



Locally Maintained Pavement Condition Assessment

June 19, 2013

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Background

How Did We Get Here?

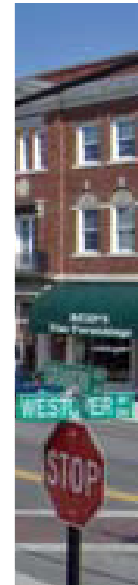
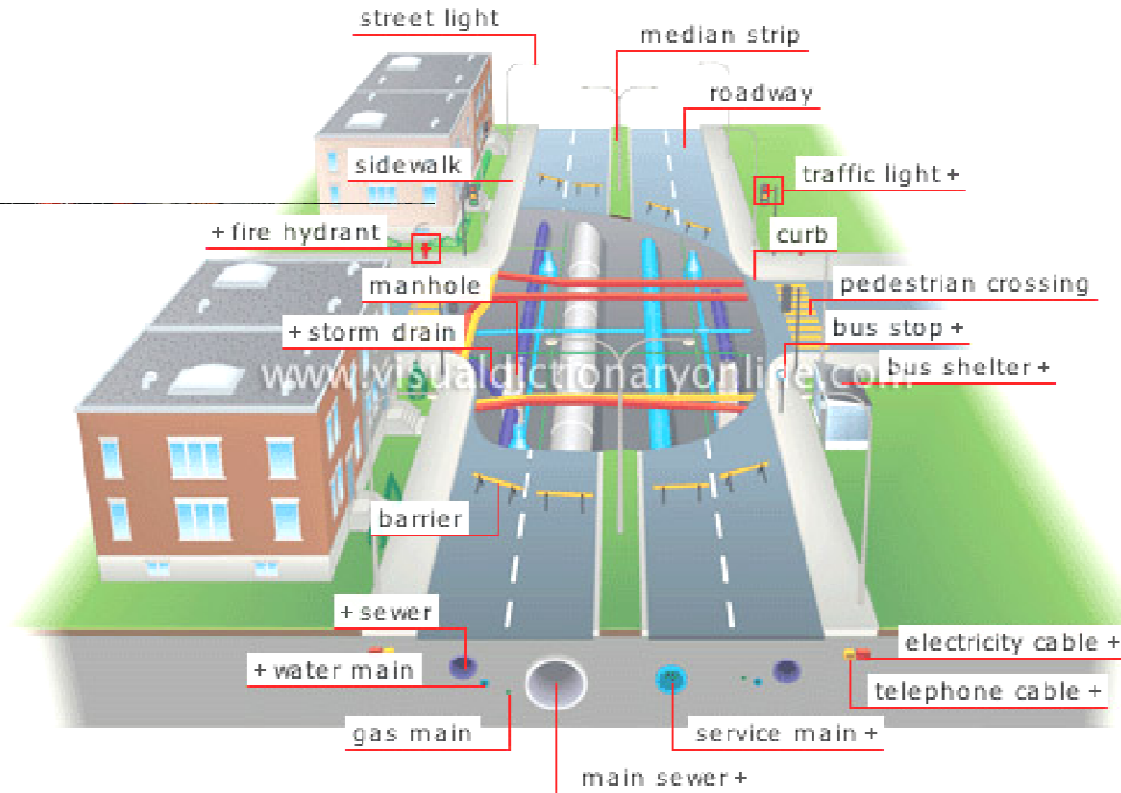
- **CTB discussion / questions regarding the equitable distribution of maintenance funds across systems and localities**
 - **Payments to Municipalities (functional class)**
 - **Payments to Arlington & Henrico (all roads)**
 - **Spending on VDOT Primary and Secondary System by District/Urban vs Rural**
 - **MN funding may be more equitably distributed by a formula that incorporates a prioritized needs-based factor along with a commitment to maintain our statewide assets, regardless of maintenance responsibility.**
- **CTB Requested Additional Review over 2011 / 2012**
 - **CTB subcommittee & Reformation of Local Govt Wrkgrp to:**
 - Evaluate equalization of maintenance fund allocations
 - Develop recommendations for the effective and equitable distribution of maintenance funds
 - Develop recommendations to collect add'l local system condition and performance data

Background

- **Results of Local Workgroup (presented to CTB June 2012):**
 - **Maintenance activities in urban localities that maintain their own systems are substantially different than that on most VDOT-maintained county roads.**
 - **It is very difficult to make direct comparisons between VDOT & Local performance/spending/needs**
 - **Performance measures must keep the differences in mind when implementing statewide standards**
 - **An analysis and comparison of needs across systems is desired before recommending changes.**
 - **Utilize VDOT's pavement condition contract to collect data on local arterial system**

Background

Maintenance activities in urban localities that maintain their own systems are substantially different than on most VDOT maintained county roads.



