

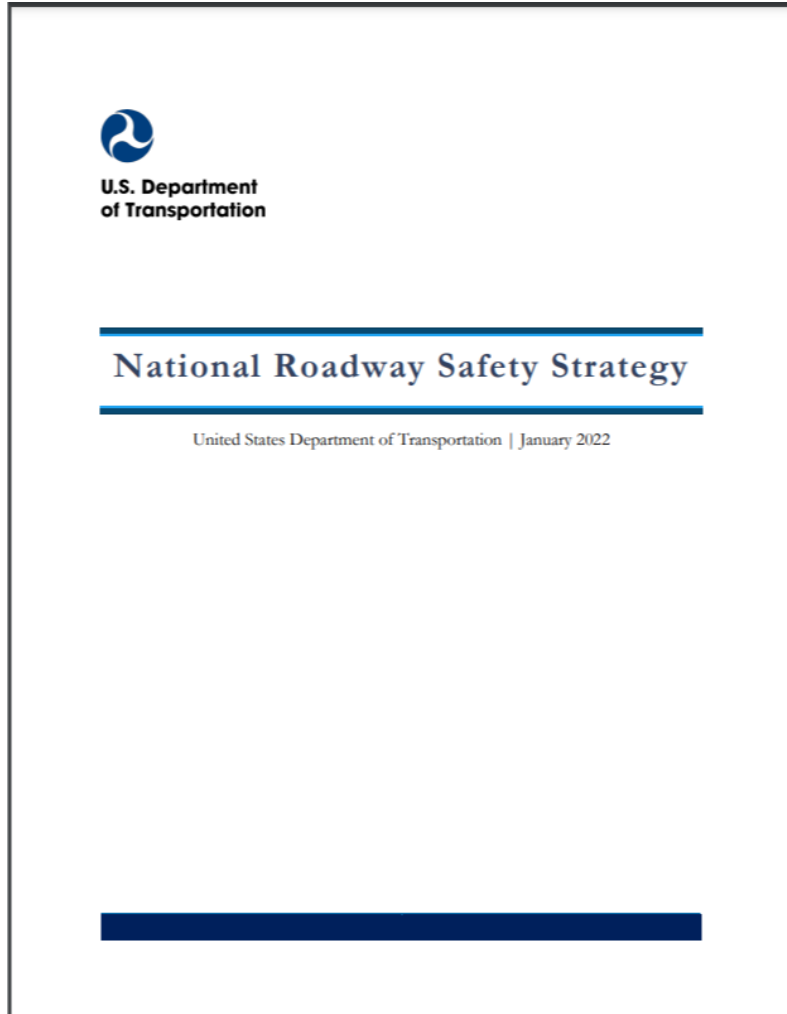


The Role of Research in a Safe System Approach

Zero is our goal. A Safe System is how we get there.

