

VIRGINIA HIGHWAY SAFETY PROGRAM STRATEGY UPDATE

NCR Transportation Planning Board

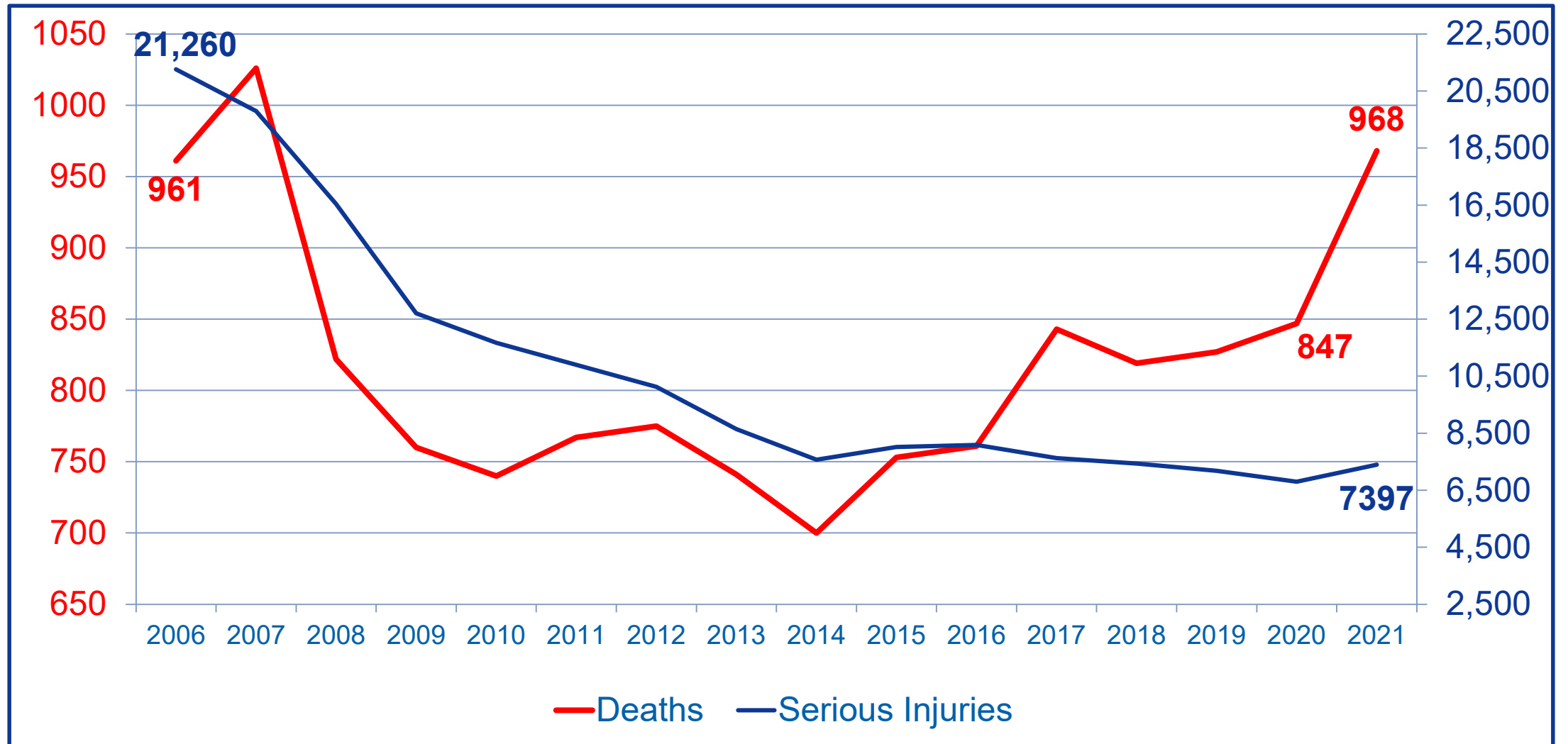
Stephen Read, P.E.
Virginia Department of Transportation

November 16, 2022

Virginia Highway Safety Program Strategy Update

- **Updated 2026 Strategic Highway Safety Plan**
- **Emphasis Area Severe Crash Trends**
- **Behavioral and Infrastructure Program Initiatives**
- **Regional and Locality Support**

Virginia Traffic Deaths and Serious Injuries (2006 - 2021)



2026 SHSP Update

Vision:

Virginia's vision is towards zero deaths and serious injuries from motor vehicle crashes so that all roadway users arrive safely at their destination.

