

Alexandria Transportation Commission



November 2, 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 67 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

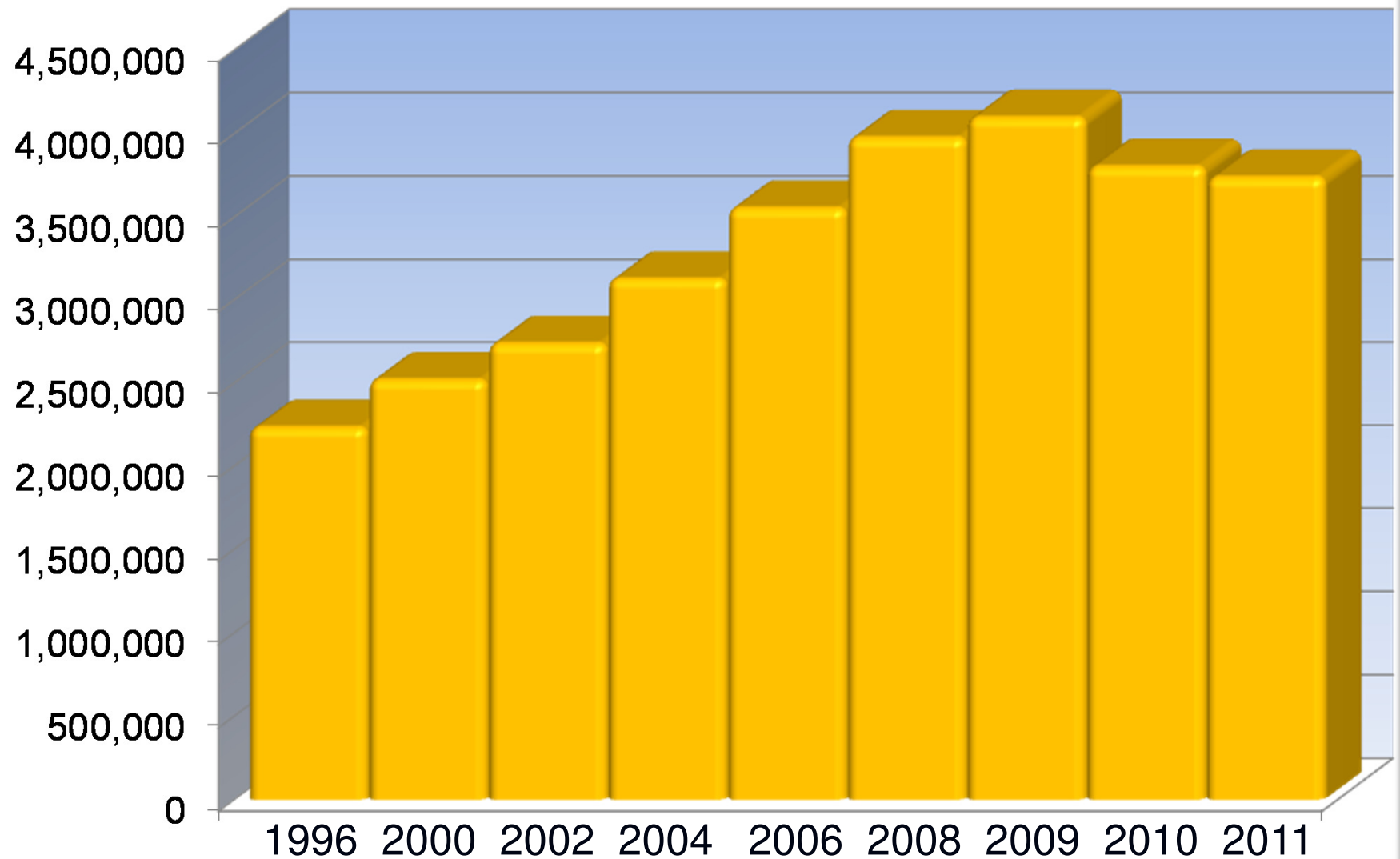
ATC Board Fare Policy Philosophy

- 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	2011
Ridership	923,405	2,521,925	3,741,499
Buses	17	47	63
Miles Operated	522,705	1,194,507	1,576,649
Hours Operated	37,500	107,628	166,660
Passengers per mile	1.8	2.3	2.7
Passengers per hour	24.6	30.3	31.4

