)
- Fulton Corridor Specific Plan (2016)
- Southwest Fresno Specific Plan (2017)

Policies, Evaluation Warrants and Ordinances

2024 Speed Ordinance *(Effective 2025)*

The 2024 Speed Ordinance (Bill NO. B-41, Ordinance NO. 2024-041) amends the official list of special speed zones and assigns speed limits to roads. Eight sections establish varying speed limits and the streets that align with those speeds.” The document lists the street name and its begin/end point for posted speed limits that range from 25 to 60 mph.

Complete Streets Policy *(Effective Date September 2019)*

This policy requires the City to commit to an inclusion or exclusion of a transportation facility that support safer mobility for all users – including bicyclists, pedestrians, transit vehicles and riders and motor vehicles. Using the Complete Streets Policy, City designers can incorporate many different traffic calming elements such as sidewalks, street lighting, lane narrowing, improved street crossing, transit shelters and multimodal facilities. The policy includes a performance measure to evaluate the progress and success of implemented projects.

Residential Street Speed Hump Policy *(Approved February 2022)*

The City’s Residential Street Speed Hump Policy document was developed to provide a traffic calming technique to slow traffic speed on residential streets. The city chose speed hump installation as the primary traffic calming technique included in the many FHWA proven countermeasures. The policy outlines the vision, intent, eligibility, funding, application process, prioritization, implementation, maintenance, and removal of residential speed humps.

Pedestrian Hybrid Beacon Warrant Summary *(Date Unknown)*

The City activated the first pedestrian hybrid beacon (HAWK) at the intersection of Locan Avenue and Cortland Avenue to provide increased safety for the new Janet Young Elementary School. A HAWK is distinct from pre-times traffic signals and constant flash warning beacons because it is only activated by pedestrians when needed. HAWKS have been shown to significantly reduce pedestrian crashes.² The HAWK Warrant summary sheet provides a list of required thresholds as outlined in the 2009 MUTCD to be considered for installation.

Uncontrolled Crosswalk Policy *(Adopted May 2017)*

The policy provides guidance on determining the location of marked crosswalks at uncontrolled locations such as intersections, midblock, and trail crossings. The policy provides specific criteria to warrant the installation, designed to add safety, visibility and comfort for vulnerable road users when crossing a roadway.

Stop Warrant Data Sheet *(Date Unknown)*

The City traffic management staff utilizes the stop warrant data sheet to determine if an all-way stop-controlled intersection is warranted to ensure safety as motorists enter and leave the intersection. The data collection is based on the 2009 Manual on Uniform Control Devices (MUTCD).

Traffic Signal Warrant Summary *(Date Unknown)*

The city's traffic operational staff utilize a traffic warrant sheet based on CA MUTCD to gather data points and determine the need for the addition of a traffic signal.

Data Collection and Analysis

A variety of plans collect and analyze data to provide a baseline of needs, safety, crash history and trends (motor vehicle, pedestrian and bicycle), traffic volumes and speeds. These data points are then utilized to provide the city with the ability to prioritize and create project development to allow for funding in the areas with the most need and benefit.

Within the City of Fresno's Intelligent Transportation System (ITS) is a state-of-the-art technology that provides data collection of vehicle volumes, travel speeds, traffic counts and signal timing performance. This collected data informs the city of existing traffic signal coordination and assists the system in reducing commute times throughout the network, in turn reducing emissions of Volatile Organic Compounds, Nitrogen Oxide, and Greenhouse Gasses.

²<https://highways.dot.gov/safety/pedestrian-bicyclist/safety-countermeasures/pedestrian-hybrid-beacon-guide-recommendations>

Regional, State, and Federal Plans and Policies

Regional

Advisory Committees

Active Transportation Advisory Committee

The City of Fresno formed a public Active Transportation Advisory Committee (ATAC) to advise and recommend policies for the planning, development, and maintenance of an active transportation network.

Disability Advisory Committee

The City of Fresno Disability Advisory Commission was formed to increase public awareness and ensure that all citizens have equal access to resources and services.

Fresno County Regional Active Transportation Plan (ATP) (Updated 2024)

The Fresno County Regional ATP is the countywide ATP to provide local and regional jurisdictions with the framework for implementing active transportation projects. The Plan does not include the City of Fresno Active Transportation Plan or any overlap, instead focusing on 11 other cities and unincorporated communities.

