

# Department of Vehicle Services

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## Budget Committee Presentation

November 30, 2010

# DVS Mission

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To establish efficient and effective delivery of fleet services by providing customer agencies with safe, reliable, economical, and environmentally-sound transportation and related support services which are responsive to the needs of customer departments, and which conserve the value of the vehicle and equipment investment.

# DVS History

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- ◆ Prior to 1969, each county agency maintained their own fleet.
- ◆ The Equipment Management Transportation Agency (EMTA) was organized in 1969 as a cooperative effort between the county and schools.
- ◆ EMTA was one of the first joint county/schools consolidation initiatives.
- ◆ ***Schools was then, and is now, the largest single organization served by DVS.***

# DVS

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- ◆ Vehicle Maintenance and Management
- ◆ Fuel Operations
- ◆ Vehicle/Equipment Replacement Funds

# Vehicle Maintenance and Management

- ◆ County fleet (as of 7/1/10): 5,816 units
  - FCPS: 2,272
  - County: 3,544
    - 2,901 General Fund/General Fund Supported
      - 1,871 Public Safety
      - 1,030 Non Public Safety
    - 643 Other Funds
  
- ◆ These figures do not include
  - Connector buses: 254
  - Fastran buses: 95

# Vehicle Maintenance and Management

- ◆ DVS Vehicle Maintenance Facilities
  - Alban
  - Newington
  - Jermantown
  - West Ox

# Vehicle Maintenance and Management

- ◆ DVS maintains the largest municipal fleet in the State of Virginia
- ◆ October 2010 School Bus Fleet Magazine:
  - 6<sup>th</sup> largest bus fleet in the nation
- ◆ FY2009 ICMA data (of responding jurisdictions)
  - 7<sup>th</sup> largest Police fleet
  - 4<sup>th</sup> largest Fire fleet
  - 3<sup>rd</sup> largest EMS fleet

# Vehicle Maintenance and Management

- ◆ What DVS does NOT maintain:
  - Connector Buses
  - Fastran Buses
  - Fairfax Water vehicles
  - F&RD maintains apparatus (ladders, pumps, hoses, etc.)

# Vehicle Maintenance and Management

- ◆ How does DVS' cost compare to the private sector?
  - 12/5/2005 quarterly report from the Board Auditor: “DVS labor and parts costs are generally lower than or competitive with the private sector.”
  - DVS Current Labor Rate \$57.70/hr
    - Survey of local vendors – average \$109.50/hr
    - Current service contracts – average \$89/hr

# Vehicle Maintenance and Management

- ◆ How does DVS' cost compare to other large municipal jurisdictions?

## FY2009 ICMA Data, Maintenance Cost/Mile

Jurisdiction	Police Vehicles	Light I Veh (<8,500 gvwt)	Light II Veh (>8,500 gvwt)	Medium Vehicles	Heavy Vehicles
Dallas, TX	\$0.29		\$0.23	\$0.31	\$0.68
<b>Fairfax County, VA</b>	<b>\$0.23</b>	<b>\$0.16</b>	<b>\$0.19</b>	<b>\$0.39</b>	<b>\$1.06</b>
Oklahoma City, OK	\$0.15	\$0.12	\$0.25	\$0.32	\$0.88
Phoenix, AZ	\$0.20	\$0.23	\$0.30	\$0.47	\$2.05

# Vehicle Maintenance and Management

How much work is contracted out?

FY2005 – FY2010 DVS Maintenance Costs (in millions)

	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Total Maintenance Cost	\$30.1	\$30.5	\$31.3	\$32.2	\$32.8	\$32.5
Amount Contracted out	\$3.0	\$2.9	\$3.0	\$3.4	\$3.4	\$3.5
Percent Contracted Out	9.8%	9.4%	9.4%	10.6%	10.4%	10.8%

6 year average: 10.1%

Connector and Fastran buses are also maintained by contractors. Countywide, 35% of vehicle maintenance is performed by contractors.

# Vehicle Maintenance and Management

How does 35% compare to other jurisdictions?

FY2009 ICMA Data: Jurisdiction	Population	Square miles	% of Fleet Maintenance Expenditures Contracted Out
Phoenix AZ	1,563,058	518.8	18.1%
Lake County IL	712,453	1,368.0	1.2%
Oklahoma City OK	551,789	621.0	32.5%
Long Beach CA	492,642	52.0	12.0%
Kansas City MO	480,129	318.6	1.8%
Washoe County NV	423,833	6,406.0	11.3%
Prince William County VA	392,900	338.0	17.6%
Plano TX	263,800	72.2	14.1%
Scottsdale AZ	245,501	184.2	9.5%
Chesapeake VA	226,064	353.0	12.2%

# Vehicle Maintenance and Management

In conjunction with the FCPS, we have worked with Virginia State Board of Education to increase the maintenance intervals on school buses.

