

No Boundaries Presentation



Maintenance Program
October 25, 2016

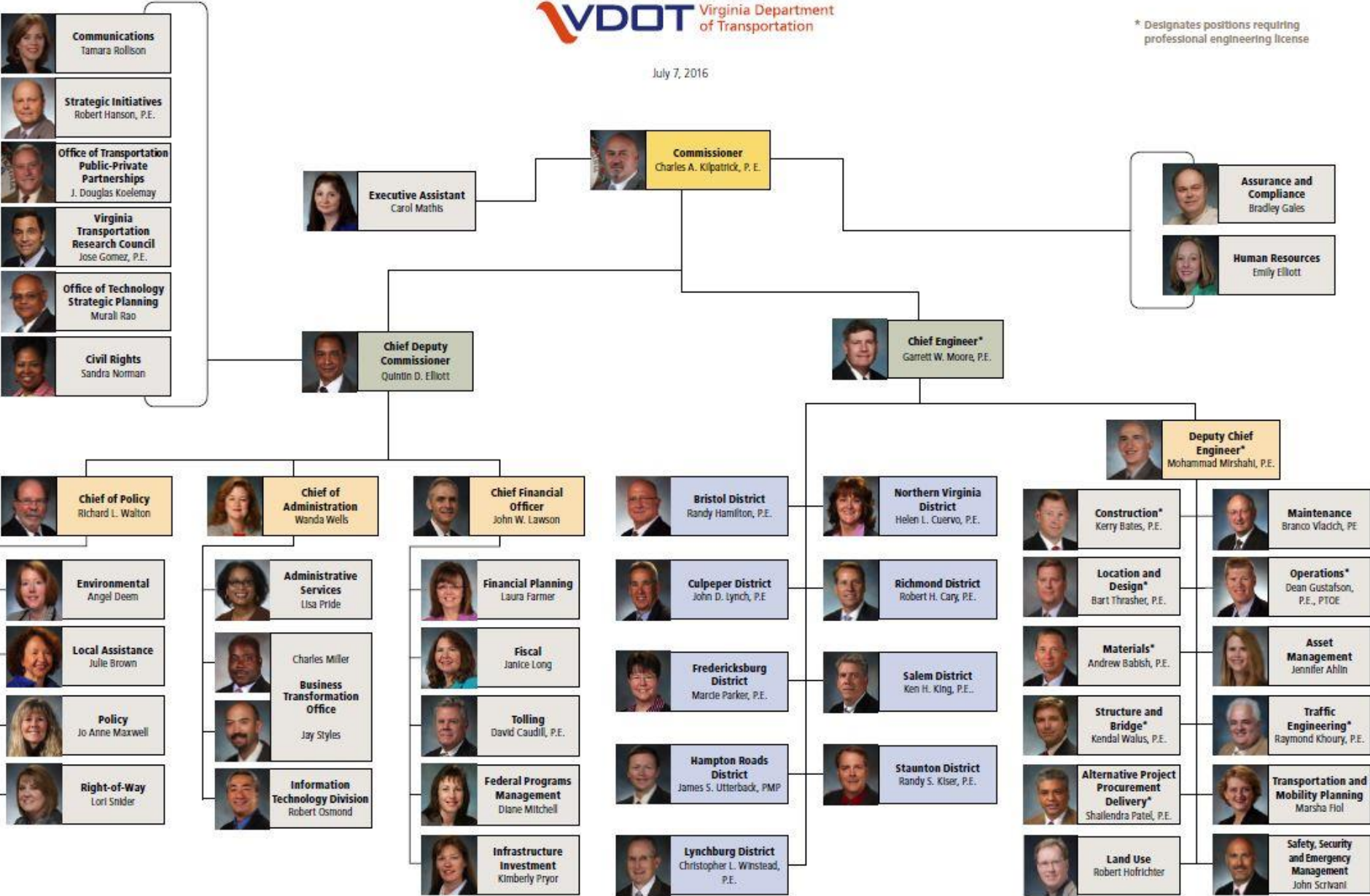
Steven R. McNeely
Assistant District Administrator – Maintenance
(District Maintenance Engineer)
Richmond District