The Regional ATP contains four goals:

1. Create a safe, regional network
2. Develop better transit connections
3. Increase walking and biking
4. Increase safety at crosswalks.

A recent update in 2024 (the previous version completed in 2018), the Regional ATP outlines safety design enhancements to improve safety for pedestrians and bicyclists through increased pedestrian visibility and separated bicycle lanes. It includes the Plan project lists, prioritization, and conformance to the Active Transportation Program, ensuring that the Plan and projects are eligible for grant funding, streamlining the project implementation approach.

Fresno County Regional Trails Plan (March 2021)

The Fresno County Regional Trails Plan was developed with the consideration that the Fresno area population is growing, and the County is committed to creating a high quality of life for residents and visitors through recreational opportunities via the countywide trail system and improving health and safety. The Regional Trails Plan is built upon a year of community engagement, analysis, and trail project prioritization. Building upon the 2018 Fresno County Regional Active Transportation Plan, this plan focuses exclusively on off-street trails and trail connections in unincorporated areas, and it will eventually be integrated with the county bicycle master plan to form a comprehensive active transportation master plan. The Plan developed an inventory of the existing trail network, project recommendations, and implementation recommendations. The development of this trail plan was guided by five key goals: enhancing livability, connectivity, mobility, collaboration, and economic development.

Fresno Safe Routes to School Action Plan (2018)

The Fresno Safe Routes to School (SR2S) Action Plan was funded by a grant from the California Office of Traffic Safety, through the National Highway Traffic Safety Administration. The project was led by Cultiva La Salud, and partners including Fresno PARCS and California Walks. The plan aimed to guide the City of Fresno in developing a robust and

sustainable Safe Routes to School program. The Fresno SR2S Plan draws from the national Safe Routes to School program to guide Fresno in the development of initiatives and approaches specific to the City’s unique challenges. The Plan includes a toolbox to create safer routes and roadway crossings for students and their families and caretakers to walk, bike, or roll to and from school. While the community recognizes the importance of safe routes to school, no formal program currently exists in Fresno. This action plan was developed using community input through a walking and biking summit, and it draws on national best practices to address community needs.

State

California Department of Transportation (Caltrans) Strategic Highway Safety Plan (SHSP)

(Effective January 2023)

“The Strategic Highway Safety Plan (SHSP) is a statewide, coordinated traffic safety plan that provides a comprehensive framework for reducing roadway fatalities and serious injuries on California’s public roads. Led by stakeholders representing California’s 5 Es — Education, Enforcement, Engineering, Emergency Response, and Emerging Technologies — and informed by extensive outreach to a network of safety partners across the state, the 2020–2024 SHSP is founded on the belief that everyone, no matter how they travel, should be able to arrive at their destination safely.” The plan provides an understanding of current trends and factors around traffic and traffic safety. The plan utilizes crash data to focus on strategies to greatly reduce the potential for fatalities, serious injury and overall crash rates.

California Department of Transportation (Caltrans) Road Safety Action Plan (2023-24)

“The Caltrans Road Safety Action Plan is a coordinated effort led by the Division of Safety Programs, in partnership with Caltrans districts and other Headquarters divisions. The purpose of the Road Safety Action Plan is to support Caltrans' goal of eliminating fatal and serious injury crashes on our roadways by 2050.”

Federal

Safe Systems Approach

The U.S. Department of Transportation’s (US DOT) “Federal Highway Administration (FHWA) is committed to the zero deaths vision and acknowledges that even one death on the transportation network is unacceptable. The idea began in 1997 in Sweden and has become a worldwide vision. The Safe Systems Approach (SSA) is founded on the principles that humans make mistakes and have limited ability to recover from crash impacts. Designed around six principles that form the basis of the SSA: deaths and serious injuries are unacceptable, humans make mistakes, humans are vulnerable, responsibility is shared, safety is proactive, and redundancy is crucial. “Making a commitment to zero traffic deaths means addressing all aspects of safety through the following five Safe System elements that, together, create a holistic approach with layers of protection for road users: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care.”

Policies, Practices, Plans and Procedures Recommendations

The table below describes the ways in which the City currently prioritizes safety, and offers potential recommendations for updating plans, policies, and procedures to enhance safety.

