

VDOT Maintenance and Operations Update

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**2011 VAA Fall Asphalt Conference
October 2010**

Maintenance and Operations Program Goals

Deliver emergency and safety services to efficiently operate the system

- **Emergency response for snow, flood and other weather related emergencies**
- **Incident management activities such as safety service patrols**
- **Operate and maintain the 24/7 facilities: traffic operations centers, river and mountain tunnels, movable bridges, safety rest areas, ferries, parking lots**
- **Ordinary maintenance on pavements, bridges, tunnels, traffic & safety, and technology assets, response to citizen calls for service**
- **Maintain drainage, vegetation, barriers, equipment**

Maintain and extend the useful life of core highway assets

- **Perform corrective and restorative maintenance, and rehabilitation of pavements and bridges**
- **Perform major repairs and equipment replacement based on life-cycle cost for tunnel systems, traffic & safety, and technology assets**

Scope of Systems

- 126,529 VDOT maintained lane miles – 3rd largest network in U.S.
- 19,381 VDOT maintained bridges and large culverts
- 740,000 ground mounted signs, 30,000 overhead signs
- 66,700 miles of pavement markings
- 6,286 miles of guardrail
- 3,407 signalized intersections or flashers
- Technology- 648 cameras, 502 dynamic message boards, 79 portable message signs, 68 weather stations, 35 highway advisory radios
- 7 tunnels (4 water tunnels; 2 mountain tunnels, 1 urban tunnel)
- 7 ferry boats
- 17 movable bridges
- 5 traffic operations centers
- 42 safety rest areas

**Vehicle Miles of Travel (VMT)
on VDOT Maintained Roads**

24.0 billion annual VMT on interstates

24.7 billion annual VMT on primaries

14.4 billion annual VMT on secondaries

Operation and Maintenance Services Delivered in FY2011 and Expenditure (\$millions)

- **Pothole blitz: 108,203 potholes patched**
- **53,300 safety service patrol citizens assists**
- **Over 33 million safety rest area visits annually**
- **5,651 lane miles paved in calendar year 2010 - \$220.6**
- **9,218 lane miles planned to be paved in calendar year 2011 - \$418.2**
- **1,111,500 callers to 511 Virginia traveler information**
- **402,196 work orders, 96,367 generated from citizen requests**
 - **Pothole patching**
 - **Dead animals**
 - **Drainage problems**
 - **Limb/tree damage**
- **159,485 acres mowed - \$36.2, 2-3 mowing cycles**
- **96,779 signs fabricated**
- **32,152 ferry crossings**
- **Major weather events: Responded to 21 snow events and 14 tornadoes**

Maintenance and Operations Investments

Focus on physical condition of assets

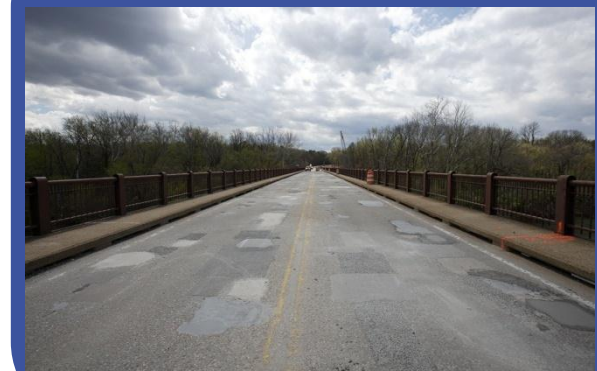
Mill and Overlay



Restore



Deck Rehab



Guardrail Upgrade



Striping



Replace



Maintenance and Operations Services

The focus on emergency response, operations, and ordinary/routine maintenance of assets

