



Highway Safety Improvement Program

August 2017

Highway Safety Improvement Program (HSIP)

- Purpose – significant reduction in traffic fatalities and serious injuries on all public roads
- Federal Aid Program
- Data driven, strategic approach
- 3 Components
 - Strategic Highway Safety Plan
 - Highway Safety Improvement Projects
 - Railway-Highway Crossing Projects

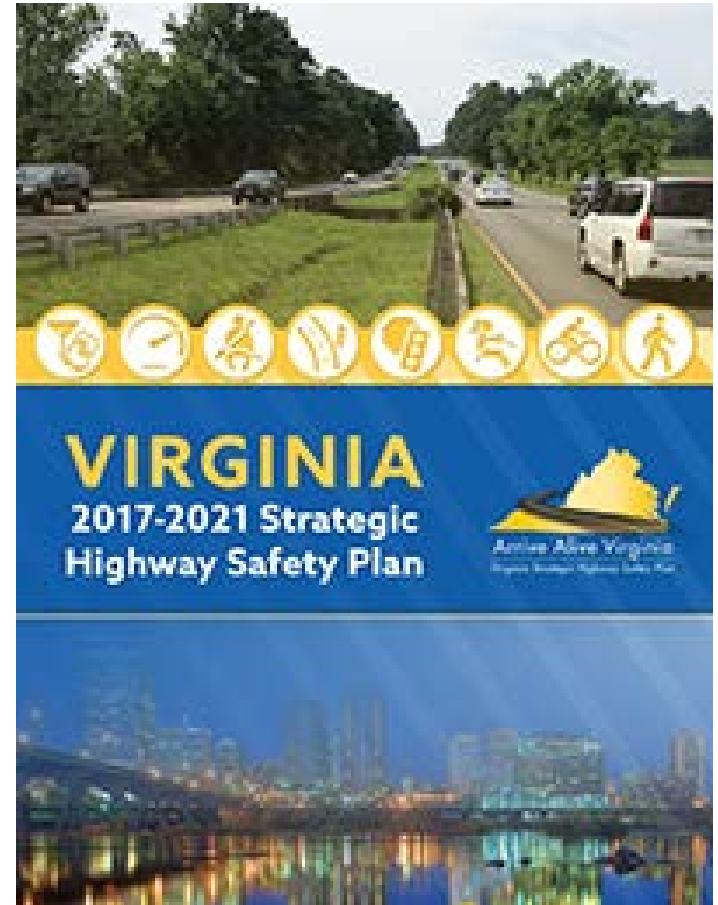


VDOT Highway Safety Improvement Program
Implementation Guidelines



Strategic Highway Safety Plan

- Statewide, multimodal
- Multi-stakeholder – VDOT, DMV, VSP
- Updated every 5 years
- Goals
 - Reduce highway deaths & serious injuries by half by 2030
 - 3% reduction per year



Strategic Highway Safety Plan

Fatal & Severe Crashes Fredericksburg District

Fatal and Severe Injury Crashes (2010-2015)	Total Crashes	Interstate	State Highway	County Road	City Street	Night	Adverse Weather, Day	Adverse Weather, Night	Reduced Friction, Clear Weather	Curve	Intersection	Roadway Departure	Speeding	Alcohol	Drugs	Large Vehicle	Bicycle	Pedestrian	Unrestrained	Young Driver	Aging Driver	Motorcycle	Distracted Driver	Drowsy Driver
Total Crashes	3,044	316	1,300	1,025	403	928	241	176	112	782	1,143	1,546	1,021	539	51	199	40	132	688	627	436	305	399	113
Intersection	1,143	2	662	378	101	308	83	59	43	223		396	303	171	18	47	17	57	211	240	200	122	134	25
Roadway Departure	1,546	138	503	726	179	571	123	128	66	646	396		706	381	40	75	4	0	522	323	107	126	272	101
Speeding	1,021	128	352	426	115	368	99	78	48	409	303	706		260	22	59	3	15	316	237	85	119	153	30
Alcohol	539	38	198	237	66	337	9	46	16	196	171	381	260		23	11	4	45	229	56	33	33	68	22
Drugs	51	2	22	21	6	16	5	4	2	19	18	40	22	23		1	0	0	15	11	6	1	9	4
Large Vehicle	199	77	82	29	11	47	21	10	8	33	47	75	59	11	1		2	4	42	20	36	4	29	7
Bicycle	40	1	19	13	7	10	1	1	1	6	17	4	3	4	0	2		0	0	13	7	0	6	0
Pedestrian	132	7	65	31	29	69	6	9	5	13	57	0	15	45	0	4	0		1	20	17	0	2	1
Unrestrained	688	55	255	281	97	285	42	49	24	237	211	522	316	229	15	42	0	1		139	69	0	126	39
Young Driver	627	41	235	254	97	201	49	42	29	175	240	323	237	56	11	20	13	20	139		43	29	92	17
Aging Driver	436	45	235	96	60	71	29	11	10	74	200	107	85	33	6	36	7	17	69	43		47	51	12
Motorcycle	305	24	136	110	35	73	7	2	10	110	122	126	119	33	1	4	0	0	0	29	47		21	2
Distracted Driver	399	32	174	124	69	113	27	23	17	116	134	272	153	68	9	29	6	2	126	92	51	21		70
Drowsy Driver	113	14	53	20	26	47	3	8	2	36	25	101	30	22	4	7	0	1	39	17	12	2		