Notable National, State, and Peer City Best Practices	Current Safety Practices in Fresno	Gaps/ Safety Recommendations
Vulnerable Road User Safety		
<p>As multimodal transportation becomes a larger component of the transportation system, state and local agencies are looking to Bicycle and Pedestrian Level of Traffic Stress and Level of Service to determine how much of the network is available to Vulnerable Road Users (VRUs).</p> <p>The National Complete Streets Coalition provides content to build robust comprehensive policies designed around 10 key components. Many cities within California have utilized the construction of a Complete Street policy to improve Vulnerable Road User (VRU) Safety.</p> <p>FHWA provides guidance on VRU safety assessment to ensure VRUs are prioritized in the development or reconstruction of road projects.</p>	<p>Many of the City of Fresno’s existing plans, policies, and ordinances evaluate and consider pedestrian and bicyclist safety through level of traffic stress analysis, safety design enhancements, review of pedestrian and bicyclist collisions, and the development of a bicyclist and pedestrian safety education plan. In this way, the City is aligned with national and state best practices.</p> <p>Using the City’s existing policies and plans, City engineers have flexibility to incorporate many different traffic calming elements such as sidewalks, street lighting, lane narrowing, improved street crossing, transit shelters and multimodal facilities. Existing policies include performance measures to evaluate the progress and success of implemented projects, and the City has an adopted Complete Streets Policy.</p>	<p>When City plans are updated, align those plans directly with the Safe System Approach, which would also help connect to the Vision Zero Action Plan and the upcoming California Strategic Highway Safety Plan (2025). When plans are updated, it is also an opportunity to document completed or under-construction projects and/or programs that improve pedestrian and bicycle safety to demonstrate the City’s commitment to safety.</p> <p>Future plan updates have the potential to make a strong case for mode shift away from personal motor vehicle travel—to active transportation and transit options—as a safety strategy to reduce exposure and support the zero fatality and serious injury goal.</p>
Transit Safety		
<p>At the municipal level, Portland, Oregon, is a good case study for incorporating Intelligent Transportation Systems (ITS) into existing traffic signals ensuring reliable and safe transport. In Portland, their efforts to invest in ITS are improving ridership and the safety of users and other travelers.</p>	<p>The existing Fresno DOT Public Transit Agency Safety Plan prioritizes safety by providing City staff with guidance on developing a safer transit system.</p> <p>Currently, there is an existing Transit Signal Priority (TSP) along FAX Q Routes on Blackstone Avenue and Cesar Chavez Boulevard.</p>	<p>Consider working with FAX to establish Safe Routes to Transit Performance Targets. Targets can be designed to address gaps in safe transit access, identify and address collisions near transit stations, and improve active transportation and ADA infrastructure around transit stations.</p>

Notable National, State, and Peer City Best Practices	Current Safety Practices in Fresno	Gaps/ Safety Recommendations
<p>At the state level, Caltrans' <u>Best Practices to Improve Transit Operations and Safety</u> recommends education and workforce development to prepare for diverse, inclusive, and equitable transportation leaders for efficient movement of people and products.</p> <p>FHWA provides guidance on actions to increase the safety of pedestrians of all ages and abilities accessing transit. FHWA guidance provides engineers with sidewalk design, roadway crossing alternatives including crossing at rail systems, bicycle considerations and transit design, of vehicles, and stop locations.</p>	<p>Transit operators collect data that might be a supplemental source of incidents that may not be available in the traditional law enforcement traffic crash reports.</p> <p>FAX's Safety Risk Management provides a potential model to consult during development of the Vision Zero Action Plan's performance measure recommendations.</p>	<p>Consider working with FAX to conduct a transit stop facility assessment to improve safety for users at transit stops. Improving safety at transit stops can encourage transit ridership and can contribute to mode shift away from personal motor vehicle travel—to active transportation and transit option—as a safety strategy to reduce exposure and support the zero fatality and serious injury goal.</p> <p>Aligning the Active Transportation Plan update with transit planning efforts would show the importance of the intermodal relationship. Every transit trip is also at least two active transportation trips, to the bus/coach train, and then from the bus/coach/train to the rider's destination.</p>
Systemic Roadway Network Safety		
<p>Caltrans has established a commitment to eliminating fatal and serious injury on California roadways by 2050 by adopting the Safe System Approach.</p> <p>Caltrans continues to update the <u>Strategic Highway Safety Plan</u> identifying strategies for implementation across state highways. The document outlines specific actions including developing a High Injury Network for all road users.</p>	<p>The City's Local Roadway Safety Plan (LRSP) considers recent collision history and patterns, behavior, and the built environment to determine a systemic approach to improving safety. The LRSP also follows both quantitative and qualitative approaches to develop a comprehensive methodology to determine where and what safety interventions should be implemented to obtain the most significant safety improvements.</p>	<p>Although the LRSP has “systemic” in the title, the document tends to focus on hot spot locations. The Vision Zero Action Plan can build upon the LRSP with some true systemic/proactive analyses and treatments (e.g., low-cost signing and pavement marking citywide, low-cost signal improvements at every signalized intersection regardless of crash history, etc.)</p> <p>When updating the LRSP, incorporate the Safe System Approach and align with the current California Strategic Highway Safety Plan challenge</p>

