

ADVANCED TRANSIT VEHICLE CONSORTIUM

Los Angeles County Metropolitan Transportation Authority
One Santa Fe Ave., MS 63-4-1,
Los Angeles, CA 90012

OCTOBER 27, 2015

TO: ATVC BOARD OF DIRECTORS

FROM: RICHARD HUNT, PRESIDENT

**SUBJECT: RECEIVE AND FILE REPORT ON METRO BUS FLEET
REPLACEMENT PLANS**

At the July 2015 ATVC Board Meeting, staff was asked to report back on Metro's ten year bus fleet replacement plans and forecast.

Attached are two planning documents that guide Metro's bus fleet replacement planning. The "Bus Fleet Replacement Plan" guides bus procurement and replacement decisions through 2020. The Bus Fleet Management Plan is a ten year forecast that includes updates on Metro's bus fleet's operational plans (new services, etc...).



Richard Hunt
President, Advanced Transit Vehicle Consortium

Attachment: Metro Bus Fleet Replacement Plan (2015 Update)
Bus Fleet Management Plan –10 Year Service Forecast (Table 2-4)

Copies: ATVC Board Members and Alternates
Phillip A. Washington, Metro CEO
Stephanie N. Wiggins, Metro Deputy CEO
James T. Gallagher, Metro COO

Series	Make	Year	12 Year Life	CNG Exp Date	2014 (actual as of 4/1/15)															
					2015	2016	2017	2018	2019	2020										
Metro Directly Operated Bus Fleet					43															
70-7214	NABI LF	1999	2011	2014																
53-5522	NEW FLYER LF	2000	2012	2015	98	25	25	25												
73-7514	NABI LF	2000	2012	2015	100	18	18													
76-7949	NABI LF **	2001	2013	2016	323	350	266	150	150	150										
79-7999	NABI 40' Comp	2003	2015	2018	12	20														
75-7599	NABI	2004	2016	2019	73	73	75	3												
80-8099	10 Compo 45' Bus	2004	2016	2019	10	10	10													
80-8099	40 Compo 45' Bus	2005	2017	2020	40	40	40	40	40											
80-8099	50 Compo 45' Bus	2006	2018	2021	39	50	50	50	50											
92-9399	100 CNG Artic	2005	2017	2020	30	30	30	0												
92-9399	100 CNG Artic	2006	2018	2021	167	170	170	148	0											
94-9495	2007 Artic Buy	2007	2019	2022	64	94	94	94	45											
95-9594	2008 Artic Buy	2008	2020	2028	92	92	92	92	33											
42-4205	NABI Gasoline Electric Hybrid	2008	2020	2028	0	6	6	6	6											
81-8359	2009 45' Compo Bus	2009	2027	2029	130	130	130	130	130											
81-8359	2010 45' Compo Bus	2010	2028	2030	125	130	130	130	130											
8360-8400	2010 45' Compo Bus	2010	2028	2030	39	41	41	41	41											
8401-8492	2011 45' Compo Bus	2011	2029	2031	87	91	91	91	91											
8500-8599	2012 45' Compo Bus	2012	2030	2032	149	149	149	149	149											
5600-5874	2014 Buy (40')	2014	2026	2034	275	275	275	275	275											
5875-6149	2015 Buy (40')	2015	2027	2035	120	275	275	275	275											
	2016 Buy (350 40' New Flyer CNG)	2016	2028	2036		250	350	350	350											
	2016 Buy	2016	2028	2036																
	2017 Buy (artics + 40's)	2017	2029	2037																
	2017 Buy (artics + 40's)	2018	2030	2038																
	2017 Buy (artics + 40's)	2019	2031	2039																
	2020 Buy	2020	2032	2040																
Contrator Buses																				
70-7214	NABI LF	1999	2011	2014																
30-3019	NEW FLYER LF	1998	2010	2013																
11000	Orion Contractor Buses	2000	2012		66	66														
12000	Ei Dorado Contractor Buses	2003	2015																	
9950-9999	Contractor Buses	2000	2012																	
3100-3150	NABI 31' CNG Contract Buses	2010	2022	2025	50	50	50	50	50											
3150-3175	NABI 31' CNG Contract Buses	2012	2024	2032	15	15	15	15	15											
	New Contract Service Buses																			
Total New Vehicles by Year					2345	2355	2364	2364	2364	2364	2364	2364	2364	2364	2364	2364	2364	2364	2364	2364
Retirement Eligible In Active Fleet					275	275	250	200	200	200	200	200	200	200	200	200	200	200	200	200
Average Age, Active Fleet					719	6.4	433	6.3	205	6.6	93	6.3	90	6.3	90	6.3	90	6.3	90	6.3

