



BONNEVILLE
POWER ADMINISTRATION



Momentum Savings

**Monthly
Update**

May 25, 2016



Non-residential lighting
sales data collection

RTF Market Analysis
Subcommittee

Next steps on baseline
alignment

Product Flow and Efficiency
Mix 101

Feedback on the Intro to
Momentum Savings packet

A large, rounded rectangular graphic on the right side of the slide. It has a teal background with a pattern of small, light-colored dots. The rectangle is outlined with a thick, bright yellow border. The word "Agenda" is centered within this graphic in a large, black, serif font.

Agenda



**Status Update:
Non-res Lighting
Data Collection**



Quick Context

- Stock and Flow
 - Sales data measures flow
 - Quantifiable information
- Lighting Distributors
 - Manufacturers too inaccessible
 - Contractors too numerous



The Plan

- Recruit our Allies (*StrikeForce!*)
 - NEEA (Elaine Miller)
 - Evergreen Consulting
 - Utility lighting program managers
 - BPA
- Persuade Distributors
 - Know our audience
 - Appeal to their hearts



Where We Stand (January – May)

- More participation than ever
 - 2014: 12 distributors
 - 2015: 16 distributors
 - 2016: 23 distributors... *and counting*
- Good mix of distributors
 - 5 large
 - 4 medium
 - 14 small
- Overall, a great year



Goals Going Forward

- Mo' Data, Mo' Statistical Certainty
 - Bring in the hold outs
- Sustainable Research - Retainment
 - Refine incentives
 - Simplify process
 - Validate trust
- Normalize Data Collection
 - They'll expect us to come knocking



**Status Update: RTF
Market Analysis
Subcommittee**



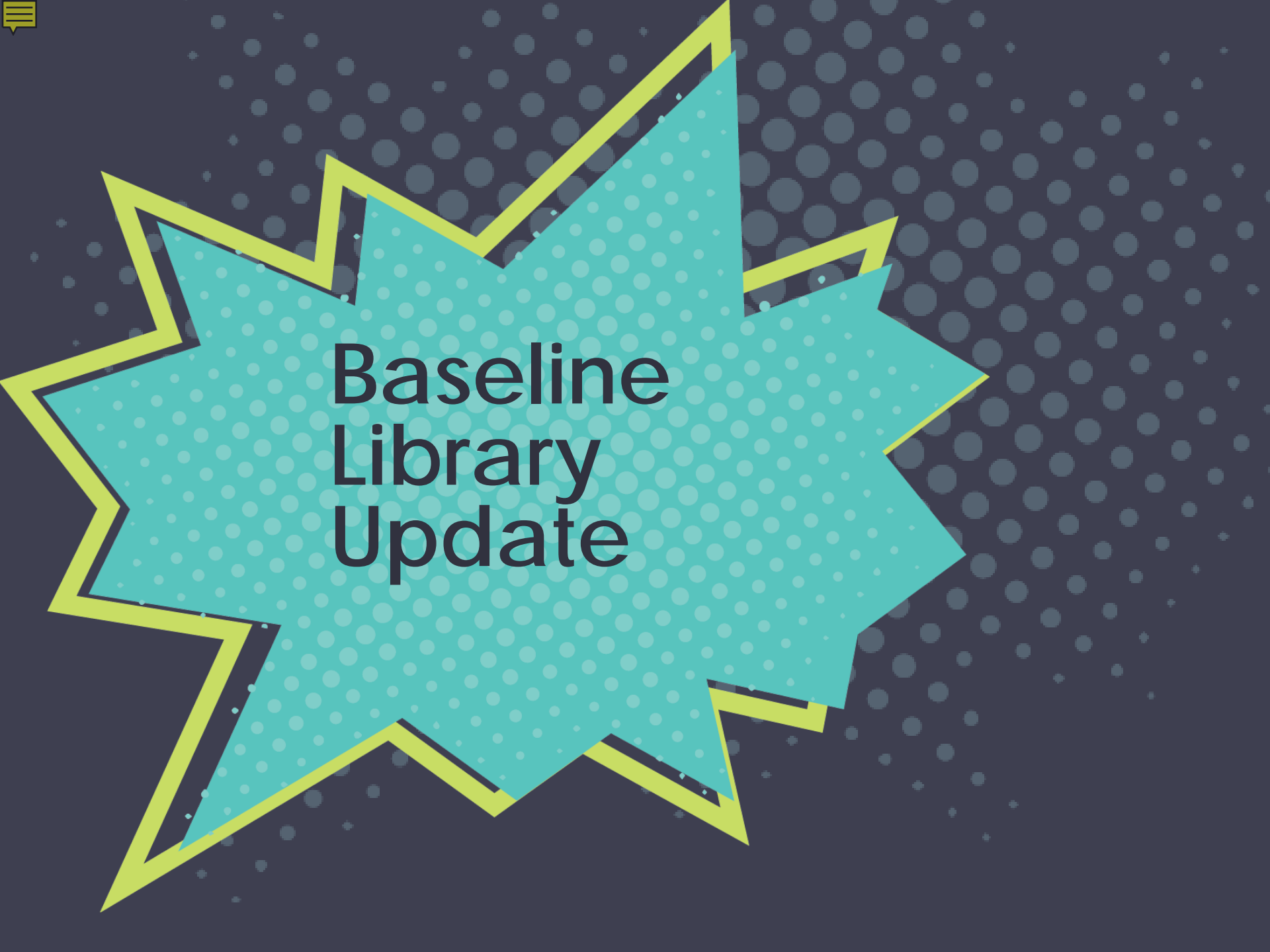
Subcommittee kicking off!