VDOT Organization

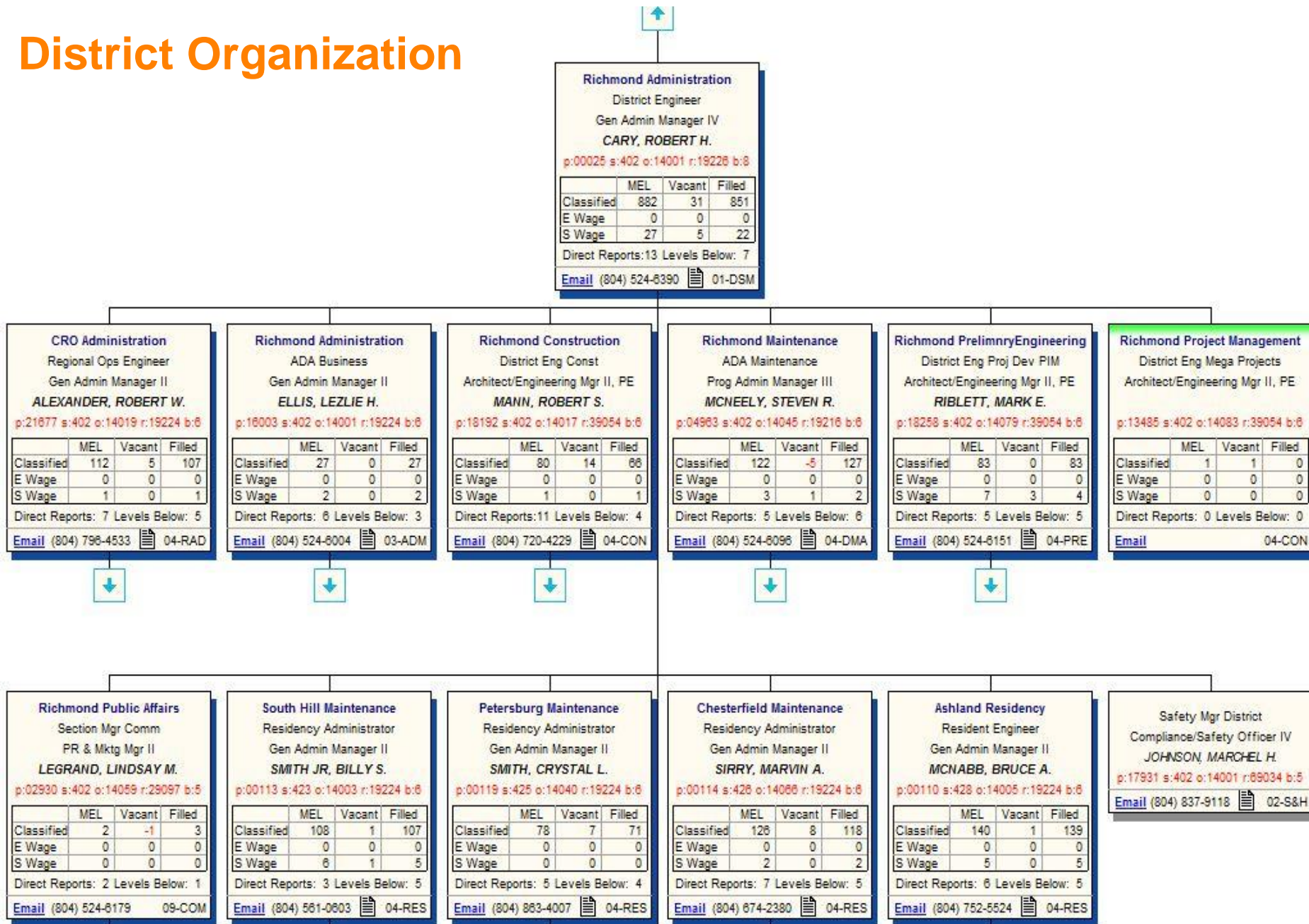


July 7, 2016

