



DATE: June 27, 2023

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt a Resolution Adopting a Local Road Safety Plan

RECOMMENDATION

That Council adopts: 1) a resolution (Attachment II) adopting the Local Road Safety Plan (LRSP) (Attachment IV) which assesses and identifies locations and safety needs to improve local road safety within the City; and 2) a resolution (Attachment III) to commit to Vision Zero with the goal of eliminating traffic deaths and severe injuries on the City's roadways by 2050.

SUMMARY

This plan uses historical collision data and an understanding of local context to assess existing roadway safety conditions in the City, identify areas for improvement, and provide recommended actions with an implementation plan. Ultimately, this LRSP creates a data-driven decision-making framework to reduce the number of fatal and severe injury collisions on local roadways.

The plan is organized into six main sections:

- **Vision and Goals:** Establishes a larger vision for transportation safety in Hayward and sets goals for how to get there.
- **Plan Development:** Details the collaborative and data-driven planning process that involved stakeholder and community engagement.
- **Existing Conditions:** Provides an analysis of traffic safety trends in Hayward.
- **Toolbox:** Lists proven engineering countermeasures and strategies that can improve roadway safety.
- **Recommendations and Implementation:** Prioritizes short- and long-term projects and sets a strategy for assessing progress toward established goals.
- **Evaluation:** Provides a framework for evaluating Hayward's progress toward achieving the safety goals presented in this plan.

The plan also recommends site-specific as well as systemic safety improvements, based on which the City submitted an application for the Highway Safety Improvement Program (HSIP) Cycle 11 funding program. However, the City was not awarded funding for HSIP

Cycle 11. If adopted, the City's LRSP will be a basis for the Councils' consideration of adoption of a Vision Zero in the future.

Council Infrastructure Committee Review

City staff presented a draft of the Local Road Safety Plan to the Council Infrastructure Committee (CIC) on April 26, 2023. Comments and feedback from the committee were received and the draft was recommended for Council approval.

BACKGROUND

The LRSP is a critical planning, policy, and implementation document that supports the City's efforts to improve the safety of its transportation infrastructure for all modes and for people of all ages and abilities. In order to pursue safety improvement grant funds through the HSIP administered by Caltrans, a local agency must have an LRSP or equivalent planning document. This draft LRSP adopts a multi-disciplinary approach to traffic safety that creates partnership opportunities with stakeholders (including other agencies) who can help implement recommendations. The plan is also aligned with 2020-2024 California Strategic Highway Safety Plan's guiding principles that integrate social equity and encourage the implementation of proven countermeasures and emerging technologies. The plan uses the Safe System approach endorsed by the United States Department of Transportation and Caltrans commitment to achieve its vision of no fatalities and severe injuries on California roadways by 2050.

The Safe System approach involves anticipating human mistakes by designing and managing road infrastructure to keep the risk of a mistake low. The plan uses the Safe System approach to identify ways Hayward and identified partners can protect all roadway users. It identifies safety emphasis areas for the City and includes engineering and non-engineering recommendations to improve traffic safety in Hayward, especially in identified emphasis areas. This plan and its recommendations will help create a Safe System in Hayward.

DISCUSSION

Vision and Goals:

Based on the findings from the existing conditions analysis and feedback from the public, the project team developed a vision and goals for the plan.

Vision:

Identify safety improvements, strategies, and programs using the Safe System approach to eliminate fatalities and severe injuries.

Goals:

Identify emphasis areas contributing to fatal and severe injury crashes to prioritize investments in countermeasures and strategies.

- Define priority locations for safety improvements for all modes of travel.

- Identify cost-effective countermeasures and safety improvements that can be applied systemically.
- Identify transportation safety programs and strategies using the Safe System Approach and work collaboratively with agencies and safety partners toward implementation.
- Monitor and evaluate emphasis areas and overall safety performance of the City's transportation network.
- Identify locations that directly benefit the following populations or users: children, older adults (65 and over), equity priority communities, disadvantaged populations, and transit users (consistent with the Guiding Vision of the City's Racial Equity Action Plan and the National Safety Council's Road to Zero Coalition).

The project team identified specific objectives under each of the goals.

