


CITY OF LOS ANGELES
INTER-DEPARTMENTAL MEMORANDUM

Date: February 25, 2025

To: Honorable City Council
c/o City Clerk, Room 395, City Hall
Attention: Honorable Heather Hutt, Chair, Transportation Committee

From: Laura Rubio-Cornejo, General Manager
Department of Transportation 

Subject: **TRAFFIC ENFORCEMENT ALTERNATIVES PROJECT: SELF-ENFORCING INFRASTRUCTURES
AND MOBILITY PLAN 2035**

SUMMARY

In response to Council File (CF) 20-0875, this report provides a definition of 'self-enforcing infrastructure' and discusses how the City of Los Angeles (City) delivers this infrastructure through Mobility Plan 2035 (MP2035) implementation in compliance with the Healthy Streets (HLA) ballot measure. The report contains a brief definition and description of 'self-enforcing infrastructure' or 'self-explaining roadways' as defined by the Federal Highway Association (FHWA), a discussion of how the City implements 'self-enforcing roadways' under the Vision Zero program where applicable, and an overview of the Los Angeles Department of Transportation's (LADOT) prioritization score methodology.

RECOMMENDATION

That the City Council NOTE and FILE this report.

BACKGROUND

In February 2021, Council directed LADOT, with assistance of the City Administrative Officer CAO, Chief Legislative Analyst (CLA), Los Angeles Police Department (LAPD), and the City Attorney to develop and issue a Request for Proposals (RFP) seeking a consultant to conduct a study on the feasibility of utilizing civilian enforcement of traffic laws for motorists, cyclists, and other forms of transportation occurring within the City, and to convene an Advisory Task Force to make recommendations to the City for traffic safety alternatives and convene community meetings to solicit feedback in regards to community needs.

LADOT received funding in the Fiscal Year 2021-2022 budget to issue the RFP and manage a consultant contract. In partnership with LAPD, CAO, CLA, and the City Attorney, LADOT released a Task Order Solicitation (TOS) in August 2021, selected a consultant team led by Estolano Advisors in February 2022, and shortly thereafter began soliciting for advisory task force participation.

From June 2022 until September 2023, the consultant team facilitated a series of Task Force meetings with the support of a City working group that included LADOT, CAO, CLA, LAPD, and the City Attorney.

The task force finalized their recommendations in September 2023, and LADOT transmitted the final report to Council in November 2023. The report included several task force recommendations, one of which includes increasing and prioritizing self-enforcing infrastructure investments in high-injury network corridors, low-income communities, and communities of color to implement road features that naturally slow traffic and discourage drivers from breaking traffic laws.

In June 2024, Council directed LADOT to report with a definition of self-enforcing infrastructure and an implementation prioritization methodology. Council further directed LADOT to report on how to develop and implement self-enforcing infrastructure as part of HLA compliance, as well as a plan to evaluate self-enforcing infrastructure projects and develop a multi-departmental approach to develop standards and review self-enforcing infrastructure projects.

DISCUSSION

LADOT is responsible for developing and implementing transportation plans to meet the needs of the traveling public and commerce, including the conceptual planning, design, and operation of the City's streets, as well as the installation and maintenance of traffic signs, signals, street name signs, and other transportation control devices. Collectively, these treatments provide the physical and visual environment that guides Angelenos as they walk, bike, drive, or otherwise travel on the City's streets. As it designs and maintains this infrastructure, LADOT prioritizes the City's streets with the highest rates of severe and fatal crashes, and follows the United States Department of Transportation's (USDOT's) [Safe System Approach](#) which is the guiding paradigm to address roadway safety nationally.

The Safe Systems Approach calls for transportation systems to be designed to account for human error and minimize its consequences on the road, to reduce both the frequency and severity of traffic crashes so that fewer people are injured and nobody is killed if a crash does occur. While all road users are human and will make mistakes, the Safe Systems Approach recognizes that the consequences of those mistakes vary for drivers, motorcyclists, bicyclists, and pedestrians. Because mistakes made behind the wheel have the highest consequences for all road users, and the speed of the vehicle involved in a crash determines the severity of human injury or death, this approach focuses on responsible driving and reduced vehicle speeds to improve safety outcomes. It incorporates safe street design to both prevent crashes and protect road users who are the most physically vulnerable to injury or death from a crash – those who are walking or biking.

