



RETAIL SALES FORECAST

July 25, 2017 Energy and Environment Committee Meeting

Paula Laschober, City Light Chief Financial Officer

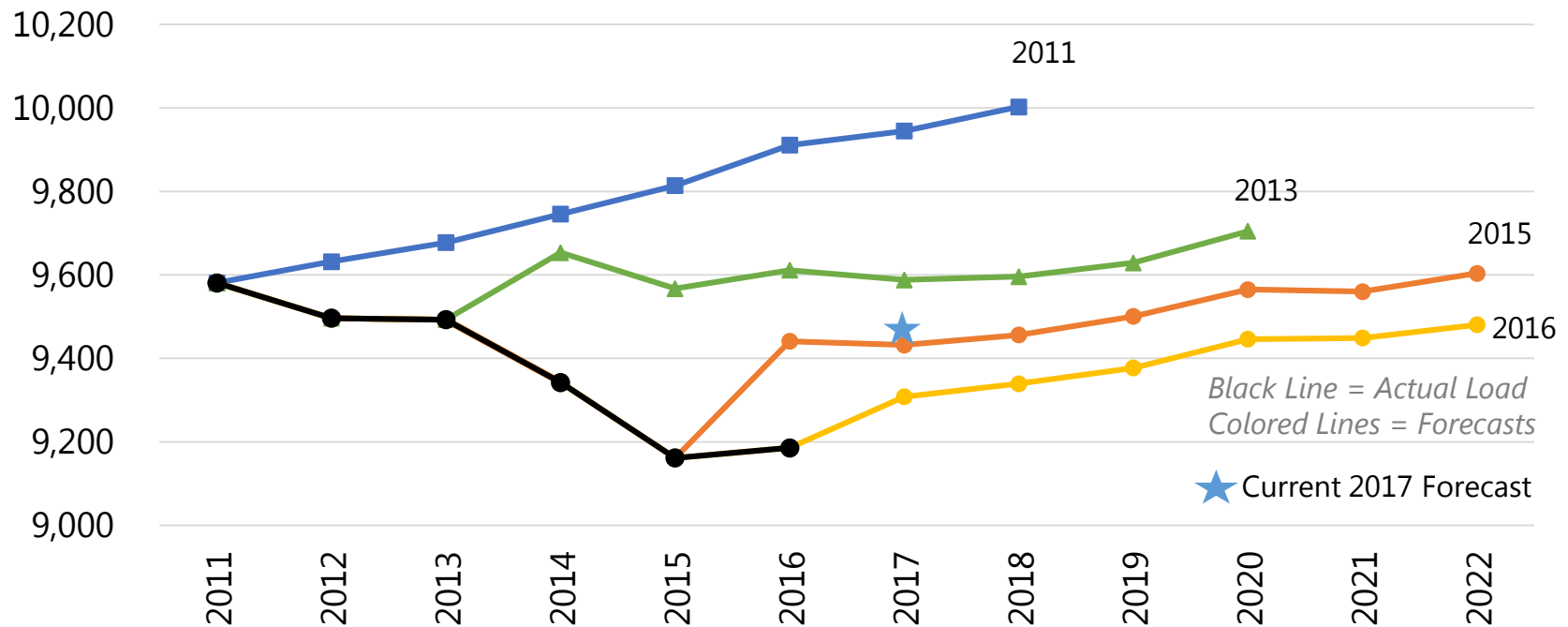
Tony Kilduff, Council Central Staff

AGENDA

- Previously:
 - Declining retail sales
 - Need to collect \$30M more annually --> rate pressure
 - Current rate design amplifies retail revenue swings
 - Policy options for revenue stabilization
- Today:
 - Retail sales forecast methodology improvements
- Future presentations:
 - Electrification (revenue) opportunities

DECLINING SALES, REVENUE SHORTFALL

Retail Sales Forecasts (Gwh)



Recent forecasts have not captured the declining trend in retail sales, leading to revenue shortfalls

