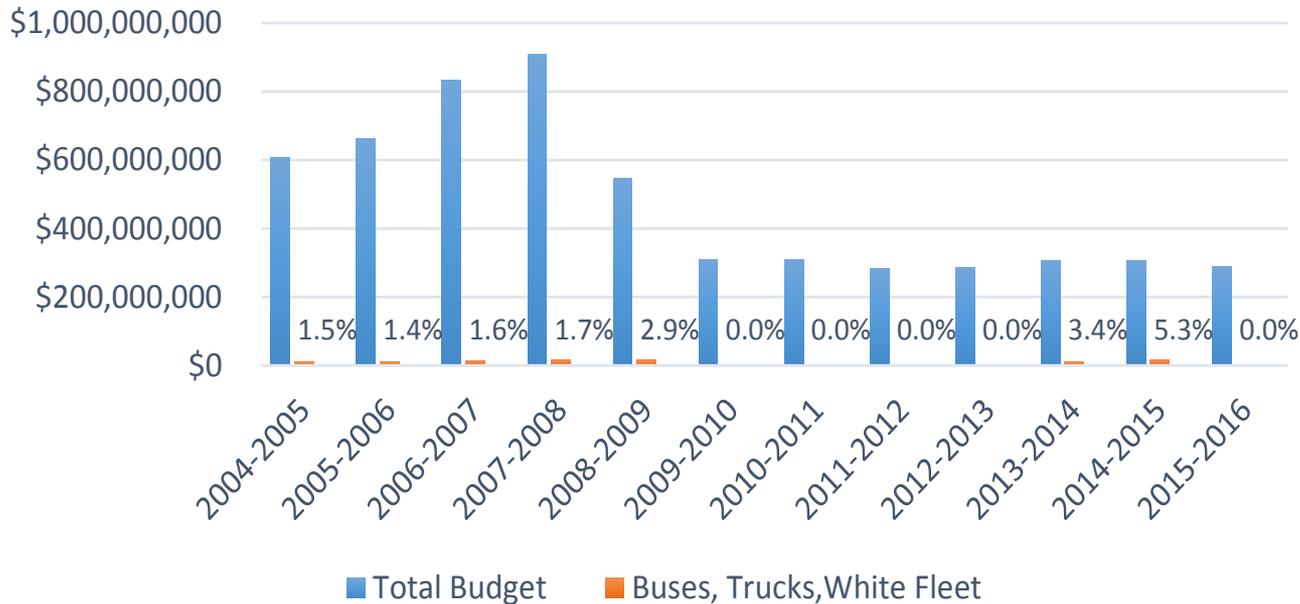


Transportation - Limited Capital Budget in Recent Years

Transportation Budget as a % of Total Capital



Notes:

- **Since 2005:**
 - Approximate \$5.6 billion in Capital budgets
 - No transportation Capital budgets between 2010 through 2013, and 2016
 - Over 10 years, the transportation department received \$90 million (1.6%) of total Capital budgets
- **2016-17:**
 - Requesting minimal annual investment (Equivalent to 100 buses) which allows us to maintain our current bus average age-of-fleet (~11 years)

Age of Bus Fleet Analysis

Year	Number of Buses	Percentage of Fleet	Age
1996	30	2.29%	20
1997	96	7.32%	19
1998	108	8.2%	18
1999	1	0.1%	17
2000	44	3.4%	16
2001	65	5.0%	15
2002	123	9.4%	14
2003	69	5.3%	13
2004	125	9.5%	12
2005	81	6.2%	11
2006	0	0.0%	10
2007	104	7.9%	9
2008	95	7.2%	8
2009	124	9.5%	7
2010	0	0.0%	6
2011	0	0.0%	5
2012	1	0.1%	4
2013	0	0.0%	3
2014	50	3.8%	2
2015	98	7.5%	1
2016	98	7.5%	0



- Notes:**
- Aging bus fleet:
 - Increase rider risks
 - Break down frequently
 - Require a higher proportion of repair and fuel costs
 - Requires a higher spare bus ratio
 - Average age of fleet:
 - BCPS: ~11 years
 - Council of the Great City Schools
Median Average Age: 7-8 years

1,312

Simple Cost – Benefit Analysis (ROI)

Return on investment (ROI) Buses Only:

Simple ROI is the incremental gains of an action divided by the cost of the action. As a performance measure, ROI is used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. The project with best ROI is prioritized.