Current: Every 30 operating days or 2,500 miles

Proposed: Every 45 operating days or 5,000 miles

Should reduce maintenance costs as well as driver time.

Reductions in maintenance costs will be partially offset by increased maintenance costs due to an aging school bus fleet.

# Fuel Operations

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## ◆ Manage County Fuel Program

- Purchase approximately 10 million gallons of fuel annually
- Maintain 52 County Fuel Sites
  - Police Stations
  - Fire Stations
  - Schools
  - DVS Maintenance Facilities
  - Public Works Facilities
  - Park Authority Sites

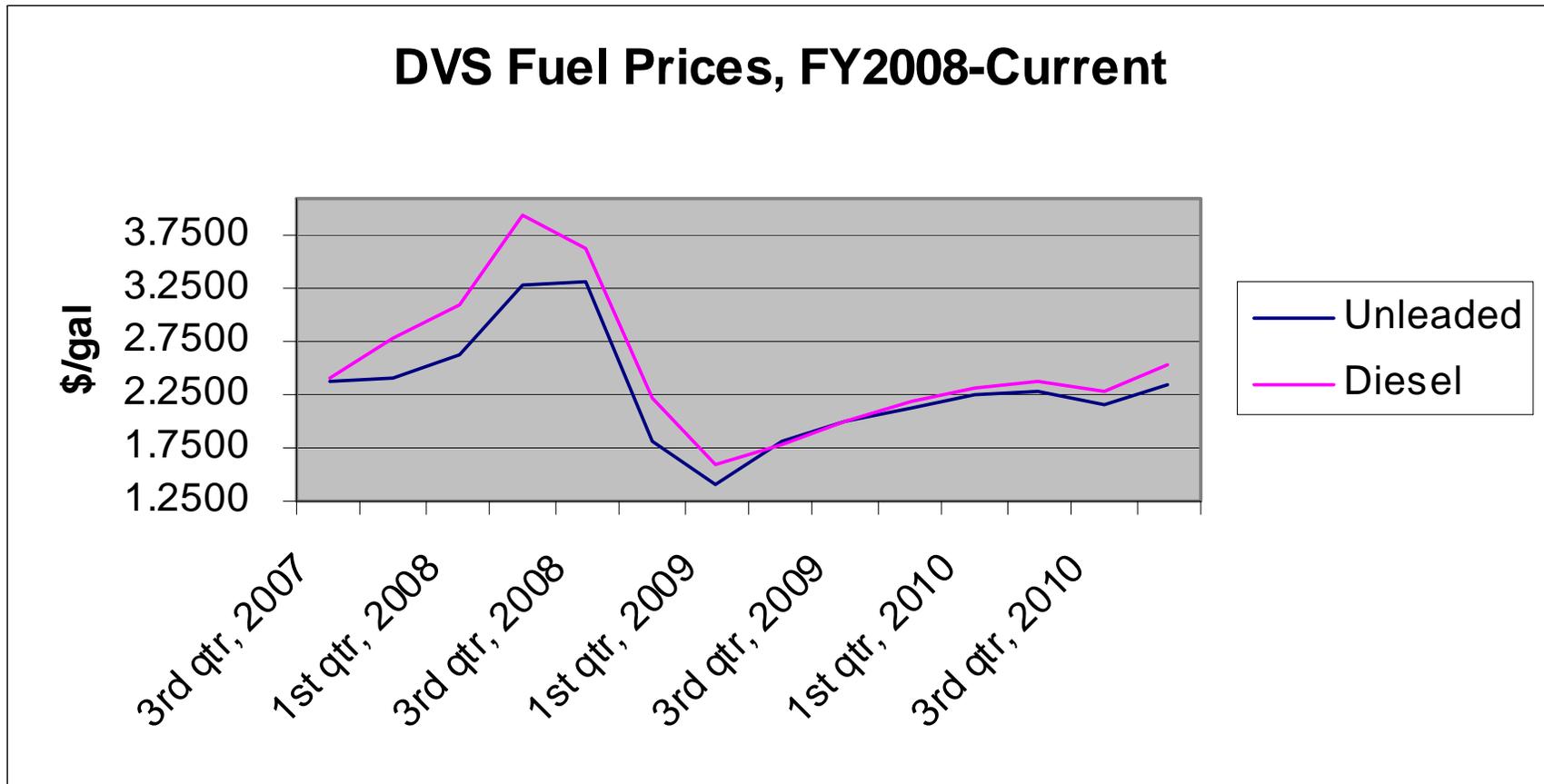


# Fuel Operations

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- ◆ Fuel is purchased via a Council of Governments (COG) Contract, which provides great buying power and therefore good prices
- ◆ Fuel is provided to our customers at a cost significantly lower than commercial gas stations (excluding tax)
  - Over the last 3 years, we have averaged \$0.15/gallon savings for unleaded fuel and \$0.28/gallon savings for diesel fuel
  - This amounts to an annual savings of over \$2 million