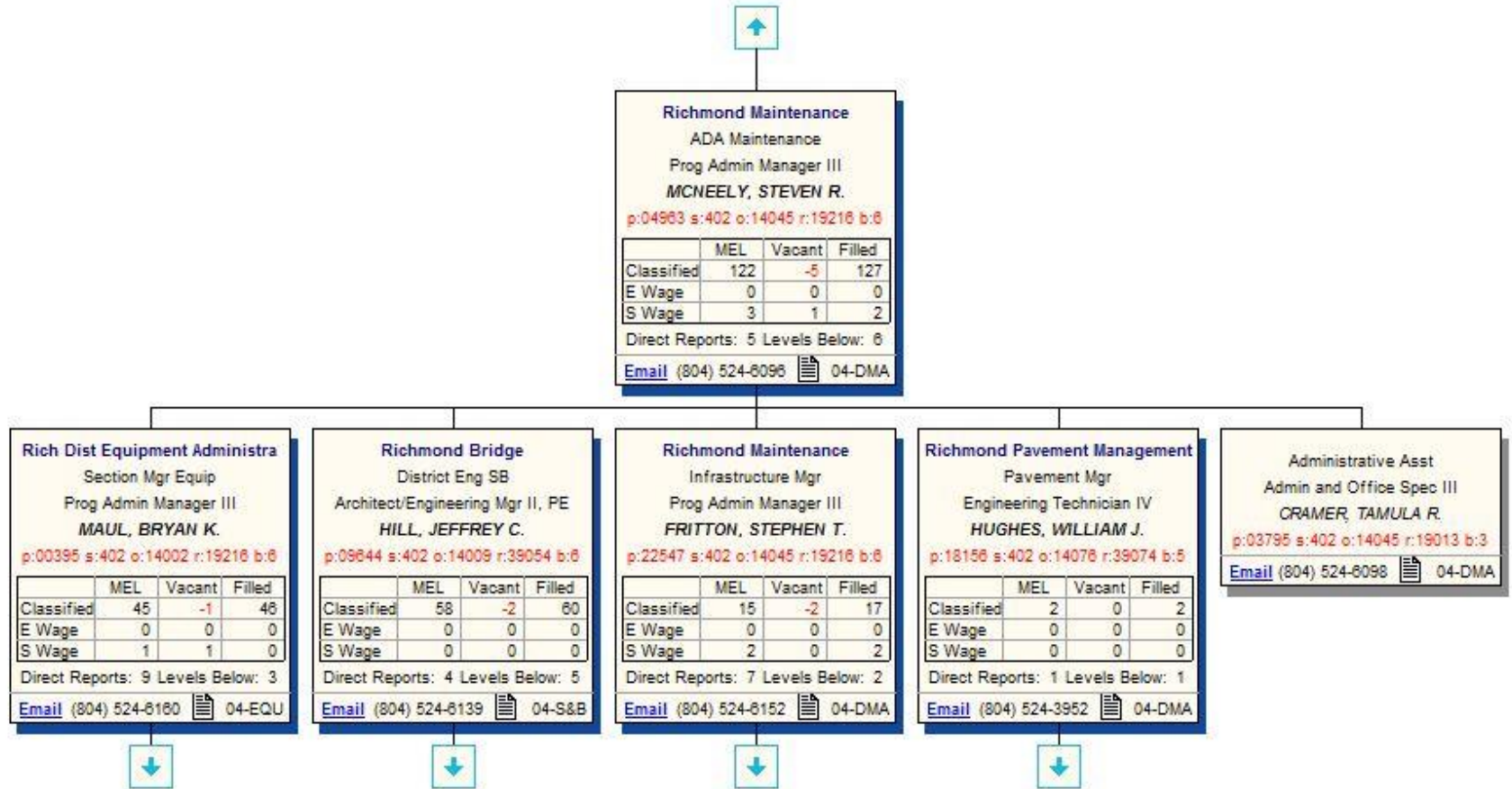
* Designates positions requiring professional engineering license



