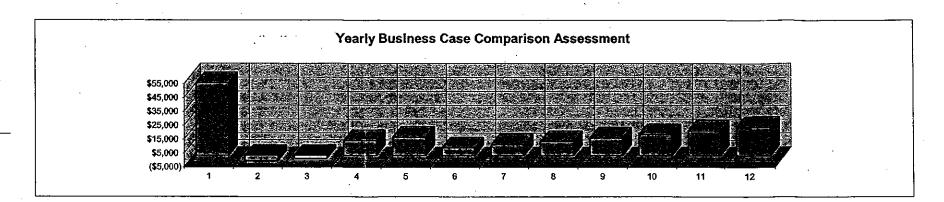
City of Milwaukee

City of Milwaukee Safety Academy

Utility SavIngs	\$61,824
Water/Sewer	\$4,890
Annual Operational Savings	\$8,922
>Total Annual Project Savings	\$75,636
>Implementation Cost	\$695,162
Potential Incentive/Rebate	\$29,707
Cost of Capital	3.50%
Discount Rate	4.00%
Repayment Term	12
Savings Escalation Rate	3%
One Time Operational Savings	\$28,700



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Utility Savings —	\$61,824	\$63,679	\$65,589	\$67,557	\$69,583	\$71,671	\$73,821	\$76,036	\$78,317	\$80,666	\$83,086	\$85,579
Water/Sewer	\$4,890	\$5,037	\$5,188	\$5,343	\$5,504 _.	\$5,669	\$5,839	\$ 6,014	\$6,195	\$6,380	\$6,572	\$6,769
One Time Operational Savings	\$28,70 0			V -, - · ·	4 -,		40,000	70,011	70,100	4-,	V -	• •
Operational Savings	\$8,922	\$9,190	\$9,465	\$9,749	\$10,042	\$0	\$0	\$0 -	\$ 0	\$0	\$0	\$0
Total Savings	\$ 104,336	\$77,905	\$80,242	\$82,649	\$85,129	\$77,340	\$79,660	\$82,050	\$84,511	\$87,047	\$89,658	\$92,348
Potential Grant	\$29,707				···········	· · · · · · · · · · · · · · · · · · ·					·	
M&V Guarantee	(\$9,890)	(\$10,187)	(\$10,492)				•					•
Improvement Measures (P+I)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)
Principal	(\$47,607)	(\$49,274)	(\$50,998)	(\$52,783)	(\$54,631)	(\$56,543)	(\$58,522)	(\$60,570)	(\$62,690)	(\$64,884)	(\$67,155)	(\$69,505)
Interest	(\$24,331)	(\$22,664)	(\$20,940)	(\$19,155)	(\$17,307)	(\$15,395)	(\$13,416)	(\$11,368)	(\$9,248)	(\$7,054)	(\$4,783)	(\$2,433)
· ·	(\$42,231)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)	(\$71,938)
Annual Savings & Costs	\$52,215	(\$4,220)	(\$2,188)	\$10,711	\$13,191	\$5,402	\$7,722	\$10,112	\$ 12,573	\$15,109	\$17,720	\$20,410

PV of Facilities Improvements

\$100,924

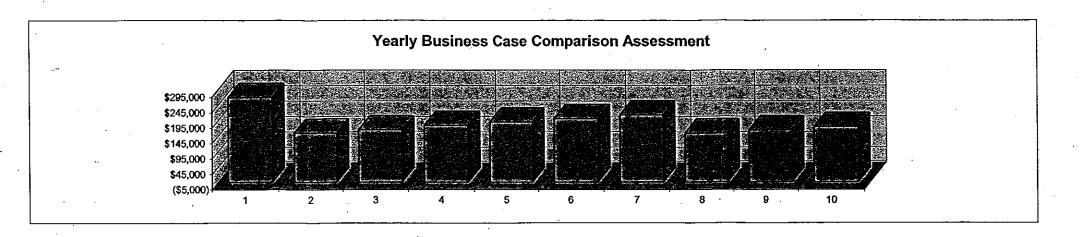
Simple Payback

8.8 Years

City of Milwaukee

City of Milwaukee LED Traffic Signals

Utility Savings	\$272,147
Water/Sewer	\$0
Operational Savings	\$57,349
>Total Annual Project Savings	\$329,496
>Implementation Cost	\$1,486,453
Potential Incentive/Rebate	\$125,000
Cost of Capital	3.30%
Discount Rate	4.00%
Repayment Term	10
Savings Escalation Rate	3%