Strategic Highway Safety Plan

Fredericksburg District Focus

- Roadway Departures
- Intersections
- Speeding
- Unrestrained Drivers
- Distracted Drivers
- Young Drivers



Projects Approved by CTB June 2017 for FY 2018-2023

Locality	Project Description	Identified Safety Improvement	Budget
Fredericksburg	Flashing Yellow Arrow Upgrades	Failure to Yield Angle Crashes	\$495,000
Spotsylvania	Offset Right Turn Lane Old Plank Road at Ashleigh Park	Angle Crashes	\$855,000
Districtwide	Retroreflective Back Plates	Red Light Running	\$1,625,000
Districtwide	Shoulder Rumble Strips	Roadway Departure Crashes	\$1,700,000
Districtwide	Traffic Actuated Flashers	Angle Crashes	\$341,000
Spotsylvania	Install Mini Roundabout at Old Dominion Parkway & Lee Hill School Road	Angle Crashes	\$657,500

Projects In Design

Locality	Project Description	Identified Safety Improvement	Budget
Gloucester	Intersection Improvements Route 17 at West Main Street	Rear End, Sideswipe & Angle Crashes	\$880,000
Gloucester	Intersection Improvements Route 17 at Route 216	Rear End & Angle Crashes	\$930,000
Districtwide	Trench Widening	Roadway Departure Crashes	\$2,100,000
Stafford	Bike/Ped Improvements on Leeland Road	Bike/Ped Safety	\$3,350,000
Stafford	Sidewalk on Courthouse Road	Pedestrian Safety	\$544,500
Districtwide	Traffic Signal Replacements	Rear End & Angle Crashes	\$2,250,000
Spotsylvania	Access Management on Southpoint Parkway	Rear End & Angle Crashes	\$1,433,000

Projects In Design

Locality	Project Description	Identified Safety Improvement	Budget
Districtwide	Roadway Departure Countermeasures	Roadway Departure Crashes	\$1,500,000
Districtwide	Flashing Yellow Arrow Upgrades	Failure to Yield Angle Crashes	\$2,940,000
Districtwide	Centerline Rumble Strips	Head On & Sideswipe Crashes	\$700,000

Projects Under Construction

Locality	Project Description	Identified Safety Improvement	Budget
Fredericksburg	I-95 Safety Improvements at Route 3	Sideswipe Crashes	\$23,000,000 *
Spotsylvania	Intersection Improvements at Route 1 and Harrison Road	Rear End & Angle Crashes	\$21,930,538 *

Projects Complete

Locality	Project Description	Identified Safety Improvement	Year Complete
Stafford King George	Corridor Safety Improvements on Route 218	Roadway Departure Crashes	2015
Spotsylvania Caroline	Trench Widening on Routes 301, 208, and 17	Roadway Departure Crashes	2016
Lancaster	Pedestrian Improvements in Town of Irvington	Pedestrian Safety	2016
Lancaster	Pedestrian Improvements in Town of Warsaw	Pedestrian Safety	2016
Spotsylvania	Intersection Improvements at Harrison Road and Leavells/Salem Church Road	Angle Crashes	2015
Gloucester	New Traffic Signal on Route 17 at TC Walker Road	Angle Crashes	2015

