



# 2015 Budget - Operating

Electrical, Street Lighting & Traffic  
Signals



## Electrical Overview

The Electric Department is responsible for providing safe, efficient, and reliable electrical service to residential, commercial and industrial customers within the municipal boundaries of the City of Penticton



## Electrical responsibilities

- Provide electrical service to 17,095 customers;
- Maintain and operate a dual voltage distribution system;
- Operation and maintenance of:
  - 4 substations feeding 17 distribution circuits;
  - 179 km of overhead power lines;
  - 85 km of primary underground cable;
  - 3,975 power poles (3052 wood, 923 steel);
  - 2,846 distribution transformers;
  - 3,204 streetlights; and
  - 36 full traffic signals & 7 pedestrian signals.



## Electrical – how we are organized

- Design:
  - Substations
  - Overhead and underground power lines
  - Switches, transformers, regulators
  - Customers connections to our power grid
  - Street lights
  - Traffic signals



## Electrical – how we are organized

- Meters and Traffic Signals:
  - Install / maintain and read meters
  - Install and maintain traffic and pedestrian signals



## Electrical – how we are organized

- Electrical Operations - Construct and maintain:
  - Substations
  - Overhead and underground power lines
  - Customer connections
  - Street lights
  - Traffic signals



# Electrical

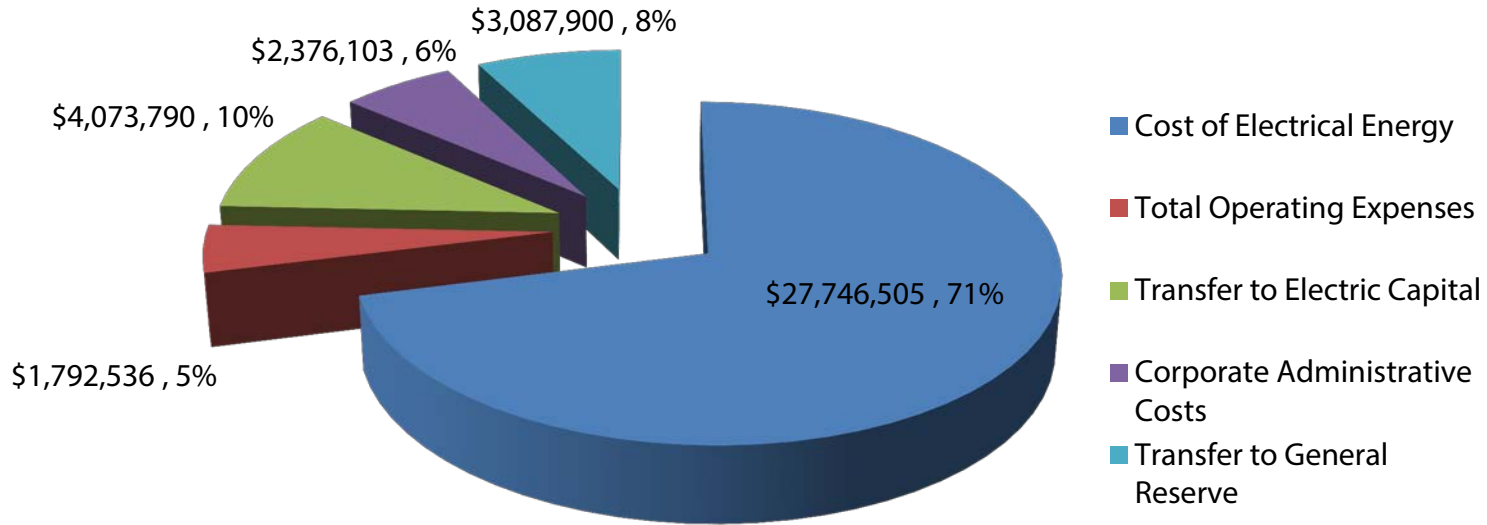
## How we do it:

- Dedicated departmental staff consisting of:
  - Department Manager
  - Department Supervisor
  - Department Secretary
  - Electric Utility Tech (2, 1 vacant)
  - Foreman
  - Sub-foreman (2)
  - Meter Traffic Tech (1, 1R)
  - Power Line Technician (6)