District Organization



District Maintenance Organization



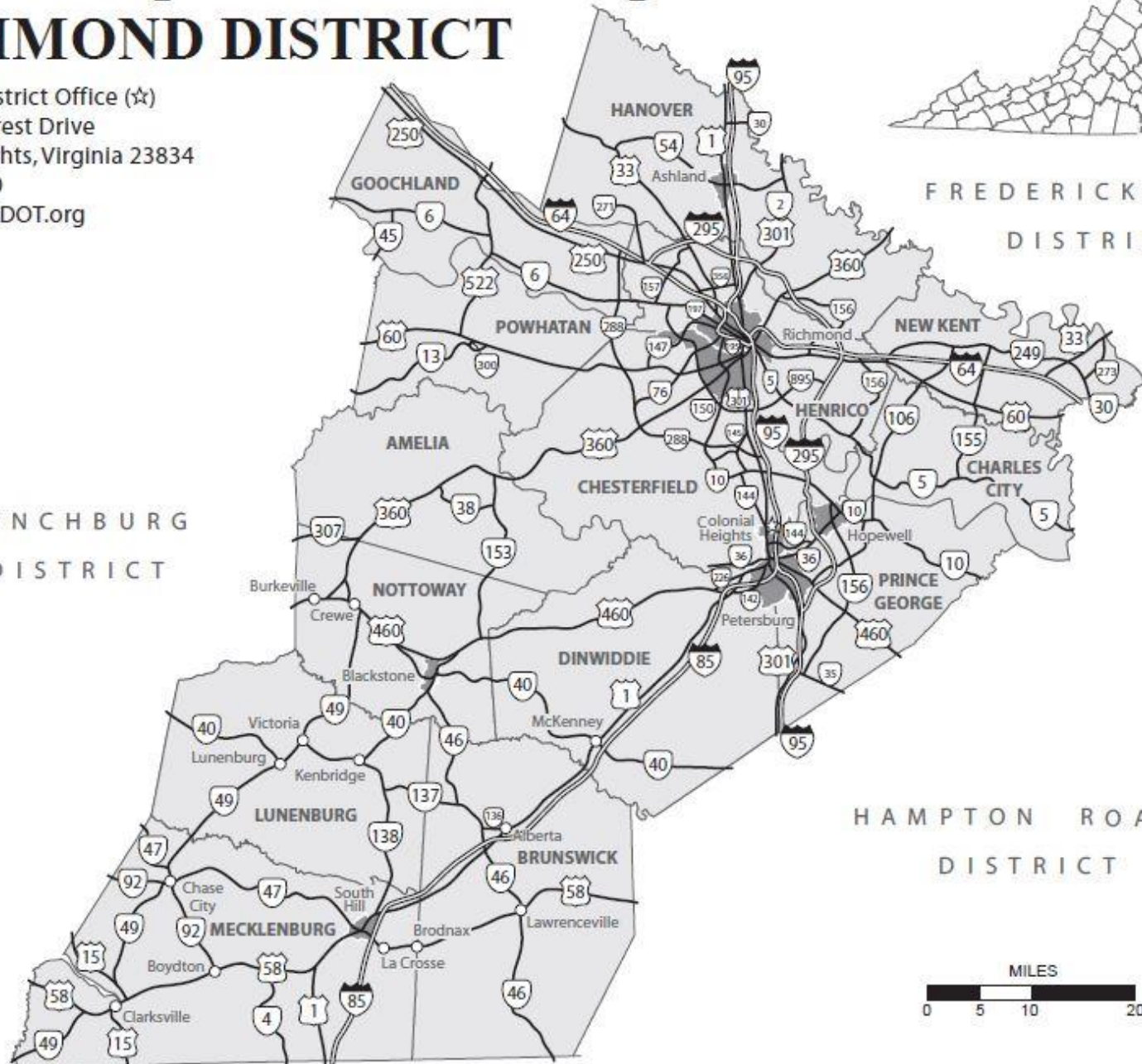
Virginia Department of Transportation

RICHMOND DISTRICT

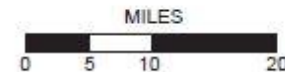
Richmond District Office (☆)
2430 Pine Forest Drive
Colonial Heights, Virginia 23834
804-524-6000
www.VirginiaDOT.org