Mission:

To fulfill the Vision through Safe System

Collaboration with four **E**s of roadway safety – Education, Enforcement, Engineering, and Emergency response & medical services to achieve safe travel for a fifth **E** – Everyone.

<https://bit.ly/VA2026SHSP>



SHSP Safe System Guiding Principles and Strategies

Adopted from the Safe System approach

Death/serious injury is unacceptable

Humans make mistakes

Humans are vulnerable

Redundancy is crucial

Responsibility is shared

Safety is proactive

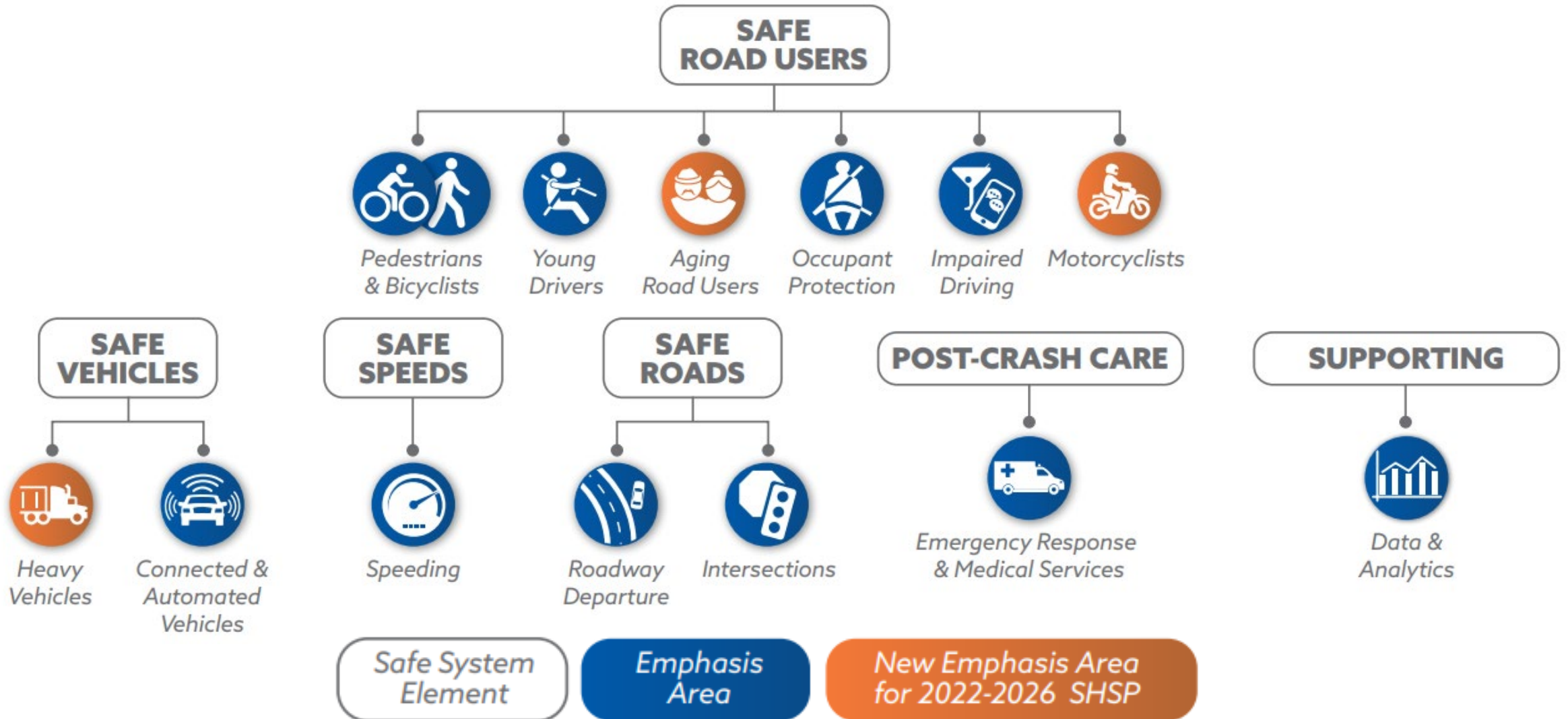
Actions consider equity

Principles-guided Strategies

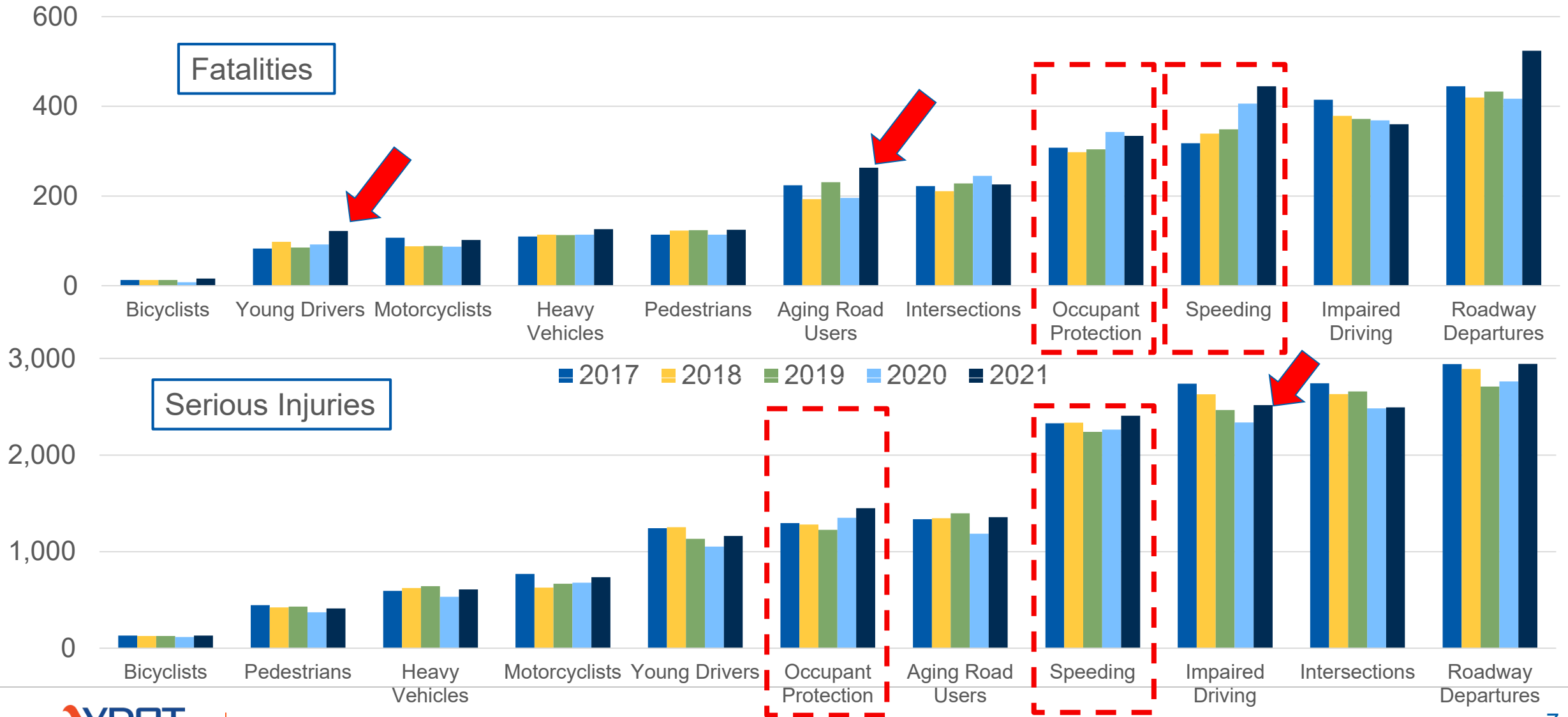


Source: FHWA

SHSP Emphasis Areas



2017-21 Emphasis Area Fatalities and Serious Injuries



VHSIP Funding Overview and Background

- **VA Transportation Bill and IIJA bring safety funding increases**
 - Safety Infrastructure and Behavioral Investment Plan requirement
- **VHSIP state funding policy**
 - Infrastructure projects have systemic focus
 - Behavioral focus on key emphasis areas
- **Funding**
 - Approximately 100M+ per year for infrastructure
 - Approximately 20% of safety funds go to locally-maintained roads based on proportion of fatal crashes in Virginia, remainder to state roads
 - Projects funded based on return on investment



COMMONWEALTH of VIRGINIA

Commonwealth Transportation Board