In addition to encouraging safe driving behavior, in many cases these treatments in the public right-of-way also communicate the legal rules of the road for all users to follow. While LADOT is responsible for enforcing the parking regulations in the City of Los Angeles, only LAPD has the authority to issue citations for traffic violations if a driver, bicyclist, or pedestrian does not follow the rules of the road. In its recommendations to reduce armed enforcement of traffic violations, the task force included an increased investment in self-enforcing infrastructure to further implement road features that naturally slow traffic and discourage drivers from breaking traffic rules.

The Federal Highway Association (FHWA) defines self-enforcing, or self-explaining roadways in its [Self-Enforcing Roadways: A Guidance Report](#) (page 13) as: *“a roadway that is planned and designed to encourage drivers to select operating speeds consistent with the posted speed limit. To affect speed compliance, designers typically use geometric elements that encourage drivers to select operating speeds that are appropriate for the intended purpose of the roadway. The ideal is for operating speeds and posted speed limits to be in harmony with the roadway's geometric design speed.”*

Speed is the primary focus of the Safe Systems Approach, and the primary moving violation addressed by self-enforcing roadways in the FHWA Guidance Report. Speed is also the indicator that most influences the severity of a crash, and is the primary factor that determines consequences of that crash to human life. As LADOT prioritizes and implements street design, traffic control, and signage on the City's High Injury Network (HIN) and aligns its practices with the Safe Systems Approach, it will both improve traffic safety and expand self-enforcing infrastructure Citywide. These treatments are also integral to street design projects that implement the City's MP2035 goals in compliance with Measure HLA.

USDOT Safe Systems Approach

The Safe Systems Approach recognizes the complexity of transportation systems and potential for human error, and sets five objectives: safer roads, safer speeds, safer people, safer vehicles, and post-crash care. This approach aims to both prevent crashes from occurring and minimizes the harm caused by crashes that do occur. The design principles in the Safe System Approach accommodate human error and protect road users that are the most vulnerable to physical injury or death. It focuses on strategies and treatments that reduce speeding and improve compliance with posted speed limits.

LADOT follows the USDOT Safe Systems Approach through its current policies and programs. While the Department does not currently use the term self-enforcing to refer to its transportation safety work, its practices are aligned with the FHWA's Self-Enforcing Roadways Guidance Report.

The Safer Roads, Safer Speeds, and Safer People objectives of the Safe System Approach are most closely tied to the definition and design of self-enforcing roadways. Below is a discussion of these objectives and how LADOT incorporates them into its work to implement self-enforcing roads in the City of Los Angeles.

Safer Roads

The goal of the Safer Roads objective is to design roadway environments to mitigate human mistakes and account for injury tolerance, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users. To achieve this goal, [USDOT identified and recommends several countermeasures](#) proven to reduce traffic fatalities.

LADOT incorporates these countermeasures into its street design to slow vehicular traffic speeds and create conditions that prioritize people's ability to reach their destination safely. These countermeasures include traffic control devices like speed humps/tables, pedestrian refuge islands, and roundabouts, as well as design elements including lane narrowing, high visibility crosswalks, class II and/or class IV bike lanes, and road reconfigurations. USDOT countermeasures also recommend specific traffic signal treatments, such as leading pedestrian intervals and speed limit enforcement to support safer streets.

In addition to these USDOT-recommended countermeasures, LADOT implements Traffic Signal Speed Coordination through its Automated Traffic Surveillance and Control Program (ATSAC) to mitigate human mistakes and account for injury tolerances. This strategy synchronizes traffic signals to improve traffic flow efficiency, manage traffic speeds, and encourage safer driving speeds. It looks at a group of vehicles, known as a platoon, traveling in the same direction through a series of intersections along a corridor at a speed consistent with or near the established speed limit, and time intersection signals to stop any outlying vehicles at a red light. The red traffic signal forces the speeding vehicles to reduce speed, drive safely, and stop to allow the rest of the platoon to catch up. By controlling the number of vehicles in a

platoon, the flow rate of a corridor can be effectively controlled for safer speeds closer to the marked or desired speed limit. Together, these traffic control, street design, and signal timing treatments encourage drivers to comply with posted legal speed limits without the need for armed enforcement.