# 2015 Electrical Operating Budget



**Total: \$39,076,834**





# Electrical Operating Budget

Description	2013 actual	2014 budget	2014 projection	2015 budget
Cost of Electrical Energy	\$24,916,851	\$27,031,900	\$26,331,022	\$27,746,505
Total Operating Expenses	\$621,058	\$1,848,626	\$1,817,086	\$1,792,536
Transfer to Electric Capital	\$3,052,300	\$6,228,975	\$121,405	\$4,073,790
Corporate Administrative Costs	\$2,096,900	\$2,213,800	\$2,231,347	\$2,376,103
Transfer to General Reserve	\$3,035,700	\$3,039,000	\$3,000,000	\$3,087,900
<b>TOTAL</b>	<b>\$33,722,809</b>	<b>\$40,362,301</b>	<b>\$33,500,860</b>	<b>\$39,076,834</b>



## Cost of Electrical Energy

Projected costs are based on:

1. Current aggregate cost of electrical energy
2. Load growth projection
3. Approved FortisBC electricity rate increase



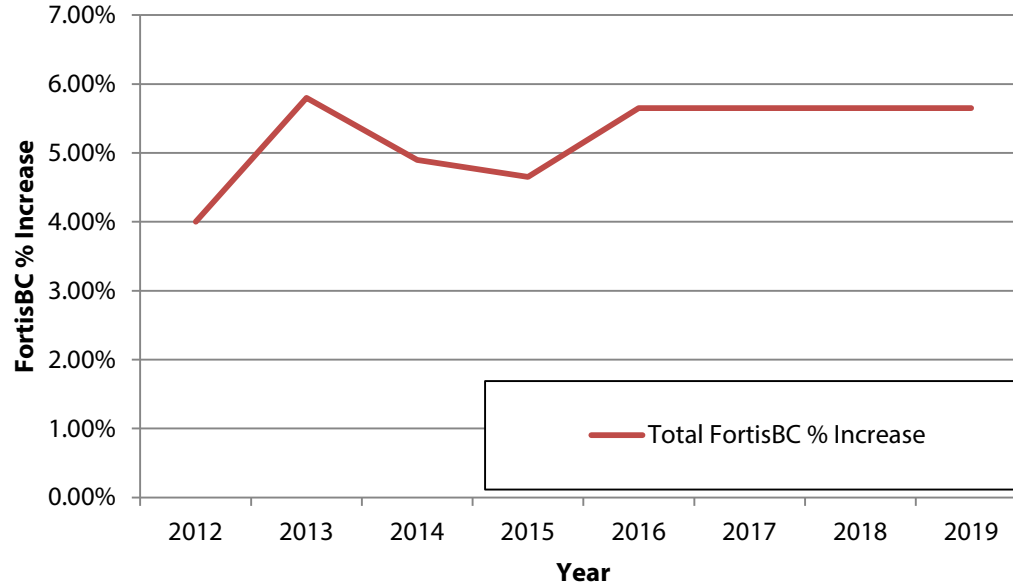
# Electrical Energy Costs

2014 Cost	FortisBC Increase	2015 Cost
\$ 0.0761 /kwh	4.65%	\$0.0796 /kwh
2014 Energy Purchase	Load Growth	Projected 2015 Energy to Purchase
345,974,708 kwh	0.69%	348,373,966 kwh
Projected 2015 Energy to Purchase	2015 Cost	2015 Electrical Energy Costs
348,373,966 kwh	\$0.0796 /kwh	\$27,746,505



# Cost of Electrical Energy

## FortisBC % Annual Increases





## Revenue from Sales of Electrical Energy

Projected revenues are based on:

1. Forecasted electrical energy purchased from FortisBC
2. Less Distribution System Losses (Average 3.34%)
3. Electricity rate margin over cost of power (Average \$0.0303 KWH)