DASH Annual Ridership



DASH Operating Statistics

	FY2009	FY2010	FY2011
Operating Revenues	3,292,954	3,429,544	4,086,459
Operating Expenses	11,080,723	11,341,630	12,148,015
Net Operating Expenses (City Subsidy)	7,787,769	7,912,086	8,061,556
Operating Ratio	29.7%	30.2%	33.6%
DASH Capital Outlays	115,737	29,887	35,543
Net Operating Expenses (City Subsidy)	7,903,506	7,941,973	8,097,135

*Metrobus operating ratio approximately 28%

**National average for comparable size systems is 12-15%

Regional SmarTrip Program

- DASH first local bus system to test SmarTrip
- Regional SmarTrip program began in July 2007
- SmarTrip use is increasing steadily
- 70% of DASH base fares (\$1.50) paid with SmarTrip
- 59% of all DASH fare payments paid with SmarTrip
- Metro's paper passes were phased out on January 31, 2011
- Metro 7-Day Weekly electronic pass usage has declined significantly due to software glitches and price point
- DASH Pass in pilot testing on SmarTrip

Short and 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 will need to be 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	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST (FY 12 DOLLARS)	ESTIMATED SUBSIDY COST (FY 12 DOLLARS)	ESTIMATED CAPITAL COSTS
2012	Increased Frequency – AT1	15		4	\$480,000	\$436,000	\$2,500,000
	¹ Increased Frequency – AT2X	10		4	\$549,000	\$549,000	\$600,000
	Increase Frequency – AT10 Midday		30	0	\$136,000	\$125,000	0
	Increase Frequency – AT10 Saturday		30	0	\$42,000	\$37,000	0
	Totals			8	\$1,207,000	\$1,147,000	\$3,100,000
	¹ Express bus service between Mark Center and the King Street Metrorail Station. Operating and capital costs are subsidized by Department of Defense under a Cooperative Agreement.						

Improve Service Frequencies on Current Routes

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST (FY12 DOLLARS)	ESTIMATED SUBSIDY COST (FY12 DOLLARS)	ESTIMATED CAPITAL COSTS
2013	Increased Frequency – AT6	15		4	\$490,000	\$450,000	\$2,500,000
	Increased Frequency – AT8	10		2	\$227,000	\$200,000	\$1,250,000
	TOTAL			6	\$717,000	\$650,000	\$3,750,000
2014	Increased Frequency – AT5	15		3	\$427,000	\$388,000	\$1,875,000
	TOTAL			3	\$427,000	\$388,000	\$1,875,000

Improve Service Frequencies on Current Routes

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED COST (FY12 DOLLARS)	ESTIMATED SUBSIDY COST (FY12 DOLLARS)	ESTIMATED CAPITAL COSTS
2015	Increased Frequency – AT10	15		2	\$225,000	\$195,000	\$1,250,000
	Increased Frequency – AT3	15		1	\$140,000	\$110,000	625,000
	Increased Frequency – AT4	15		1	\$30,000	\$137,000	625,000
	TOTAL			4	\$395,000	\$442,000	\$2,500,000

2016	Increased Frequency – AT7	15		4	460,000	\$430,000	2,500,000
	TOTAL			4	\$460,000	\$430,000	\$2,500,000

Introduce Crosstown Routes

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED TOTAL COST (FY 12 DOLLARS)	ESTIMATED SUBSIDY COST (FY 12 DOLLARS)	ESTIMATED CAPITAL COSTS
2012	Mark Center / Potomac Yard Crosstown Route (weekday)	30		4	\$907,000	\$787,000	\$2,500,000
	Totals			4	\$907,000	\$787,000	\$2,500,000
2013	Mark Center / Potomac Yard Crosstown Route (Saturday)		45	0	\$97,000	\$87,000	
	Mark Center / Potomac Yard Crosstown Route (Sunday)		45	0	\$86,000	\$78,000	
	Mark Center/Potomac Yard Crosstown	15		4	\$907,000	\$787,000	\$2,500,000
	TOTAL			4	\$1,090,000	\$952,000	\$2,500,000