June 10th 9-11

Contact to join: GHerndon@NWCouncil.org

Meeting 1: Fundamentals of Market Analysis

Meeting 2: Lighting Model Development Tiger Team



**Baseline
Library
Update**



First Meeting: Technical Workshop

- **Date:** June 8th
- **Objectives:**
 - Focus on technical modeling in CPA analysis
 - Discuss how having an agreed upon efficiency mix in the baseline might impact implementation of CPAs
- **Desired Outcome:** We make sure that there is no unintended consequence to CPAs from using the same frozen efficiency level
- **Attendees:** Council staff, NEEA planning staff, CPA consultants (EES, Cadmus, AEG, Utility Consulting, Cadeo)



Second Meeting: Process and Next Steps

- **Date:** TBA
- **Objectives:**
 - Summarize key takeaways from technical workshop
 - Discuss the process—when, how and other logistics for managing the process to roll out a regional baseline library
 - Present and discuss options for consideration on how to move forward
- **Desired Outcome:** We gather feedback from the region on how to move forward with developing a regional baseline library
- **Desired Attendees:** Utility staff who manage CPAs, Council staff, NEEA planning staff, other interested stakeholders
- **Webpage:** <http://www.bpa.gov/goto/BaselineLibrary>



Product Flow and Efficiency Mix 101



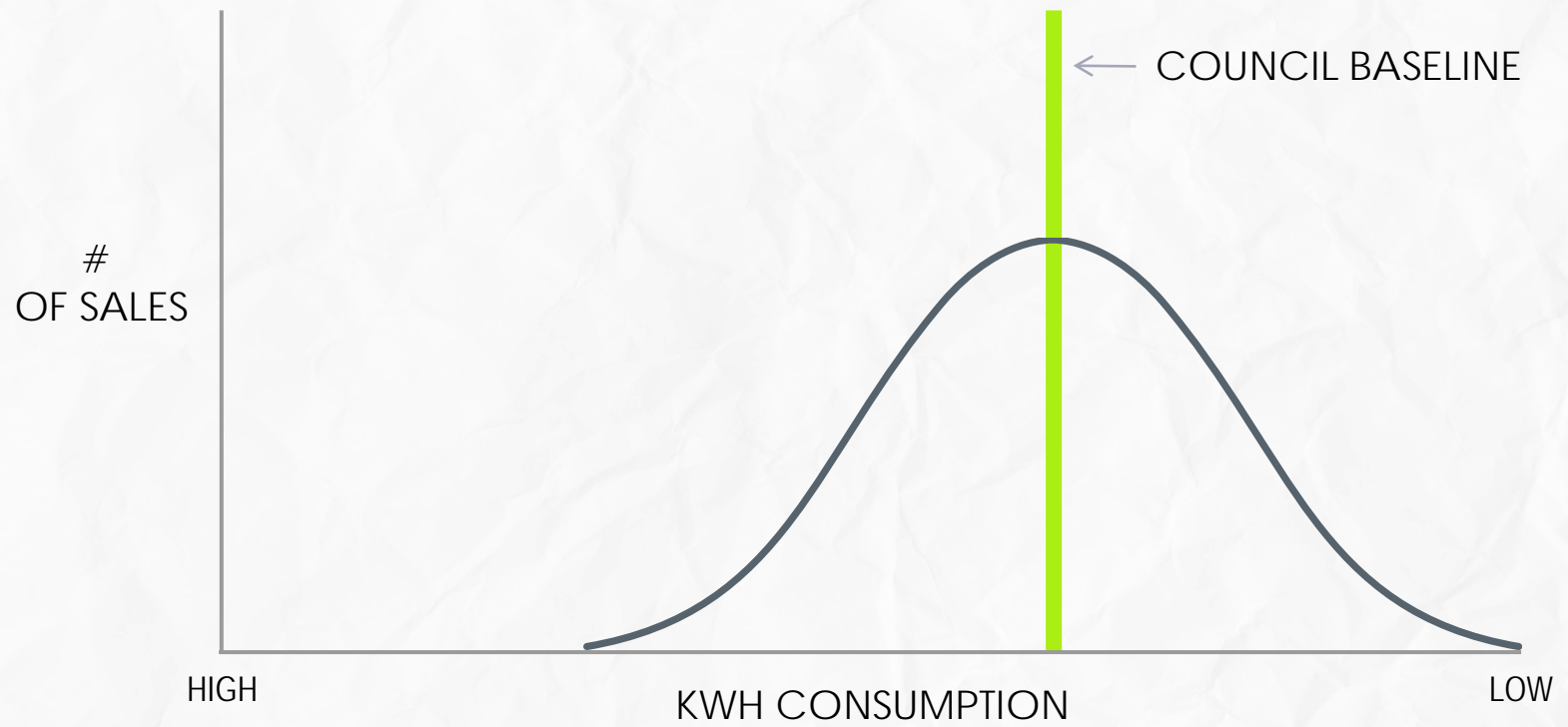
SOME TERMINOLOGY

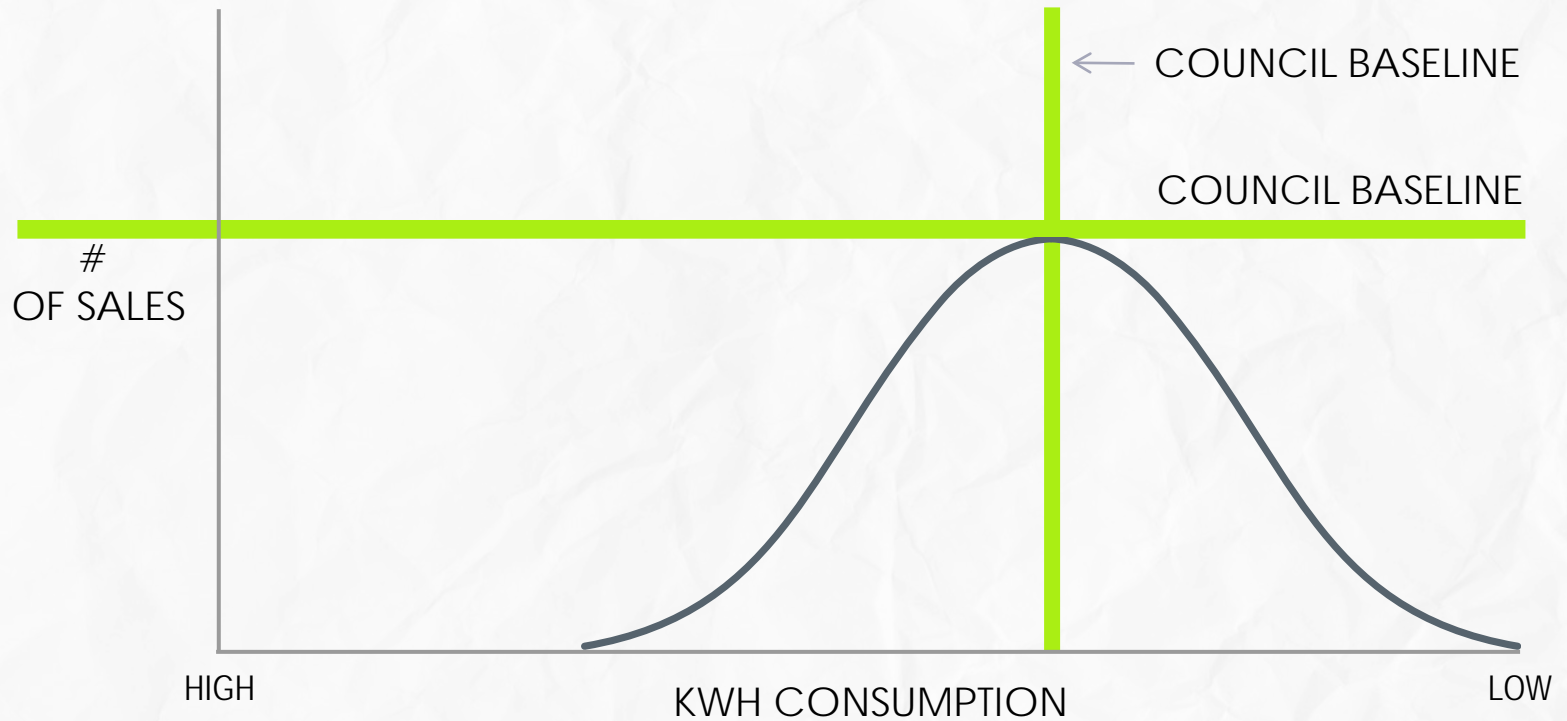


INSTALLED STOCK



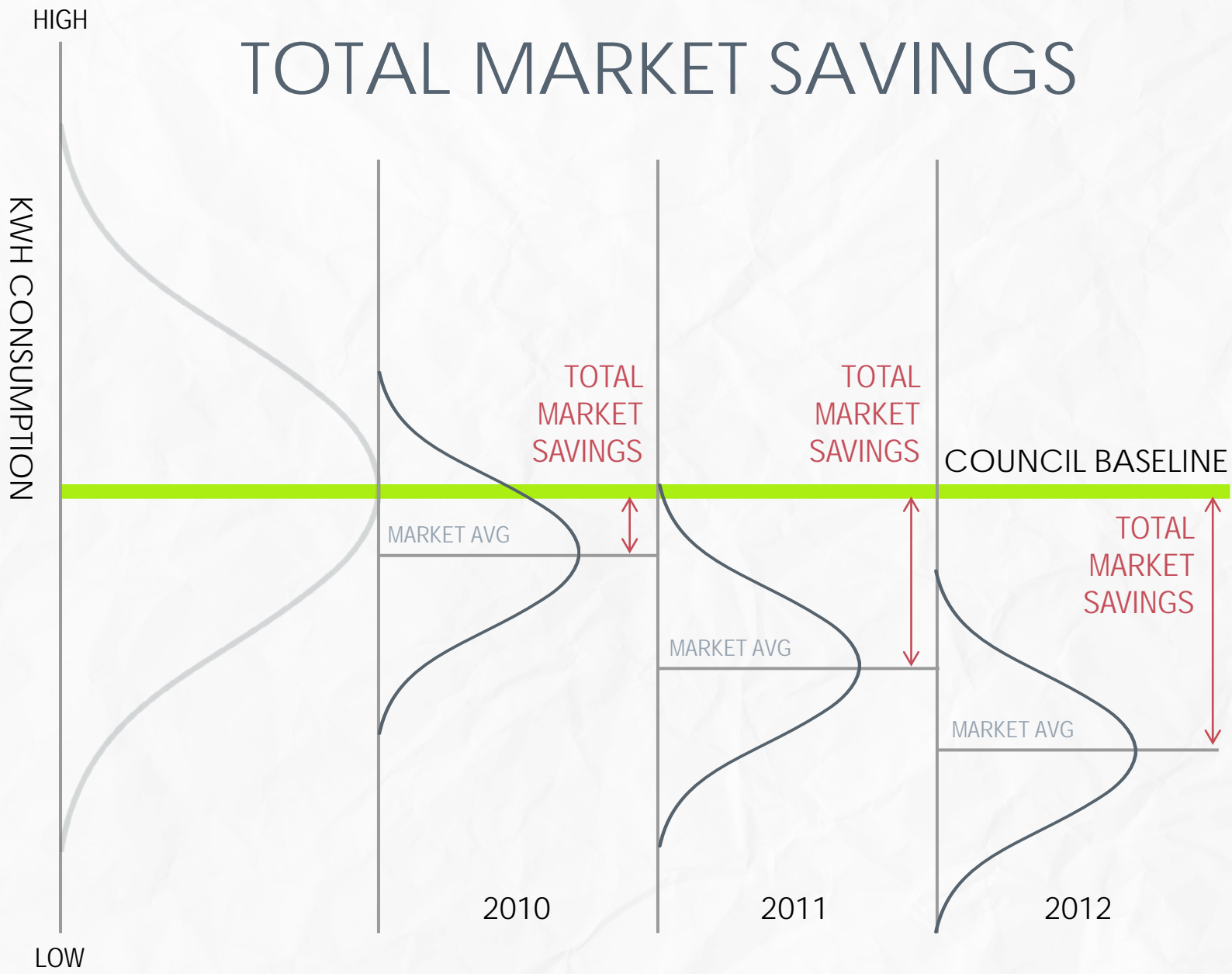
PRODUCT FLOW





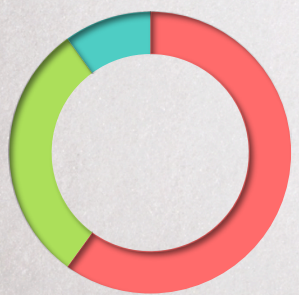


TOTAL MARKET SAVINGS





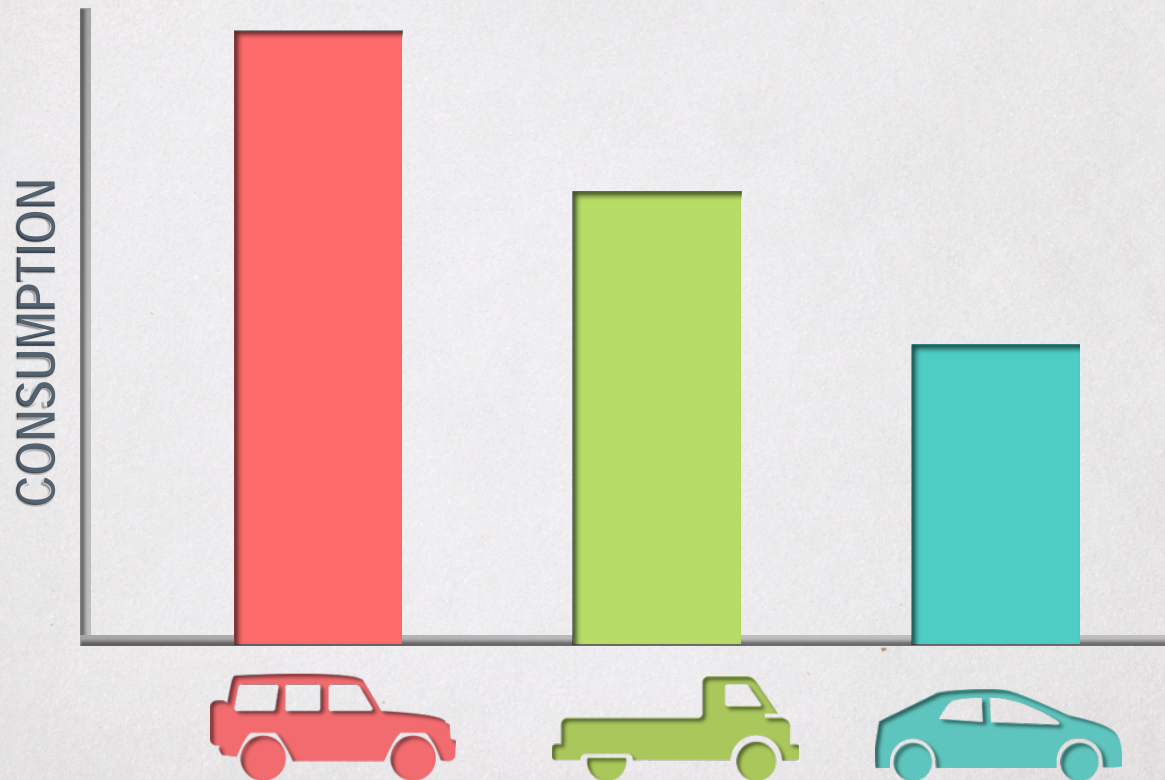
THE EFFICIENCY MIX

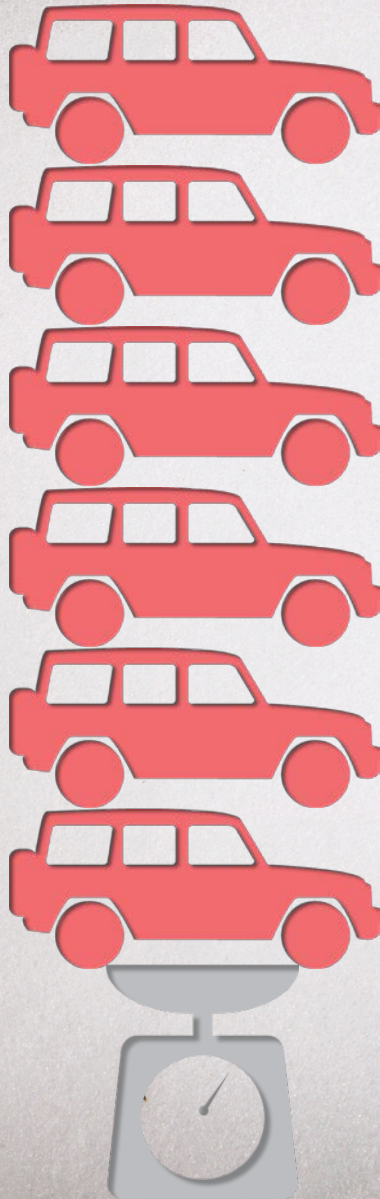


THE EFFICIENCY MIX

is the distribution of sales that fall within each efficiency level in a given market in a given year

UNIT ENERGY CONSUMPTION (UEC)





