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Date

Road Safety – Advancing the Safe System Approach for All Users

I. Introduction

A. Purpose

This Secretary's Executive Order directs employees to implement policies and procedures that advance the Safe System Approach to road safety. The purpose of this order is to achieve the goals of the Washington State Strategic Highway Safety Plan, known as *Target Zero*, and the Washington State Department of Transportation (WSDOT) Highway Safety Improvement Program Implementation Plan, titled *Getting to Zero*.

This policy provides for a sustainable approach to highway safety for all roadway users through planning, programming, scoping, design, and operations using scientifically sound safety management practices.

Through the Safe System Approach, WSDOT intends to systematically reduce fatal and serious injury crash potential statewide. This approach provides for explicit consideration of all road users in the planning, design, construction, operation, and maintenance of transportation facilities. It directly addresses the disproportionate effects of past transportation projects on specific neighborhoods and locations.

It establishes a principle that road users are considered equitably in design and operational decision making within the given roadway context. It coordinates with WSDOT Executive Order (EO) 1090 *Advancing Practical Solutions* and EO 1119 *Anti-Racism Policy and Diversity, Equity, and Inclusion Planning*.

B. Supersession

This Secretary's Executive Order supersedes and replaces the prior version with the title *Sustainable Highway Safety Program*, dated February 11, 2013. All references to the superseded E 1085.00 now reference E 1085.01.

C. What Has Changed

This revision modifies the language in each section of this document, including the following changes:

- It reorganizes Section I to separate the purpose from the background information to understand the context of the policy.
- It renames the Sustainable Safety approach as the Safe System Approach.
- It addresses disproportionate crash outcomes for specific modes and locations.

- It summarizes the responsibilities of specific organizations and roles. It moves the details to charters and procedural documents.

D. Background

The State of Washington has set a goal to have zero fatal and serious crashes on our roadways by 2030 as directed in *Target Zero*.

To achieve this goal, WSDOT has continued to advance the use of safety science. Most recently, this was known as WSDOT's Sustainable Safety Program. Together with WSDOT's Practical Solutions approach, it focused on proactive approaches to address the contributing factors and crash types that lead to fatal and serious crashes, the installation of systems to reduce potential crash forces (such as roadside safety systems, roundabouts, and target speeds), and changes in design practices to consider context and modal priority on the state highway system. These practices align with what is now more commonly known as the Safe System Approach.

In addition, WSDOT, together with its partners and consistent with the Cooper Jones Active Transportation Safety Council, incorporated the Safe System Approach into the Washington State *Target Zero* plan in 2019. The Active Transportation Plan in 2021 provided additional analysis concerning the disproportionate crashes for vulnerable road users, particularly in locations affected by decisions that created wide, fast, and busy roadways lacking walking/biking facilities in certain neighborhoods while insulating others from these contributors to crash exposure. This executive order forms a next step to Safe System implementation.

The Safe System Approach to road safety is a holistic approach based on the following elements: safe roads, safe speeds, safe vehicles, safe road users, and post-crash care. In the Safe System Approach, WSDOT has a primary responsibility of road infrastructure planning, design, and operations. This includes speed management, multimodal context-sensitive geometric design, traffic systems management and operations, roadside features and road user actions affected by road infrastructure design and operations (such as signage, lighting, and striping), and the safety management systems that support analysis and decision making. Within these elements, the Safe System Approach applies the following principles:

- **Eliminate death and serious injuries:** While no crashes of any type are desirable, the Safe System Approach prioritizes elimination of crashes that result in death and serious injuries.
- **Support safe road use:** Road users will inevitably make mistakes that can lead to crashes. The transportation system and vehicles can be designed and operated to reduce the injury outcomes from those errors. A forgiving system accommodates reasonable and predictable human limitations and behavior (such as diligence, perception, and attention). Roads that are developed in this manner as “self-enforcing and self-explaining roads” make it more difficult for errors to occur, and when the errors do occur, they result in fewer fatal and serious injuries.
- **Reduce large crash forces:** Road users have limits for tolerating crash forces before death or serious injury occurs. Therefore, it is important within the Safe System Approach to manage the transfer of kinetic energy through adoption of design and operational elements that account for and reduce crash speeds and impact angles to be within survivable limits.

