

**CITY COUNCIL WORK SESSION
for the
ANNUAL MEETING OF THE STOCKHOLDERS OF THE ALEXANDRIA TRANSIT CO.
AND WORK SESSION WITH DASH
TUESDAY, FEBRUARY 22, 2011
5:30 P.M.
CITY COUNCIL WORKROOM**

AGENDA

I. Welcome and Comments by the Mayor Mayor William D. Euille

ANNUAL STOCKHOLDERS MEETING	
II. Election of Members of the Board of Directors	Sandy Modell, General Manager-Alexandria Transit Company
III. Selection of an Independent Outside Auditor	Sandy Modell, General Manager-Alexandria Transit Company

WORK SESSION WITH DASH	
IV. Items for Discussion:	Sandy Modell, General Manager-Alexandria Transit Company
a. DASH Bus Technology Issues	
b. DASH Bus Replacement and Expansion Schedule	
c. DASH 10-Year Service Expansion Plan	
d. Comprehensive Operational Analysis (COA)	
e. Efficiency and Effectiveness Study	
V. Questions and Discussion	City Council
VI. Adjournment	

Individuals with disabilities who require assistance or special arrangements to participate in the City Council Work Session may call the City Clerk and Clerk of Council's Office at 746-4500 (TTY/TDD 838-5056). We request that you provide a 48-hour notice so that the proper arrangements may be made.

WS
2-22-11

City Council Work Session

with the

Alexandria Transit Company (ATC)

Board of Directors



February 22, 2011

Alexandria Transit Company History and Organization



- Service began March 11, 1984
- Coincided with the opening of the King Street and Braddock Road Metrorail stations
- Replaced a number of Metrobus routes to provide City savings
- Established as a separate non-profit public service corporation, wholly-owned by the City
- Similar to successful organizational models used in Richmond, Roanoke, and Lynchburg since 1973

Alexandria Transit Company

History and Organization

- Began with a fleet of 17 buses
- Currently operates 63 buses
- DASH provides fixed route bus service within the City of Alexandria on 9 routes, with peak period service to the Pentagon on two routes
- DASH carries 3.9 million customers annually

System Objectives

- Designed to support specific community objectives
- Safe, reliable, convenient, comfortable, and courteous
- Efficient in the use of resources, whatever their source
- Major community objectives that the system is designed to support:
 - Improved internal circulation within the City
 - Improved access to Metrorail stations and other transit modes
 - Development of the City's major growth areas
 - Relief of traffic-congested corridors and the avoidance of alternative expenditures for highway and parking facilities
 - A decrease in the amounts paid by the City for Metrobus service

ATC Board Fare Policy Philosophy

- Maintains simple, affordable, and convenient \$1.50 fare
- Provides system-wide discount programs for all riders
- Unique 4-hour transfer pass largely used by non-working or part-time employed seniors and persons w/ disabilities, students, and low income residents
- Discounted monthly pass program largely used by commuters and other regular customers
- Participate in Regional Fare Plan and improve convenience and seamlessness between modes