LYNCHBURG
DISTRICT



HAMPTON ROADS
DISTRICT



North Carolina

Responsibilities

- **127 employees**
- **Structures and Bridges**
- **Pavements**
- **Budgets**
- **Performance Reporting**
- **SWMB**
- **Infrastructure Management**
- **Equipment**
- **Interstate Maintenance**
- **Policy**

Maintenance Activities

- Pavement Repairs and Reconstruction
- Bridge Repairs and Reconstruction
- SWMB
- Roadside – Vegetation Management
- Ditching
- Mowing
- Incident Management
- Snow Removal
- Equipment
- Claims
- Sidewalks, Trails, Sound Barriers, Fences
- Drainage and Slopes
- Lights, Signals, Guardrail, Signs
- Pavement Marking
- Projects

Fun Facts

- **VDOT Budget is \$5B each year**
- **7,725 VDOT Employees**
- **882 District Employees**
- **567 Maintenance Employees**
- **45 Equipment Employees**
- **5,100 Pieces of Equipment Valued at over \$80M**
- **4 Residencies**
- **27 AHQs**
- **14 Counties**
- **1.3 Million citizens in District (15% of State)**
- **7.7M miles traveled by district vehicles each year**
- **Average 50 bridge hits each year**
- **\$500K per year in tires**

Statewide Program

Organizations and Categories	Cardinal Allocations
☐ Central Office	\$244,776,583
☐ Bristol	\$158,889,268
☐ Salem	\$204,855,147
☐ Lynchburg	\$136,139,405
☐ Richmond	\$236,594,507
☐ Hampton Roads	\$178,130,481
☐ Fredericksburg	\$110,302,253
☐ Culpeper	\$95,757,154
☐ Staunton	\$148,833,995
☐ Northern Virginia	\$304,283,455
Grand Totals	\$1,818,562,249

District Budget 2017

<input checked="" type="checkbox"/> Richmond	\$236,594,507
<input checked="" type="checkbox"/> Cost Center	\$122,876,906
<input checked="" type="checkbox"/> Project	\$113,717,601

<input checked="" type="checkbox"/> Richmond	\$236,594,507
<input type="checkbox"/> Cost Center	\$122,876,906
<input checked="" type="checkbox"/> Emergency and Incident Management	\$16,627,142
<input checked="" type="checkbox"/> Facility and Other	\$17,026,330
<input checked="" type="checkbox"/> Roadway	\$9,780,576
<input checked="" type="checkbox"/> Routine Maintenance	\$67,172,582
<input checked="" type="checkbox"/> Traffic and Safety	\$12,270,277
<input checked="" type="checkbox"/> Project	\$113,717,601

Pavement Lane Miles

District	Interstate	Primary	Secondary	Frontage	Total
Bristol	528	2,809	12,306	112	15,755
Salem	493	2,668	14,731	105	17,997
Lynchburg	0	2,805	12,397	43	15,245
Richmond	1,323	3,439	13,932	75	18,769
Hampton Roads	874	1,770	7,122	92	9,858
Fredericksburg	281	2,190	9,279	24	11,774
Culpeper	279	1,852	8,282	52	10,465
Staunton	940	2,482	10,473	75	13,970
Nova	725	1,732	10,878	78	13,413
Statewide	5,443	21,747	99,400	656	127,246

Structure Inventory

Table 1 – Total Number of Bridges and Large Culverts

DISTRICT	Number of Structures (Bridges and Large Culverts)				
	Interstate	Primary	Secondary	Urban	Total
Bristol	216	954	2,033	208	3,411
Salem	218	809	1,945	102	3,074
Lynchburg	0	661	1,395	58	2,114
Richmond	521	782	1,120	161	2,584
Hampton Roads	455	450	498	282	1,685
Fredericksburg	82	254	476	7	819
Culpeper	121	499	1,054	22	1,696
Staunton	429	828	2,137	108	3,502
NOVA	379	546	1,228	46	2,199
Grand Total	2,421	5,783	11,886	994	21,084