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Utility Savings	\$272,147	\$280,311	\$288,721	\$297,382	\$306,304	\$315,493	\$324,958	\$334,706	\$344,748	\$355,090
Water/Sewer	\$0	\$0	\$0	\$0	\$0 .	\$ 0	\$0	. \$0	\$0	\$0
Operational Savings	\$57,349	\$59,069	\$60,842	\$62,667	\$64,547	\$66,483	\$68,478	\$0	\$0	. \$0
Total Savings	\$329,496	\$339,381	\$349,562	\$360,049	\$370,851	\$381,976	\$393,435	\$334,706	\$344,748	\$355,090
Potential Grant	\$125,000	·					•			
M&V Guarantee	(\$3,709)	(\$3,820)	(\$3,935)				·			
Improvement Measures (P+I)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)
Principal	(\$127,883)	(\$132,103)	(\$136,463)	(\$140,966)	(\$145,618)	(\$150,423)	<u>(</u> \$155,387)	(\$160,515)	(\$165,812)	(\$171,284)
Interest	(\$49,053)	(\$44,833)	(\$40,473)	(\$35,970)	(\$31,318)	(\$26,513)	(\$21,549)	(\$16,421)	(\$11,124)	(\$5,652)
	(\$51,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)	(\$176,936)
Annual Savings & Costs	\$273,851	\$158,625	\$168,691	\$183,113	\$193,915	\$205,040	\$216,499	\$157,770	\$167,812	\$178,154

PV of Facilities Improvements

\$1,555,958

Simple Payback

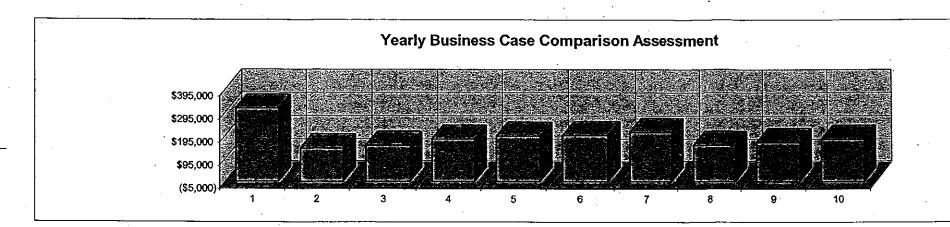
4.5 Years

 \bigvee

City of Milwaukee

Safety Academy and LED Traffic Signals Combined

Utility Savings	\$333,971
Water/Sewer	\$4,890
Operational Savings	\$66,271
>Total Annual Project Savings	\$405,132
>Implementation Cost	\$2,181,615
Potential Incentive/Rebate	\$154,707
Cost of Capital	3.30%
Discount Rate	4.00%
Repayment Term	10
Savings Escalation Rate	3%
One Time Operational Savings	\$28,700
and the second s	



									•	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Utility Savings	\$333,971	\$343,990	\$354,310	\$364,939	\$375,887	\$387,164	\$398,779	\$410,742	\$423,064	\$435,756
Water/Sewer	\$4,890	\$5,037	\$5,188	\$5,343	\$5,504	\$5,669	\$5,839	\$6,014	\$6,195	\$6,380
One Time Operational Savings	\$28,700		:		•	. ,			• •	•
Operational Savings	\$66,271	\$68,259	\$70,307	\$72,416	\$74,589	\$66,146	\$68,130	\$0	\$0	\$0
Total Savings	\$433,832	\$417,286	\$429,805	\$442,699	\$455,980	\$458,979	\$472,748	\$416,756	\$429,259	\$442,137
Potential Grant	\$154,707				· · · · · · · · · · · · · · · · · · ·	-	<u> </u>			
M&V Guarantee	(\$13,599)	(\$14,007)	(\$14,427)					•		
Improvement Measures (P+I)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)
Principal	(\$187,689)	(\$193,883)	(\$200,281)	(\$206,891)	(\$213,718)	(\$220,771)	(\$228,056)	(\$235,582)	(\$243,356)	(\$251,387)
Interest	(\$71,993)	(\$65,800)	(\$59,401)	(\$52,792)	(\$45,965)	(\$38,912)	(\$31,627)	(\$24,101)	(\$16,327)	(\$8,296)
	(\$104,976)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)	(\$259,683)
	· · · · · · · · · · · · · · · · · · ·									
Annual Savings & Costs	\$315,257	\$143,596	\$155,695	\$183,016	\$196,297	\$ 199,296	\$213,065	\$157.074	\$169,576	\$182,454

PV of Facilities Improvements

\$1,568,683

Simple Payback

5.3 Years