Introduce Crosstown Routes

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED COST (FY12 DOLLARS)	ESTIMATED SUBSIDY COST (FY12 DOLLARS)	ESTIMATED CAPITAL COSTS
2014	Increased Frequency Potomac Yard/Mark Center/Landmark Crosstown Route (weekday)	15		5	\$1,264,000	\$1,125,000	\$3,125,000
	Potomac Yard – Landmark Crosstown Route (Saturday)		60	0	190,000	181,000	
	Potomac Yard – Landmark Crosstown Route (Sunday)		60	0	135,000	130,000	
	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 (Saturday)		45	0	\$94,000	\$84,000	
	Van Dorn Metro – Shirlington Crosstown Route (Sunday)		45	0	\$90,000	\$82,000	
	TOTAL			3	\$734,000	\$639,000	\$1,875,000

Introduce Crosstown Routes

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED COST (FY12 DOLLARS)	ESTIMATED SUBSIDY COST (FY12 DOLLARS)	ESTIMATED CAPITAL COSTS
2019	Braddock Metro / Lincolnia Crosstown Route (weekday)	30		4	\$641,000	\$561,000	\$2,500,000
	Braddock Metro / Lincolnia Crosstown Route (Saturday)		45	0	\$107,000	\$96,000	
	Braddock Metro / Lincolnia Crosstown Route (Sunday)		45	0	\$95,000	\$90,000	
	TOTAL			4	\$843,000	\$747,000	\$2,500,000
2020	Increased 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	Increased Frequency on Southern Towers / Potomac Yard Crosstown Route (weekday)	15		3	\$326,000	\$296,000	\$1,875,000
	Increased 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

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2012	King Street Trolley	15		4	\$840,000	\$840,000	N/A
	TOTAL			4	\$840,000	\$840,000	N/A

2017	Old Town Circulator (weekday)	15		6	\$731,000	\$574,000	\$3,750,000
	Old Town Circulator (Saturday)		30	0	148,000	130,000	
	Old Town Circulator (Sunday)		30	0	92,000	76,000	
	TOTAL			6	\$971,000	\$780,000	\$3,750,000

Add Community Based Shuttles & Trolleys

YEAR	SERVICE	PEAK FREQUENCY	OFF-PEAK FREQUENCY	ADDITIONAL PEAK BUSES	ESTIMATED COST (FY12 DOLLARS)	ESTIMATED SUBSIDY COST (FY12 DOLLARS)	ESTIMATED CAPITAL COSTS
2018	Eisenhower East Circulator (weekday)	10		4	\$618,000	\$558,000	\$2,500,000
	Eisenhower East Circulator (Saturday)		30		40,000	\$32,000	
	Eisenhower East Circulator (Sunday)		30		39,000	\$34,000	
	Potomac Yard Circulator (weekday)	15		4	500,000	\$446,000	2,500,000
	Potomac Yard Circulator (Saturday)		60		42,000	\$37,000	
	Potomac Yard Circulator (Sunday)		60		39,000	\$36,000	
	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 (Saturday)		30	0	\$105,000	\$95,000	
	Landmark / Van Dorn Circulator (Sunday)		45	0	\$55,000	\$48,000	\$1,250,000
	Cameron Station Peak Circulator (weekday)	15		2	\$284,000	\$254,000	
	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	82	89	97	101	109	118	126	136
<i>Scheduled Replacement</i>	10	7	6	8	5	3	5	6	5	5
<i>Fleet Expansion</i>	9	10	7	8	4	4	9	8	10	4
<i>Total Fleet</i>	72	82	89	97	101	105	114	122	132	136
<i>Total Bus Purchase Required</i>	19	17	13	16	9	7	14	14	15	9
<i>Cost of Required Bus Purchase (mil)</i>	\$12.4	\$11.2	\$8.6	\$10.5	\$6.0	\$4.6	\$9.2	\$9.2	\$9.8	\$5.9

New Bus Capital Costs

<u>Bus Type</u>	<u>Diesel Cost</u>	<u>Hybrid Cost</u>
30' Low Floor Transit	\$399,000	\$595,000
35' Low Floor Transit	\$429,000	\$600,000
40' Low Floor Transit	\$439,000	\$625,000
30' Low Floor Trolley	\$459,000	\$655,000

Historical Funding Gap for DASH Bus Replacement Program

- Buses have a 12 year life cycle
- Approximately 12-15 months to receive buses once ordered
- City has had a strong reliance on State funding sources
- CIP only projects funding part of the replacement needs
- ATC has not been able to maintain its replacement schedule due to significant reduction in State funding in recent years
- Replacement buses arriving now will replace buses that are 15 and 16 years old
- Operating buses that have exceeded their useful life has increased cost of repair parts by 33% or \$143,000
- Older buses do not have clean diesel engine technology advances and do not provide advances in accessibility for disabled persons

