



DATE: June 23, 2022

TO: Transportation Advisory Commission

FROM: Laura Rubio-Cornejo, Director of Transportation

SUBJECT: **INFORMATION ITEM - Safe System Approach to Transportation**

RECOMMENDATION:

This item is presented for information only.

BACKGROUND:

The Department of Transportation (DOT) is transitioning to a Safe System Approach to address the increasing number of pedestrian fatalities within the City. Historically, the DOT has used a multifaceted approach to address traffic safety throughout the City including engineering, education, encouragement, enforcement and evaluation. While this program has been effective at reducing collisions within the City by providing a comprehensive approach to traffic safety and identifying implementable solutions, pedestrian fatalities resulting from traffic collisions continue to increase. In response to the trend of pedestrian fatalities within the City, the existing principal of ensuring Pasadena will be a city where people can circulate without cars and objective to encourage walking, biking, transit and other alternatives to motor vehicles, DOT has shifted its approach to transportation planning and traffic safety to the Safe System Approach.

The Safe System approach aims to eliminate fatal and serious injuries for all road users. It does so through a holistic view of the road system that first anticipates human mistakes and second keeps impact energy on the human body at tolerable levels. This approach was recently adopted by the Federal Highway Administration and is based on domestic and international safety research.

The Safe Systems Approach is built upon five core safe system principals:

- Death and Serious Injury is Unacceptable - While no crashes are desirable, the Safe System approach prioritizes addressing crashes that result in death and serious injuries;
- Humans Make Mistakes - People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to anticipate and accommodate human mistakes with the ultimate goal being to avoid death and serious injuries;
- Humans are Vulnerable - People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities;

- Responsibility is Shared - All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes do not lead to fatal or serious injuries;
- Safety is Proactive - Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.
- Redundancy is Crucial - Reducing risks requires that all elements of the transportation system are strengthened, so that if one part fails, the other parts still protect people. These five elements are identified below.

The implementation of a Safe System approach is achieved through five Safe System Elements. These five elements are:

- Safe Road Users
- Safe Vehicles
- Safe Speeds
- Safe Roads
- Post-Crash Care

Implementation of the Safe System Approach goes beyond identifying principles and elements. It requires a commitment to shift how we think about transportation safety and how we prioritize our transportation investments. This includes implementing a holistic work plan that addresses safety through operational improvements and capital projects. This work plan builds on the implementation of the recently completed Local Road Safety Plan and the Pedestrian Plan, among other ongoing capital projects and education and awareness programs to address safety throughout the City. Many of the capital improvements are contingent on additional funding. As such, an important component of the work plan is the pursuit of grant funding of Federal, State and Regional funding to enhance safety. This is ongoing and will continue to be a focus of the Department.

The purpose of this presentation is to detail how the City of Pasadena Department of Transportation is transitioning to the Safe System Approach, and addressing the safe system elements as a fundamental component of work conducted within the department.

NEXT STEPS:

DOT is actively transitioning to the Safe System Approach through the implementation of projects and programs and pursuit of grant funding that helps advance projects and programs that align with the Safe System Approach philosophy.

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