Notable National, State, and Peer City Best Practices	Current Safety Practices in Fresno	Gaps/ Safety Recommendations
		areas and goals, ³ which could provide additional insight and factors to consider for potential improvements and further enhance safety.
Speed Management		
<p>Historically, speed management practitioners have relied on engineering studies of speed data and crash rates to set speed limits. Practitioners typically rely on existing operating speeds (85th percentile), assuming that most drivers are reasonable and that only a small number of drivers are responsible for speed related crashes.</p> <p>Current research and best practices are moving towards speed management programs that include additional data points such as land use, roadway geometry, road users, collision history, traffic volumes and roadway classifications. As an example, the City of Richland, Washington developed an updated speed limit policy and procedure to utilize recent changes in methodologies and research that incorporated contextual factors such as bicycles, pedestrians, adjacent land use and roadway context.</p>	<p>Fresno’s existing speed setting procedures are consistent with typical speed setting practices in the United States. Each year, the City of Fresno conducts Engineering and Traffic Surveys (E&Ts) on a subset of roads, and updates speed limits on each subset of roads on five-year cycle. Speed limits are established by the E&Ts and consider the following:</p> <ol style="list-style-type: none"> 1. Prevailing speeds (or 85th percentile speeds). 2. Collision History 3. Highway, traffic, and roadside conditions not readily apparent to the driver. 	<p>The City of Fresno can evaluate roadways to identify collision density, business activity, pedestrian or bicyclist activity, and school zones.</p> <p>Setting context-based speed limits is an important first step in a speed management program. The <i>NCHRP Report 966: Posted Speed Limit Setting Procedure and Tool: User Guide</i> introduces similar concepts related to context-based speed limit setting. Applying these within the current California law can result in standardized and context-sensitive speed limits citywide.</p>

³ Note: Members of the consultant team are involved in the 2025 California SHSP update and can provide updates on any upcoming changes to the new plan that might affect the Vision Zero Action Plan.

Notable National, State, and Peer City Best Practices	Current Safety Practices in Fresno	Gaps/ Safety Recommendations
Traffic Calming		
<p>FHWA provides safety practitioners with the <i>Traffic Calming ePrimer</i> to provide a toolbox of measures proven to assist in reducing speeds and integrating pedestrian and bicycle safety into roadway improvements.</p> <p>Many local agencies are improving existing programs and policies to ensure robust development of traffic safety for communities and road users of all modes and abilities.</p> <p>Caltrans looks to selected traffic calming measures (striping, crosswalk striping, pedestrian Hybrid Beacon and Rectangular Rapid Flashing Beacons) to improve the safety of pedestrians and bicyclists along state highways.</p>	<p>The City of Fresno has an existing Residential Street Speed Hump policy which allows residents to apply for speed humps in their neighborhoods as a traffic calming measure. The program selects streets based on neighborhood applications, eligible street type and speed, existing speeding problems, and prioritization ranking.</p> <p>The City has implemented chicanes, intersection realignments, road diets, and curb extensions at locations throughout the City.</p> <p>Existing warrants sheets list required thresholds as outlined in the 2009 MUTCD.</p>	<p>Improvements to the Residential Speed Humps policy could include additional traffic calming measures beyond just speed humps.</p> <p>If additional funding continues to be available for the Residential Street Speed Hump program, expand the program and update the webpage and policy name to include other traffic calming solutions. Currently, the City primarily installs speed humps as a low cost and quick build solution, while other solutions are still considered. The City can consider best practices in traffic calming countermeasures including but not limited to horizontal deflection (lateral shift, chicanes, realigned intersections, etc.), vertical deflection (speed humps, speed cushions, raised crosswalks, etc.), and street width reductions (corner/curb extensions, choker islands, road diets or on-street parking). These solutions can be implemented in an iterative manner if the desired traffic calming is not achieved, considering the built environment and funding availability.</p> <p>Leverage the upcoming Vision Zero Major Streets Traffic Calming Toolkit as a guide for City staff to design, implement, and maintain alternative traffic calming solutions. Build on these efforts through the upcoming City of Fresno Design Guidelines project.</p>