Background

Local System Spending

Based on FY08 – FY11 Certified Expenditures (Weldon-Cooper)

- Urban Localities Average Spending:
 - *Pvmt/Drainage – \$6,941/ln-mi; 44% of total spending*
 - *Traffic Devices/Operations – \$2,740/ln-mi; 24% of total spending*
- Arlington Average Spending:
 - *Pvmt/Drainage – \$9,879/ln-mi; 30% of total spending*
 - *Traffic Devices/Operations – \$9,936/ln-mi; 30% of total spending*
- Henrico Average Spending:
 - *Pvmt/Drainage – \$1,845/ln-mi; 20% of total spending*
 - *Traffic Devices/Operations – \$877/ln-mi; 13% of total spending*
- VDOT Budgets approx. 36% for P/S Pavements

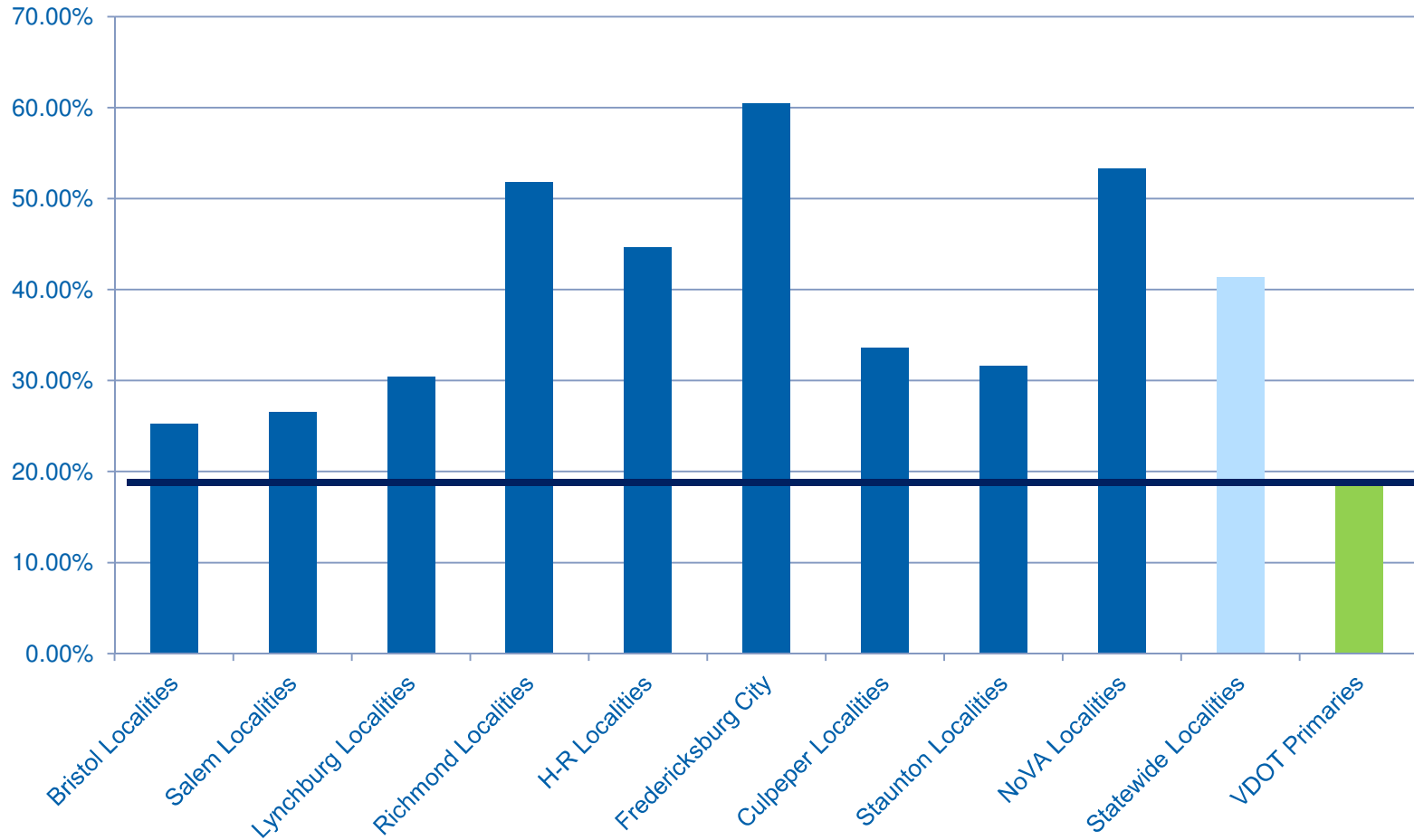
**Accounts for additional 36% Municipalities and 111% Arlington Spends on Street Maintenance above VDOT MN payments*