November 3, 2022

Secretary Buttigieg releases national plan

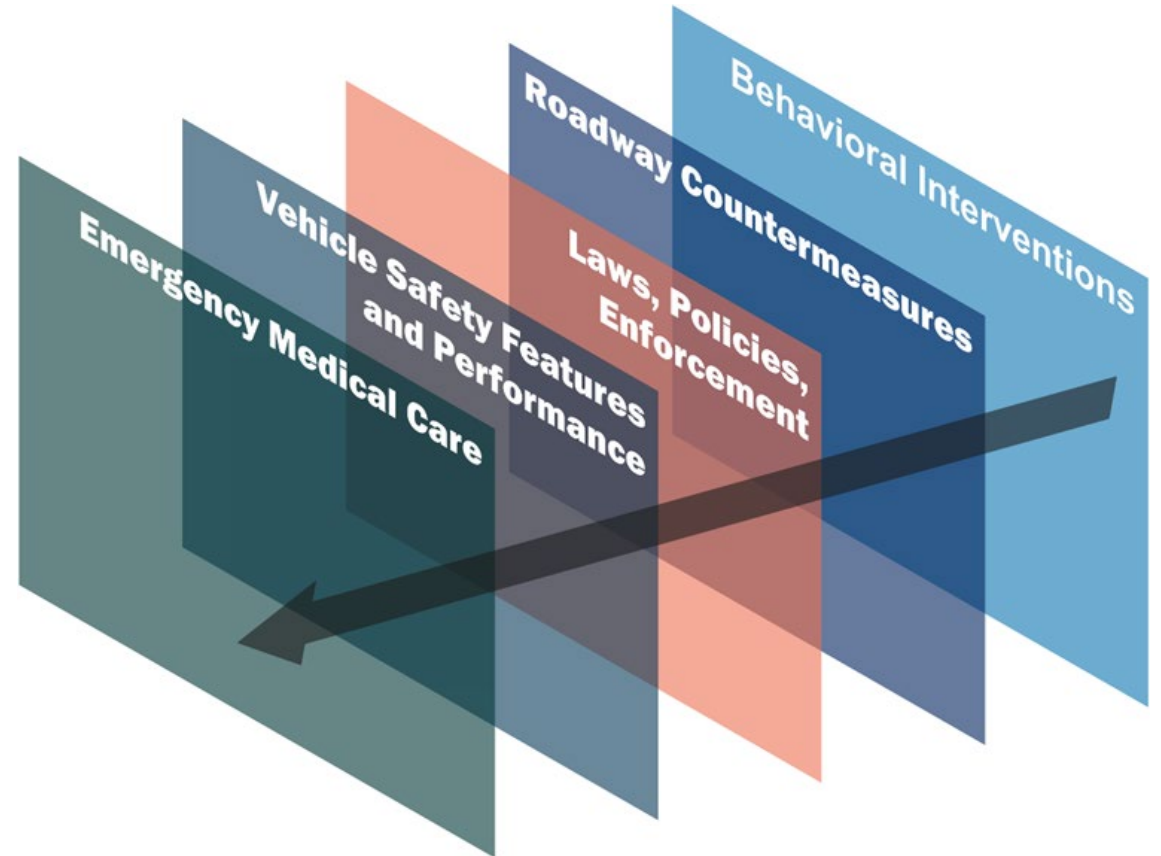


WASHINGTON, DC - November 8, 2021: Transportation Secretary Pete Buttigieg speaks during a briefing at the White House in November. (Demetrius Freeman/The Washington Post)

National Roadway Safety Strategy

- Addressing roadway safety requires a holistic, comprehensive approach
- Objectives correspond to the Safe System Approach elements:

Safer People
Safer Roads
Safer Vehicles
Safer Speeds
Post-Crash Care



A New Direction

The Safe System Approach aims to eliminate fatal and serious injuries for all road users by:



**Accommodating
human mistakes**



**Keeping impacts on the human
body at tolerable levels**

Paradigm Shift

Traditional approach

Prevent crashes

Improve human behavior

Control speeding

Individuals are responsible

React based on crash history

Safe System Approach

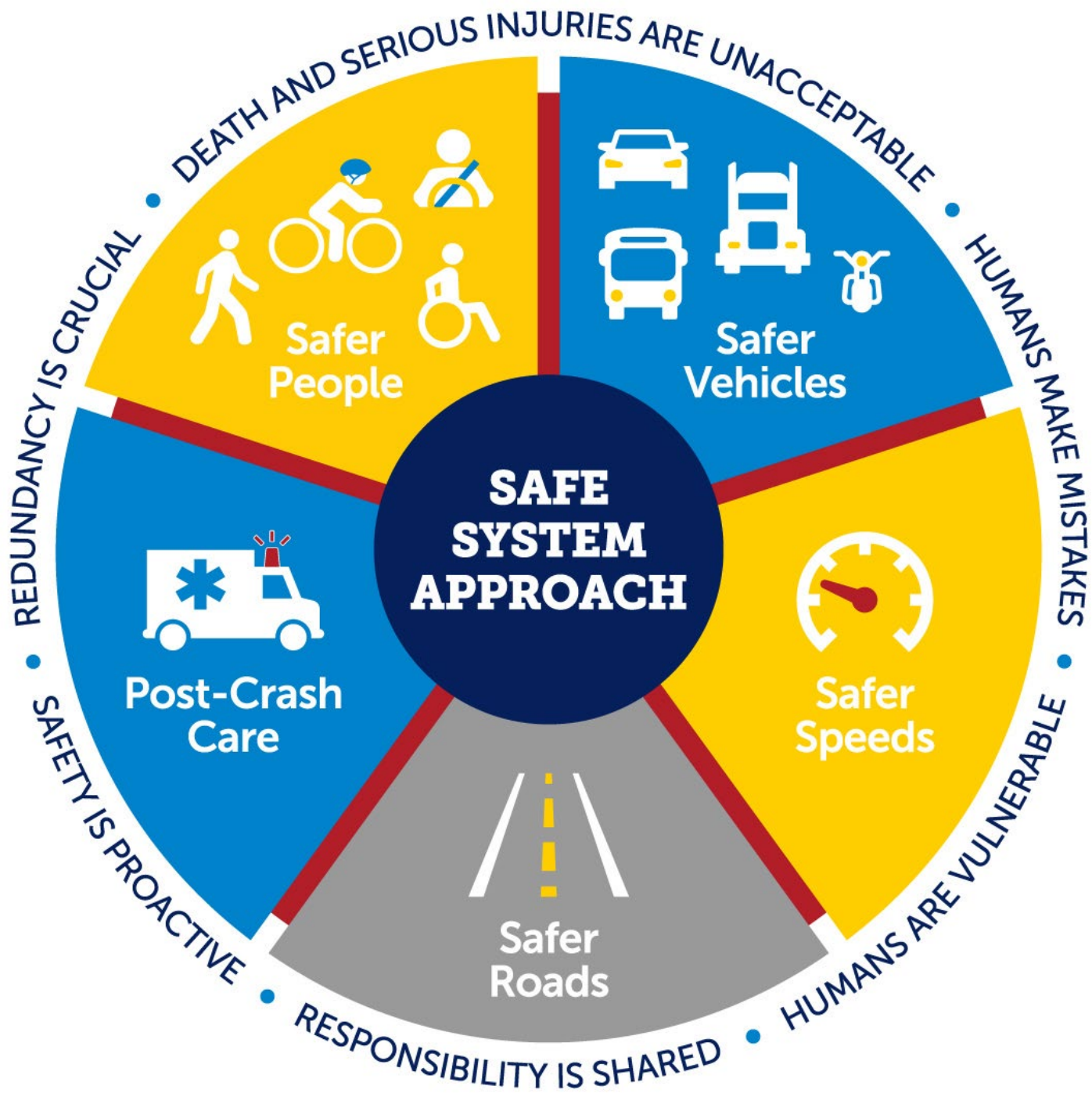
Prevent death and serious injuries

Design for human mistakes/limitations

Reduce system kinetic energy & addressing human behaviors

Share responsibility

Proactively identify and address risks