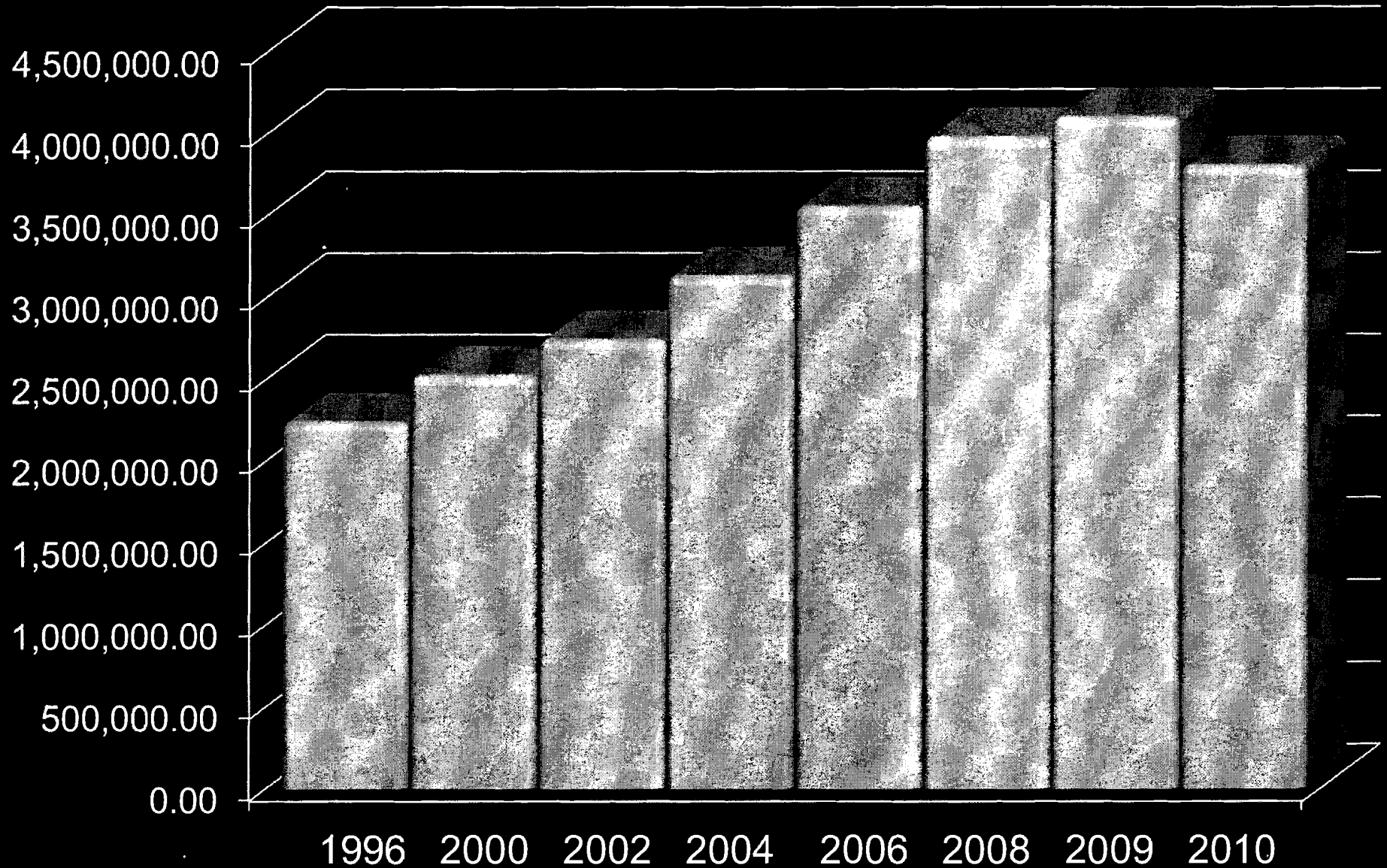
ATC Board Fare Policy Philosophy

- Considers cost impacts on riders who transfer between modes
- Current fare policy provides an attractive alternative choice riders and the single occupant commute
- Balances City's goals of increasing transit ridership with increasing operating revenues
- Explores revenue generating options other than fare increases to offset increasing operating costs and City subsidy, such as TMP-funded service, BRAC, charter and contract services

DASH Operating Statistics

	1985	2000	2010
Ridership	923,405	2,521,925	3,805,551
Buses	17	47	63
Miles Operated	522,705	1,194,507	1,562,437
Hours Operated	37,500	107,628	161,985
Passengers per mile	1.8	2.3	2.8
Passengers per hour	24.6	30.3	32.5

DASH Annual Ridership



SmarTrip

- DASH was the first Northern Virginia bus system to test SmarTrip
- All local system began accepting SmarTrip in July 2007
- Metro passes can be purchased on SmarTrip
- FY11 to-date 70% of DASH base fares (\$1.50) have been paid using SmarTrip
- Metrobus Weekly Passes are now electronic on SmarTrip
- Metro's paper passes were phased out on January 31
- Testing of electronic DASH Pass on SmarTrip to begin on March 1

Short & Long Range Plan Goals

■ Address impacts on current services caused by:

- Increased ridership demand
- Increased traffic congestion
- Increased travel times

■ Address increasing transit demands due to:

- Population growth
- Employment growth
- Changing travel patterns
- New development areas

■ Meet standards for urban transit service by:

- Increased service levels and service frequency
- Improved connections throughout the City

Current & Future Demand

- Existing routes will require additional buses and increased service levels (frequency) to address overcrowding, reliability, and to attract new riders
- New routes added to provide cross-town transit connections and access to new residential developments, employment, and activity centers
- Innovative services such as circulators, shopping shuttles, and community buses should be explored
- Provide transportation solutions in City planning efforts involving water taxi to National Harbor, BRAC, Potomac Yard, and transit ways