Vision Zero:

Vision Zero is a movement to eliminate all traffic-related deaths and severe injuries which is at the core of this LRSP and aligns with larger statewide and national efforts to reduce fatal and severe injury crashes. This plan has been designed with the ultimate goal of eliminating traffic deaths and severe injuries on the City's roadways by 2050. A Vision Zero-focused LRSP prioritizes collaboration, accountability, and equity in the planning and design process. One of the key elements of a Vision Zero approach is using data to drive analysis and strategy selection. This LRSP brings together data from crash history, roadway features, public engagement efforts, and demographic data to prioritize solutions and locations. Such robust data will help Hayward to be proactive rather than reactive, working to stop fatal and severe injury crashes *before* they happen.

Plan Development

Community and stakeholder engagement was key to the successful development of this plan. Stakeholders who can provide a diversity of viewpoints in the goal and emphasis area development and who will be appropriate parties for implementation action items were identified at the start of the project.

The project team engaged the public throughout the plan development process. Based on these discussions and findings from the data analysis, safety for vulnerable road users was identified as a key emphasis area for this safety plan. The project team used three methods to gather public input:

- Interactive webmap¹: The team developed an interactive webmap for community members to mark areas with safety concerns. Respondents could flag areas on the high injury network with safety concerns based on their travel mode.
- Community survey: The team developed an online survey with English and Spanish versions. Respondents were asked how and how often they use different travel modes and could rank priorities for safety improvements. Fifty-two people responded to the survey.

¹ <http://maps.kittelson.com/Hayward-LRSP>

- Community events: The team set up booths at the Hayward Block Party and at the Hayward Farmers Market and connected with more than seventy community members individually to hear feedback (verbal, written and recorded on materials on-site).

Existing Conditions:

The existing conditions analysis was conducted to identify safety emphasis areas. Based on the emphasis area, the plan identifies appropriate engineering countermeasures and non-engineering strategies to reduce collisions. This analysis covered:

- Summary of Existing Safety-related Plans, Policies and Programs: The project team reviewed and summarized relevant safety-related plans, policies, and programs.
- Review and Evaluation of Collision Data: The project team analyzed collision data from 2017-2021 and prepared a technical memorandum summarizing findings, including a list of high collision locations and crash risk factors. This memorandum included charts and exhibits illustrating key findings related to factors such as personal attributes/human factors (e.g., driver impairment, behavior), vehicular and equipment factors (e.g., braking, occupant restraints), and roadway and environmental factors (e.g., speed limits, roadway geometric design).
- Identification of High-Collision Locations: A citywide analysis was conducted to identify corridors and intersections with the highest concentration of collisions. A ranked list of high-collision intersections and roadway segments was prepared based on crash frequency and severity. This helps identify high-priority locations that are also competitive for further grant application cycles.
- Field Observations: Based on the identified locations, the project team conducted field observations to develop potential engineering solutions.
- Emphasis Areas: Based on the collision analysis, high collision locations, and field observations, the project team identified seven emphasis areas that deserve special focus and priority and help guide the LRSP's recommended actions and implementation strategies. Emphasis areas represent crash factors whose reduction would have the greatest overall effect on traffic safety. The emphasis areas were as follows:
 - Pedestrian safety
 - Bicyclist safety
 - Signalized and unsignalized intersections
 - Unsafe speeding and aggressive driving
 - Broadside crashes
 - DUI crashes
 - Roadway and lane departure crashes

Toolbox and Recommendations:

Countermeasures and Strategy Identification:

To build a system that is safe for all modes of transportation for users of all ages and abilities, the project team provided both proven engineering countermeasures and non-engineering strategies promoted by the Federal Highway Administration (FHWA), the

California Strategic Highway Safety Plan (SHSP) and Caltrans Local Roadway Safety Plan Guidelines.

Engineering countermeasures include roadway improvements such as pavement markings, curb and median designs, signage, and traffic control, among others. Non-engineering strategies use tools including education, equitable enforcement strategies, and emerging technology to improve roadway safety. Both countermeasure types work together, creating the layers of safety that are critical to a Safe System.