SGR Project Estimates and Allocations

District	Maintenance Label	Project ID	Description	Total Estimate	Fund Source	Previous Allocation	FY2018	FY2019	FY2020	FY2021	Total Allocation
Bristol	☒ UPC-Bridge(SGR)					\$13,956,100	\$5,777,045	\$5,733,051	\$3,734,033	\$23,188,013	\$52,388,242
	☒ UPC-Pavement(SGR)					\$3,955,034	\$1,895,593	\$0	\$0	\$0	\$5,850,627
Culpeper	☒ UPC-Bridge(SGR)					\$4,344,622	\$1,782,317	\$0	\$0	\$5,531,561	\$11,658,500
	☒ UPC-Pavement(SGR)					\$2,413,679	\$1,156,843	\$0	\$0	\$0	\$3,570,522
Fredericksburg	☒ UPC-Bridge(SGR)					\$23,669,201	\$7,176,336	\$7,121,686	\$4,638,475	\$17,630,083	\$60,235,781
	☒ UPC-Pavement(SGR)					\$3,500,174	\$1,677,585	\$0	\$0	\$0	\$5,177,759
Hampton Roads	☒ UPC-Bridge(SGR)					\$19,650,509	\$4,390,647	\$8,659,397	\$25,533,602	\$19,450,113	\$77,684,268
	☒ UPC-Pavement(SGR)					\$1,665,778	\$798,384	\$0	\$0	\$0	\$2,464,162
Lynchburg	☒ UPC-Bridge(SGR)					\$12,926,405	\$5,012,880	\$8,037,819	\$8,909,810	\$4,751,251	\$39,638,165
	☒ UPC-Pavement(SGR)					\$3,549,128	\$1,701,048	\$0	\$0	\$0	\$5,250,176
Northern Virginia	☒ UPC-Bridge(SGR)					\$10,368,621	\$4,969,536	\$4,931,691	\$2,075,041	\$0	\$22,344,889
	☒ UPC-Pavement(SGR)					\$4,589,389	\$2,199,631	\$0	\$0	\$0	\$6,789,020
Richmond	☒ UPC-Bridge(SGR)					\$23,229,250	\$8,994,120	\$8,681,393	\$2,623,349	\$0	\$43,528,112
	☒ UPC-Pavement(SGR)					\$7,020,066	\$3,364,620	\$0	\$0	\$0	\$10,384,686
Salem	☒ UPC-Bridge(SGR)					\$30,082,840	\$6,244,344	\$6,196,791	\$4,036,076	\$24,238,513	\$70,798,564
	☒ UPC-Pavement(SGR)					\$4,083,537	\$1,957,182	\$0	\$0	\$0	\$6,040,719
Staunton	☒ UPC-Bridge(SGR)					\$17,055,803	\$5,503,590	\$7,282,475	\$6,358,617	\$20,672,692	\$56,873,177
	☒ UPC-Pavement(SGR)					\$1,644,021	\$787,957	\$0	\$0	\$0	\$2,431,978

Total = \$483,109,347

SOGR Test

PAVEMENT

Raises critical condition index (CCI) above 60

Meets definition of pavement rehabilitation and reconstruction in Federal Highway Administration's memo dated 9/12/2005