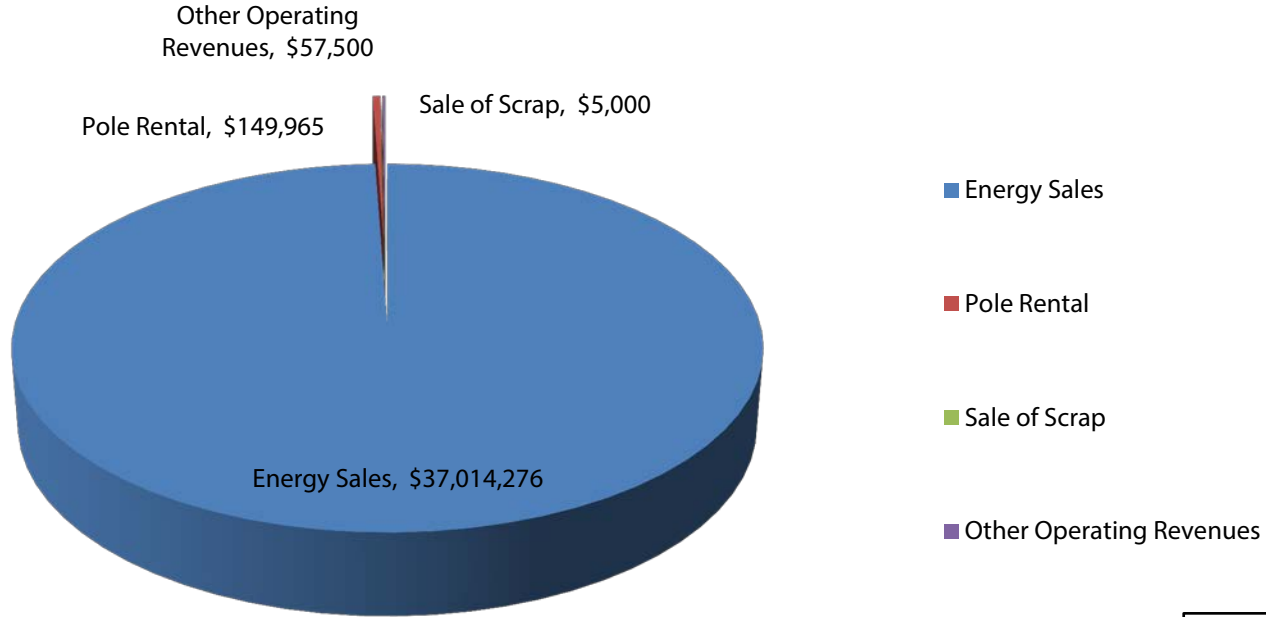


## Electrical Energy Revenues

<b>2015 Cost</b>	<b>Add: Average Margin</b>	<b>2015 Energy Rate</b>
\$ 0.0796 /kwh	\$ 0.0303 /kwh	\$ 0.1099 /kwh
<b>2015 Electrical Energy to Purchase</b>	<b>Minus: Losses @ 3.34%</b>	<b>Projected 2015 Energy Sales</b>
348,373,966 kwh	11,625,045 kwh	336,748,921 kwh
<b>Projected 2015 Energy Sales</b>	<b>2015 Energy Rate</b>	<b>2015 Electrical Energy Revenues</b>
336,748,921 kwh	\$0.1099 /kwh	\$ 37,014,276



