

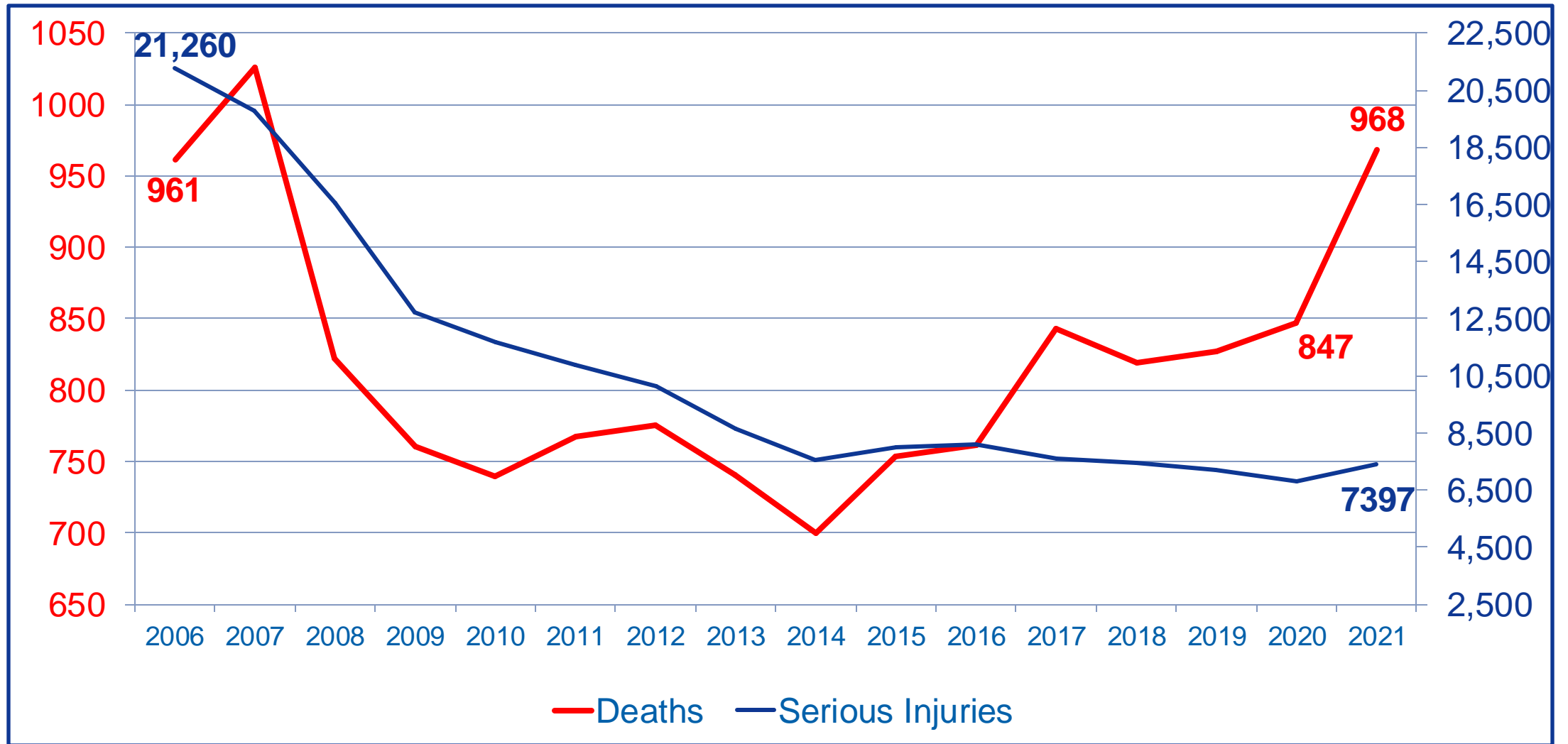
# **VIRGINIA'S 2023 SAFETY TARGETS**

## NCR TPB - Transportation Safety Subcommittee

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Oct 11, 2022

# Virginia Traffic Deaths and Serious Injuries (2006 - 2021)



# Where are Traffic Deaths Increasing in 2021?

- **Total increase from 2020 to 2021 was 121 (14%)**
  - VDOT Interstate deaths increased by 32 (24%)
  - VDOT Primary deaths increased by 60 (19%)
  - VDOT Secondary deaths increased by 12 (6%)
  - Locally owned/maintained road deaths increased by 17 (9%)
- **Speeding deaths up 96 (29% increase since 2020)**
- **Unbelted deaths up 51 (15% increase since 2020)**

