Arlington County DES Paving Program

June 2, 2009 Civic Federation Briefing

Dave Hundelt, Chief, Water, Sewer and Streets Bureau

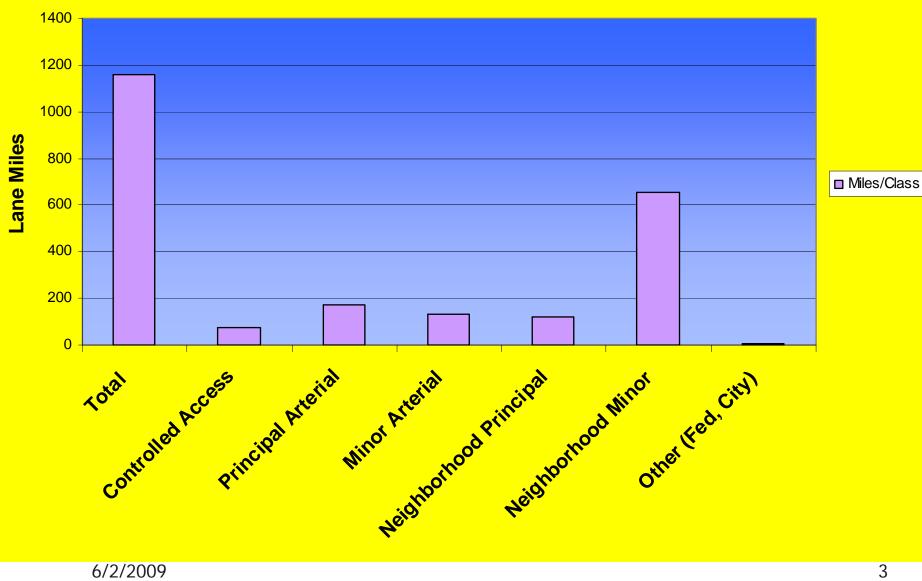
dhundelt@arlingtonva.us

703-228-6539

Paving In Arlington

- 960 Lane Miles of Arlington County Streets
- 170 Lane Miles of VDOT Streets (Arterials)
- Hot Mix Milling and 2" Overlay
- Slurry Seal liquid, cold applied, 3/8"
- Microsurfacing liquid, cold, 5/8"
- Re-building Cut out, stone, base, top

Street Classifications



VDOT Streets

- U.S. 50, Arlington Boulevard
- U.S. 29, Lee Hwy
- U.S. 1, Jefferson Davis Hwy
- Glebe Rd. (VA 120)
- Old Dominion Dr. (VA 309)
- VA 110 (limited access hwy)
- Chain Bridge Rd. (VA 123)
- Washington Blvd (VA 27) (50-Memorial Bridge)

- Washington Blvd. (VA 237) (Lee to Glebe)
- Fairfax Dr. (VA 237) (Glebe to Wilson)
- 10th St. N. (VA 237) (Wilson to 50)
- Spout Run Pkwy (Lee to Lorcom)
- Columbia Pike (VA 244) –
 Possible County FY11

Hot Mix Asphalt Paving









Hot Mix – Milling and Paving

- 2-inch thick asphalt overlay
- Edge or Full Milling prior to Paving
- Prefer Curb and Gutter in place, but 5% of funding for streets lacking C & G.
- Lasts 10-40 years depending on loads, cuts, weather, base, drainage, etc.
- Cost is \$14/Sq Yd currently, sensitive to crude oil price fluctuations

Slurry Seal



Slurry Seal

- Mixture of Stone, Asphalt Emulsion, Lime and Water
- Mixed on truck, Applied Cold immediately behind truck.
- 3/8-inch Thick, Dries in 2-3 hours
- Residential Streets Only, lighter traffic, lower speeds
- Protects pavement from wear, UV, helps with water intrusion, gives uniform appearance
- Cost of \$1.60/Sq Yd currently

Micro-Surfacing





Micro-Surfacing (Latex Slurry)

- Mixture of Stone, Asphalt Emulsion, Portland Cement or Lime and Water
- Tack Coat of Liquid Asphalt applied to street prior to Microsurfacing truck.
- Mixed on truck, Applied Cold immediately behind truck.
- 5/8-inch Thick, Dries in 30 Minutes
- Designed for Higher Volume, Higher Speed Streets such as Arterials and Collector Streets
- Protects pavement from wear, UV, helps with water intrusion, gives uniform appearance
- Cost of \$3.50-4.50/Sq Yd currently 6/2/2009

Re-Builds: Soil-Cement Stabilization









Re-Builds: Traditional and Soil/Cement Stabilization

- Complete excavation of street, 12-18" deep.
- Traditional: 6" stone, 6" Base, 2" Top, done in full blocks or patching areas.
- Soil Cement: Mix cement into sub-base soils, 6" Base, 2" Topping, full blocks only.
- Very disruptive, expensive.
- Done on all streets as necessary, Soil Cement better for residential.
- Cost of \$35/Sq Yd +/- for Soil Cement, \$70/Sq Yd for Traditional

Administration – How it Works

- WSS Maintenance Contracts Section
- Two Construction Managers plus Section Manager
- Survey every street on 3 year cycle to get PCI – done by Consultant
- PCI for every block, averaged as a County
- Preliminary lists generated by January, Final by March. Based on PCI, Paving History, Calls, Projects expected, winter problems, etc.