Patching



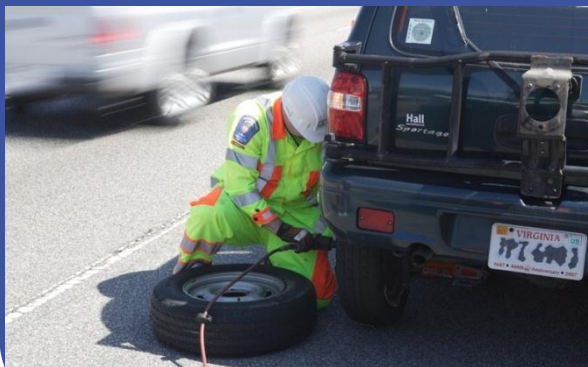
Flushing



Mowing



Safety Service



Snow Removal



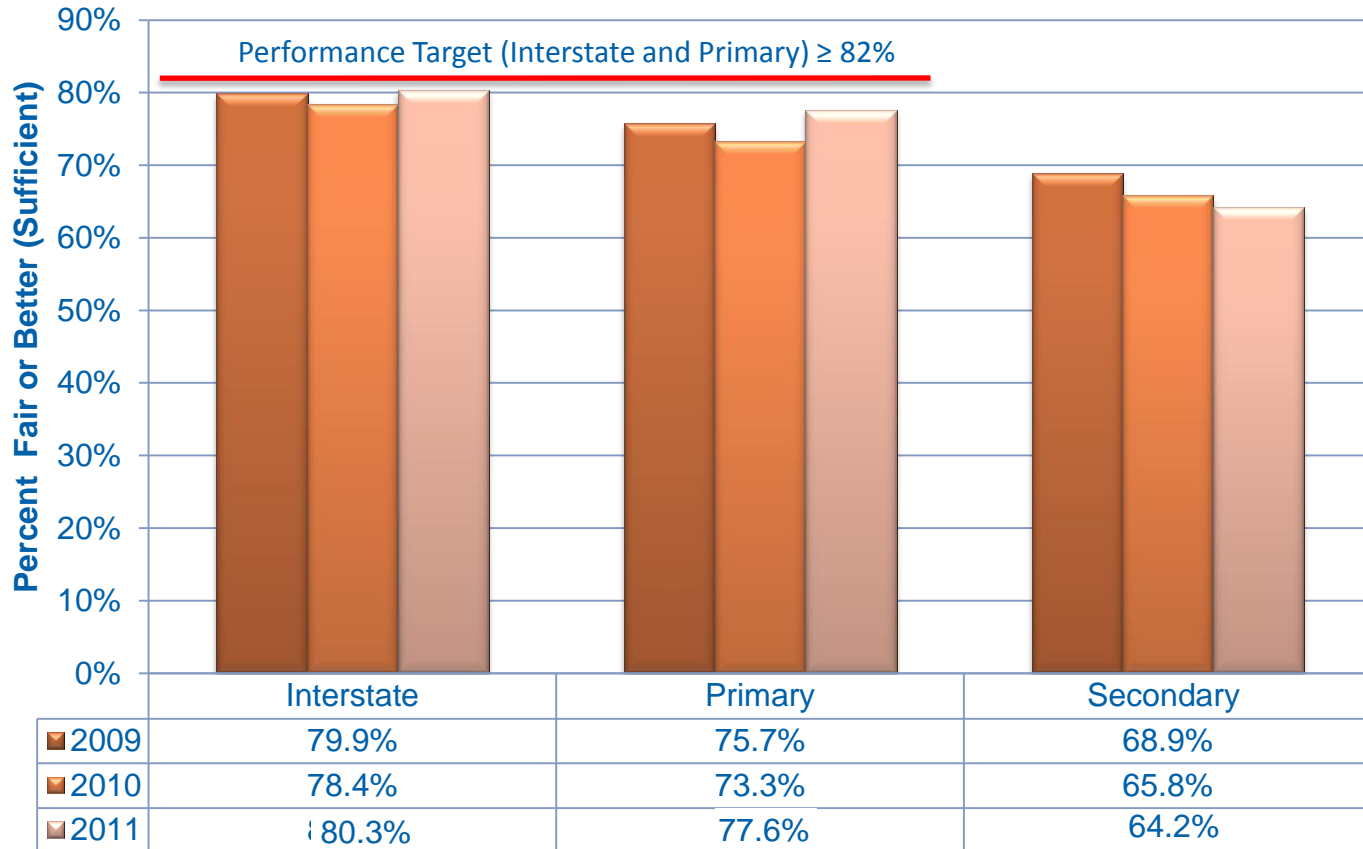
Washing



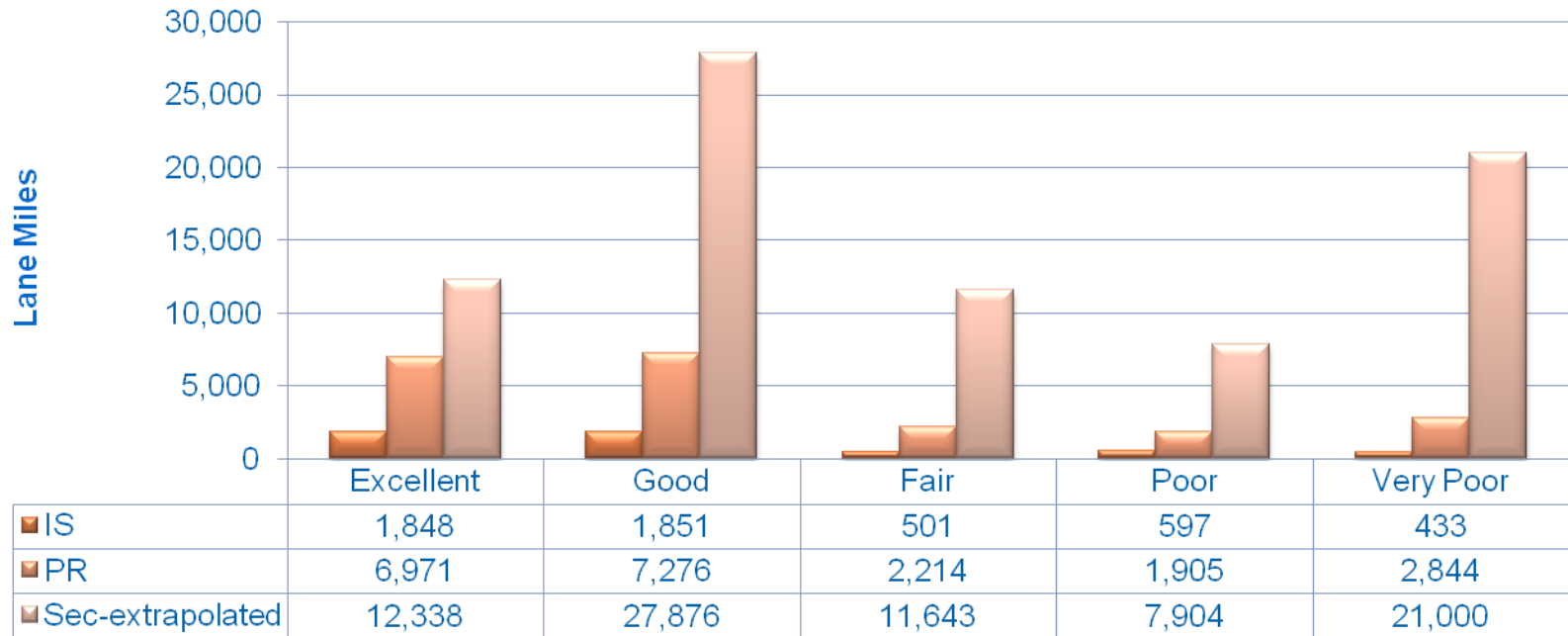
Maintenance and Operations Budget FY 2011-2012 (\$ millions)

	FY 2011 Budget	FY 2012 Budget
Investment		
Pavement	318.3	360.6
Interstate Pavement	92.6	83.8
Primary Pavement	164.9	188
Secondary Pavement	60.7	88.8
Bridges	131.1	123
Tunnels	24.6	22.7
Traffic and Safety	116.5	140.7
Emergency and Incident Management	23.3	28.9
Sub-Total	613.8	675.9
Services		
Emergency and Incident Management	157.7	177.1
Traffic and Safety	70.4	65.3
Roadway	173.5	159.1
Roadside	137.9	137.2
Facility and Other	192.1	197.9
Sub-Total	731.5	736.7
Total	1345.3	1412.6