Safer Speeds

The Safer Speeds objective of the Safe Systems Approach builds on street design efforts with thoughtful, equitable, context-appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement to encourage compliance with posted speed limits. Unsafe, illegal speeding can result in injury or death to any road user, and has the most deadly impact on people walking or biking because they are not physically protected by a vehicle and are therefore the most physically vulnerable in a crash.

While roadway design and traffic control devices can help manage speeds and can deter drivers from speeding illegally, USDOT guidance states that achieving safe speeds requires a multifaceted approach that also includes safe and context-specific speed limit setting, robust education, and equitable enforcement strategies.

Signed into law in 2021, [Assembly Bill 43](#) gave cities in California more flexibility to set speed limits based on safety and street design rather than driver behavior. This change in state law allowed LADOT to repeal speed limit increases and reduce speed limits on nearly 200 miles of streets across the City. By reducing speed limits we protect the most vulnerable pedestrians, bikers, seniors, and children by giving drivers and others more time to react to conditions and prevent a collision.

To encourage drivers to comply with posted speed limits, while reducing both the financial burden and interaction with armed officers inherent with traditional speeding tickets, [AB 645](#) authorizes the City of Los Angeles to implement a Speed Safety System Pilot Program. [Speed Safety Cameras](#) use speed measurement devices to detect speeding above a posted speed limit, capture license plate information, and send a notification or citation to the vehicle owner by mail. LADOT is authorized to install these speed detection cameras at 125 locations, limited to identified safety corridors, frequent street racing locations, and school zones. These systems are proven to improve driver behavior while minimizing punitive consequences - violations start at \$50 for going 11mph over the posted speed limit and do not include a point on the driver's license. Fatal crashes have gone down by as much as 70% in cities that have implemented similar programs, and evidence shows that violations decrease over time, suggesting lasting improvement to driver behavior. Once the recommended criteria to identify the 125 corridor locations is determined, staff will present the recommended criteria to Committee and Council.

LADOT conducts Community-First Engagement as a part of all of its street design project development and delivery. Education on the rules of the road and the safety consequences of violating speed limits and other safety requirements is included in all engagement efforts. To expand these ongoing efforts and create a dedicated transportation safety education and awareness campaign, LADOT requested both contractual and staff resources in the Fiscal Year 2025-2026 budget.

Safer People

All road users are encouraged to make safe decisions as they travel to their destinations, but USDOT identifies speeding, driving while intoxicated, and not wearing seatbelts as the three critical decisions that contribute to fatal traffic crashes. While street design, traffic control, signal timing, speed limit setting, education, and equitable enforcement can all reduce the likelihood that a driver will violate

posted speed limits, mistakes and bad judgment may still occur. The Safer People objective recognizes that although people generally use the roadway system in a safe manner on any given trip, these mistakes, lapses in judgment, and other risky behaviors require work beyond infrastructure.

Implementation

Prioritization Score

LADOT completed a [Safety Study Report](#) that provided a comprehensive analysis of collision data in the five-year period from 2017 through 2021. This analysis resulted in a Prioritization Score for LADOT's Vision Zero Program for all streets and intersections in the City. The Prioritization Scores are used to rank intersections within the City of Los Angeles to prioritize the design and implementation of safety projects, using the Safe Systems Approach for all roadways and intersections. LADOT will make the prioritization methodology available to all City departments to guide their work plans, including Department of Public Works, Police Department, Fire Department, and others that are aiming to improve safety outcomes on City streets.

The Safety Study Report includes an update to the HIN, now referred to as the Priority Safety Corridors. The Priority Safety Corridors were identified using the comprehensive analysis of collision data in the five-year period from 2017 through 2021. Self-enforcing infrastructure including speed safety camera enforcement, speed tables, raised medians, bicycle lanes, and traffic signal speed coordination will be prioritized on these corridors, and incorporated into project design and implementation based on specific crash patterns.

Crash Reduction Factor

Crash Reduction Factor (CRF) is the percentage crash reduction that might be expected after implementing a given countermeasure at a specific site. The higher the CRF, the more effective the countermeasure is for the safety of collision victims. The FHWA has a list of [proven safety countermeasures](#) with proven crash reduction factors, which LADOT uses to implement self-enforcing infrastructure.