RETAIL SALES FORECAST METHODOLOGY REVIEW

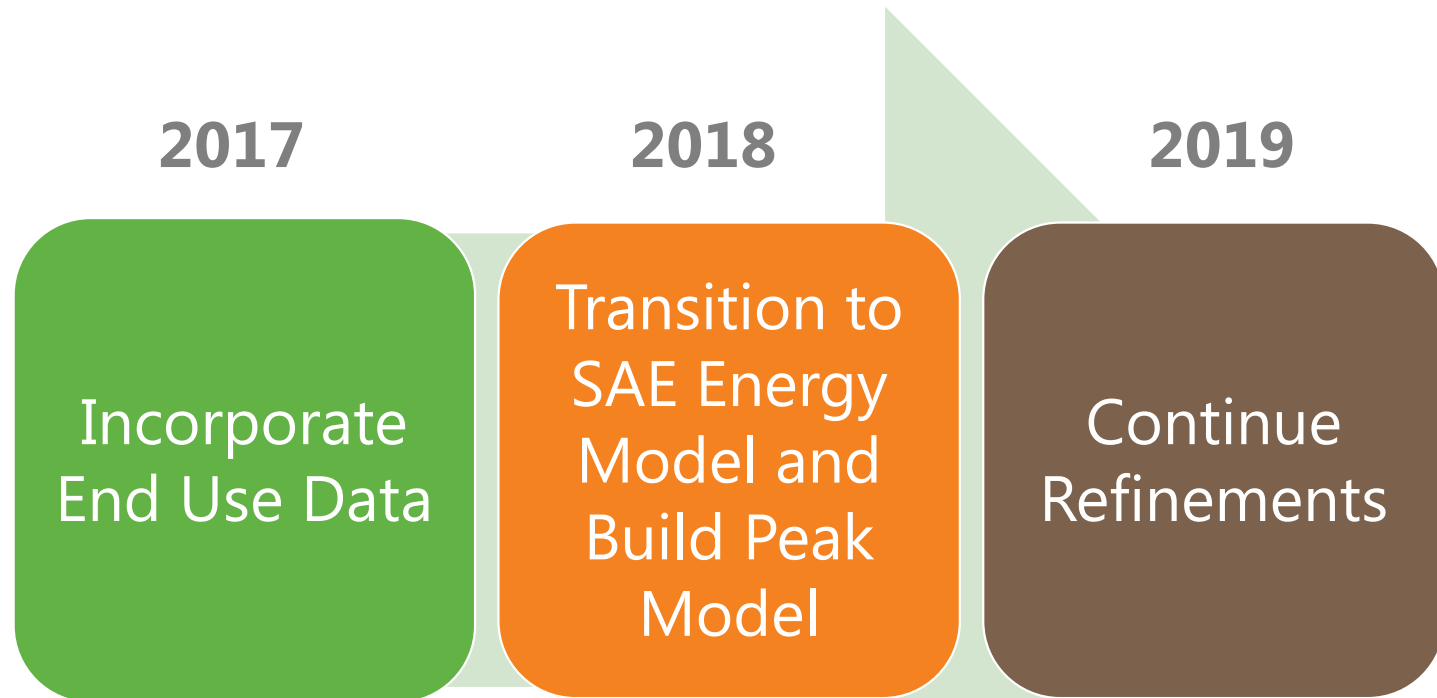
- Third party review: summary of key findings
 - City Light's methods are not consistent with current industry best practices
 - Need to move to new modeling methods that better capture changes in the energy intensity of customer end uses
 - End uses = Lighting, Heating, Cooling, Appliances....etc.
 - Many utilities facing similar issue

METHODOLOGY IMPROVEMENTS

- Key improvements under way
 - More granular model: change from quarterly to monthly
 - Purchase local economic forecast as opposed to spending lots of time creating our own
 - Access knowledge and data across the utility (Form Technical Advisory Team)
 - Leverage work in the Conservation Potential Study (CPA) to help inform future changes in customer end-uses, including codes and standards
 - Improve modeling of weather effects