How it works continued

- Carryover about \$1M to begin season
- Milling starts in March, Paving in April, Slurry/Microsurfacing betw. May and September
- Re-Build Pick a few blocks then add per Milling
- Concrete Maintenance coordinated prior to paving

Coordination with other Programs

- 2002 Memo To NC Affirmed Commitments for "Alternative Funding" on Projects. (Conditioned On Full Funding of Paving)
- Incentive for NC to Work on Non-Curb and Gutter Streets (Greatest Need)
- <u>Disincentive</u> for Narrowing, Nubs, Unnecessary Destruction of Pavement
- We had consistently met this commitment until 2009.
- 5% for Non Curb and Gutter Streets (2007) 6/2/2009

A "Typical" Block

500 feet long, 30 feet wide

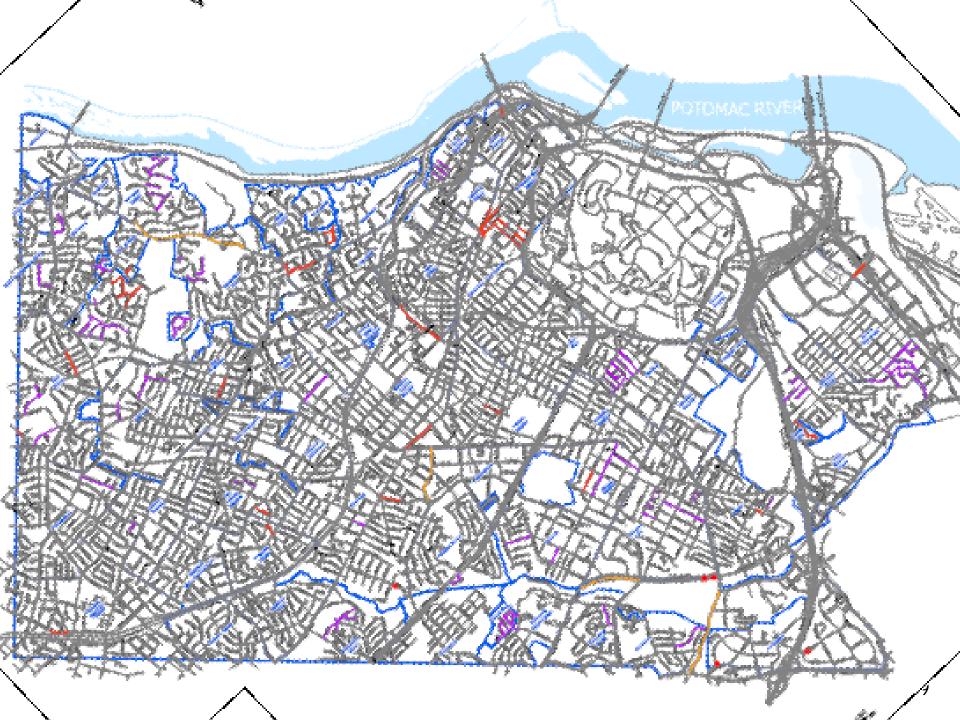
- Hot Mix \$23,000
- Slurry Seal \$2,700
- Micro Surfacing \$6,700
- Re-Build \$58,000 Soil Cement, \$116,000-Traditional

Where We Are: FY2010

- Proposed \$5.5M, 17.5 year Cycle. Received \$2.3M, 42 year cycle, So Far...
- More funding may be available for Pay as You Go Capital in FY2010, may not know how much until July/August 2009.
- Microsurfacing and Soil Cement added for '09
- 65% Hot Mix Re-Surfacing 15 lane Miles
- 15% Slurry Seal 30 lane Miles
- 10% Re-Building Streets (Soil Cement Pilot Included) – ½ Lane Mile

Report a Problem

- 703-228-6570 DES Call Center
- www.arlingtonva.us
 "Report a Problem"
 - Click on Pothole
 - Fill out report with location, problem description, etc.
- VDOT 703-383-VDOT (8368)



Questions?

- Dave Hundelt <u>dhundelt@arlingtonva.us</u> 703-228-6539
- Hung Tran, Maintenance Contracts, 703-228-7730, <u>htran@arlingtonva.us</u>
- Francis Soulamany, Construction Manager, 703-228-7822 <u>fsoulamany@arlingtonva.us</u>
- <u>www.Arlingtonva.us</u>, search on Paving.
 Current Paving map on line.