# 2015 Electrical Revenues



**Total: \$37,226,740**



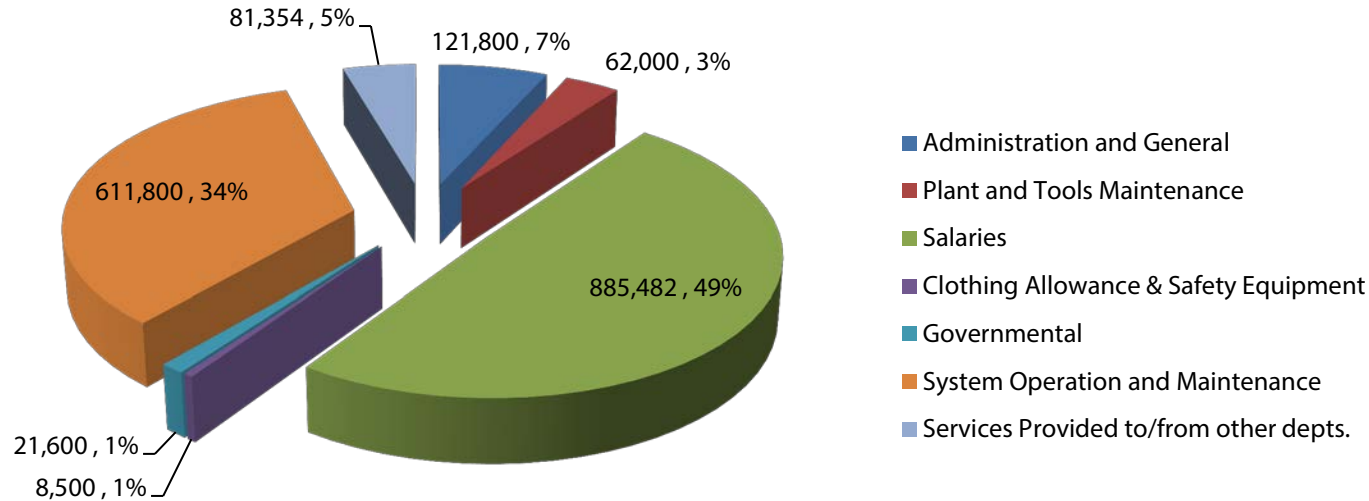
## Electrical Revenues

Description	2013 actual	2014 budget	2014 projection	2015 budget
Electrical Energy Sales	\$32,950,571	\$36,467,920	\$34,251,135	\$37,014,276
Pole Rentals	\$141,460	\$143,000	\$143,000	\$149,965
Sale of Scrap Transformers	(\$522)	\$0	\$0	\$5,000
Other: Meter Checks, Non AMR	\$70,378	\$57,500	\$87,642	\$57,500
<b>TOTAL</b>	<b>\$33,161,887</b>	<b>\$36,668,420</b>	<b>\$34,481,777</b>	<b>\$37,226,740</b>





# 2015 Electrical Operating Expenses



**Total: \$1,792,536**



## Electrical Operating Expenses

Description	2013 actual	2014 budget	2014 projection	2015 budget
Administration & General	(\$195,304)	\$484,800	\$469,173	\$121,800
Vehicle Operations & Maint.	\$0	\$27,600	\$27,600	\$0
Plant & Tools Maintenance	\$50,431	\$55,800	\$55,096	\$62,000
Salaries	\$383,019	\$545,500	\$661,786	\$885,482
Clothing Allowance & Safety Equipment	\$5,264	\$8,500	\$8,379	\$8,500
Governmental	\$544	\$21,600	\$21,600	\$21,600
System Operations & Maint.	\$341,798	\$553,226	\$423,352	\$611,800
Svcs. from other depts.	\$35,305	\$151,600	\$150,100	\$81,354
<b>TOTAL</b>	<b>\$621,058</b>	<b>\$1,848,626</b>	<b>\$1,817,086</b>	<b>\$1,792,536</b>