NOTES:
 Directly Operated Fleet size assumptions from L RTP and OMB's 10 Year Service Forecast
 Does not include additional vehicles for Orange Line Extension or other future fleet expansions.

Buses that have reached retirement eligibility
 Buses 14+ Years

Table 2.4

Metro's Ten-Year Bus Fleet Forecast

REVENUE SERVICE HOURS (RSH)	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Directly Operated (DO) RSH	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663	6,327,663
Purchased Transportation (PT) Operated RSH	519,176	519,176	519,176	519,176	519,176	519,176	519,176	519,176	519,176	519,176	519,176
Orange Line RSH	130,516	130,516	130,516	130,516	130,516	130,516	130,516	130,516	130,516	130,516	130,516
Silver Line RSH	84,380	84,380	84,380	84,380	84,380	84,380	84,380	84,380	84,380	84,380	84,380
Total RSH	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735	7,061,735
RSH ADJUSTMENTS											
Wilshire BRT Bus Lane Only (FY 2016)	0										
Gold Line Foothill Extension (FY 2016)	0										
(1)Exposition Light Rail - Phase 2 (FY 2016)	(3,600)										
Crenshaw/LAX Light Rail (FY 2020)						TBD					
Regional Rail Connector (FY 2021)							0				
Westside Subway Extension Phase 1 (FY 2023)											
Total RSH Adjustment	0	(3,600)	0	0	0	0	0	0	0	0	0
PEAK BUSES											
40' (40 seats)	1,007	1,002	992	982	982	982	982	982	982	982	982
ZEV 40' (40 seats)		5	15	25	25	25	25	25	25	25	25
45' (46 seats)	507	507	507	507	507	507	507	507	507	507	507
60' (57 seats)	321	321	321	321	321	321	321	321	321	321	321
Total Directly Operated Buses	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835
*Contract Operated Buses	122	122	122	122	122	122	122	122	122	122	122
Total Peak Buses	1,957	1,957	1,957	1,957	1,957	1,957	1,957	1,957	1,957	1,957	1,957
BUS SPARES (20%)											
Directly Operated											
40'	213	213	213	213	213	213	213	213	213	213	213
45'	122	122	122	122	122	122	122	122	122	122	122
60'	42	42	42	42	42	42	42	42	42	42	42
Total DO Spares	377	377	377	377	377	377	377	377	377	377	377
Contract Operated Spares	30	30	30	30	30	30	30	30	30	30	30
Total Spares	407	407	407	407	407	407	407	407	407	407	407
Total Active Fleet	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364	2,364
SCHEDULED PEAK SEATS											
	85,937	85,937	85,937	85,937	85,937	85,937	85,937	85,937	85,937	85,937	85,937
BUS PROCUREMENT SCHEDULE											
60'				100	100	100	100				
45'											
40' CNG	275	175	175	200	100	100	125	175	175	175	175
ZEB/SEB 40'	5	10	10								
Total Planned Procurement	280	185	185	300	200	200	175	175	175	175	175
Costs (\$Millions)	\$162.4	\$109.2	\$109.2	\$200.0	\$142.5	\$142.5	\$114.4	\$100.6	\$100.6	\$100.6	\$100.6
AVERAGE AGE OF ACTIVE FLEET	7.5	6.4	6.1	5.1	-	-	-	-	-	-	-

Note: Planned bus procurements beyond FY 2018 is unfunded. Staff is working on identifying and securing funds.