Improve Service Frequencies on Current Routes

YEAR	SERVICE	PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST	ESTIMATED SUBSIDY COST	ESTIMATED CAPITAL COSTS
2012	AT8	10	2	\$227,000	\$199,000	\$1,250,000
	AT2	10	4	539,000	493,000	2,500,000
	AT1	15	4	480,000	436,000	2,500,000
	AT10 (Midday)	30	0	136,000	125,000	\$0
	TOTAL		13	\$2,062,000	\$1,843,000	\$8,125,000
2014	AT5	15	3	\$427,000	\$388,000	\$1,875,000
2015	AT10	15	2	225,000	195,000	1,250,000
	AT3	15	1	140,000	110,000	625,000
	AT4	15	1	30,000	137,000	625,000
	TOTAL		4	\$395,000	\$442,000	\$2,500,000
2016	AT6	15	4	490,000	\$450,000	\$2,500,000
	AT7	15	4	460,000	430,000	2,500,000
	TOTAL		8	\$950,000	\$880,000	\$5,000,000

Introduce Crosstown Routes

YEAR	SERVICE	PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST	ESTIMATED SUBSIDY COST	ESTIMATED CAPITAL COSTS
2012	Mark Center/Potomac Yard Crosstown	30	3	\$680,000	\$590,000	\$1,875,000
2013	Mark Center/Potomac Yard Crosstown (weekends)	45	0	183,000	165,000	
	Potomac Yard – Landmark Crosstown	60	2	305,000	263,000	1,250,000
	Mark Center/Potomac Yard Crosstown	15	6	1,338,000	1,161,000	3,750,000
	TOTAL		8	\$1,826,000	\$1,589,000	\$5,000,000
2014	Increased Frequency Potomac Yard / Mark Center/Landmark Crosstown	15	5	\$1,264,000	\$1,125,000	\$3,125,000
	Potomac Yard – Landmark Crosstown	60	0	325,000	311,000	
	TOTAL		5	\$1,589,000	\$1,436,000	\$3,125,000
2017	Van Dorn Metro – Shirlington Crosstown Route (weekday)	30	3	550,000	\$473,000	\$1,875,000
	Van Dorn Metro – Shirlington Crosstown Route (weekend)	45	0	184,000	166,000	
	TOTAL		3	\$734,000	\$639,000	\$1,875,000

Introduce Crosstown Routes

YEAR	SERVICE	PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST	ESTIMATED SUBSIDY COST	ESTIMATED CAPITAL COSTS
2019	Braddock Metro / Lincolnia Crosstown Route (weekday)	30	4	\$641,000	\$561,000	\$2,500,000
	Braddock Metro / Lincolnia Crosstown Route (weekend)	45	0	202,000	186,000	
	TOTAL		4	\$843,000	\$747,000	\$2,500,000
2020	Increase Frequency on Potomac Yard / Landmark Crosstown Route (weekday)	15	4	\$1,264,000	\$1,112,000	\$2,500,000
	TOTAL		4	\$1,264,000	\$1,112,000	\$2,500,000
2021	Increase Frequency on Southern Towers / Potomac Yard Crosstown Route (weekday)	15	3	\$326,000	\$296,000	\$1,875,000
	Increase Frequency on Van Dorn / Shirlington Crosstown Route (weekday)	15	3	352,000	322,000	1,875,000
	TOTAL		6	\$678,000	\$618,000	\$3,750,000

Add Community Based Shuttles & Trolleys

YEAR	SERVICE	PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST	ESTIMATED SUBSIDY COST	ESTIMATED CAPITAL COSTS
2012	King Street Trolley	20	3	\$626,000	N/A	N/A
2017	Old Town Circulator (weekday)	15	6	731,000	\$574,000	\$3,750,000
	Old Town Circulator (weekend)	30	0	240,000	\$206,000	
2018	Eisenhower East Circulator (weekday)	10	4	618,000	\$558,000	2,500,000
	Eisenhower East Circulator (weekend)	30		79,000	\$66,000	
	Potomac Yard Circulator (weekday)	15	4	500,000	\$446,000	2,500,000
	Potomac Yard Circulator (weekend)	60		81,000	\$73,000	
	TOTAL		8	\$1,278,000	\$1,143,000	\$5,000,000
2019	Landmark / Van Dorn Circulator (weekday)	15	4	\$722,000	\$607,000	\$2,500,000
	Landmark / Van Dorn Circulator (weekend)	45	0	160,000	143,000	
	Cameron Station Peak Circulator	15	2	284,000	254,000	1,250,000
	TOTAL		6	1,166,000	1,004,000	\$3,750,000