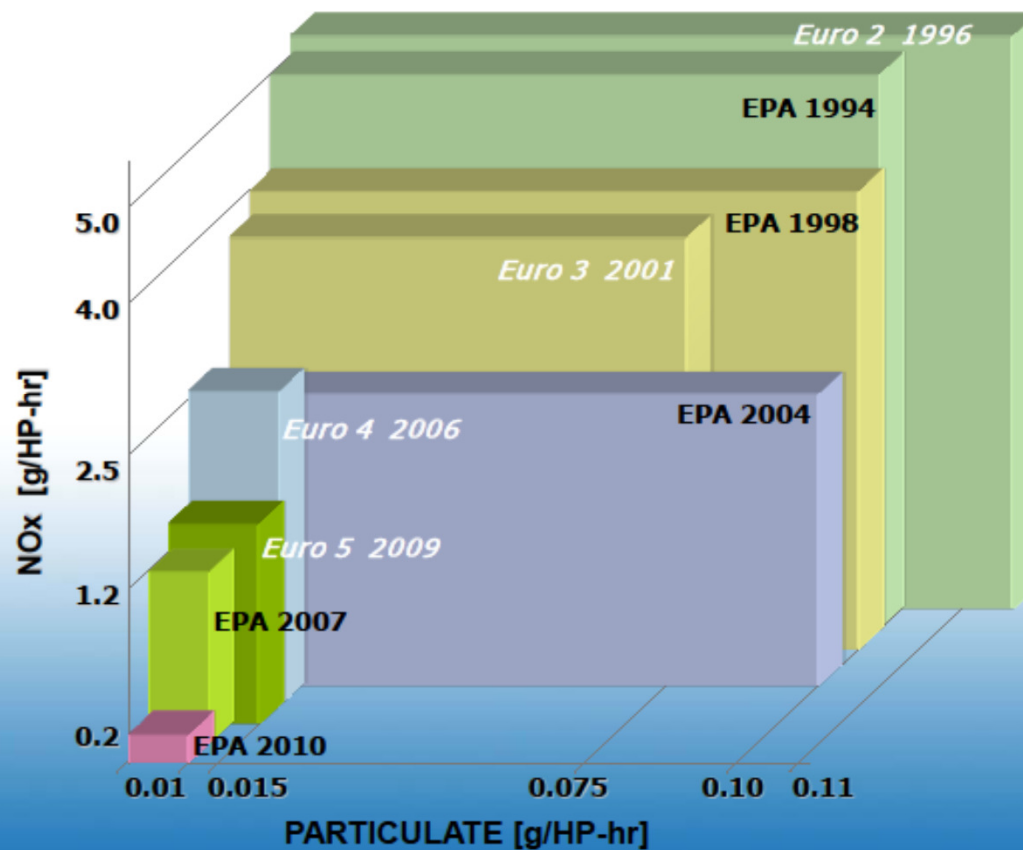
DASH Bus Replacement Schedule

Buses	Scheduled Replacement Yr.	Actual Replacement Yr.
3 – 1996 Gilligs	2008	2011
7 – 1998 Gilligs	2010	2011
3 – 1998 Gilligs	2010	2012
4 – 1999 Gilligs	2011	2012
1 – 1999 Gillig	2011	2013
5 – 2000 Orions	2012	2013
5 – 2000 Orions	2012	2014
2 – 2002 Orions	2014	2014
4 – 1996 Rehab Gilligs	2015	2015
5 – 2002 Orions	2014	2015
3 – 2005 Orions	2017	2016
5 – 2005 Orions	2017	2017
6 – 2005 Orions	2017	2018
9 – 2007 Gilligs	2019	2019
4 – 2007 Gilligs	2019	2020

Diesel Engine Emissions

Evolution of On-Highway Standards EPA & Euro

GILLIG



DASH Real-Time Bus Information Technology Innovations

- Real-time bus information system development continues
- Anticipate test rollout in Spring 2012
- An SMS (text messaging) interface will be implemented
 - Customers receive real-time schedule information via their cell phones and smart phones

THANK YOU!

