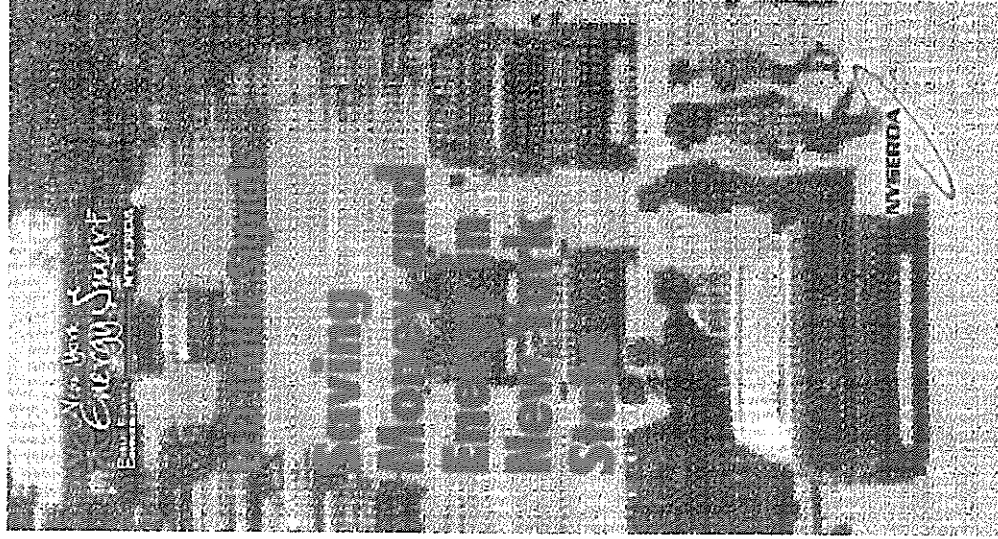


NYSEERDA LED Traffic Signal Program Overview

- Tools
 - LED traffic Signal
- Informational Brochure



Traffic Signal Fast Facts

- New York State spends approximately \$1.6 billion each year on energy to operate traffic signals, or about half of which is wasted.
- Energy audits, energy audits, and smart traffic signal retrofits have prompted many state and municipal governments to replace their old traffic signals with energy efficient LED traffic signals.
- LED signals are powered by modern electronics for a typical life of one year compared to a typical life of one year for conventional incandescent signals.
- Drivers often comment that LED signals appear brighter than incandescent traffic signals.
- Traffic signals using LEDs use up to 99 percent less energy than the old incandescent signals, save and save for typical maintenance costs, and are more reliable.

Typical Signal Wattages

Signal	Incandescent	LED	Savings
1st Red	100	10	90%
2nd Green	60	6	87%
PeDESTAL	60	7	88%

LED signals are easy to find by calling your local utility supplier or the NYSEERDA Office of Capital Services (OCS). You'll find out how to purchase LED signals through OCS.

ENERGY, MAINTENANCE, & POLLUTION SAVINGS CALCULATOR

Notes: The purpose of this calculator is to provide an estimate of energy, environmental, and maintenance savings, as well as payback years. This spreadsheet is based on user inputs. "Signals" refers to individual ball/corner/peds, not complete heads. Calculate with US Dollars

Energy Savings

	LED SOURCE												EXISTING LIGHT SOURCE											
	8' Red	12' Red	Red Arw	8' Grn	12' Grn	Grn Arw	8' Yel	12' Yel	Yel Arw	Ped Man	Ped Hand	8' Red	8' Grn	8' Yel	12' Red	12' Grn	12' Yel	Red Arw	Grn Arw	Yel Arw	Ped Man	Ped Hand		
Energy consumed by signal																								
Energy rate																								
On-line of signal per day																								
Avg Number of intersections																								
Total number of signals																								
Energy Consumed Annually																								
Energy Dollars Spent Annually																								
Energy Dollars Saved Annually																								
Annual Energy Savings																								

Annual Carbon Dioxide Savings

Unit	lb	1.64
Annual Carbon Dioxide Savings	lb	23,652.610
Equivalent Amount of Cars Eliminated by Energy Savings per Year		2,612

Maintenance Savings

	LED SOURCE												EXISTING LIGHT SOURCE											
	8' Red	12' Red	Red Arw	8' Grn	12' Grn	Grn Arw	8' Yel	12' Yel	Yel Arw	Ped Man	Ped Hand	8' Red	8' Grn	8' Yel	12' Red	12' Grn	12' Yel	Red Arw	Grn Arw	Yel Arw	Ped Man	Ped Hand		
Scheduled intersection maintenance per year																								
Cost of scheduled maintenance																								
Cost of emergency bulb replacement																								
Frequency of emergency bulb replacement per year																								
Maintenance Dollars Spent Annually																								
Maintenance Dollars Saved Annually																								

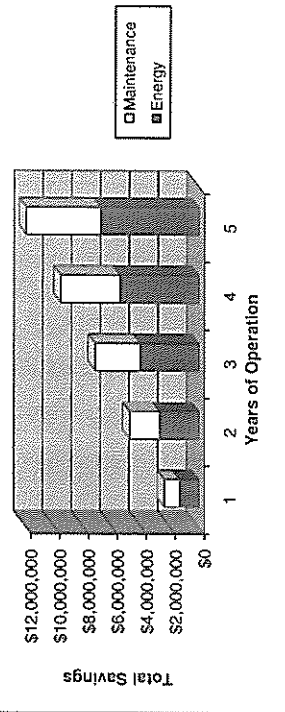
Investment

	LED SOURCE												
Unit	8' Red	12' Red	Red Arw	8' Green	12' Grn	Green Arw	8' Yel	12' Yel	Yellow Arw	Ped Man	Ped Hand		
Capital cost of one signal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Total Material Cost Per Signal Type	\$360.00	\$450.00	\$110.50	\$612.00	\$920.00	\$146.000	\$420.000	\$510.000	\$91.000	\$715.000	\$565.000		
Cost to replace each bulb with LED	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Total Investment per Signal Type	\$510.00	\$500.000	\$143.000	\$762.000	\$1,140.000	\$168.500	\$570.000	\$560.000	\$123.500	\$977.500	\$747.500		
Total Investment For Signals	\$6,322.000												
Total Project Rebate	\$0												
Energy Engineering & Admin	\$0												
Total Capital Required	\$6,322.000												
Finance Charges	\$0												
Total Project Investment	\$6,322.000												

2.64

PAYBACK YEARS

Cumulative Savings



Cumulative Amount of Cars Eliminated by Energy Savings