Shannon Valentine
Chairperson

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Agenda item # 15

**RESOLUTION
OF THE
COMMONWEALTH TRANSPORTATION BOARD**

January 12, 2022

MOTION

Made By: Ms. Hynes **Seconded By:** Mr. Kasprovicz
Action: Motion carried, unanimously

Title: Approval of Virginia Highway Safety Investment Strategy

WHEREAS, across the nation, traffic deaths are up an estimated 18.5% the first six months of 2021 as compared 2020; and

WHEREAS, in Virginia, from January 2021 through the end of October 2021, traffic deaths are up almost 13 percent compared to the same period in 2020; and

WHEREAS, pursuant to §33.2-373 of the *Code of Virginia*, it is the responsibility of the Commonwealth Transportation Board (the Board) to establish the Virginia Highway Safety Improvement Program (the Program) to reduce motorized and non-motorized fatalities and severe injuries on highways in the Commonwealth, whether such highways are state or locally maintained; and

WHEREAS, pursuant to §33.2-373 of the *Code of Virginia*, the Board shall adopt an investment strategy to guide the investments of the Program, and the investment strategy shall cover a period of at least five years and seek to achieve a significant reduction in the anticipated number of fatalities and severe injuries over the covered period and shall give priority to projects, strategies, and activities based on the expected reduction in fatalities and severe injuries relative to cost, including improvements that are widely implemented based on a high-risk roadway feature that is correlated with a particular crash type, rather than crash frequency

<https://www.ctb.virginia.gov/resources/2022/jan/res/15.pdf>

Key Emphasis Areas Behavioral Program State Safety Funding (FY22-24)

	FY 22-24 (\$M)	Action Plan
Key EAs	30.0	
1. Unrestrained	10.2	Edu and Outreach
2. Speeding Involved	9.0	Edu and Outreach
3. Impaired Driving* Involved	7.2	Edu and Outreach
4. Pedestrian	3.6	Edu and Outreach

Note:

*** Impaired Driving - Drunk, Drugged, Distracted and Drowsy**

Systemic Highway Safety Initiatives

Roadway Departure Crashes - Proven Countermeasures

Edge line Rumble Strips



Up to 50% crash reduction

Curve Signs



Up to 16% crash reduction

Centerline Rumble Stripe



Up to 60% crash reduction

Safety Edge



Up to 20% crash reduction


Intersection Crashes - Proven Countermeasures

High-visibility Backplates



Up to 15% crash reduction

Flashing Yellow Arrow

	Steady Red Arrow Drivers turning left must stop and wait (except where permitted by law).
	Steady Yellow Arrow Stop, if you can do so safely.
	Flashing Yellow Arrow Proceed with left turn after yielding to oncoming traffic and pedestrians.
	Steady Green Arrow Proceed with left turn.

