



# Using Partnerships to Improve Delivery of Programs in VDOT

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## Topics

- **Workforce Development**
- **Civil Rights**
- **State of Good Repair and SMART SCALE**
- **Environment**
- **Innovation**

# Virginia Education Center for Asphalt Technology

## Who are we partnering with?

- Virginia Asphalt Association
- Federal Highway Administration
- Germanna Community College

## What are we partnering with them to do?

- Design and deliver asphalt related materials certifications
- Establish Steering Committee and Community of Practice to guide training

## How is it improving service delivery?

- State of the art asphalt related practices and procedures to inspection workforce
- Increasing technical knowledge of VDOT inspection staff and consulting and contracting communities

# Virginia Education Center for Asphalt Technology



## VECAT

- 8 Programs delivered
- 20 Separate classes
- 4 Locations statewide - Germanna Fredericksburg, Germanna Culpeper, Virginia Western, Paul D. Camp



## 434 Total Enrollment

- 382 Certifications awarded
- 52 Failed
- **88% Pass Rate**



## Demographics

- 64 VDOT Attendees
- 370 Contractors, Consultants, Municipalities

# Inspector Apprenticeship Program

## Who are we partnering with?

- Virginia Department of Labor and Industry
- The Community College Workforce Alliance (CCWA)
- The Consulting and Contracting Community

## What are we partnering with them to do?

- Design and deliver content for the Highway Construction Inspector Apprenticeship Program
- Expand availability of apprentice course content to the entire construction community

## How is it improving service delivery as provided by VDOT?

- Increasing overall knowledge of new construction inspectors at VDOT and in the consultant/contractor community
- Establishing a clear pathway for the development of new inspectors

# Inspector Apprenticeship Program



## Participation

- 115 Employees enrolled to date
- 44 Completed the Apprenticeship



## Classroom

- CCWA Classes
- Appropriate Materials Certification School Classes



## Future

20 Additional Apprentices being recruited now.

# Transportation Industry Intern Program

## Who are we partnering with?

- Industry Partners such as Carter Machinery, Adams Construction, Boxley, AECOM, Mattern & Craig, MBP, AMT
- Virginia Western Community College

## What are we partnering with them to do?

- Expose interns to diverse roles in the transportation industry
- Provide interns with hands-on job assignments

## How is it improving service delivery as provided by VDOT?

- Creates a pool of potential new, experienced employees who want to work for VDOT and in the industry

# Transportation Industry Intern Program

Summer 2017

Salem District Pilot

Six Industry Interns

Two Hired!!



# Reengineering the Business Opportunity and Workforce Development (BOWD) Center

## Goals

- Increase number of new DBEs
- Increase number of DBEs that become prime contractors
- Leverage resources to meet objectives
- Increase partnership/mentoring/training opportunities with prime contractors
- Partner with industry associations to meet mutual goals

## VDOT stakeholders input used to reengineer the BOWD Center

- The Department of Small Business and Supplier Diversity
- Virginia Transportation and Construction Alliance
- American Council of Engineering Companies of Virginia
- Transportation DBE Advisory Council
- Virginia Asphalt Association

## **Business Opportunity and Workforce Development (BOWD) Center**

- **Business Opportunity Workforce Development (BOWD) Center resources can assist you when working with DBE firms**
- **Goal is for you and the companies that work with you to be successful**
- **If you have a DBE firm that needs further assistance in a particular area, please contact David Smith, BOWD Center Manager**
- **Today is soft opening of BOWD Center at new location (old Sandston Residency)**

## On-the-Job Training (OJT) Manual Update

- The On-the-Job training manual last updated in 1995
- VDOT and industry partners came together to update
- Revision has a statewide impact on the OJT program
- **Partners included:**
  - Fluor-Lane 95, LLC
  - E.V. Williams, Inc.
  - Shirley Contracting
  - Tavares Concrete Company, Inc.
  - Skanska USA
  - Virginia Transportation Construction Alliance
  - U.S. Department of Labor

## ACEC Round Robin for Consultants

VDOT and the American Council of Engineering Companies of Virginia and Metropolitan Washington partnered to help build relationships with VDOT, ACEC member firms and DBE firms.

The event included a round robin rotation of DBE firms with ACEC/VA members and VDOT selection committee members at each table.

### Benefits

- Increase the firm's exposure to the VDOT community of engineers
- Expand teaming partners on upcoming RFPs
- Gain insight into VDOT's selection process by networking with VDOT selection committee members
- Learn about partnering opportunities with ACEC member firms

## State of Good Repair and SMART SCALE

### State of Good Repair: 45 percent of construction funds set aside for:

- Reconstruction and replacement of structurally deficient state and locally owned bridges
- Reconstruction and rehabilitation of pavement on the Interstate System and primary state highway system, including municipality maintained primary extensions, determined to be deteriorated

### SMART SCALE has changed how we identify candidate projects

- Greater emphasis on the planning process and linkage to VTrans needs
- Shift from top-down to a bottom-up approach to transportation
- Extensive role given applicants in the process; VDOT/DRPT cannot submit applications
- Encourages multimodal candidate projects

# SMART SCALE

## SMART SCALE has changed how we do business

- **Paradigm shift for project selection**
- **Projects no longer partially funded – projects selected for funding will be fully funded through construction**
- **Project scope and features are defined earlier**
- **Greater and earlier collaboration with applicants**
- **Improves and strengthens collaboration between various disciplines**
- **Creates partnerships between applicants and VDOT and DRPT**
- **Share proposed changes and enhancements and solicit feedback**
- **SMART Portal enhanced for other application programs**

# SMART SCALE

## Increased Transparency and Accountability

Virginia.gov Agencies | Governor Search Virginia.Gov

**SMART SCALE** Pursuing the Right Transportation Projects in Virginia

**ON TIME**

DEVELOPMENT: 69% (114 of 165)

DELIVERY: 100% (2 of 2)

**ON BUDGET**

DEVELOPMENT: 96% (\$158 of 165)

DELIVERY: 100% (2 of 2)

Program Overview | Program Details

Pursuing the Right Transportation Projects in Virginia

**PROJECT SCORECARD**

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Ballston-MU Metrorail Station West Entrance App ID: 674

Project constructs second entrance to Ballston-MU station.