**Does not account for differences between arterial and collector/local spending*

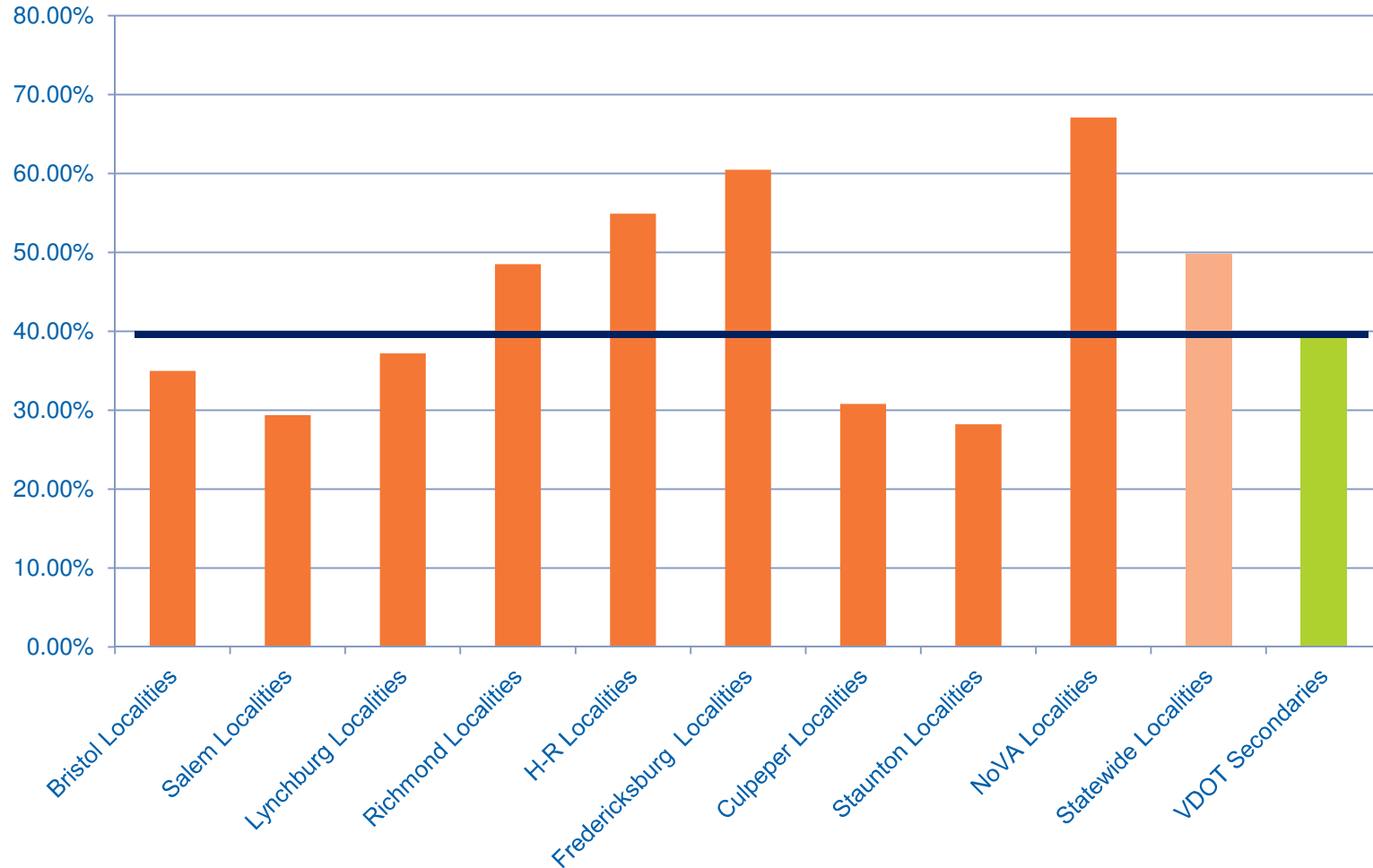
Local Pavement Data Collection As requested by CTB

- **Local Arterials Pavement Condition Analysis**
 - Summer 2012 – Spring 2013
 - 84 Localities (82 Cities/Towns, Arlington & Henrico Counties)
 - Collected Arterial Routes Only
 - Collected 5,875 Lane Miles (**approximately 20% of Locally Maintained Lane Miles**)
- **Local Arterial Routes consist of 63% Primary Routes**
 - Compared Locality Primary Extensions to VDOT Primary Routes
 - Compared Locality Non-Primary Routes to VDOT Secondary Routes
- **Looked at “Deficient” Arterial Pavements**
 - Critical Condition Index (CCI) below 60
 - Scale 0 to 100 (100 represents pavement with no visible distresses)

% Deficient Pavement Local Primaries / VDOT Primaries



% Deficient Pavement Local Non-Primary / VDOT Secondary



* Does not represent most local roads (37% of Arterial Routes)

Local Government Workgroup – Conclusions

- **Local arterial pavement is generally in the same or worse condition than similar roadways maintained by VDOT; This is more significant in more urbanized areas**
- **Localities are expending ~44% of total spending on pavements**
 - **VDOT budgets ~36% of maintenance funds for Primary/Secondary pavements**
- **71 of the 86 Localities that receive maintenance payments are expending more on maintenance than the amount received from VDOT**
- **Urbanized streets are not necessarily the same as VDOT maintained streets**
- **Negligible correlation between deficiency in pavement when compared to:**
 - **Spending**
 - **% Truck Traffic**
 - **AVMT**
 - **% Population**
- **Possible Causes:**
 - **Age**
 - **Quality of CN**
 - **Utility Conflicts**
- **Even with the data, this is still an incomplete picture.**

Local Government Workgroup – Recommendations

- **Make no changes in current methodology for Local Government maintenance payment**
- **Continue to track overall system performance, monitor progress, and assess needs over time**



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