BRIDGE

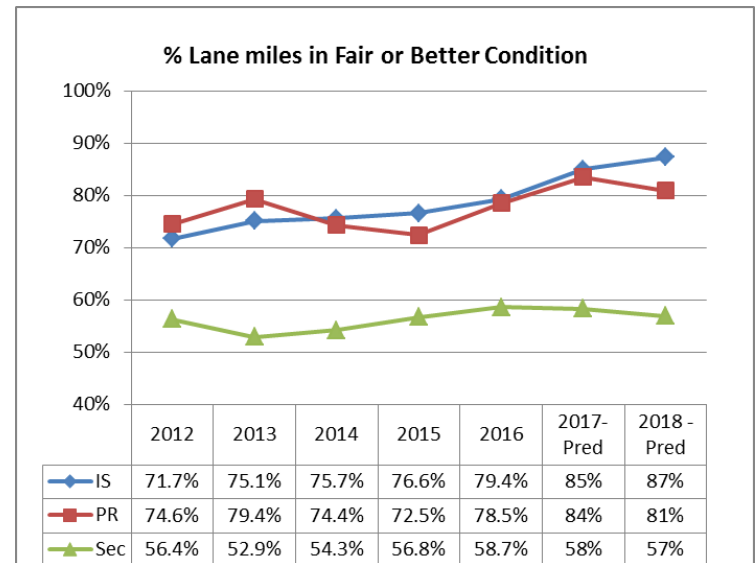
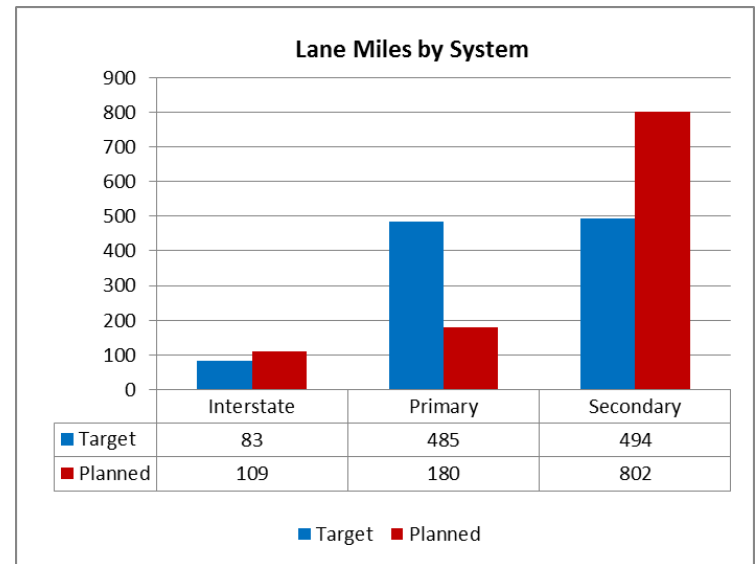
Removed from structurally deficient status

Meets definition of bridge rehabilitation and replacement in Federal Highway Administration's Bridge Preservation Guide dated August 2011