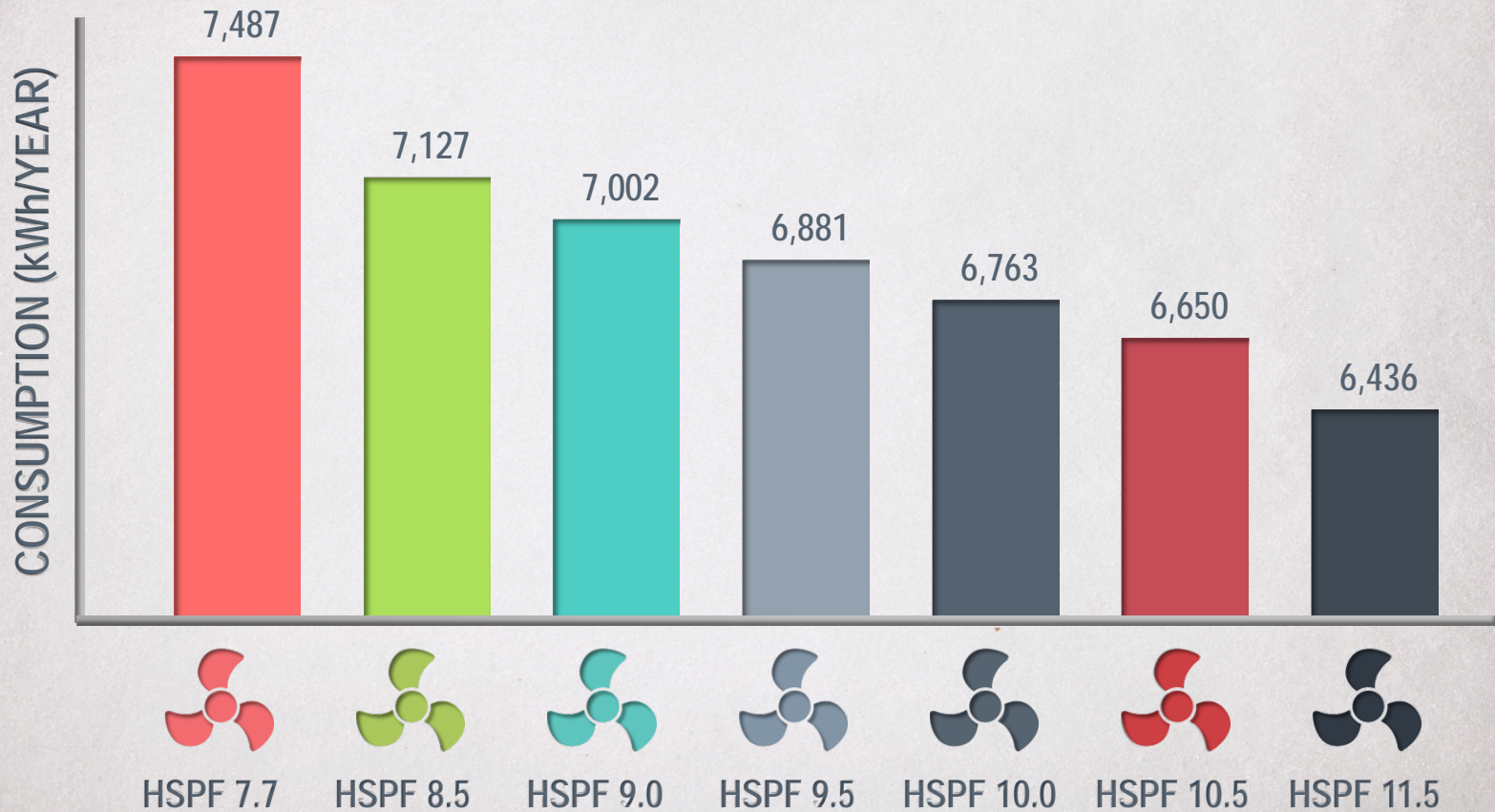
UEC WEIGHTED BY EFFICIENCY MIX



UEC WEIGHTED BY EFFICIENCY MIX

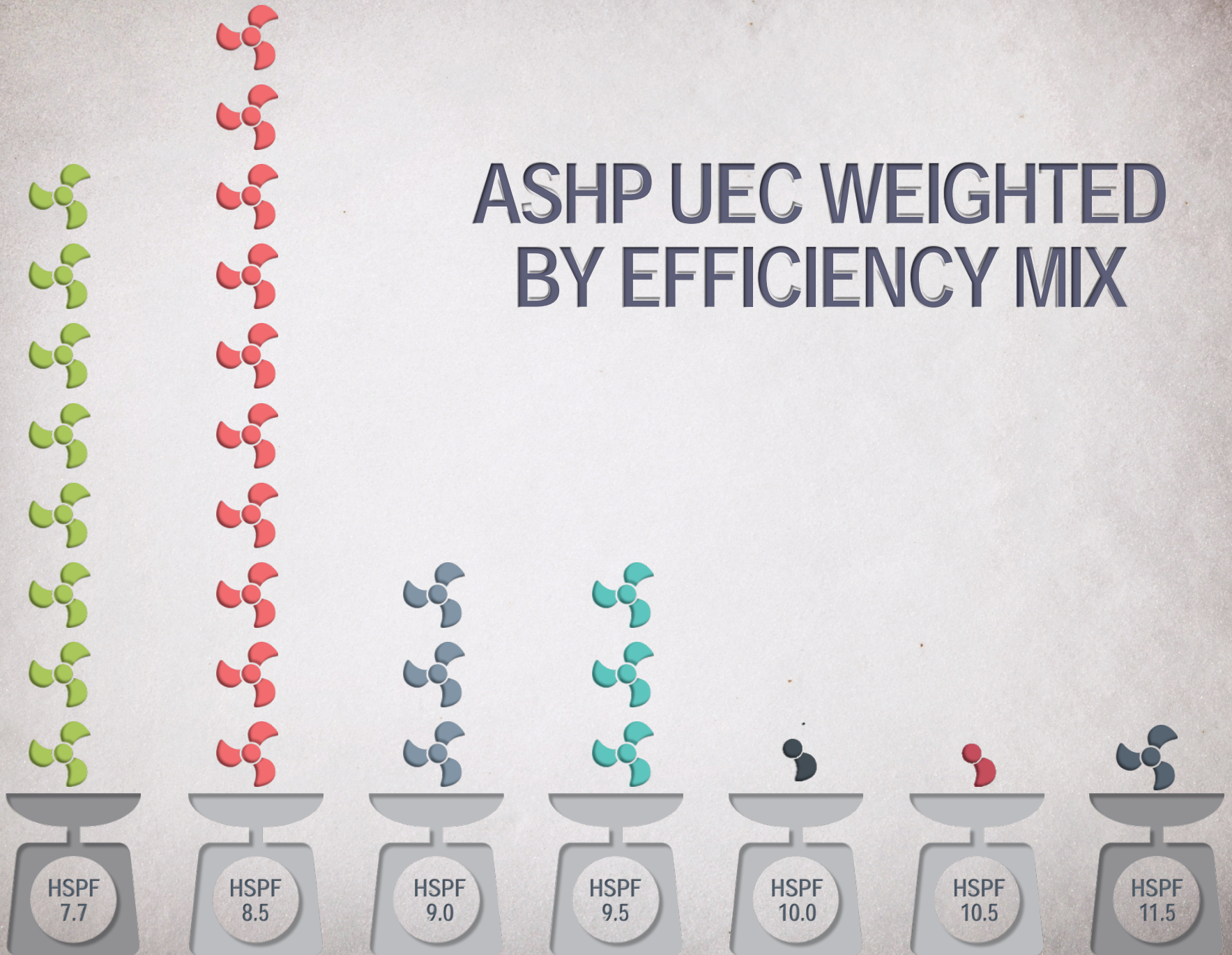


ASHP UNIT ENERGY CONSUMPTION



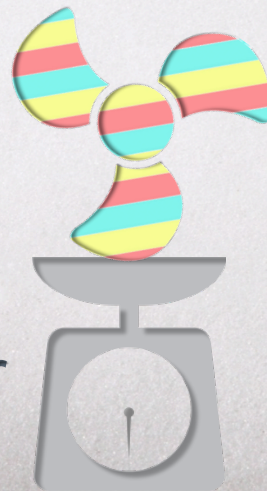


ASHP UEC WEIGHTED BY EFFICIENCY MIX



ASHP UEC WEIGHTED BY EFFICIENCY MIX

7,835
kWh/year





TAKEAWAYS

1. THERE ARE MANY EFFICIENCY LEVELS IN THE MARKET, AND THEY'RE ALL PART OF THE MARKET AVERAGE
2. EACH EFFICIENCY LEVEL HAS ITS OWN UEC
3. WE WEIGHT EACH UEC BY SALES DATA TO GET OVERALL AVERAGE UEC