# Fuel Operations



# Fuel Operations

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## FY2010 Gallons Purchased (in millions)

	Gallons	%
Schools	3.3	33%
Transportation (Connector)	3	30%
Gen Fund/Gen Fund supported	2.7	27%
Other	1	10%
Total	10	100%

# Fuel Operations

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- ◆ Alternatives:
  - Hybrids
  - Flex fuel vehicles
  - Hybrid Electric – Plug in
  - Electric

# Vehicle/Equipment Replacement Reserves

- ◆ Manage Vehicle Replacement Reserve (VRR)
  - General Fund agencies
- ◆ Administer Other Replacement Reserves
  - Fire and Rescue Department
  - Police Department
  - Department of Neighborhood and Community Services

# Vehicle/Equipment Replacement Reserves

- ◆ Vehicle Replacement Reserve (VRR)
  - Allows agencies to set aside funding over the life of a vehicle so funding is available when the vehicle needs to be replaced
  - Flat monthly rate, based on purchase price, inflation, salvage value, and service life
  - Mainly general fund agencies participate
  - 33 agencies and 2,289 vehicles participate as of 7/1/10
  - Vehicles up to medium duty trucks

# Vehicle/Equipment Replacement Reserves

- ◆ Vehicle Replacement Reserve (VRR)
  - From 2005-2008, purchased an average of 288 vehicles annually
  - October 2008, extended criteria by 1 year  
FY09 purchases: 108
  - October 2009, extended criteria by 1 more year  
FY10 purchases: 55
  - Savings from this 2 year deferral: \$9 million

# Vehicle/Equipment Replacement Reserves

## Example Replacement Criteria, Vehicle Replacement Reserve

Description	Old Yrs	New Yrs	Miles
Mid Size Sedans	6	8	85,000
Police Package Sedans	4	6	80,000
Mini Pickups/Vans	6	8	90,000
1/2-1 Ton Pickup/Van/4x4	8	10	110,000

## Example Other Replacement Criteria

Description	Yrs	Miles
Ambulance	10	
Heavy Duty Dump Truck	9	135,000
Transfer Tractor	10	410,000
Pumpers/Ladder Trucks/Air & Light	12	
Trailer	12	
School Buses	12	

Vehicles must meet BOTH Age and Mileage criteria, where shown

# Vehicle/Equipment Replacement Reserves

How does Fairfax County replacement criteria compare to other municipal jurisdictions?

<b>FY2009 ICMA Data: Jurisdiction</b>	<b>Population</b>	<b>Vehicle must meet:</b>	<b>Police</b>	<b>Fire</b>	<b>EMS</b>	<b>Light I (&lt;8,500)</b>	<b>Light II (&gt;8,500-10,000)</b>	<b>Medium</b>	<b>Heavy</b>
Arlington, TX	374,417	Age OR miles	6 / 115K	15 / 120K	n/a	10 / 85K	11 / 90K	12 / 90K	12 / 120K
Austin, TX	765,957	Inspect when hits miles	4 / 80K	Ladders: 20 Pumpers: 15	5 / 200K	10 / 80K	12 / 100K	n/a	n/a
Eugene, OR	154,620	Age OR miles	5 / 100K	16 / 125K	10 / 200K	12 / 100K	12 / 100K	12 / 100K	12 /
<b>Fairfax County, VA</b>	<b>1,068,744</b>	<b>Age AND Miles</b>	<b>6 / 80K</b>	<b>12 / n/a</b>	<b>10 / n/a</b>	<b>8-10/ 80K-110K</b>	<b>10 / 110K</b>	<b>10 / 110K</b>	<b>9 / 135K</b>
Lexington-Fayette, KY	282,114	Age OR miles	10 / 100K	n/a	n/a	10 / 100K	10 / 100K	10 / 100K	10 / 100K
North Las Vegas, NV	219,914	Miles only (or high maintenance cost)	Marked 75K, Unmarked 125K	n/a	n/a	/ 125K	/ 125K	/ 125K	/ 125K
Richmond, VA	195,463	Mileage and Maintenance costs	4 / 100K	10 / 100K	n/a	n/a	7 / 85K	10 / 85K	7 / 85K

# Vehicle/Equipment Replacement Reserves

Is actual mileage driven consistent with mileage criteria?