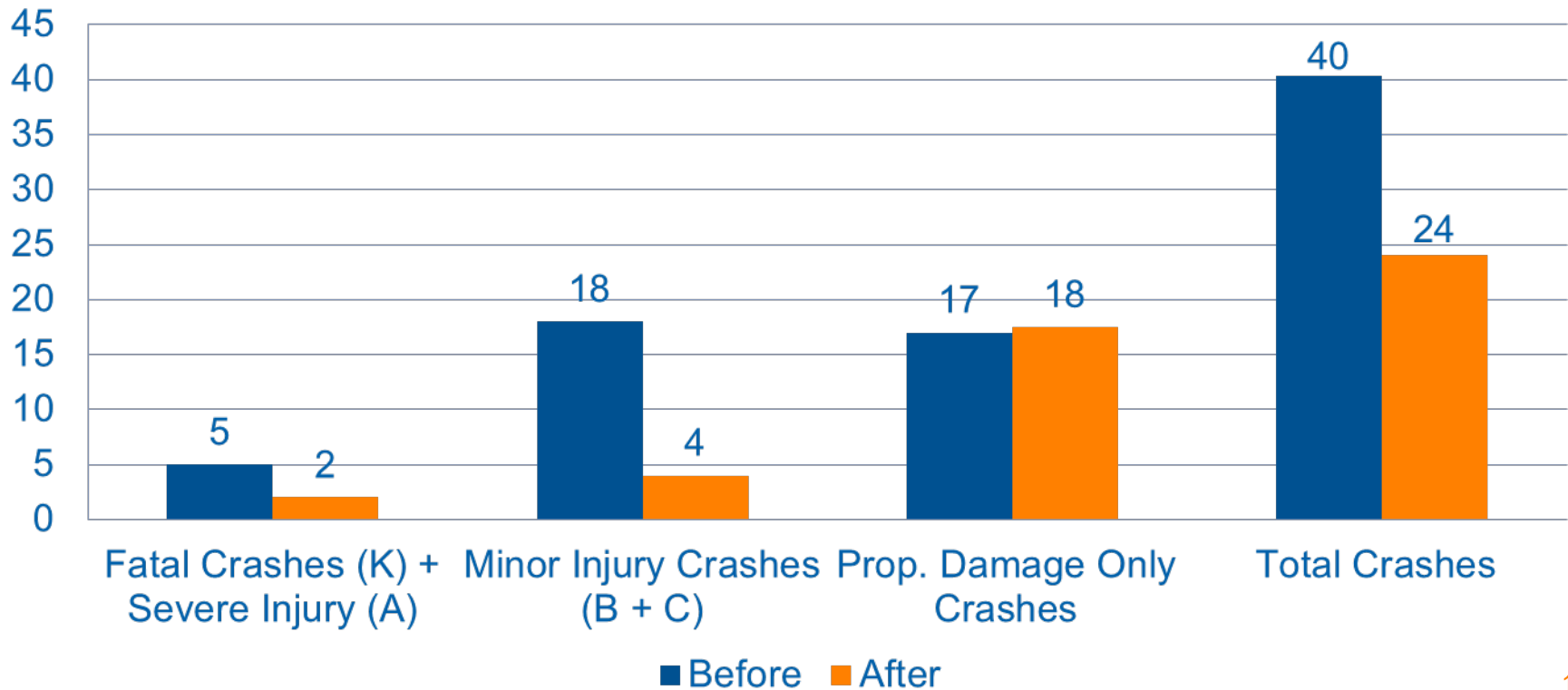
Projects Complete

Locality	Project Description	Identified Safety Improvement	Year Complete
Spotsylvania	Intersection Improvements at Route 1 and Mudd Tavern Road	Rear End & Angle Crashes	2016
Middlesex	Intersection Improvements at Route 17 and Route 17B	Angle Crashes	2015
Spotsylvania	New Traffic Signal on Harrison Road at Old Leavells Road	Angle Crashes	2014
King George	New Traffic Signal on Dahlgren Road at Caledon Road	Angle Crashes	2017
Caroline	Replace Traffic Signal in Port Royal	Rear End Crashes	2017

Before & After Results

40% Reduction in Total Crashes
74% Reduction in Injury Crashes

Intersection Before and After



Questions?