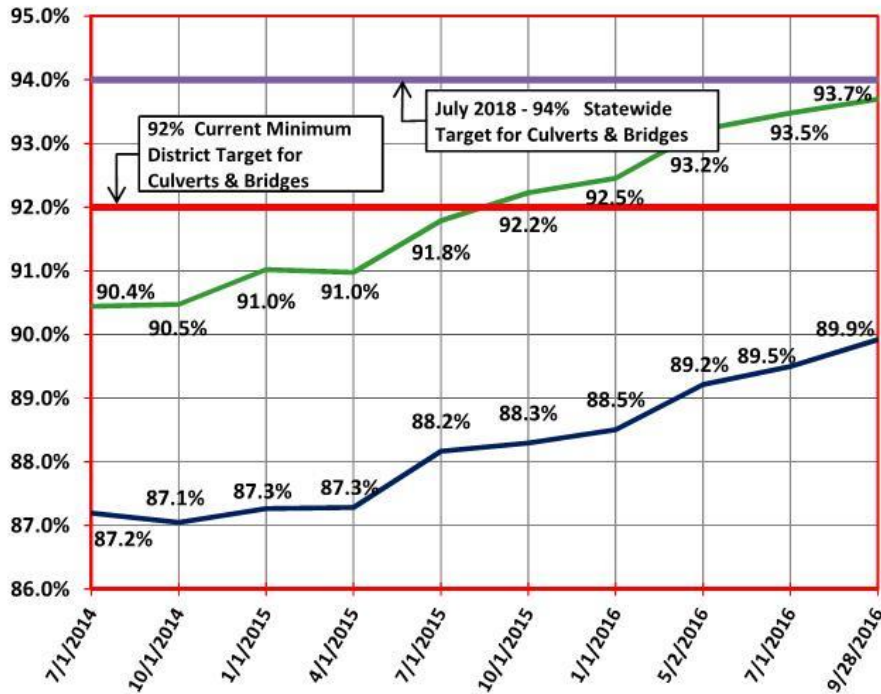
Adds or restores strength

Quarterly Pavement Report for CY17 Paving Richmond District: Oct 2016

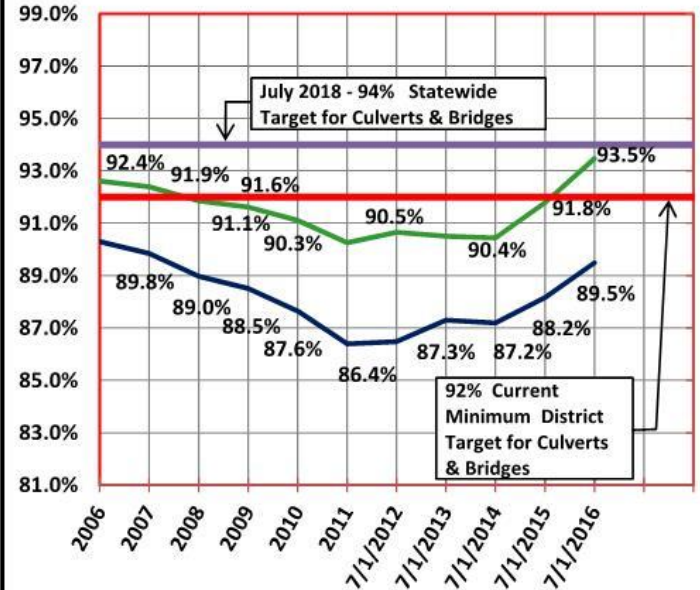
- Advertising target for paving was \$82M
- As of Sept 30th , the district plans to pave 1091 lane miles in CY17
- Based on planned paving, the district is predicted to meet performance targets on the Interstate System and not meet targets on Primary and Secondary in CY18
- Currently the district has 10 lane miles with CCI < 30 on the interstate system. Work is planned on all of those lane miles.



Percentage of Non-Deficient Structures
Graph of Near -Term Progress

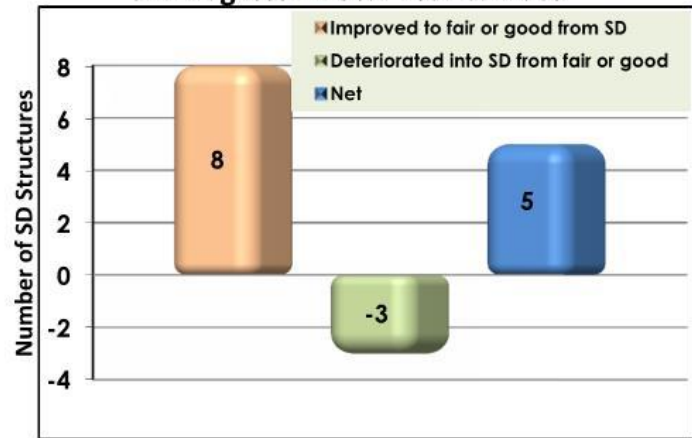


Percentage of Non-Deficient Structures
Graph of Long-Term Progress



Current # of SD Structures = 147

SD Progress - Fiscal Year to Date



Percentage of Bridge and Culvert Structures in Fair or Good Condition	Description	Target Date	Target	Actual
	Interstate	Current	97%	96.3%
	Primary	Current	94%	93.4%
	Secondary	Current	89%	93.2%
	All Systems, NBI & Non-NBI Structures	July 2018	92%	93.7%
	All Systems, NBI & Non-NBI Bridges	July 2018	92%	89.9%
All Systems, NBI Structures	July 2018	92%	92.2%	
On Time Inspections	Bridges & Culverts (VDOT & Local)	Current	95%	100.0%

Winter Operations

\$13.2M budgeted

3,500 Pieces of equipment VDOT and Contractors

Expended 2 times budget last year

Recent Strides

Bridges

Staffing

- New Design Team
- Bridge Crew

System Improvements

Pavements

Focus on Repair Types

Additional Funding (SOG)

System Improvements

New Shop

Opened new South Hill Shop

Challenges

Bridges

Pavements

Qualified Bridge and Construction Inspections Teams

Winter Operations

Equipment Utilization

Safety

No Boundaries Help

New materials which may be better, less expensive or perform better

Equipment utilization

New equipment types or attachments

Safety

Questions

