



Customer Service, Operations and Safety Committee

Board Information Item IV-B

February 8, 2007

Bus Semi-Annual Update

**Washington Metropolitan Area Transportation Authority
Board Action/Information Summary**

Action
 Information

MEAD Number:

Resolution:
 Yes No

PURPOSE

To update the Board on Metrobus accomplishments in 2006 that are noticeable to the customer.

DESCRIPTION

- Replaced 417 older buses and reduced the average fleet age from 10.1 years to approximately 6.5 years.
- The Board authorized a multiple-year bus procurement replacing up to 500 buses over five years (100 buses per year) to maintain the fleet age. An option for an additional 100 buses per year is included in the contract.
- In November 2006, production began on 25 Metro Matters "expansion" buses.
- Received notification of the award of two FTA grants for hydrogen fuel cell buses.
- The mid-life overhaul completed its 1,000th bus and overhauled 106 buses.
- The Clean Fleet project is complete. WMATA now has the lowest/cleanest emissions possible without total fleet replacement.
- In April 2006, 100% of the bus fleet became wheelchair accessible.
- New fare boxes are installed and working.
- The Automatic Vehicle Location (AVL) system is providing the bus location, and the new bus radio system is providing communications.
- Equipped 742 buses (about half the bus fleet) with security cameras.
- Riders on Bus Lines 90, 92, 93, 9A, 9E, F4, and F6 are able to get next bus information in a public Beta test.



BUS SEMI-ANNUAL UPDATE

Presented to the Board of Directors:

**Customer Service, Operations and Safety
Committee**

February 8, 2007





Delivery of 417 Replacement Buses

- 2 Manufacturers
- 4 Contracts
- 5 Bus Models
- 3 Powertrain Technologies
- Manufacture and Delivery Process
- Training the Training Instructors
- Training Bus Maintenance Employees and Bus Operators
- Acceptance, D.C. Inspection and Commissioning of all 417 Buses
- Removing 417 older buses from revenue service
- Reliability Issues



Bus Procurements

250 COMPRESSED NATURAL GAS BUSES



215 - 40' buses

35 - 30' buses





Bus Procurements (Continued)

50 HYBRID / ELECTRIC BUSES



39 “Standard” Hybrid Electric Buses

11 “Restyled” Hybrid Electric Buses





Bus Procurements (Continued)

117 ADVANCED TECHNOLOGY DIESEL BUSES



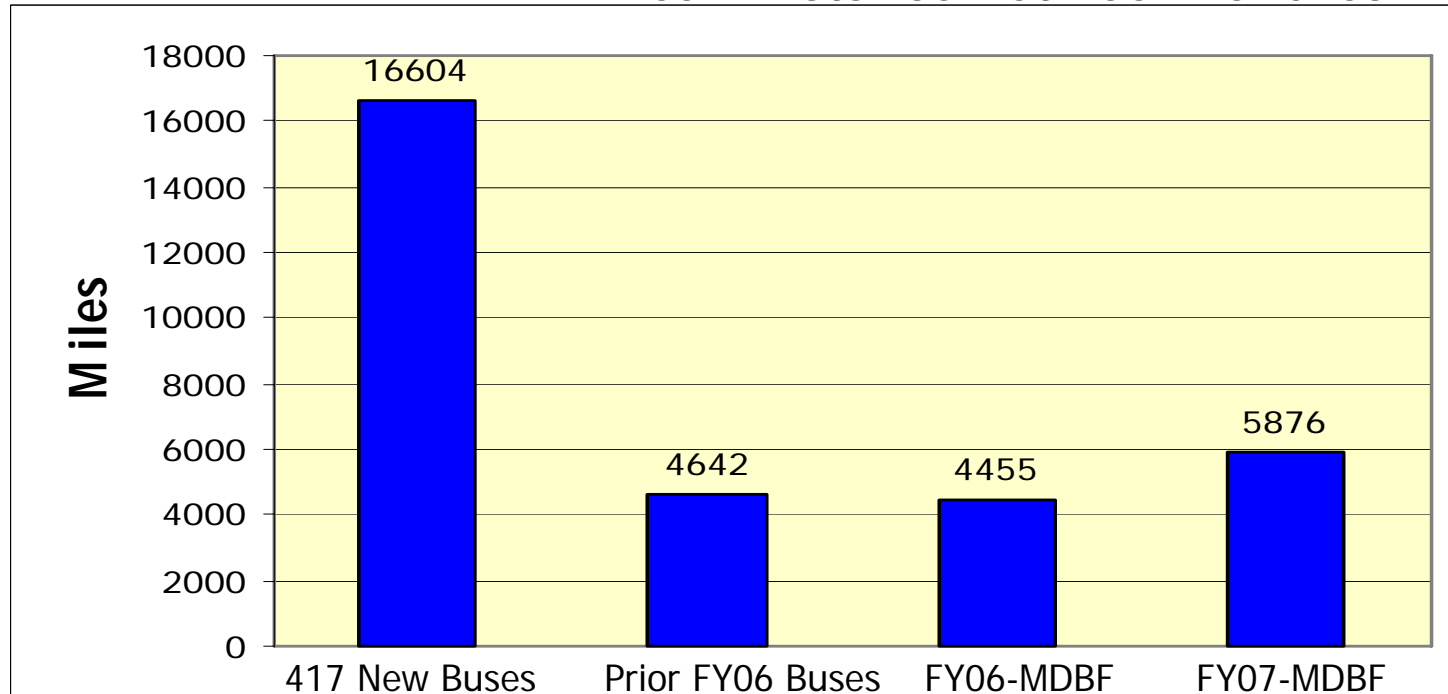
117 "Restyled" Advanced Technology Diesels