Metrobus Service Replacement

Route	Year Replaced	Annual Savings
Metro 29's / AT 8 Weekday	1992	\$500,000
Metro 29's / AT 8 Weekend	1993	\$150,000
Metro 28C / AT 6	2003	\$120,000
Metro 9B&10P / AT 10	2006	\$118,000

Future Route Replacement Options	Buses Required	Estimated Annual Savings
Metrobus 8 lines Foxchase – Seminary	9	\$380,000
Metrobus 21 lines Landmark - Pentagon	7	\$400,000

DASH Replacement and Expansion Schedule

FISCAL YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<i>Existing Fleet</i>	63	72	81	94	102	106	114	123	131	141
<i>Fleet Expansion</i>	9	9	13	8	4	8	9	8	10	4
<i>Total fleet</i>	72	81	94	102	106	114	123	131	141	145
<i>Transit Coaches</i>	67	76	84	92	96	104	113	121	131	135
<i>Trolley Coaches</i>	5	5	10*	10	10	10	10	10	10	10
<i>Fleet Expansion Scheduled Replacement</i>	9	9*	13	8	4	8	9	8	10	7
<i>Scheduled Replacement</i>	10	7*	6	8	5	3	5	6	5	5
<i>Total Bus Purchase Required</i>	19	16	18	16	9	11	14	14	15	12
<i>Cost of Required Bus Purchase</i>	\$12.4	\$10.4	\$11.7	\$10.4	\$5.9	\$7.2	\$9.1	\$9.1	\$9.8	\$7.8

Comprehensive Operational Analysis (COA)

- In 2008, ATC developed a preliminary Long Range Expansion Plan, based on ridership data collected in 2006 and 2007
- The COA included on-board ridechecks and on-board surveys of every route for every time period and day of the week of operations
- A comprehensive review of existing DASH service performance and effectiveness should be completed every 3-5 years
- ATC Board approved the funding of a COA in FY12
- The COA will be used to update the Long Range Plan and develop and prioritize its implementation

Efficiency and Effectiveness Study

- Management and Governance - review the structures to determine overall efficiency and effectiveness in establishing and implementing transit policies for the DASH system
- Best Management Practices - a review of transit related best management practices and a corresponding assessment of how closely DASH comports with BMP's
- Performance Measurement - identification of appropriate benchmarks, output measures, and outcome measures for the DASH system and comparison to its peer transit agencies
- Staffing and Staff Utilization - review organization to determine if staffing levels are adequate to perform current required functions and determine optimal staffing levels to accommodate growth
- Implementation - a strategy for implementing recommendations related to the above that prioritizes efforts to achieve optimal efficiency/effectiveness

DASH Real-Time Bus Information Technology Innovations

- Real-time bus information system development continues
- Anticipate test rollout in Spring 2011
- An SMS (text messaging) interface will be implemented
 - Customers receive real-time schedule information via their cell phones and blackberries
 - Shared stops with Metrobus will share the same stop number
- Ultimately, all systems in the region will offer coordinated information
- A full public rollout is anticipated by summer 2011

2010 Clean Diesel vs. Hybrid Buses

- In 2010, the EPA required new vehicles to achieve a new diesel exhaust emissions regulations limit, which is .2 NO_x (g/hp-hr) down from 1.2 in 2007, and comparable to hybrids
- Hybrids use 10 - 20% less diesel fuel than conventional buses and produce less emissions overall
- The regenerative braking system increases brake life
- Cost of clean diesel bus is \$190,000 less than hybrid

