# Virginia Department of Transportation

# **Highway Safety Improvement Program**

# **Safety for Non-Motorized Users**

Stephen Read, P.E. August 1, 2013



# **VDOT HSIP History**

### Ten Years Ago.....

DOT

- Highway Safety Projects (\$6-9M/Year)
  - Cost less than \$500k
  - B/C assessment of crash reduction
  - High crash intersections and short segments (e.g., curve)
- Rail-Highway Grade Crossing (~\$5M/Year) <\$500k risk reductions</li>

#### New approach was started:

- Urban jurisdictions wanted non-motorized improvements and suggested legislating
- Added 10% set aside program for Bike and Ped improvements
- Used Transportation Enhancement approach for submittals



# Virginia's 2012-2016 SHSP

#### Vision -

Toward Zero Deaths. All roadway users should arrive safely at their destinations

#### <u>Mission</u> –

To save lives and reduce motor vehicle crashes and injuries through a data driven strategic approach that uses enforcement, education, engineering, and emergency response strategies

#### <u>Goal</u> –

To reduce deaths and severe injuries by half by 2030

#### Target -

To reduce deaths and severe injuries 3 percent per year until 2016

http://www.virginiadot.org/info/hwysafetyplan.asp





# **SHSP Emphasis Areas**

Engineering

**Strategies** 

include

actions for all

users

- 1. Roadway Departure
- 2. Intersections
- 3. Speed
- 4. Occupant Protection
- 5. Impaired Drivers
- 6. Young Drivers
- 7. Data Collection, Management and Analysis

State's Highway Safety Office uses NHTSA grants on driver behavior issues (numbers 4-6) that also includes pedestrian performance measures and actions.

http://www.dmvnow.com/safety/





## VDOT

## **Crash Map Layers**



Highway Improvements with Accommodations

 Signal upgrades with ramps, crosswalks, and ped phases

Driven by ben/cost of expected vehicle crash reductions

 Additional sidewalk connections and/or lighting at intersections

Added space and (reaction) time risk reductions

• Paving Shoulders with wider markings, rumble strips

Added space and (reaction) time risk reductions

# Bike & Ped Safety Project Development

- High Risk Corridor(s) / Master Plan Routes Identify missing links and barriers
- Safety Assessment

DOT

Bikeability and Walkability Assessments ; LOS

- Document Purpose, Need and Cost Area wide; corridor specific; intersection specific?
- Submit BPS Proposals and Priorities

# **Eligible BPS Projects**

## **Intersections:**

- pedestrian crossing; signing and marking
- signal detection, activation and timing
- lighting
- bike lanes

## **Mid-block:**

- pedestrian crossing, signing and marking, signals
- traffic calming devices for non-motorized users

## **Along Roadway:**

- bike lanes (or shoulders); multi-use trails; sidewalks
- signing and marking
- lighting

# **BPS Proposal Scoring**

- 1. Identify the Problem- 30 Points (Purpose & Need)
  - Risks and barriers on location map
  - Crash, traffic and ped counts if available
- 2. Identify the Solution 45 points (Improvement)
  - Description of how project fits master plan
  - Fairly detailed sketch of proposed improvements
- 3. Proposed Project Schedule and Cost 15 points
  - Recent line item costs

- Schedule by phase from begin date
- 4. Describe Local Support 10 points
  - Citizen, agency, political backing

#### VDOT

## **Bike and Ped Safety Proposals**

http://www.vdot.virginia.gov/business/ted\_app\_pro.asp

BPS-Proposal (Rev 10/15/2012)									Project#:			
Virginia Department of Transportation									Applicant#:			
Highway Safety Improvement Program									BPS File:			
Bike and Pedestrian Safety Im	provement	Proposal Fo	rm FY	13-14					Initiate Date:		for office use only	
Agency:	e		Project Sponsor:		Tel:				Email:			
Street Address:		Fax				VDOT District			VDOT Region:			
City, State, Zip :			Priority	y # (If subm	itting 2 + proposals	ing 2 + proposals):		Repeated Prop	- osal from prev. y	sal from prev. yrs?:		
kie: The yellow are required inputs and while areas are optional. The gray area	z are automatically generated	by embedded formulas.										
Program Type County / City	Route (Inclus	ie Name) Syste	em (1)	Frm/Mjr B Node-Offs	coad (HTRIS/RNS set If Applicable)	To/Cross Ro Node-Offset	d (HIRIS/RNS If Applicable)	Study Period Begins	Study Period Ends	ADT(s)	Type of Plans	
Bike & Ped												
Functional Class Code				Area I	ocation Code			Federal Sy	ystem Code			
Fully Describe Project classich Maps of Add Plannare required with all proposely			_									
Identify the Problems (Describe the principle problem)	Attachment-A	Provided Poi	ints	0 30								
(Provide satement of principle solution addressing the problem) Attachment-B Provided Points												
Proposed Project Schedule and Cost (	Attachment-C	Provided Poi	ints	0 15		1						
				Be	gin Date	End	i Date	Estimat	ed Cost		Remarks	
	Idministration Costs See Note )							S				
	ROW and Utilities/Environmental Clearance							S	1			
	Construction							s	-			
	Contingencies			Nete: 1. A local resolution is moganed upon notification of program approval for secondary			s					
	Total Project Cos	Total Project Cost Federal Funds Requested (Provide supporting and cost stimute deals on Attachment C)			cad and varbus projects. 2: VODT Dathict and Central Office/pensoreal charge welve and derivatives from the regret remenged by Cadilles. Safety Projects red managed by VDDT shall include a minimum of \$5,000 for VDDT PE coas.			S	1.1			
	Federal Funds Re							S				
		_										
tescribe Local Support Describe how the project will benefit the community and the support of agency and citizens with details on Attachment D)	( Attachment-D	Provided Poi	ints	0 10								
			<u>0</u>									
Iotal Points =					100							
ignature of Sponser with Authority to Expend 10% Matching Funds.												
Name (Print)					Signature				Date			
DOT anticipates providing the 10 percent match for the FY2013-14 ; howe	ver, the sponsor should be a	the to supply the local match if	state Anding	becomes unava	ilable. Please submit an e	lectronic copy of th	is spreadsheet to HSI	Program (livinginiado L	org and mail a paper o	opy with signature to	the address below	

Atta: BPS Improvement Proposi

Countries: Residency and County Staffane requested to submit proposed improvement safety studies through Resident Traffic Engineer

## **School/Library Area Accommodation Plan**



Master Planned: ➤ Land-use = bike

and ped travel

Conflicts defined

Countermeasures studied and costs estimated

Community involvement and support

## **Multi-Land Use Corridor Proposal**

#### Hillsdale Drive Traffic Safety Study



Sponsored by:

Thomas Jefferson Planning District Commission, Charlottesville-Albemarle MPO, Virginia Department of Transportation, Albemarle County, City of Charlottesville, Jefferson Area Board for the Aging, Charlottesville-Albemarle Sasciation of Realtors Charlottesville-Albemarle Association of Realtors

For information Contact:

Thomas Jefferson Planning District Commission 300 East Main Street PO Box 150 Charlottesville, VA 22902 (434) 979-7310 www.ipde.org

ATTACHMENT E



#### Corridor Studied:

Conflicts, users, speeds and volumes defined

Countermeasures studied and costs compared

Regional context and support provided Appendix A: Map of Pedestrian and Traffic Safety Recommendations



## **School Zone Traffic Calming**





## **Contact Information**

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