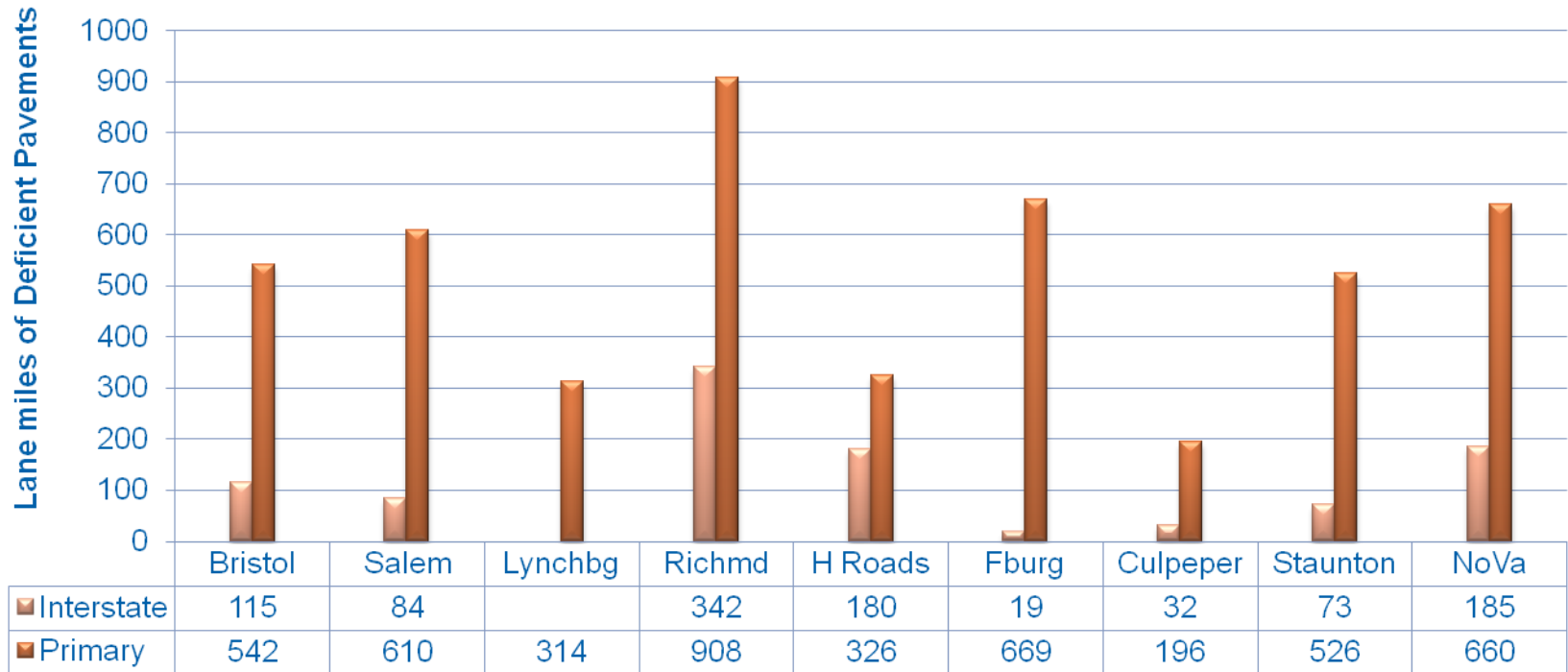
Percent of Lane Miles in Sufficient Condition by System