Up to 20% crash reduction

Unsignalized Intersections



Up to 10% crash reduction

Pedestrian Crossings



Up to 56% crash reduction

Locally Maintained Safety Initiatives

High-Visibility Backplates



Up to 15% crash reduction

Flashing Yellow Arrow



Steady Red Arrow
Drivers turning left must stop and wait (except where permitted by law).

Steady Yellow Arrow
Stop, if you can do so safely.

Flashing Yellow Arrow
Proceed with left turn after yielding to oncoming traffic and pedestrians.

Steady Green Arrow
Proceed with left turn.

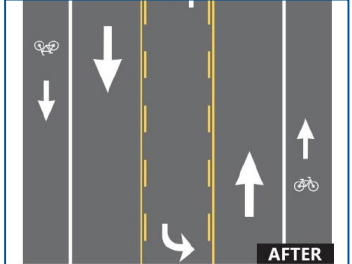
Up to 20% crash reduction

Pedestrian Crossings



Up to 56% crash reduction

Road Diets



Up to 47% crash reduction

Unsignalized Intersections



Up to 10% crash reduction

Curve Signs



Up to 40% crash reduction

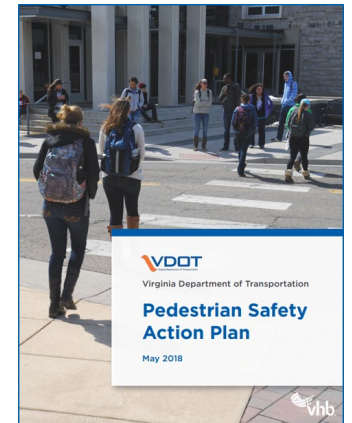
Virginia Highway Safety Improvement Program Infrastructure Investment Plan - September 2022 Update

Source	VHSIP Funding Through FY 28 (\$M)	Schedule (Calendar Year)
Original \$152 M VDOT Systemic Plan (2020)		
High-Visibility Backplates	14.4	Completed on schedule in 2021
Flashing Yellow Arrows	10.7	Completed on schedule in 2022
Curve Delineation	25.3	Complete 2024
Pedestrian Crossings - Phase 1	34.4	Complete 2025
Unsignalized Intersection	24.2	Complete 2024
Shoulder Wedge	Maintenance funds	Resurfacing Cycle - 15 yr
CL Rumbles - Primaries	7.8	Accelerated by 5 years, Complete by 2030
Edge Rumbles - Primaries	35.1	Accelerated by 5 years, Complete by 2030
Fall 2022 \$520 M Investment Plan		
Locally-Maintained Road Projects	110.3	TBD, Project Specific Completion Dates
Expanded Flashing Yellow Arrows (VDOT)	15.8	Accelerated 2 years. New Completion Date 2025
Pedestrian Crossings - Phase 2 (VDOT)	20	Accelerated PE start by 1 year. Up to 200 locations. Complete 2028
Two-Lane Rural Roads (VDOT)	150	Added funding for up to 1000 more miles. Up to 2,000 Miles now funded. Complete 2028.
Future Systemic Initiatives	100	TBD
Spot Projects (VDOT)	124.4	TBD, Project Specific Completion Dates
Total	672.4	

Technical Assistance and Support

- **Safety Planning and Actions**
 - MPO/TPO safety analysis
 - Safe Streets for All – scope and letters of support
 - Vulnerable Road User Assessment – include updated Pedestrian Safety Action Plan in 2023
- **Safety Project Planning and Applications**
 - Safety Circuit Rider – Localities
 - Consultant Project Scoping and Costing

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Local Collaboration



- **Vulnerable User Safety with Health Department**
 - **Prioritizing Active Transportation Health and Safety**
 - **VA Walkability Action Institute – VDH training local participants on building alliances to create policy, system and environmental change action plans**
 - **Vulnerable Users Road Safety Assessments – pilot in Fairfax led to HSIP projects**
 - **VirginiaPATHS.org resources for engaging local stakeholders**

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