American Public Transportation Association Coach Bus Life Peer Review Report

Metropolitan Council
Transportation Committee
February 13, 2012

Background

- Regional Fleet Management Procedures adopted September 2010
 - Establish equity throughout the region
 - Formalize region-wide procedures to guide the acquisition, maintenance and disposal of buses
 - Conduct a peer review on 14-year coach bus life-cycles

Council Approved Fleet Replacement Criteria

Vehicle Type	Manufacturers	Council Established Life- Cycle	FTA Minimum Life-Cycle
Coach Bus	Motor Coach Industries, Van Hool	*14 years	12 years or 500,000 miles
Heavy-Duty Transit Bus 30'- 40' & articulated	Gillig, New Flyer, NABI, Nova, Orion, Millennium Transit	12 years	12 years or 500, 000 miles
Heavy-Duty Small Transit Bus 30'	Blue Bird, Thomas Built, Optima, Supreme	10 years	10 Years or 350,000 miles
Medium-Duty and Purpose-Built 25'-35'	Champion, Eldorado, Goshen	7 years	7 years or 200,000 miles
Light-Duty Small Bus 16'-28'	Champion Bus, Eldorado National, Glaval Bus, Goshen Coach, Supreme, Startrans	5 years <u>and</u> 200k miles – diesel engine 175k miles – gas engine	4 years or 100,000 miles

^{*} Subject to APTA Peer Review Recommendation



*Basis for 14-year Coach Bus Recommendation

Transit Agency	Planned Replacement Cycle	Average Annual Miles	Estimated Miles at Retirement
Denver	12 Years Eligible at 500k	85,000	726,000-926,000 at 10 years
Utah Transit Authority	14-16 years	50,000-60,000	700,000
Toronto – GO Transit	16-18 years	65,000-75,000	1.0 M – 1.24 M
Seattle – Sound Transit	14 years	80,000-90,000	1.1 M – 1.26 M
New York Transit	12 years	33,000-42,000	400,000-500,000
Georgia Regional TA	12 years	42,000	500,000
New Jersey Transit	14-15 years Minimum of 12	80,000 Commuter 40,000 Inner City	769,000 Average
SouthWest Transit & Minnesota Valley TA		27,000	12 years = 324,000 14 years = 378,000
Shakopee		19,000	12 years = 228,000 14 years = 266,000
Prior Lake		32,000	12 years = 384,000 14 years = 448,000
Metro Transit		27,000 estimated	12 years = 324,000 14 years = 378,000

^{*} Research conducted in 2009

APTA Peer Review Overview

- Site visit conducted in June 2011
- Panelists
 - Paul Finnerty, Director Bus Services
 GO Transit, Toronto, ON
 - Mike Hubbell, VP Maintenance
 Dallas Area Rapid Transit, Dallas, TX
 - Michael Perry, Dep. Exec. Director Transportation & Maintenance Sound Transit, Seattle, WA
 - Jeff Hiott, Senior Program Manager, APTA
- Facilities visited
 - SouthWest Transit Eden Prairie Garage
 - Minnesota Valley Transit Authority Eagan Garage
 - Metro Transit East Metro Garage

APTA Peer Review Methodology

- On-site interviews with agency staff
- Review of vehicle maintenance and procedures documentation
- Tour of facilities
- Vehicle inspections
- Interview with Charlie Zelle, President of Jefferson Lines (private operator of MCI coach buses)

APTA Peer Review Report

- Focus on oldest buses
 - Look for evidence of cracking or buckling in sidewall supports
 - Look for evidence of rust of cracking in the roof structure
 - Consider maintenance cost for extended coach service life
 - Evaluate maintenance plans
- Summary of observations
- Recommendation on 14 year replacement cycle

APTA Peer Review Conclusion and Recommendation

- "The APTA peer review panel believes the coach buses inspected can reasonably sustain a 14 year life" based on:
 - Buses incur very low annual mileage
 - Providers adhere to a high standard of maintenance
 - Panel sees no reason why the buses cannot be safely and reliably operated for 14 years
 - Consider retiring pre-2003 models at 12 years

Staff Recommendation

- Regional Fleet Management Procedures will continue to reflect a 14 year coach bus replacement cycle
- Eight coach buses, model years 2000-2002, will be retired after 12 years