Each countermeasure catered to addressing at least one out of the seven identified emphasis areas to address the priority safety issues. The plan goes beyond the list of improvements and strategies and also identifies innovative ideas such as quick-builds, which are short-term and low-cost so that the City can implement them as pilot projects to improve roadway user safety.

Project Prioritization:

To demonstrate which intersections and roadways Hayward may prioritize, the project team developed a prioritization spreadsheet that scores each roadway and intersection on the high injury network according to its crash severity, a location-based social equity indicator score, and how many of Hayward's seven emphasis areas were applicable to that area. The prioritization spreadsheet allows for different relative weights for each of the three factors relative to one another.

By focusing on emphasis areas, the City can be proactive. Rather than simply reacting to an abundance of reported crashes, the City can use the weighted scores to apply systemic safety improvements at locations with the greatest opportunity for safety benefits.

The LRSP includes a demonstration of the framework, showing a list of the top twenty priority locations based on a scenario emphasizing crash severity and frequency as 20%, social equity and transit proximity 40%, and emphasis area presences 40%. The City may revise future prioritization based on city priorities or grant funding opportunities.

Safety Projects:

The project team identified example safety projects at two sites on the high-injury network – Tennyson & Baldwin and Tennyson & Calaroga. The latter location was submitted for funding with the HSIP Cycle 11 call for projects. The project demonstrated a benefit-cost ratio of 14.79 –below the cutoff of 18.0 for this cycle. The project concepts are included with the LRSP for the City to continue to refine, solicit input from the community, and advance. Unfortunately, this project was not selected for the HSIP Cycle 11 grant.

Implementation Strategy:

To set up the City for success with clear guidance and a strong implementation strategy, the plan identifies action items and performance measures for implementation and eventual evaluation. The recommended action items and performance measures are aligned with plan goals. Near-term and long-term action items are listed with performance measures. In addition, the plan identifies a list of different funding sources—grants such as the Caltrans

Active Transportation Program, HSIP, California Office of Traffic Safety, regional funding, and federal funding sources, which strategically position the City to win grant funding.

Evaluation:

The plan includes a template and framework for evaluation to make it easy for the City to evaluate progress on its mission to eliminate traffic deaths by 2050.

ECONOMIC IMPACT

There is no economic impact related to this agenda item.

FISCAL IMPACT

The Local Road Safety Plan was funded by the California Department of Transportation (Caltrans) LRSP \$90,000 grant program with a \$10,000 City contribution from the Transportation System Improvement Fund (Fund 460), therefore, there is no direct fiscal impact on the City's General Fund related to this project.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of Invest in Infrastructure. Specifically, this item relates to the implementation of the following project(s):

Project N2: Implement major corridor traffic calming initiatives

PUBLIC CONTACT

Two public outreach events were held to gather feedback from the residents. One at the Hayward Block Party on July 18, 2022, and the other one at the Hayward Farmers Market on August 20, 2022. The team connected with more than seventy community members individually to hear feedback (verbal, written and recorded on materials on-site).

At both these events, the team developed an interactive webmap² for community members to mark areas with safety concerns. Respondents could flag areas on the high injury network with safety concerns based on their travel mode.

The team also developed an online survey with English and Spanish versions. Respondents were asked how and how often they use different travel modes and could rank priorities for safety improvements. Fifty-two people responded to the survey.

City staff presented a draft of the Local Road Safety Plan to the Council Infrastructure Committee (CIC) on April 26, 2023³. Comments and feedback from the committee were received and the draft was recommended for Council approval.

NEXT STEPS

² <http://maps.kittelson.com/Hayward-LRSP>

³ <https://hayward.legistar.com/LegislationDetail.aspx?ID=6179977&GUID=4CC2648A-9F86-4F13-A6BB-5B10661347A9&Options=&Search=>

If Council approves this request, the City will initiate the implementation of safety improvement and application of roadway safety grants. City will commit to Vision Zero as the citywide guiding principle with the goal of eliminating roadway fatalities and severe injuries by 2050.

Prepared by: Jade Kim, Assistant Transportation Engineer
Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'Kelly McAdoo', with a long horizontal stroke extending to the right.

Kelly McAdoo, City Manager