Fleet Reliability

Mean Distance Between Failures

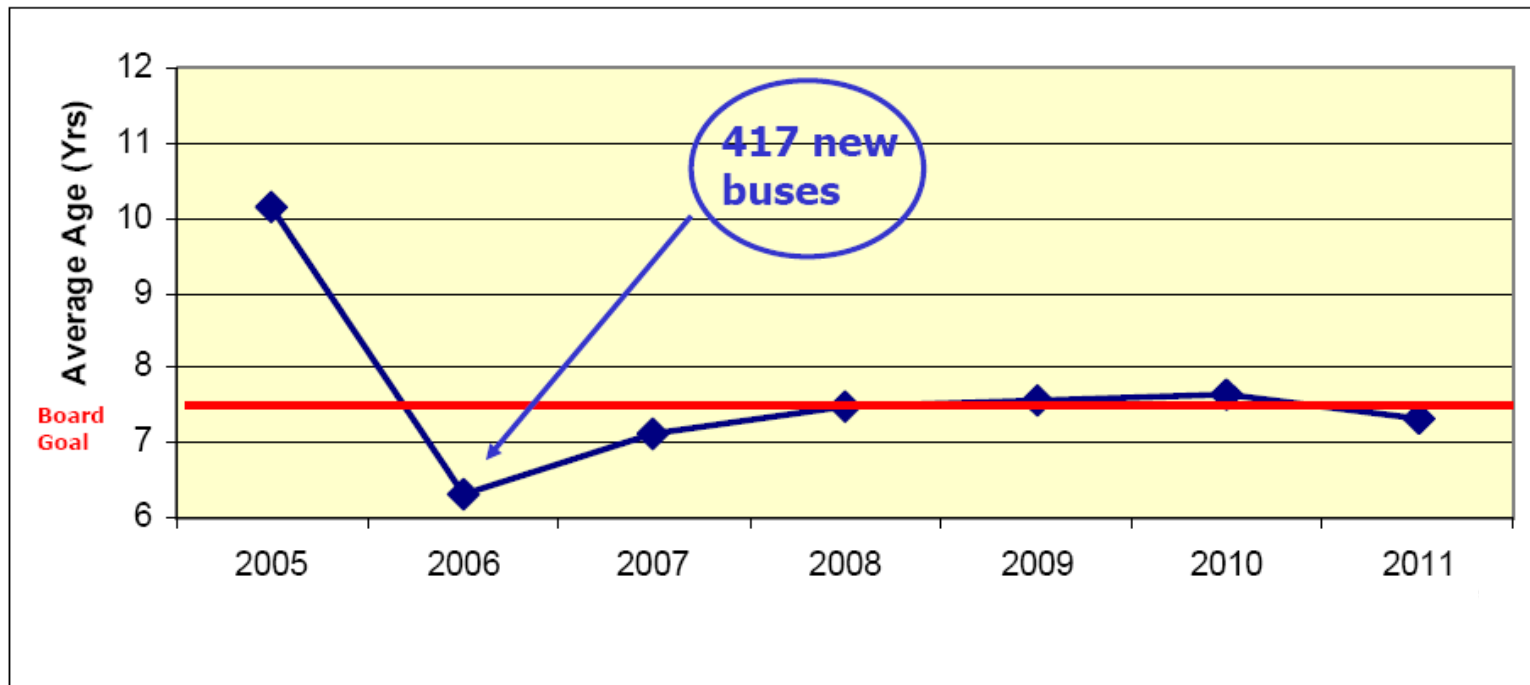


- The Fleet Mean Distance Between Failures **for the 417 buses purchased in FY06** is 16,604 miles for the period July 1, 2006 through November 30, 2006.
- The Fleet Mean Distance Between Failures **for buses purchased prior to FY06** is 4,642 miles for the same period as above.
- The **Total Fleet** Mean Distance Between Failures has improved 24.2% from 4,455 miles for the period July 1, 2005 through November 30, 2005 in FY '06 to 5,876 miles between failures in FY07 for the same period.