# FHWA Determination of “Significant Progress”

How are  
we  
doing?



- Annually, FHWA makes a determination of **Significant Progress** towards meeting the safety performance targets based on five-year average measures submitted
- **Significant Progress** determination - at least four of the five targets were met OR target must be better than the baseline (two years prior) value
- If **Significant Progress** is not made, the state must:
  1. Prepare and Submit an Highway Safety Implementation Plan to FHWA by June 30 stating what the state is doing to meet targets, and
  2. Must obligate 100% of the amount of HSIP funds for the year that the targets were set

Based on FHWA’s determination, Virginia **MADE Significant Progress** towards the 2020 targets

- Four of the Five targets were met
- The Rate of Serious Injury target was not met

# Safety Performance Management Target Setting Steps

Key steps to develop 2023 targets:

Step 1: Update and refine predictive model to establish baseline target values

Step 2: Incorporate anticipated annual reductions of projects that were recently or soon to completed

Step 3: Combine results from steps 1 and 2 to establish proposed 2023 targets

# Step 1: Prediction Model Factors and Measure Effects

Factor By District	Effect on Fatal Crashes	Effect on Serious Injury Crashes	Effect on Bike/Ped Crashes
VMT growth	↑	↑	↑
Increasing local functional class percent of VMT	↑	↑	↑
Increasing young population (15-24)	↑	↑	↑
Increasing aging population (75+)	↑	↑	
Gallons Liquor Sold		↑	
Liquor licenses			↑
Increased highway resurfacing spending	↓		
Increased emergency/incident management spending	↓		
Increased total behavioral programs spending	↓	↓	↓
Increased roadway maintenance spending		↓	
Increased average snowfall per month			↓
Increased rural functional class percent of VMT			↓

VMT: Vehicle Miles Traveled

 = Increases Effect  
 = Decreases Effect

## Step 2: Incorporate Anticipated Annual Crash Reductions from Projects

- A. Identify SMART SCALE and HSIP projects completed or to be completed between January 2022 and March 2023
- B. Categorize projects by crash type - **spot and corridor projects, hybrid projects**, and **systemic improvement** projects
- C. Identify crash history for each project and evaluate project scope to estimate potential reductions in crashes that may result from project construction
  - Estimate reductions using SMART SCALE scoring methodology
- A. Calculate annual crash reductions by crash type

# Step 2: Quantify Anticipated Annual Crash Reductions from Projects

Reviewed 200 SMART SCALE and HSIP

- More than 5,500 Fatal and Serious Injury crashes at those project locations
- Systemic project return on investment is 50 to 90 times greater than spot/corridor projects

Anticipated Annual Crash Reductions from Projects*			
Description	Fatalities	Serious Injuries	Ped/Bike F + SI
Spot/Corridor Reduction	2	16	2
Hybrid Reduction	1	3	0
Systemic Reduction	6	67	13
<b>Total Anticipated Annual Reductions (Benefits)</b>	<b>9</b>	<b>86</b>	<b>15</b>