METHODOLOGY IMPROVEMENT TIME FRAME

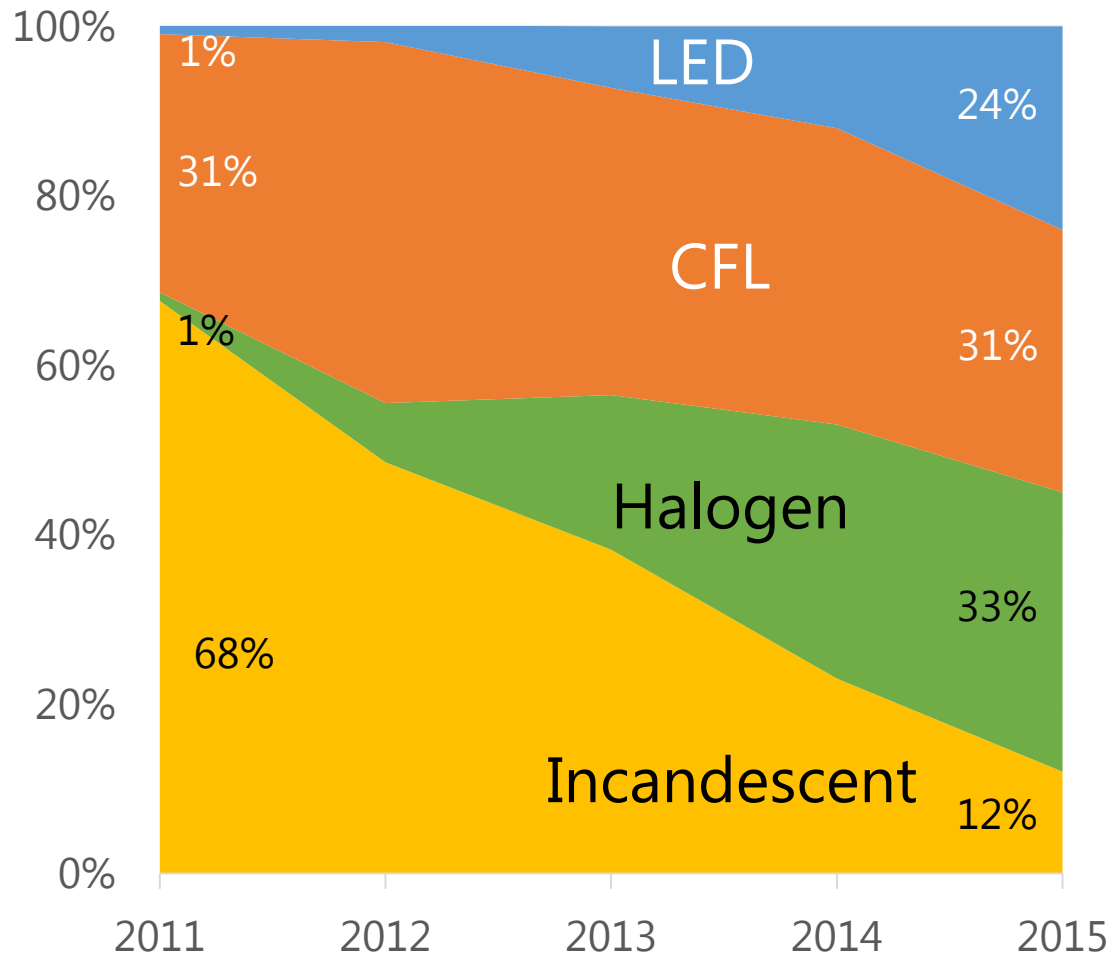
Load Forecast Model Going Forward



SAE = Statistically Adjusted End Use

INCORPORATING CHANGING TECHNOLOGY

Percentage of General Lamp Sales

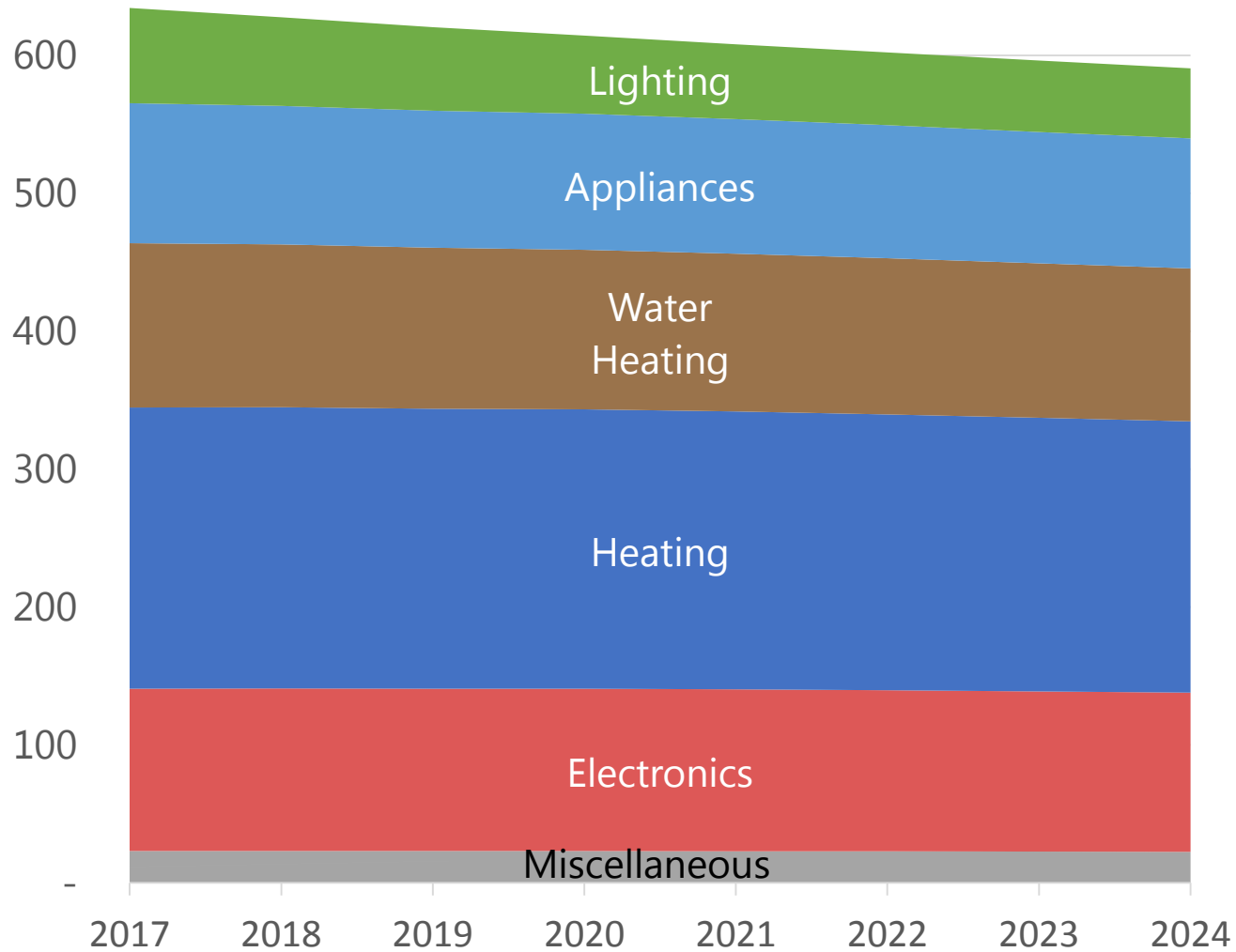


Energy Savings Compared to Incandescent

LED	87%
CFL	75%
Halogen	28%

LEVERAGING END USE DATA

Average Monthly Use Per Residential Customer (kWh)



Example, not an official forecast

TAKEAWAYS

- Brought in external consultant to review load forecasting methodology
 - Identified many process improvements
 - Some of the changes will take time, work will continue over the next couple of years
- New retail sales forecast to be complete by year-end
 - Inform 2019-2024 Strategic Plan and 2019-2020 rates
 - Will explicitly model changes in customer end uses
- Improvements will reduce the chances of chronic revenue shortage
 - However, there will always be uncertainty (risk)



Seattle City Light
is dedicated to
delivering
customers
affordable,
reliable, and
environmentally
responsible
electricity services.