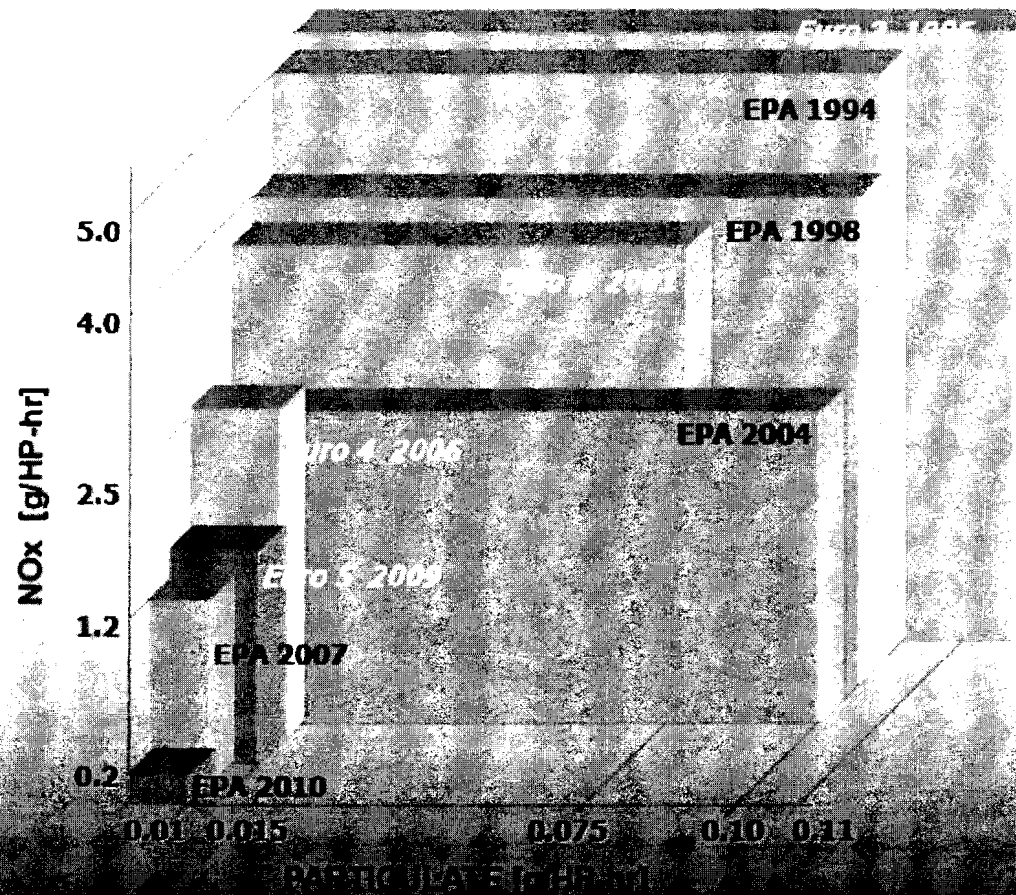
Hybrid Bus Advantages

- Combines best features of diesel and electric propulsion
- Offer advantages of low emissions, fuel efficiency, and excellent acceleration from stops
- Technology is more reliable than CNG
- No infrastructure costs
- Lower maintenance costs due to reduced stress on mechanical components
- Quieter operations through neighborhoods
- Disadvantage is initial capital cost about \$190,000 more per bus than diesel transit bus

Diesel Engine Emissions

Evolution of On-Highway Standards EPA & Euro

GILLIG



Hybrid Bus Fuel Cost Savings

	Cost of Fuel/Gal	Miles /Gal	Miles/ Year	Fuel Cost \$/Year	Savings in Fuel Cost \$/Year	Hybrid Upcharge \$	Break Even in Years	Total Fuel Cost \$ in 12 Years	Operation Budget Fuel Savings \$ in 12 years
CURRENT SCENARIO									
ISL	\$3.00	4	45,000	33,750	Baseline	NA	NA	\$ 405,000	\$ -
ISB Hybrid	\$3.00	5	45,000	\$27,000	\$6,750	\$190,000	28.1	\$ 324,000	\$81,000
FUEL INCREASES									
ISL	\$7.05	4	45,000	\$79,313	Baseline	NA	NA	\$ 951,750	\$ -
ISB Hybrid	\$7.05	5	45,000	\$63,450	\$15,863	\$190,000	12.0	\$ 761,400	\$190,350
MPG INCREASES									
ISL	\$2.50	4	45,000	\$28,125	Baseline	NA	NA	\$ 337,500	\$ -
ISB Hybrid	\$2.50	9.2	45,000	\$12,228	\$15,897	\$190,000	12.0	\$ 146,739	\$190,761
PRICE DECREASES									
ISL	\$2.50	4	45,000	\$28,125	Baseline	NA	NA	\$337,500	\$ -
ISB Hybrid	\$2.50	5	45,000	\$22,500	\$5,625	\$67,500	12.0	\$270,000	\$67,500

THANK YOU!

QUESTIONS?