The 6 Safe System Principles



**Death/serious injury
is unacceptable**



**Humans make
mistakes**



**Humans are
vulnerable**



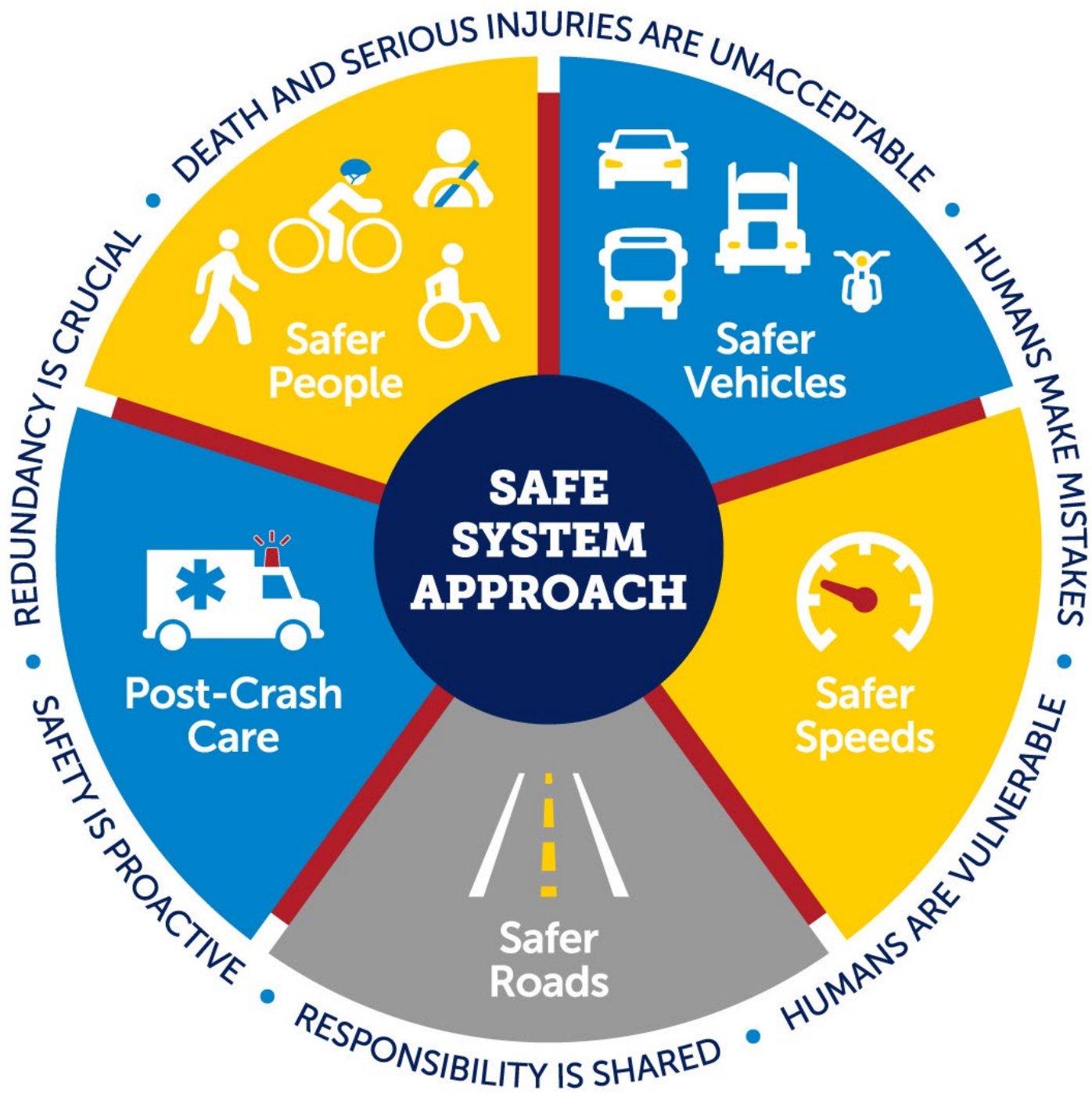
**Responsibility is
shared**



Safety is proactive

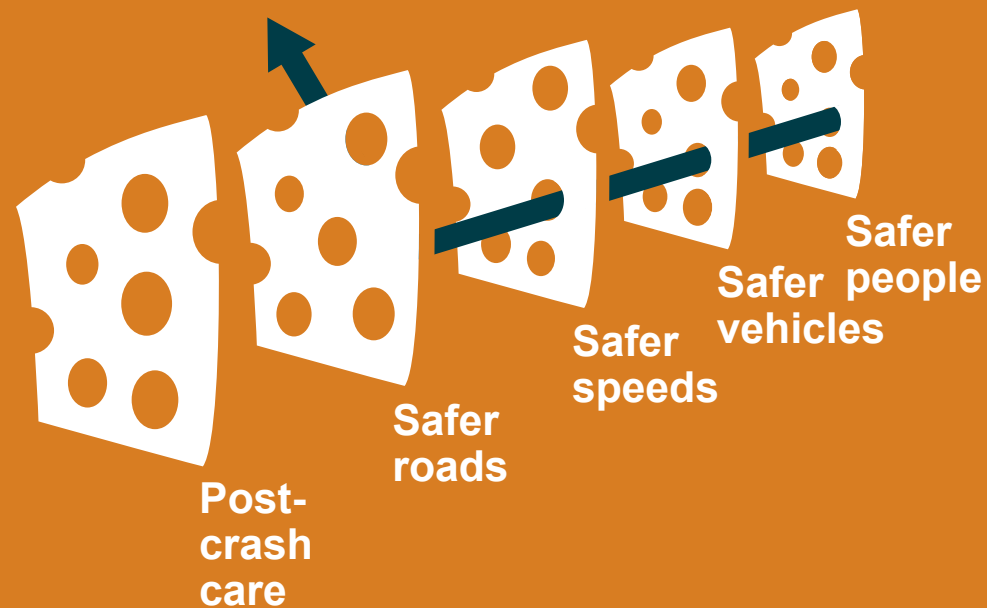


**Redundancy
is crucial**



The 5 Safe System Elements Create Redundancy

The “Swiss Cheese Model” of redundancy creates layers of protection



Death and serious injuries only happen when all layers fail