Vehicle Class	Repl Yrs	Repl Miles	Annual Miles Needed (To meet Criteria)	Annual Miles (Life-to-date Avg)	Annl Miles Actual/ Criteria
MID SIZE SEDAN	8	85,000	10,625	9,203	87%
U/M MID SIZE SDN POL PKG	6	80,000	13,333	14,210	107%
MARKED INT SDN POL PKG	6	80,000	13,333	14,595	109%
U/M INT SDN POL PKG	6	80,000	13,333	14,119	106%
MINI PICKUP	8	90,000	11,250	7,999	71%
MINI VAN/7 PAS	8	90,000	11,250	11,071	98%
TRUCK STA WAG 4X4	10	110,000	11,000	11,050	100%
3/4 TON CARGO VAN	10	110,000	11,000	8,874	81%
1 TON UTILITY	10	110,000	11,000	8,709	79%

Note: All categories average annual miles exceed 4,500 (current low mileage threshold).

For most classes of vehicles, the years and miles criteria are consistent with actual usage. Since vehicles must meet age and mileage criteria to be replaced, those in red will have to stay in the fleet longer than the replacement years, in order to meet the mileage requirement.

# Vehicle/Equipment Replacement Reserves

## Maintenance costs increase on older vehicles

Comparison of maintenance cost/mile of vehicles that did not meet replacement criteria with those that met one of the criteria. A sample of the results:

Vehicle Class	Cost/Mile (vehicle does not meet criteria)	Cost/Mile (vehicle meets one or both criteria)	CPM Difference	% Difference
MID SIZE SEDAN	\$0.124	\$0.208	\$0.084	67%
MARKED INT SDN POL PKG	\$0.243	\$0.310	\$0.067	28%
U/M INT SDN POL PKG	\$0.196	\$0.205	\$0.009	5%
3/4 TON CARGO VAN	\$0.152	\$0.344	\$0.192	126%
1 TON UTILITY	\$0.234	\$0.481	\$0.246	105%

Out of 24 classes of vehicles (which included 3,700+ vehicles), 21 classes showed an increase in maintenance cost/mile when the vehicle meets one or both of the replacement criteria.

Does not account for other factors that are impacted by vehicle age (on-road breakdowns, downtime, driver time, reliability, parts availability, etc.)

# Vehicle/Equipment Replacement Reserves

## **How do we buy vehicles?**

- ◆ Vehicles are typically purchased off State contracts
- ◆ Volume purchasing = good prices
- ◆ Some vehicles (typically specialized) go out on bid

# Vehicle/Equipment Replacement Reserves

## **Annual Review of vehicles in the fleet**

- The Fleet Utilization Management Committee (FUMC) performs an annual review of vehicles in the fleet
- Vehicles must meet minimum annual mileage to stay in the fleet
- FCPS and F&RD Volunteer units do not participate in this review
- From FY2004 through FY2010, 189 vehicles have been identified for reassignment or elimination as a result of the annual low mileage review

# Vehicle/Equipment Replacement Reserves

## **Replacement vehicles**

- Must meet both age and mileage criteria (or a condition survey showing the vehicle is uneconomical to repair)
- Get replaced with a “like type” vehicle
- Can request an upgrade if the mission has changed. DVS staff reviews and approves/disapproves accordingly.
- The agency pays the difference between “like type” and upgraded vehicle type

# Vehicle/Equipment Replacement Reserves

## **Additional vehicles**

- Must receive Fleet Utilization Management Committee (FUMC) approval
- FUMC validates the need for the vehicle, type of vehicle, etc.
- DMB must approve funding
- The agency funds the entire purchase price and is responsible for ongoing maintenance costs and the contributions into the Vehicle Replacement Reserve

# Vehicle/Equipment Replacement Reserves

The replacement process takes time, and varies by vehicle type. From the date the PO is created until the vehicle is received and ready for service:

	Average # of Months
Sedans, Mini Pickup/Van	2
Motorcycle	5
Police Package	4
Animal Control	7
Prisoner Transport	6
Ambulance	8
Packers	6
Fire Apparatus	12-25

# Vehicle/Equipment Replacement Reserves

## ◆ Other Replacement Reserves

- Ambulance (F&RD)
- Large Apparatus (F&RD)
- Specialty Vehicle (FCPD)
- Helicopter (FCPD)
- Boat (FCPD)
- FASTRAN (NCS)

# Vehicle/Equipment Replacement Reserves

## ◆ F&RD Apparatus Committee

- Provides periodic evaluations of the technical specifications of the various types of specialized fire and rescue apparatus.
- May include adding, eliminating, or otherwise changing vehicle componentry to best suit the needs of the agency and end user.
- The section then coordinates with DVS.

# Summary

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- ◆ Large operation
- ◆ Fuel prices are volatile
- ◆ Environmentally-friendly vehicles
- ◆ Manage Vehicle Replacement Reserves
- ◆ FUMC
- ◆ Vehicle replacements are “like type”
- ◆ F&RD Apparatus Committee
- ◆ Efficient and cost competitive