- **Responsibility is shared:** All stakeholders (such as transportation system designers, managers, road users, vehicle manufacturers, and policy makers) commit to reducing fatal and serious injury crashes and to working together. The focus is placed on the larger context and network of contributing factors and characteristics from which traffic death and serious injury arise, instead of the individual road users.
- **Strengthen all parts:** All parts of the transportation system are strengthened to reinforce each other so that if one part fails, the other parts still protect road users. In this way redundancy is provided for the elements that make up the safe system.
- **Safety is proactive:** Proactive (systemic safety) approaches address context, contributing factors, and crash types and help to reduce the potential for fatal and serious injury crashes. These approaches complement traditional, reactive crash reduction programs that focus on individual sites and segments with a history of observed crashes using the methods outlined by the American Association of State Highway and Transportation Officials (AASHTO) *Highway Safety Manual*.

II. Secretary's Executive Order

This Secretary's Executive Order directs WSDOT executives and employees to revise agency policies and procedures and adjust the allocation of agency resources to align with the Safe System Approach to road safety across all divisions and regions. This includes:

- A. Implementing the Safe System Approach in accordance with RCW 47.05 and consistent with WSDOT EO 1090 *Advancing Practical Solutions* and EO 1119 *Anti-Racism Policy and Diversity, Equity, and Inclusion Planning*.
- B. Working collaboratively with internal and external safety stakeholders to analyze safety performance and develop strategies that move us toward zero fatal and serious injury crashes, consistent with the Safe System Approach.
- C. Aligning and maintaining a quantitative approach to analysis across program, planning, project development, operations, and maintenance functions that complies with the intent, methods, and tools defined by the AASHTO *Highway Safety Manual*, where they are practicable.
- D. Incorporating an equity analysis in accordance with findings from modal crash data and the environmental justice requirements of the Healthy Environment for All (HEAL) Act.
- E. Prioritizing design and operational decisions that support safety for all users based on the context of the road, particularly in locations affected by legacy state transportation facilities and where gaps in walking and biking facilities exist, as outlined by the Active Transportation Plan.
- F. Explicitly identifying and addressing a project's expected effects on crash exposure and network connectivity for vulnerable road users. This acts to prevent increased exposure to fatal and serious injury crashes through needed multimodal facility and operational improvements. Where prevention is not possible, provide mitigation to reduce crash severity and propose future solutions to further reduce exposure.

- G. Updating, for all safety subcategories, the methods for determining development of ranked lists of potential safety projects as necessary to incorporate the Safe System Approach and the most recent *Target Zero* Strategic Highway Safety Plan—including *Target Zero* emphasis areas—and *Getting to Zero* Implementation Plan.
- H. Updating manuals, policies, processes, procedures, and plans to incorporate the Safe System Approach within WSDOT’s capital programs framework and consistent with Complete Streets implementation.
- I. Rescinding, replacing, or reaffirming all ranked lists of potential safety projects as necessary to achieve the goals and objectives of the Safe System Approach. Report these actions to the Office of the Secretary for consideration and final approval.
- J. Reporting to the Office of the Secretary each year about the state of highway and roadway safety and any subsequent proposed actions necessary to achieve the goals of *Target Zero* using the Safe System Approach.

III. Information to Carry Out This Secretary’s Executive Order

To support the objectives of this policy, WSDOT divisions responsible for highway and road user safety planning, programming, scoping, design, operations, and maintenance, and those offices supporting these processes, are expected to work collaboratively and in consultation with the Highway Safety Executive Committee (HSEC) to achieve the goals of *Target Zero* and *Getting to Zero*. These divisions and offices will consult with HSEC and abide by its direction on all highway safety program policies.

This executive order assigns the following responsibilities:

A. Secretary of Transportation

- Represent WSDOT on the Washington Traffic Safety Commission and foster support for the Safe System Approach.
- Communicate WSDOT’s commitment to eliminating fatalities and serious injuries.