SALES DATA

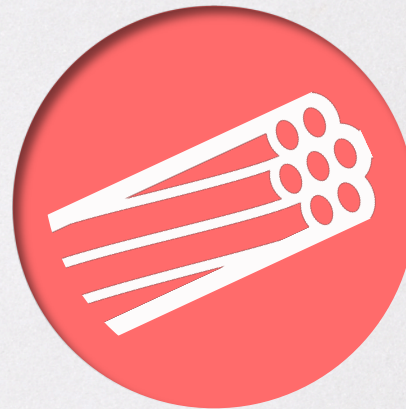


DISTRIBUTOR SALES DATA

DISTRIBUTOR TYPES



Maintenance
Repair & Operations

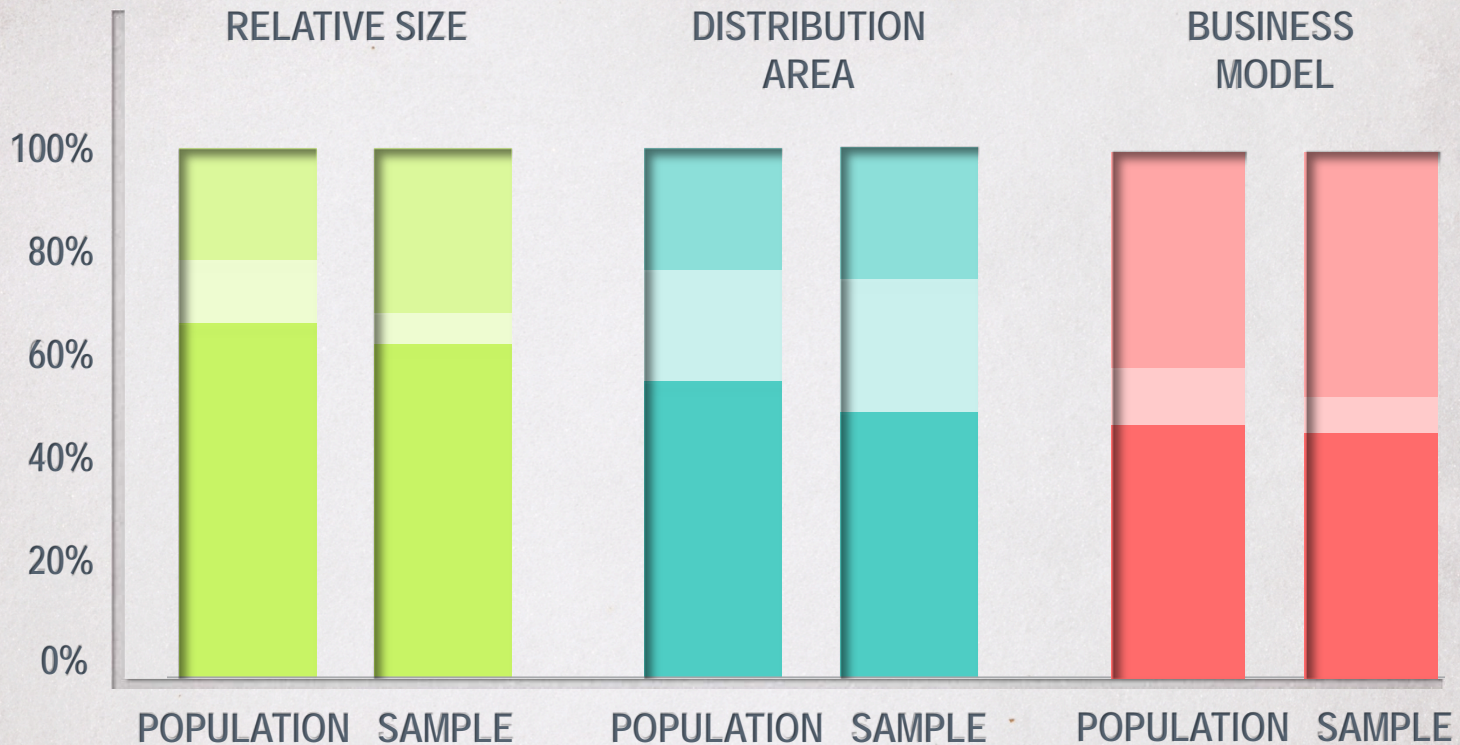


Full Line



Lighting Only

SURVEY REPRESENTATION

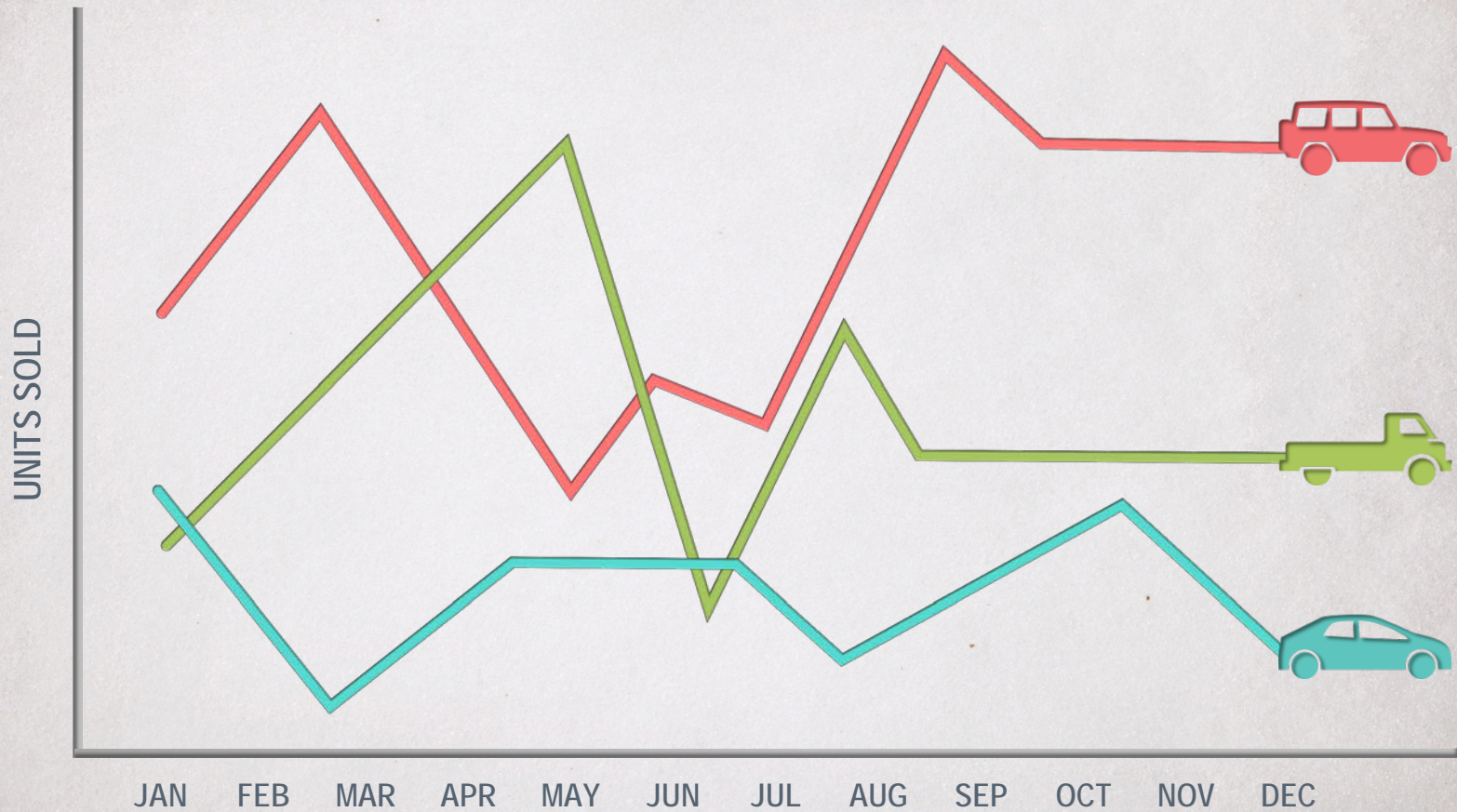


- SMALL DISTRIBUTOR
- MEDIUM DISTRIBUTOR
- LARGE DISTRIBUTOR

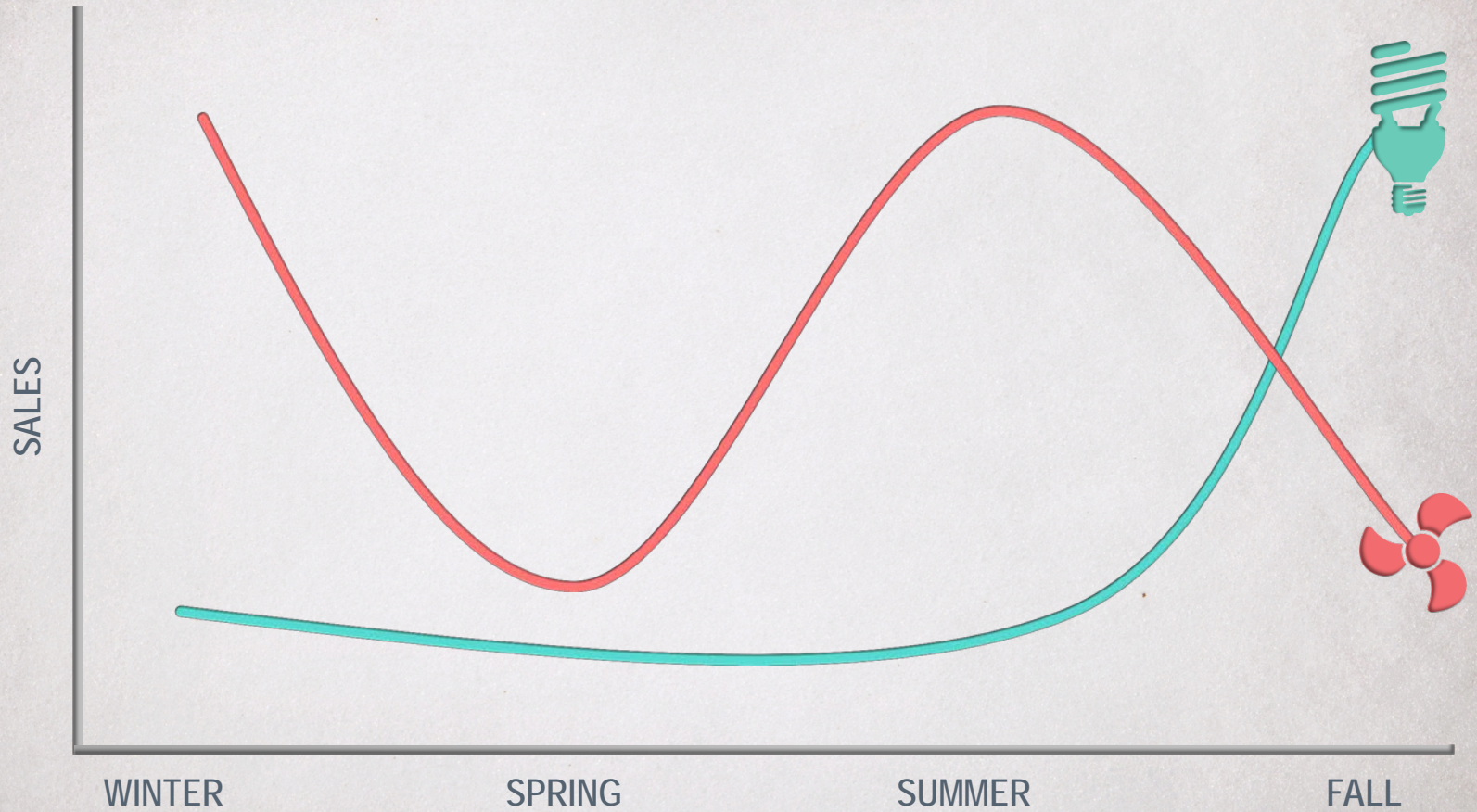
- LOCAL
