

CHAPTER XI

Vehicle Requirements

Vehicle requirements are discussed briefly in the previous chapter. The appropriate vehicle and number for each route are identified. In addition to the number of vehicles required for each route, additional vehicles will be required to provide backup for times when vehicles are out of service for preventive maintenance or repairs. Because Summit Stage operates much longer hours than typical transit systems, the fleet size is larger so that the vehicles may be used for a full 12 years and replaced on a 12-year cycle.

The current number of vehicles used in peak service is 12. A typical number of spare vehicles is 20 percent of the fleet size. This would be three vehicles for a total fleet size of 15 vehicles. To extend the lives of vehicles, Summit Stage has set the fleet size at 32 vehicles based on the annual mileage. If the fleet size was maintained at 15 vehicles, the replacement schedule would be a 5- to 6-year cycle rather than the current 12-year cycle.

The current vehicle replacement schedule is shown in Table XI-1. This chapter provides recommendations for the type of vehicle to be purchased as the existing vehicles are replaced.

Table XI-1			
Summit Stage Vehicle Fleet Information			
Vehicle Model	Year	Replacement Price	Replacement Year
Ford/Goshen (406)	2000	\$63,760	2007
Dodge/Braun (409)	2001	\$65,672	2008
Ford/Goshen (410)	2002	\$67,642	2009
Ford/Goshen (501)	2002	\$265,225	2006
Ford/Goshen (502)	2002	\$273,182	2007
Ford/Goshen (503)	2002	\$273,182	2007
Ford/Goshen (504)	2002	\$281,377	2008
Ford/Goshen (505)	2002		
Ford/Goshen (506)	2002		
Ford/Goshen (507)	2002		
Thomas/T (521)	1994	\$250,000	2003
Thomas/T (523)	1994	\$250,000	2004
Thomas/ER (529)	1997	\$250,000	2004
Thomas/ER (530)	1997	\$250,000	2004
Thomas/ER (531)	1998	\$250,000	2004
Thomas/ER (532)	1998	\$257,500	2005
NEOPLAN (533)	1998	\$281,377	2008
NEOPLAN (534)	1998	\$289,818	2009
NEOPLAN (535)	1998	\$289,818	2009
NEOPLAN (536)	1998	\$368,962	2010
NEOPLAN (537)	1998	\$368,962	2010
NEOPLAN (538)	1999	\$368,962	2010
NEOPLAN (539)	1999	\$380,031	2011
NEOPLAN (540)	1999	\$380,031	2011
NEOPLAN (541)	1999	\$380,031	2011
NEOPLAN (542)	2002	\$391,432	2012
NEOPLAN (543)	2002	\$391,432	2012
NEOPLAN (544)	2002	\$403,175	2013
NEOPLAN (545)	2002	\$403,175	2013
NEOPLAN (546)	2002	\$415,270	2014
NEOPLAN (547)	2002	\$415,270	2014
NEOPLAN (548)	2002	\$415,270	2014
NEOPLAN (549)	2002	\$427,728	2015
NEOPLAN (550)	2002	\$427,728	2015
NEOPLAN (551)	2002	\$427,728	2015

Source: Summit Stage, 2003.

The vehicle requirement to provide the proposed service is shown in Table XI-2. This is the optimal vehicle fleet mix to provide the proposed service described in the previous chapter. Note that although mini-buses are identified for some routes, the service could be provided using 30-foot buses on most of the routes. A detailed cost comparison of capital, operating, and maintenance costs between mini-buses and 30-foot coaches has shown that over the life of a 30-foot coach, the coach has a lower life-cycle cost. Therefore, if not required by the nature of the streets and community being served by a route, 30-foot coaches should be purchased rather than the mini-buses for fixed-route service.

Table XI-2 Vehicle Fleet Requirement				
Vehicle Type	Winter Service	Summer Service	Spares	Total
40 foot coach	12	0	4	16
30 foot coach	3	6	3	12
Mini-bus (fixed-route)	1	3	1	4
Mini-bus (paratransit)	2	2	1	3
<i>Source: LSC, 2003</i>				

Table XI-3 summarizes the fleet mix for fixed-route service that will be available each year based on the current replacement schedule shown in Table XI-1. The planned vehicle fleet indicates that the proposed service could be implemented for the summer season in 2004 if the 30-foot coaches are available.

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Table XI-3 Fleet Mix by Year				
Year	40-foot Coach	35-foot Medium Duty	30-foot Coach	Mini-bus
Current	19	6	0	7
2003	19	5	4	7
2004	19	1	8	7
2005	19	0	9	7
2006	19	0	10	6
2007	19	0	12	4
2008	18	0	14	0
2009	16	0	16	0

Source: Summit Stage and LSC, 2003