Division/Office: Transportation		Project: Capital Investments (Buses Only)										
Cost-Benefit Analysis (one bus)		Investment Summary										TOTAL
		Yr. 0 2016-17	Yr. 1 2017-18	Yr. 2 2018-19	Yr. 3 2019-20	Yr. 4 2020-21	Yr. 5 2021-22	Yr. 6 2022-23	Yr. 7 2023-24	Yr. 8 2024-25		
I	Net Project Cost	\$15,000	\$17,660	\$20,280	\$20,438	\$20,601	\$20,769	\$20,942	\$21,121	\$21,304	\$178,116	
II	Net Revenues/Benefits (Quantifiable)	\$0	\$16,320	\$16,810	\$17,314	\$17,833	\$18,368	\$18,919	\$19,487	\$20,072	\$145,123	
III	Return on Investment	(\$15,000)	(\$1,340)	(\$3,470)	(\$3,124)	(\$2,768)	(\$2,401)	(\$2,023)	(\$1,634)	(\$1,233)	(\$32,993)	
IV	ROI (as a %)	-24%										
	10 Buses	(\$150,000)	(\$13,400)	(\$34,702)	(\$31,243)	(\$27,680)	(\$24,011)	(\$20,231)	(\$16,338)	(\$12,328)	(\$329,934)	
	100 Buses	(\$1,500,000)	(\$134,003)	(\$347,021)	(\$312,431)	(\$276,804)	(\$240,108)	(\$202,312)	(\$163,381)	(\$123,282)	(\$3,299,342)	

Although the ROI is negative, it is risky to look at only this metric in isolation and is best used when compared to multiple investments. Additionally, the quantitative ROI does not tell the entire story.

Simple Cost – Benefit Analysis (ROI)

Return on investment (ROI) White Fleet Only:

Simple ROI is the incremental gains of an action divided by the cost of the action. As a performance measure, ROI is used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. The project with best ROI is prioritized.

Division/Office: Transportation		Project: Capital Investments (Non-Bus Vehicles)									
Cost-Benefit Analysis (average vehicle)		Investment Summary									TOTAL
		Yr. 0 2016-17	Yr. 1 2017-18	Yr. 2 2018-19	Yr. 3 2019-20	Yr. 4 2020-21	Yr. 5 2021-22	Yr. 6 2022-23	Yr. 7 2023-24	Yr. 8 2024-25	
I	Net Project Cost	\$3,900	\$4,937	\$4,968	\$5,000	\$5,033	\$5,067	\$5,102	\$5,138	\$5,175	\$44,320
II	Net Revenues/Benefits (Quantifiable)	\$0	\$2,164	\$2,229	\$2,296	\$2,365	\$2,436	\$2,509	\$2,584	\$2,661	\$19,243
III	Return on Investment (Row II minus Row I)	(\$3,900)	(\$2,773)	(\$2,739)	(\$2,704)	(\$2,668)	(\$2,631)	(\$2,593)	(\$2,554)	(\$2,514)	(\$25,077)
IV	ROI (as a %)	-57%									
	10 Vehicles	(\$39,000)	(\$27,729)	(\$27,390)	(\$27,042)	(\$26,683)	(\$26,314)	(\$25,933)	(\$25,541)	(\$25,138)	(\$250,771)
	100 Vehicles	(\$390,000)	(\$277,286)	(\$273,905)	(\$270,422)	(\$266,835)	(\$263,140)	(\$259,334)	(\$255,414)	(\$251,376)	(\$2,507,711)
	200 Vehicles	(\$780,000)	(\$554,573)	(\$547,810)	(\$540,844)	(\$533,669)	(\$526,279)	(\$518,668)	(\$510,828)	(\$502,753)	(\$5,015,423)

The ROI for the White Fleet was more challenging due to the variability in the number of vehicle models, gas mileage per vehicle, etc. The above analysis represents an overall average for the entire white fleet.