

Street Light Survey #2 Results

11 responses received as of 7/19/10: Alexandria, Arlington County, Bowie, District of Columbia, City of Fairfax, Fairfax County, Falls Church, Loudoun County, Manassas, Montgomery County, and Prince George's County

Types of Street Lights:

Streetlights in Use	Number of Lights	% of Lights	Number of Jurisdictions
Incandescent	6,888	2.5%	3
Mercury Vapor	48,550	17.8%	9
High Pressure Sodium	212,143	77.8%	10
Metal Halide Induction	768	0.3%	4
LED	1,120	.4%	4
Other	275	0.1%	2
Unknown	2,951	1.1%	1
Total	272,695		11

Mercury Vapor:

- Most encouraged technology to be replaced
- 9 jurisdictions currently use them; represent 17.8% of lights reported

High Pressure Sodium:

- All jurisdictions that reported the types of lights had some high pressure sodium fixtures
- 77.8% of the total reported fixtures in the region

LED:

- 4 jurisdictions currently have LEDs: Arlington, District of Columbia, Fairfax County, and Manassas
- 4 jurisdictions have plans to install LEDs
 - Arlington has plans to convert all streetlights to LEDs at a rate of at least 1,000 lights per year (16,580 total, with 1,066 current LEDs)
 - Alexandria plans to install 34 LEDs in the Braddock Metro Station area of the City.
 - DDOT (DC) plans to replace 1,000 light fixtures with LEDs by November 2011 using EECBG funds.
 - Manassas has a program to replace 114-120 HPS fixtures with LEDs to be completed with EECBG funding by December 2010.

Ownership of Lights:

	Number of Lights	% of Lights	Number of Jurisdictions
Own	152,289	56%	11
Lease	120,406	44%	6

In the majority of jurisdictions there is a combination of ownership that makes it more difficult to implement system-wide improvements.

Annual KWH Consumption and Costs:

	# of Lights	Annual kWh	Annual operation cost	kWh per light	Cost per light
Alexandria	9,639	7,457,169	\$1,519,796	773.6	\$157.67
Arlington	16,580	12,100,000	\$2,560,000	729.8	\$154.40
Bowie	5,860	2,772,960	\$298,400	493.5	\$53.11
District of Columbia	66,053	75,063,942	\$10,500,000	1,136.4	\$158.96
Fairfax City	2,954	2,220,000	\$510,000	752.3	\$172.82
Fairfax County	53,910	40,859,932	\$6,020,000	758.2	\$111.70
Falls Church	142	-	\$100,000	-	-
Loudoun	477	-	flat charge	-	-
Manassas	2,924	1,704,504	\$109,788	582.9	\$37.55
Montgomery	59,648	26,373,336	\$9,570,696	442.1	\$160.45
Prince George's	54,508	33,062,725	\$5,666,175	606.6	\$103.95

	# of LED lights	Annual kWh	kWh per LED light	Savings over average light*
Fairfax County	27	8,190	303.3	60%
Manassas	12	2,244	187	68%

*Savings only represents kWh consumed. LED lights may not produce the same lumens.

LED consumption saw an average 64% reduction in kWh consumed from total average in Fairfax County and Manassas. Arlington and the District of Columbia did not report separate electric usage for their current LED fixtures.