

City and Borough of Wrangell
Street Light Analysis

Lights	Each	LED Watt Per Hour	Watt per day (13 hr average)	Watt per year each	KWH per year each	Cost each per year	KWH for all per year	Cost for all per year
LEOTEK 92.46 watt (150/250)	264	92.46	1202	438722.7	438	\$ 50.81	115632	\$13,413.31
LEOTEK 135 watt (400)	100	135	1755	640575	640	\$ 74.24	64000	\$7,424.00
								\$20,837.31

Wrangell Invenotry	Current Light Size	KWH year for one	Cost each per year	KWH for all per year	Cost for all per year
186	150 HPS	941	\$109.16	175026	\$ 20,303.02
84	175 MV	809	\$93.84	67956	\$ 7,882.90
7	180 LPS	809	\$93.84	5663	\$ 656.91
47	250 HPS	1370	\$158.92	64390	\$ 7,469.24
4	400 MV	1820	\$211.12	7280	\$ 844.48
36	400 hps	2040	\$236.64	73440	\$ 8,519.04
364	Total	7789	\$ 903.52	393755	\$ 45,675.58

Current Cost \$ 45,675.58
 After Install \$ 20,837.31
 Savings \$ 24,838.27

LED Street Lights	Each	Per Unit	Total
Wrangell COOP Funding	144	\$ 367.00	\$52,848.00
AEA Funding	120	\$ 367.00	\$44,040.00
AEA Funding	100	\$ 479.00	\$47,900.00
	364		\$144,788.00

Funding
 \$ 53,400.00
 \$ 95,270.00
 \$ 148,670.00

Cost is based on currently \$0.116 per kilowatt hour

All bulbs are estimated to run for approximately 50,000 hours. Averaging 13 hours a day each will last a little over 10 years.

Estimated Cost of Instillation

8 fixtures per day	45 days to install	Lineman per hour	\$ 57.75
		Groundman per hour	\$ 29.75
		Truck cost per hour	\$ 85.00
		Total per hour	\$ 172.50
		Total per day	\$ 1,380.00
		Total to install all	\$ 62,100.00