FHWA identifies proven safety countermeasures and LADOT uses all countermeasures that apply to the specific context including but not limited to: applying appropriate speed limits, speed safety cameras, bicycle lanes, enhanced visibility enhancements, leading pedestrian intervals, medians and pedestrian refuge islands, pedestrian hybrid beacons, rectangular rapid flashing beacons, roadway reconfiguration, and walkways. These countermeasures are used to promote speed management and safety for pedestrians and bicyclists.

Additionally, LADOT created a [Countermeasure Toolkit](#) and [Countermeasure Pairing Matrix](#) to match collisions with proven countermeasures. This process ensures the City of Los Angeles is able to use effective self-enforcing roadways to increase the crash reduction factor for specific collisions.

2035 Mobility Plan Implementation

[Mobility Plan 2035 \(MP2035\)](#) provides the policy foundation that guides the City's work to develop a Citywide transportation system that provides for the efficient movement of people and goods and balances the needs of all road users. MP2035 recognizes that primary emphasis must be placed on

maximizing the safety and efficiency of existing and proposed transportation infrastructure and sets forth street designations and related standards.

Measure HLA requires the City to implement MP2035 treatments with other right-of-way improvements. By following the standards and guidance set forth by the USDOT, FHWA and the Safe Systems Approach, the City is implementing the highest and best standard. LADOT also ensures that projects implement the Mobility Plan, starting with making sure the design is aligned with the street designation. For safety projects, additional treatments to further slow speeds, improve visibility, or address other crash patterns are implemented in addition to the Mobility Plan guidance.

In the development of MP2035, crash patterns, presence of vulnerable users such as the elderly and school children, and other factors were not the primary consideration in the street designations. The primary goal of Mobility Plan 2035 was to create efficient movement of people and goods. Safety factors and criteria are more thoroughly considered and applied in the subsequent planning and design phase. Therefore, self-enforcing roads is not a prescribed outcome by implementing the Mobility Plan through the HLA ballot measure. Self-enforcing roads are expected to be implemented through other City policies and programs that govern design and hold the City to a standard of improved safety outcomes.

Other Traffic Violations

In the Alternatives to Traffic Enforcement and Community Recommendations Report, the consultant and task force identified the primary traffic violations issued from 2019-2021 (Table 11). They found that most traffic stops are for moving violations (45%), followed by equipment violations (31%), and non-moving violations (24%). Street design and traffic control devices cannot mitigate or prevent equipment and non-moving violations such as no registration or seatbelt violations, but they can reduce the likelihood of some moving violations.

Among the top 20 violation types, the most common moving violations reported from 2019-2021 were speeding (15.9%), failure to stop at a crosswalk (5.4%), failure to obey turn signs (3.3%), failure to stop at a red light (2.4%), unsafe lane changing (1.1%), and illegal u-turns (1%). By following the Safe Systems Approach, LADOT is addressing these common violations through its project delivery work. While all strategies in the Safe Systems Approach address speeding, both the FHWA and LADOT countermeasures toolkits include treatments that specifically address lesser common moving violations. These include high visibility crosswalks and speed tables that increase awareness and slow drivers down as they approach intersections, which should improve compliance with stopping at crosswalks and red lights. Narrowing lanes, constructing medians, and protecting bike lanes provide better organization that can reduce the likelihood that a driver will attempt illegal maneuvers.

LADOT will continue to prioritize self-enforcing infrastructure on the City's Priority Safety Corridors, in low-income communities, and in communities of color. Based on major safety project evaluations on Adams, Anaheim, Avalon, Broadway, Figueroa, and Temple, there is evidence that these projects do reduce average speeds and the number of severe crashes. However, high-end speeding remains an issue on almost every corridor evaluated and pedestrian deaths continued to increase Citywide in recent years. Self-enforcing streets are a critical component to both advancing the City's safety goal and reducing the likelihood of moving violations that result in armed enforcement. However, evidence suggests they cannot achieve the City's safety goals without some level of focused enforcement that addresses the most consequential moving violations that contribute to the more than 300 traffic crashes that occur in the City each year.

FISCAL IMPACT

There is no anticipated impact to general funds.

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