



Downtown Streetlights



Downtown Streetlights

- Currently 116 ornamental streetlights in the downtown area
 - 114 of these streetlights are City owned
- Installed between 2005 and 2016.
- Billed under PGE's Option B
 - Streetlights under Option A are streetlights purchased, owned and maintained by PGE.
 - Streetlights under Option B are streetlights purchased by the customer, but maintained by PGE.
- PGE has proposed a conversion of all our Downtown Ornamental Streetlights to LED



Ornamental Fixtures

- PGE has 4 approved ornamental LED Fixtures
- Three of the approved fixtures - Washington Postlite, Yarmouth Fixture and the Wellington Fixture are top mounted LED Dark Sky compliant fixtures,
- The fourth is a center mounted LED, which is not Dark Sky compliant.
- The Washington Postlite Fixture is a lensless fixture.
- Public Works staff, Engineering staff and Planning staff have reviewed the fixtures and have selected the Wellington Dark Sky compliant fixture for use.

ATTACHMENT 2

LED Acorn fixtures

Washington Postlight FCO- 70W
Installed in Molalla on Molalla Ave



Acrylic Washington Postlite II- 60W
Installed in HV and Tigard (West River Terrace)



Yarmouth Fixture
Top mounted LED



Wellington Fixture
Top mounted LED



January 2018 - AX

Street Light Comparison

- Upper Left – PARS Fixture
- Upper Right – Selected PGE Approved LED Fixture
- Bottom – Current HPS



Wellington Fixture
Top mounted LED





Dark Sky Friendly

- Action Goal 1.8 from the City's Vision calls to incorporate Dark Sky friendly Streetlights to minimize light pollution.

LED Conversion



- PGE currently expects the conversion could be completed by the end of 2018.
- The LED conversion will require a transition from Option B to Option A.
 - The new lights would be PGE owned, with no upfront cost of replacement.
 - Poles would remain Option B, until end of life or if they are car hit or damaged, at which time they would be transitioned to Option A.
- The cost is for this \$634.38 per month or \$7,612.56 per year.
 - The rate structure absorbs the cost of the new fixtures and future maintenance, repairs and replacement.

Energy and Greenhouse Gas Emissions

- The new LED streetlights will consume on average 50 percent less energy than the current streetlights.
- The KWH reduction is expected to be 35,000 KWH per year
- it is estimated that there will be 26 metric tons per year reduction in greenhouse gas emissions.

Lamp Code	Lamp Description	TOTAL LIGHTS	WATTAGE		Kwh / year*		Monthly Rate		
			Current	LED	Current	LED	Current	LED	
81	100W HPS ACORN 9,500 LUMEN	45	100	60	18450	11070	\$ 347.42	\$ 612.00	
82	150W HPS ACORN 16,000 LUMEN	62	150	70	38130	17794	\$ 609.46	\$ 972.78	
83	250W HPS ACORN 27,500 LUMEN	9	250	70	9225	2583	\$ 134.73	\$ 141.21	
		116			65,805	31,447	\$ 1,091.61	\$ 1,725.99	
						(34,358)		\$ 634.38	
						Greenhouse Gas Emissions Savings		26 Metric Tons	
Lamp Code	Lamp Description	Option A	Option B	Current Rate (A)	Current Rate (B)	Total Current Monthly	Future LED Option A Rate	Total FUTURE Monthly	POSSIBLE OPTION A LED REPLACEMENT
81	100W HPS ACORN 9,500 LUMEN	2	43	\$ 13.75	\$ 7.44	\$ 347.42	\$ 13.60	\$ 612.00	Estimated Rate for 60W LED Acorn
82	150W HPS ACORN 16,000 LUMEN		62		\$ 9.83	\$ 609.46	\$ 15.69	\$ 972.78	Estimated Rate for 70W LED Acorn
83	250W HPS ACORN 27,500 LUMEN		9		\$ 14.97	\$ 134.73	\$ 15.69	\$ 141.21	Estimated Rate for 70W LED Acorn
						\$ 1,091.61		\$ 1,725.99	