\*All values have been rounded

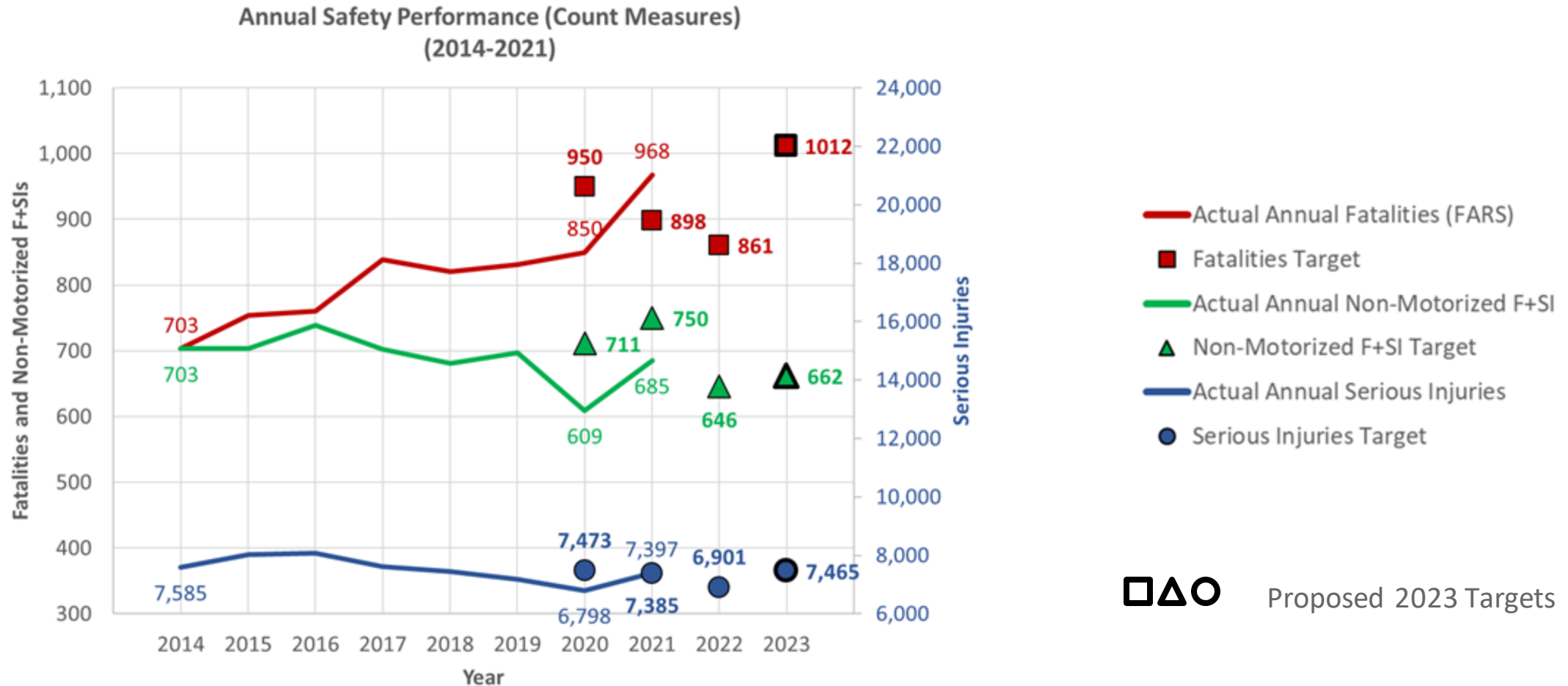


# Step 3: Proposed 2023 Virginia Safety Measures Targets

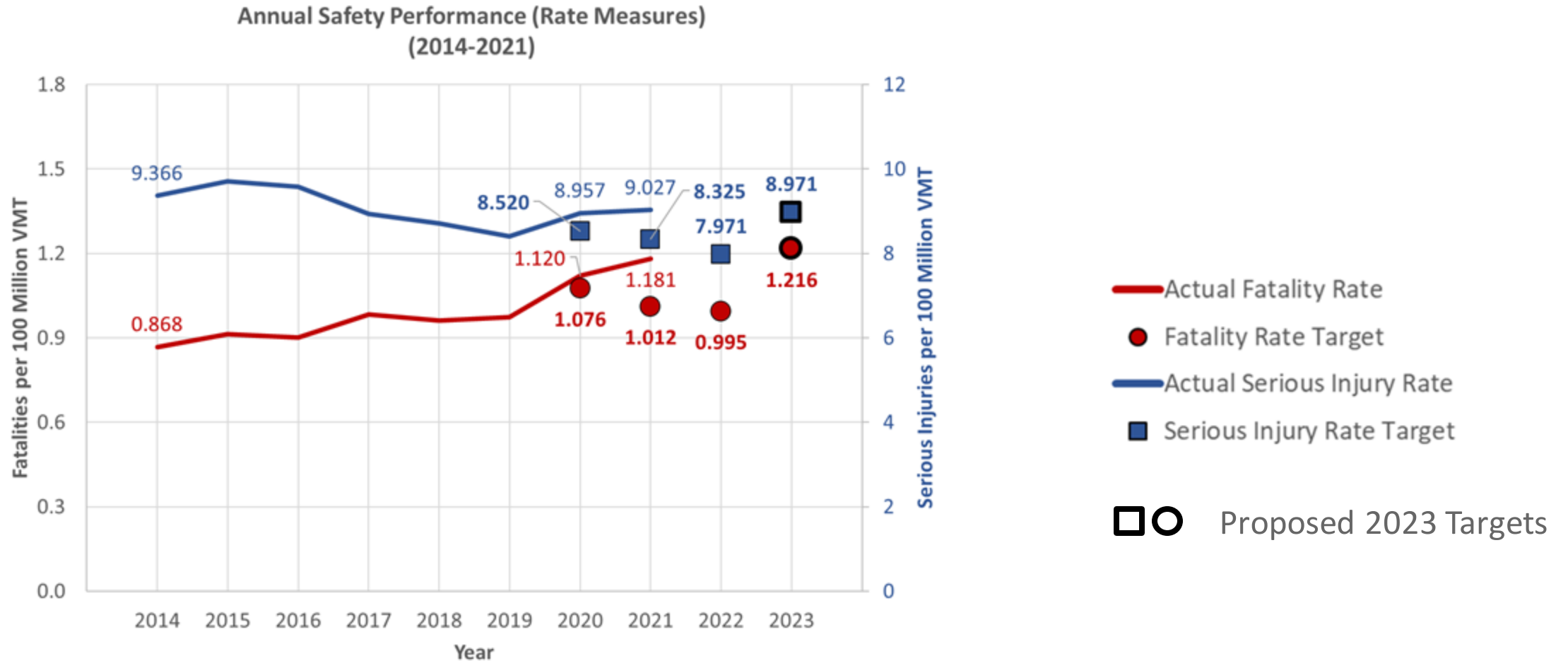
Combine the baseline predictions (Step1) with project benefits (Step 2) to establish targets

Calculating Proposed 2023 Safety Targets					
Description	Fatalities	Fatality Rate	Serious Injuries	Serious Injury Rate	Ped/Bike F & SI
STEP 1: Update and refine predictive model to establish baseline	1021	1.227	7511	9.074	677
STEP 2: Incorporate anticipated annual reductions of projects that were recently or soon to completed	9	---	86	---	15
<b>STEP 3: Proposed 2023 Targets</b>	<b>1012</b>	<b>1.216</b>	<b>7465</b>	<b>8.971</b>	<b>662</b>

# Safety Performance Management Target Performance Comparison



# Safety Performance Management Target Performance Comparison



# Federal Submitted Virginia 2023 Targets

## Annual and Final Five-Year Average Safety Targets for Federal Reporting

Target Description	F People	F Rate	SI People	SI Rate	F & SI Ped/Bike People
2023 Annual Targets	1012	1.216	7,465	8.971	662
2023 Five-Year Average Targets	926.4	1.134	7,211.8	8.822	663.2

# 2022-2023 Average Annual Percent Change

## Five-Year Average Annual Percent Change from 2021

Target Description	F People	SI People	F & SI	
			Ped/Bike People	VMT
Five-year Average Targets	3.69%	-0.52%	-0.86%	0.77%

# 2023 Virginia "State" Aspirational Targets