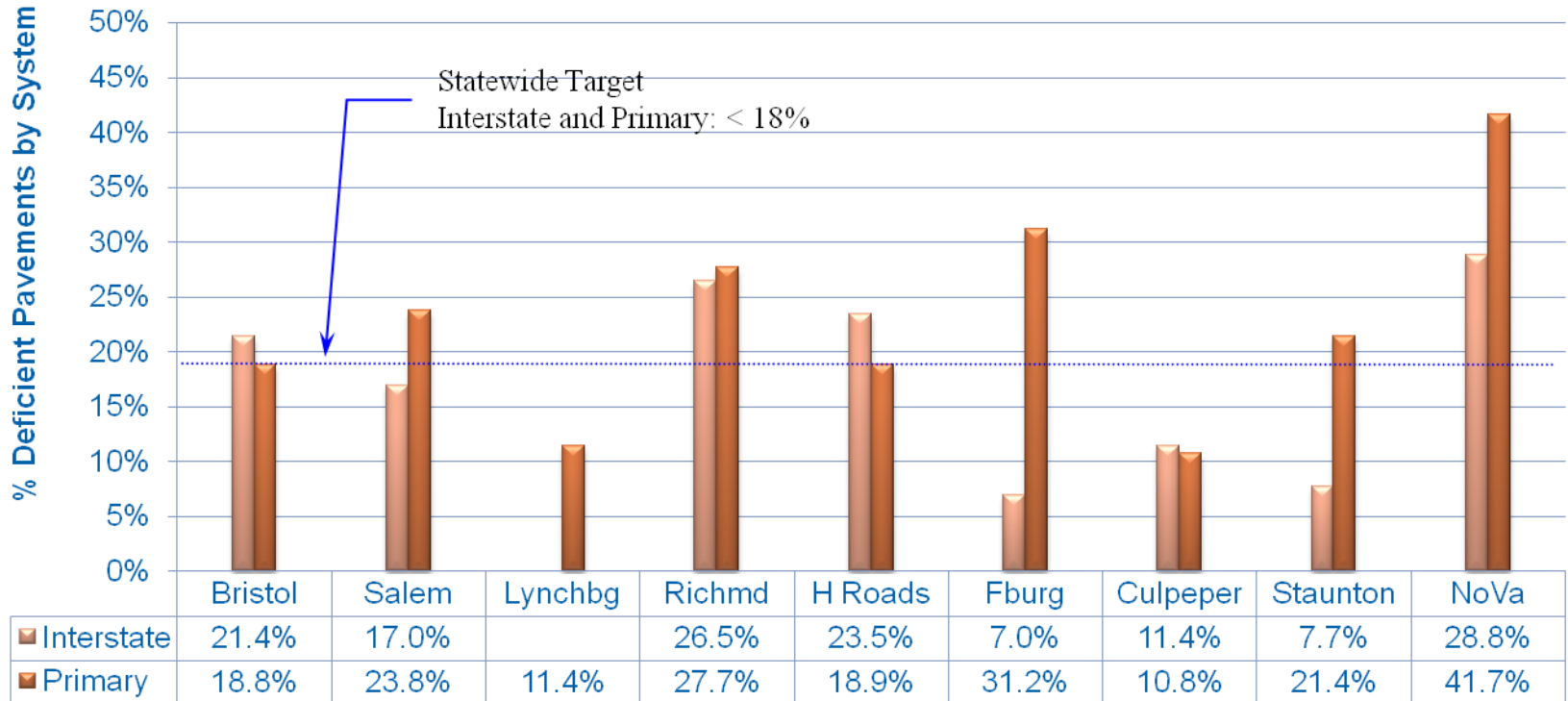
2011 Pavement Conditions Lane Miles by Roadway System



Lane Miles of Deficient Pavement by District (2011 Condition Data)



Percent Deficient Pavement by District (2011 Condition Data)



Preliminary Planned Paving - 2012

Scheduling and Contract Division is Currently Reviewing 2012 Paving Schedules

Planned Paving (Maintenance Program) in 2012:

- **Plant Mix**
 - 1,829 lane miles
 - 1.9 million tons
- **Latex**
 - 734 lane miles
 - 50,316 tons
- **Slurry Seal**
 - 774 lane miles
 - 5.3 million SY
- **Chip Seal**
 - 4,180 lane miles
 - 24.7 million SY

VDOT –VAA TRAFFIC INITIATIVES

Challenges & Issues

- Limited availability of Raw Materials for Pavement Markings
- Constructability Issues relating to Edgeline Markings on multi-lane roads
- Lack of Pay Item for Temporary Markings & Challenges of Paint Shortage
- Consistency of Traffic Loops Installation methodology & specifications
- Restrictions on Milled Surfaces & Production impacts

Actions

- Assembled cross-functional group to resolve issues: **Traffic Engineering, Construction S&C, Materials, Maintenance, Regions, Districts, Industry, VCTIR**
- Added new marking products & Extended Marking Matrix until December 31, 2011 to address paint shortage
- Issued new guidance on Edgeline markings to provide more flexibility
- Approved a Pay Item for Temporary Markings to ensure roads have markings ASAP
- Establishing Consistency in Traffic Loops installation methods & specifications
- Clarifying option for Performance Milling in addition to Regular Milling for efficiency
- Revising Specifications & Special Provisions to improve efficiency: **Temporary Pavement Markings, Restoration of Loops, Milling timeframes, etc.**
- Continues to monitor initiatives and reassess as needed for upcoming seasons



VDOT Maintenance and Construction Programs

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October 4, 2010**