B. WSDOT Executives and Senior Managers

- Communicate WSDOT’s commitment to eliminating fatalities and serious injuries.
- Facilitate alignment of this policy with other related policies and initiatives conducted by WSDOT and partner organizations.
- Provide the resources necessary to implement this executive order and support the implementation of the Safe System Approach.
- Direct policies and activities to prioritize safety across the agency.

C. Headquarters Division Directors

Develop supporting policies, guidance, programs, and training in support of the Safe System Approach within respective areas of responsibility.

D. Regional Administrators

Develop plans, projects, and practices as appropriate to support implementation of this policy.

E. All Supervisors and Managers

- Promote knowledge of the Safe System Approach through discussion and training.
- Consider ways in which their program responsibilities contribute to and support the Safe System Approach.
- Support employees in incorporating the Safe System Approach into WSDOT practices.

F. All Employees, Divisions, and Programs

- Promote the implementation of the Safe System Approach within their professional responsibilities.
- Prioritize road safety while considering race, age, ability, income, and mode-based equity in transportation outcomes to establish and maintain a system that works for everyone.
- Adopt road safety initiatives and practices within their divisions and disciplines.

G. Director, Transportation Safety and Systems Analysis

- Develop policies and procedures related to the implementation of the Safe System Approach in consultation and collaboration with affected disciplines, divisions, and programs.
- Report to the Secretary of Transportation the current State of Road Safety in Washington, outlining current crash statistics, trends, and proposed priorities and strategies for reducing fatal and serious injury crashes on Washington's roads across WSDOT programs.
- Develop the *Target Zero* Strategic Highway Safety Plan and the *Getting to Zero* Implementation Plan and set federally required safety performance targets.
- Carry out performance measurement and evaluation of Washington's road system to achieve incremental improvement towards implementation of the Safe System Approach.
- Work with affected modal plan owners to align plans and action with the Safe System Approach.

H. Highway Safety Executive Committee (HSEC)

- Adopt policies for highway and road user safety that direct employees to incorporate Safe System Approach principles in all projects and programs.
- Provide oversight and reporting for this executive order.
- Provide direction and support for the development of a report to the Secretary of Transportation on the current State of Road Safety in Washington, outlining current crash statistics, trends, and proposed priorities and strategies for reducing fatal and serious injury crashes on Washington's roads.
- Maintain a charter, approved by the Secretary, describing safety roles, decision making, and program responsibilities.

I. Highway Safety Issues Group (HSIG)

- Provide technical support for the HSEC.
- Serve as an interdisciplinary forum for discussion of safety practices, procedures, and policies.
- Maintain a charter, approved by the HSEC, describing safety roles, decision making, and program responsibilities.

IV. Contact for More Information

For more information about this Secretary's Executive Order, contact the Director, Transportation Safety and Systems Analysis, at 360-704-6363.

V. References

- [23 USC §148](#) *Highway safety improvement program*
- [Fixing America's Surface Transportation \(FAST\) Act](#)
- [RCW 47.04.280](#) *Transportation system policy goals*
- [RCW 47.05](#) *Priority programming for highway development*
- [Healthy Environment for All \(HEAL\) Act](#) (Chapter 314, Laws of 2021)
- [Secretary's Executive Order E 1038](#) *Enterprise Risk Management*
- [Secretary's Executive Order E 1090](#) *Advancing Practical Solutions*
- [Secretary's Executive Order E 1119](#) *Anti-Racism Policy and Diversity, Equity, and Inclusion Planning*
- Federal-Aid Highway Program [Stewardship and Oversight Agreement](#)
- [Washington State Strategic Highway Safety Plan: Target Zero](#)
- WSDOT [Active Transportation Plan](#) webpage
- AASHTO [Highway Safety Manual](#)

VI. Review and Update Requirements

When changes are necessary to update this document, inform the Director, Transportation Safety and Systems Analysis, who reviews this document periodically and proposes updates for leadership review and approval by the Secretary of Transportation.

Americans with Disabilities Act (ADA) Information

This material can be made available in an alternate format by emailing the Office of Equity and Civil Rights at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.