Bus Procurement (Continued)

AVERAGE FLEET AGE AFTER 417 NEW BUS DELIVERIES and PROJECTED MULTIPLE YEAR BUS PROCUREMENT



- Graph reflects planned annual delivery schedule of 185 Metro Matters expansion buses
- Fleet average age will be higher if MM 185 buses are not procured and fleet expansion occurs without additional new buses
- Fluctuation in average fleet age due to projected delivery rate of new buses vs. retirement of older buses in fleet



Upcoming New Bus Procurements



Funded 25 “Restyled” CNG Buses for Fleet Expansion.

- 14 for Georgia Avenue enhanced service
- 11 for service expansion



Funding to be determined for two FTA grants for up to six hydrogen fuel-cell buses.

- Two buses under FTA Ballard Grant
- Four buses under FTA UTC Grant



New Technologies



Bus Fare System Replacement



Automatic Vehicle Location/Bus Radio System Installation



Security Systems on approximately 50% of the Fleet



Real Time Passenger Information in public testing

Appendix



Active Bus Fleet Profile

After Delivery of 250 CNG, 50 Hybrid/Electric and 117 Advanced Technology Diesel Buses

BUS MANUFACTURER	ASSIGNED FLEET NUMBERS	PRODUCTION DATES (model year)	NUMBER OF BUSES	TOTAL BUSES	% OF TOTAL FLEET
Flxible (High Floor) (Cummins L-10 240)	9301 - 9413 9481 - 9498**	1990 1990	21 13	34	2.3%
Orion V (High Floor) (Detroit S-50 '04)	9602 - 9660	1992	59	59	4.0%
Flxible (High Floor) (Cummins L-10 280) (Cummins M-11) (Detroit S-50)	9701 - 9785 9801 - 9818 9819 - 9835 4001 - 4104	1993 1994 1994 1994	85 18 17 104	224	15.1%
Ikarus (Articulated) (Cummins M-11)	5201 - 5245***	1995	41	41	2.7%
Orion V (High Floor) (Detroit S-50)	3900 - 3950* 4200 - 4412 2100 - 2231 2000 - 2099	1997 1997 2000 2000	51 212 131 97	491	33.2%
Orion VI (Low Floor)					
Orion II (Low Floor) (Cummins B5.9E)	3701 - 3740 3741 - 3742	1999 2000	18 2	20	1.4%
Ford Cutaway (TAGS)	C001 - C004	2001	4	4	0.3%



Active Bus Fleet Profile (Continued)

After Delivery of 250 CNG, 50 Hybrid/Electric and 117 Advanced
Technology Diesel Buses

BUS MANUFACTURER	ASSIGNED FLEET NUMBERS	PRODUCTION DATES (model year)	NUMBER OF BUSES	TOTAL BUSES	% OF TOTAL FLEET
New Flyer CNG (Low Floor) (Cummins 8.3E) (John Deere)	2300 - 2399 2401 - 2459 2460 - 2464	2001 2002 2002	100 59 5	164	11.1%
Neoplan (Articulated) (Detroit S-60)	5301 - 5321***	2003	21	21	1.4%
Thomas SLF (Low Floor) (Cummins B5.9E)	3951 - 3954	2003	4	4	0.3%
Orion VII CNG (Low Floor) (Cummins 8.3E) (John Deere) (Cummins 8.3E)	2501 - 2615 2616 - 2685 2701 - 2730 3001 - 3035*	2005 2005 2005 2005	115 70 30 35	250	16.9%
New Flyer Hybrid (Low Floor) (Cummins/ Allison)	6001 - 6039 6040-6050 Restyle	2006 2006	39 11	50	3.4%
New Flyer Advanced Technology Diesel (Low Floor) (Cummins/Voith)	6101-6205 Restyle 6206-6217 Restyle	2006 2006	105 12	117	7.9%
TOTAL			1479	1479	100%

BUS LENGTHS :

* = 30'

** = 35'

*** = 60'

Otherwise Bus Length = 40'

3701 - 3742 = 26'

3951 - 3954 = 31'