# Street Lighting Overview

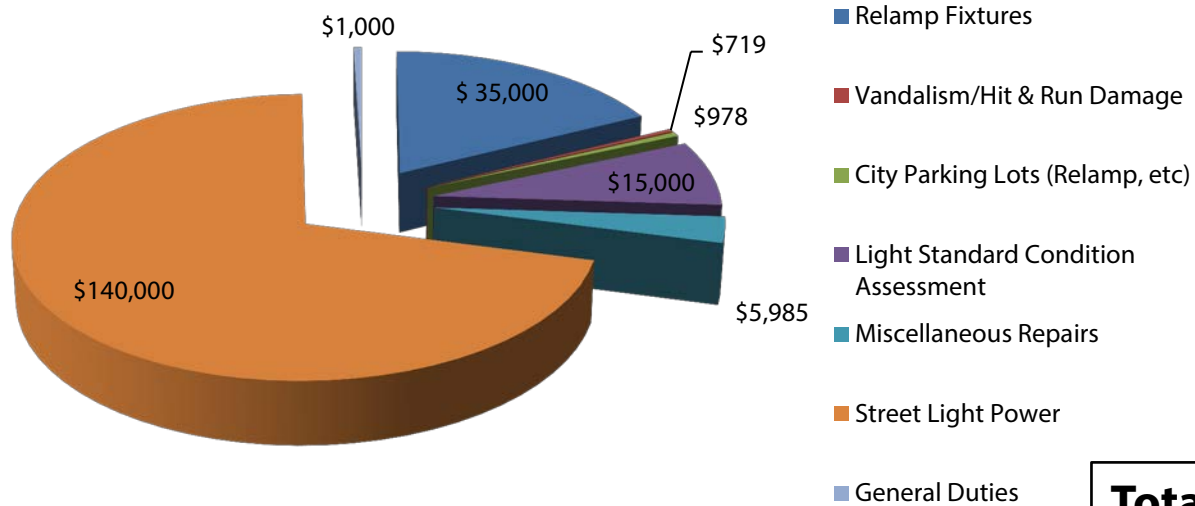


## Quick Facts:

- 3,204 street lights
- 1,465 on steel standards
- 1,739 mounted on power poles



# Street Lighting Operating Budget



**Total: \$198,682**



## Street Lighting Operating Budget

Description	2013 actual	2014 budget	2014 projection	2015 budget
Relamp Fixtures	\$41,831	\$31,400	\$33,403	\$35,000
Vandalism	\$750	\$4,200	\$687	\$719
City Parking Lots	\$1,240	\$200	\$715	\$978
Street Light Inspection	\$0	\$15,000	\$0	\$15,000
Misc. Repairs	\$4,122	\$4,200	\$7,848	\$5,985
Power	\$0	\$139,900	\$139,900	\$140,000
General Duties	\$0	\$1,000	\$652	\$1,000
<b>TOTAL</b>	<b>\$47,944</b>	<b>\$195,900</b>	<b>\$183,206</b>	<b>\$198,682</b>



# Traffic Signals Overview

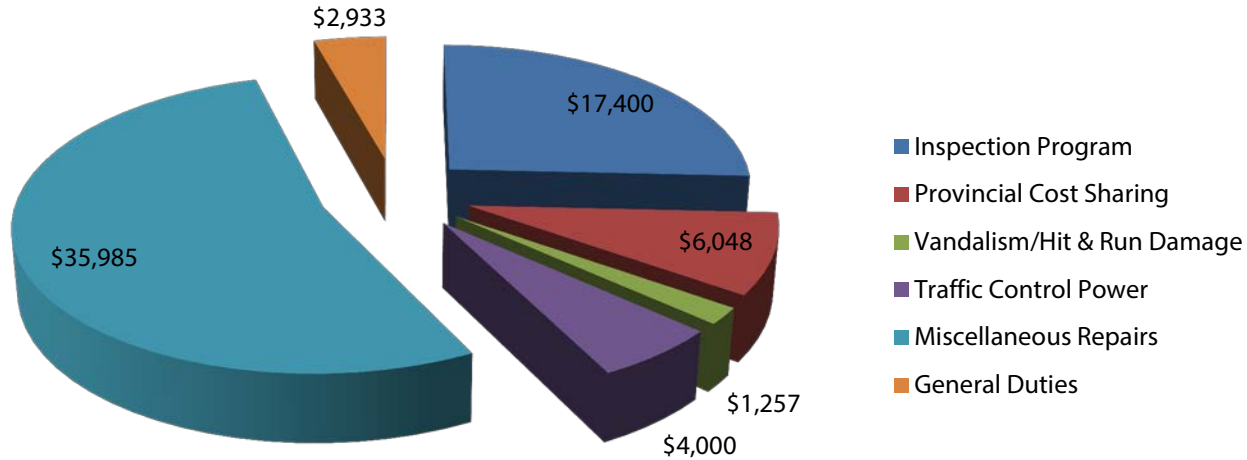
## Quick Facts:

- 36 Full Traffic Signals
- 4 Pedestrian Activated Half-Signals
- 3 Pedestrian Crossing Signals





# Traffic Signals Operating Budget



**Total: \$67,623**



# Traffic Signals Operating Budget

Description	2013 actual	2014 budget	2014 projection	2015 budget
Inspection Program	\$24,090	\$17,500	\$10,709	\$17,400
Provincial Cost Sharing	\$7,912	\$5,400	\$4,184	\$6,048
Vandalism	\$1,904	\$2,200	\$610	\$1,257
Power	\$0	\$3,600	\$3,600	\$4,000
Misc. Repairs	\$41,878	\$73,800	\$30,093	\$35,985
General Duties	\$2,874	\$3,000	\$2,992	\$2,933
<b>TOTAL</b>	<b>\$78,658</b>	<b>\$105,500</b>	<b>\$52,188</b>	<b>\$67,623</b>





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# Questions?