Project Location.....Arlington County

SMART SCALE Area Type.....A

Submitting Entity.....Arlington County

Preliminary Engineering.....Underway

Right of Way.....Underway

Construction.....Not Started

Expenditures to Date.....N/A

Key Fund Sources.....N/A

Administered By.....Locality

Eligible Funding Program(s).....District Grant

VTrans Need.....NOVA Regional Network

[\(Click for Details\)](#)

**2.2**

SMART SCALE SCORE

**#67** OF 287 STATEWIDE

**#10** OF 37 DISTRICT WIDE

SMART SCALE Requested Funds.....\$10,200,000

Total Project Cost.....\$20,000,000

Project Benefit.....2.2

Project Benefit/Total Cost.....1.1

Factor	Congestion Mitigation		Safety		Accessibility			Economic Development		Environment		Land Use	
	Person Throughput	Person Hours of Delay	Number of Fatal and Injury Crashes	Rate of Fatal and Injury Crashes	Access to Jobs	Access to Jobs for Disadvantaged Populations	Access to Multimodal Choices	Project Support for Economic Development	Intermodal Access and Efficiency	Travel Time Reliability	Air Quality and Environmental Effect	Impact to Natural and Cultural Resources	Transportation-Efficient Land Use
Measure Value	12.5	4.5	0.4	29.1	1,815	392	70	5.5	41,097	0.6	18.1	0.0	82
Normalized Measure Value (0-100)	1.4	0.8	6.9	1.2	0.2	0.2	0.2	2.1	2.8	3.8	0.1	0.4	6.9
Measure Weight (% of Factor)	50%	50%	50%	50%	60%	20%	20%	60%	20%	20%	50%	50%	100%
Factor Value	1.1		4.1		0.2			2.6		0.3		6.9	
Factor Weight (% of Project Score)	45%		5%		15%			5%		10%		20%	
Weighted Factor Value	0.5		0.2		0.0			0.1		0.0		1.4	
Project Benefit	2.2												
SMART SCALE Cost	\$10,200,000												
SMART SCALE Score (Project Benefit/SMART SCALE Cost)	2.2												

## Programmatic NEPA Approval

- **VDOT has implemented programmatic funding authorization for preventative maintenance contracted paving activities**
- **For efficiency, VDOT is working to implement a single programmatic NEPA document for preventative maintenance paving contracts**
  - **VDOT currently completes a NEPA document for each activity**
  - **Will streamline environmental review of preventive maintenance paving projects**
  - **Implementation pending negotiations with federal and state agencies**

# Stormwater Compliance at Construction Sites

**VDOT and industry have to partner to stay compliant**

**Work proactively with VDOT project team and other contractors**

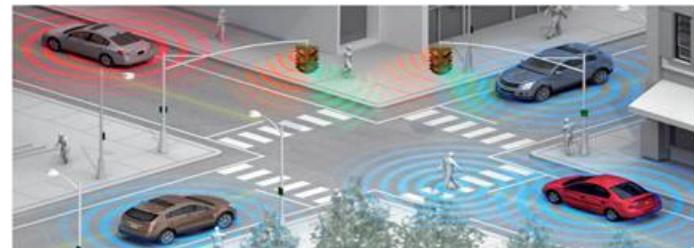
- **Know the limits of disturbance and prohibited areas**
- **Report spills and leaks from equipment**
- **Know where are the staging and laydown areas**
- **Don't assume someone else is taking the necessary corrective action**

**DEQ monitors VDOT and its contractors for full compliance**



# Connected and Automated Vehicle Partnerships

- **These technologies could change delivery of transportation services**
  - 90% of crashes attributable to driver error could be eliminated
  - Fewer crashes, more efficient flow could decrease congestion
  
- **To prepare for these changes, VDOT has been building partnerships with stakeholders for many years**
  - **Connected Vehicle Pooled Fund study – led by VDOT**
    - Partnership of state DOTs and localities to address owner/operator needs/challenges relating to connected vehicles
  - **Memorandum of Understanding – VDOT, FHWA, and Transurban**
    - Will facilitate collaborative development, testing and evaluation of connected and automated vehicle applications



## Virginia Connected and Automated Corridors

- **Partnership between Virginia Tech Transportation Institute and VDOT/VTRC Partnership**
  - Automated Corridor includes partnerships with Transurban and HERE
- **Combination of closed testbed and live roadway facilities**
  - Progression of technology from closed road (Smart Road) to controlled access (Express Lanes) to fully open roadways (I-95/I-495/I-66)
- **Currently provide real-time signal status information**
  - Provided through SmarterRoads.org for all signalized intersections in NOVA and directly to equipped vehicles from equipped intersections within the connected corridor
  - Will facilitate partnerships with private sector application providers
- **Opportunity to investigate other infrastructure needs to support connected and automated vehicles**
  - Pavement markings and signing
  - State of Good Repair



**QUESTIONS?**