Notable National, State, and Peer City Best Practices	Current Safety Practices in Fresno	Gaps/ Safety Recommendations
Intersection Safety Improvements		
<p><u>FHWA's Intersection Control Evaluation (ICE)</u> is a data-driven, performance-based framework to screen intersection alternatives and identify optimal solutions.</p> <p>Washington State DOT is a leader in national best practice for intersection safety evaluation and require a roundabout evaluation as part of its safety planning and design process.</p>	<p>The City of Fresno traffic operations staff currently use the stop warrant data sheet to determine if an all-way stop-controlled intersection is warranted to ensure safety as motorists enter and leave the intersection. The data collection is based on the 2009 Manual on Uniform Control Devices (MUTCD).</p>	<p>Update intersection data collection to reflect the 2023 MUTCD guidelines so that bicyclist and pedestrian volumes are accounted for.</p> <p>Consider incorporating an Intersection Control Evaluation (ICE) policy requiring changes to an intersection or new construction to undergo a formal evaluation (including a safety evaluation) of multiple control types.</p>
Community/Neighborhood Transportation Safety		
<p>Community plans across local and regional agencies continue to update and included transportation safety goals, policies, and strategies to improve safety for all road users.</p>	<p>The City of Fresno has many Community, Neighborhood, and Specific Plans. Transportation policies and goals in these plans tend to focus on traffic congestion, roadway Level of Service, land use, functional classification, and meeting future travel demand.</p>	<p>As updates to Community, Neighborhood, and Specific plans occur, add Vision Zero-related goals, policies and strategies. Consider incorporating the Safe Systems Approach into future Neighborhood and Specific plan updates.</p>
Data Collection		
<p><u>California's Strategic Highway Safety Plan (SHSP)</u> looks to data collection improvements to ensure decisions are being made with adequate data and resources. The 2020 – 2024 SHSP specifically discusses the need for more and better equity data (Page 27).</p> <p>The Caltrans Safety Program looks to new safety data collection methods and includes the ability to run crash data reports on crash severity.</p> <p>Each year, Caltrans releases a <u>Safety Program Accomplishment Document</u> that highlights the accomplishments of the Caltrans Division of Safety</p>	<p>The City uses the Crossroads Software platform to track and manage data related to collisions in Fresno. Crossroads “allows the user to develop collision reports and collision diagrams as well as GIS maps of crash data. Users can run queries and generate reports based on data analysis of traffic collisions, citations, and driving under the influence (DUIs). Standard and customizable data entry forms are used with drop-down menus when possible, and the tool includes a street name verification process.”</p> <p>The City uses the collision data documented in Crossroads for all planning and safety projects,</p>	<p>Explore the relationship between the City's crash database (Crossroads), and national databases (TIMS and SWITRS) to understand how they are related, and what might be causing data discrepancies.</p> <p>Coordinate with the City's Crossroads administrator/ point of contact to understand the feasibility of tracking motorcycle crashes within the database.</p> <p>Explore the feasibility of building an asset management system or road database to identify gaps, risk factors, and relevant roadway characteristics for safety. Look to FHWA resources for</p>

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<p>Programs. California communities can review those documents to understand what data collection and research Caltrans is conducting, and to identify opportunities for improving their own local data practices.</p> <p>Over the past several decades, the Federal Highway Administration (FHWA) and the United States Department of Transportation (USDOT) have focused on using data to improve decisions related to transportation investments.</p>	<p>ensuring consistency across planning and design efforts.</p>	<p>guidance on how to develop of a <u>Roadway Safety Data Program</u>.</p> <p>Consider building an asset management system or road database to identify and track gaps, risk factors, and roadway characteristics that would help the City to implement safety measures.</p> <p>Create a data dashboard to track progress towards accomplishing Vision Zero actions and meeting key metrics.</p>