- REGIONAL
- NATIONAL

- FULL LINE
- MRO
- LIGHTING ONLY

SALES IN THE BASELINE YEAR



SEASONALITY AND SALES



Not to scale



TAKE-AWAYS

1. SALES DATA IS THE BEST INDICATOR OF PRODUCT FLOW AND CAN BE COLLECTED WITH CREATIVITY AND COMMITMENT
2. SALES DATA CAN BE REPRESENTATIVE, EVEN WHEN INCOMPLETE
3. WE CAN USE MARKET SEGMENTATION TO INFORM WHETHER OR NOT OUR SALES DATA IS REPRESENTATIVE
4. WE CAN ACCOUNT FOR SEASONAL VARIATIONS BY ESTABLISHING AVERAGE EFFICIENCIES USING FULL YEAR DATA

LOCAL VARIATION



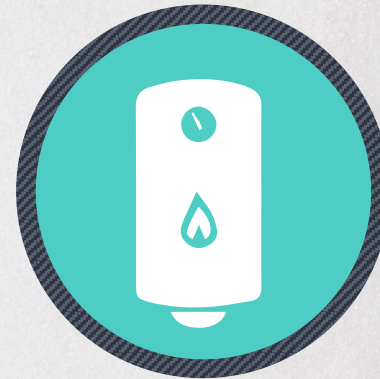
IN A BIG-BOX WORLD: MORE SIMILARITIES THAN DIFFERENCES



RBSA DIFFERENCES

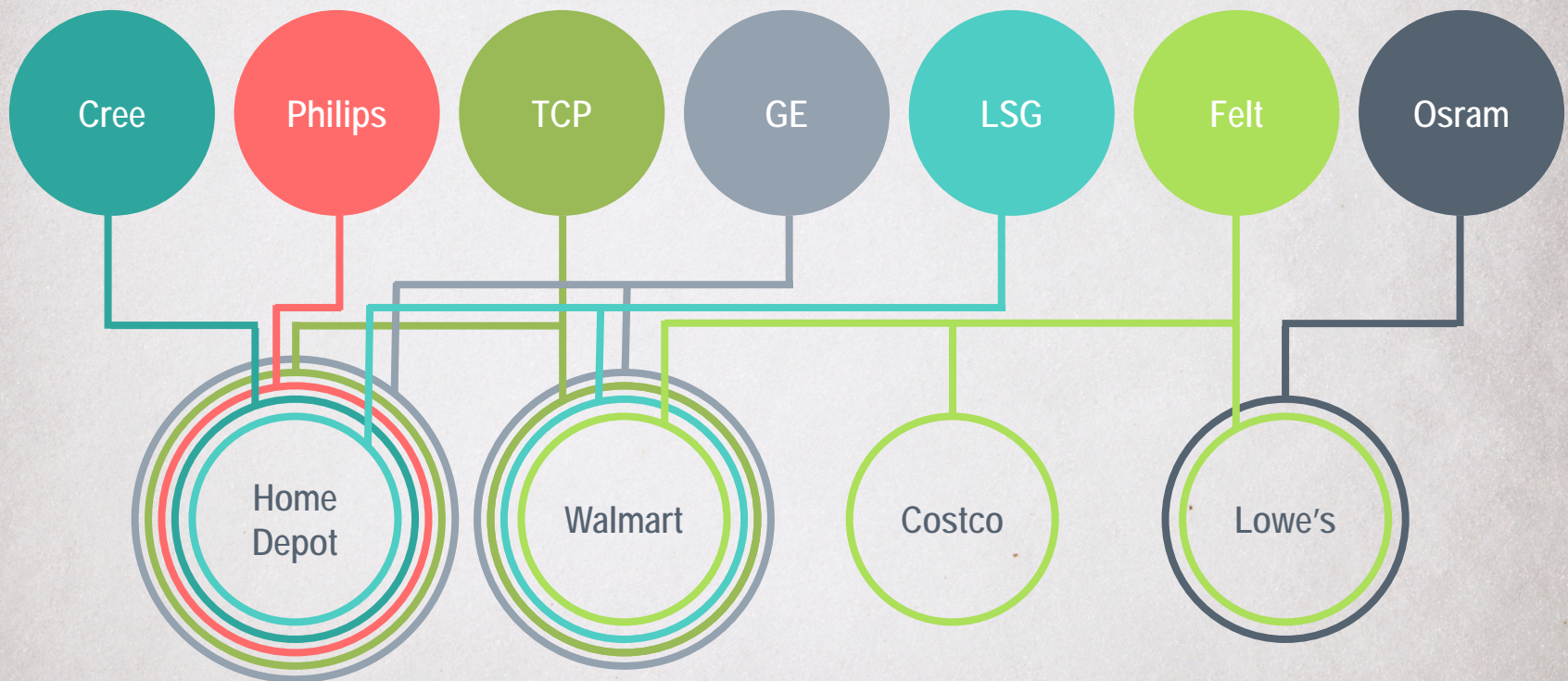


VINTAGE OF HOMES



FUEL AVAILABILITY

FOUR RETAILERS DOMINATE RESIDENTIAL LIGHTING



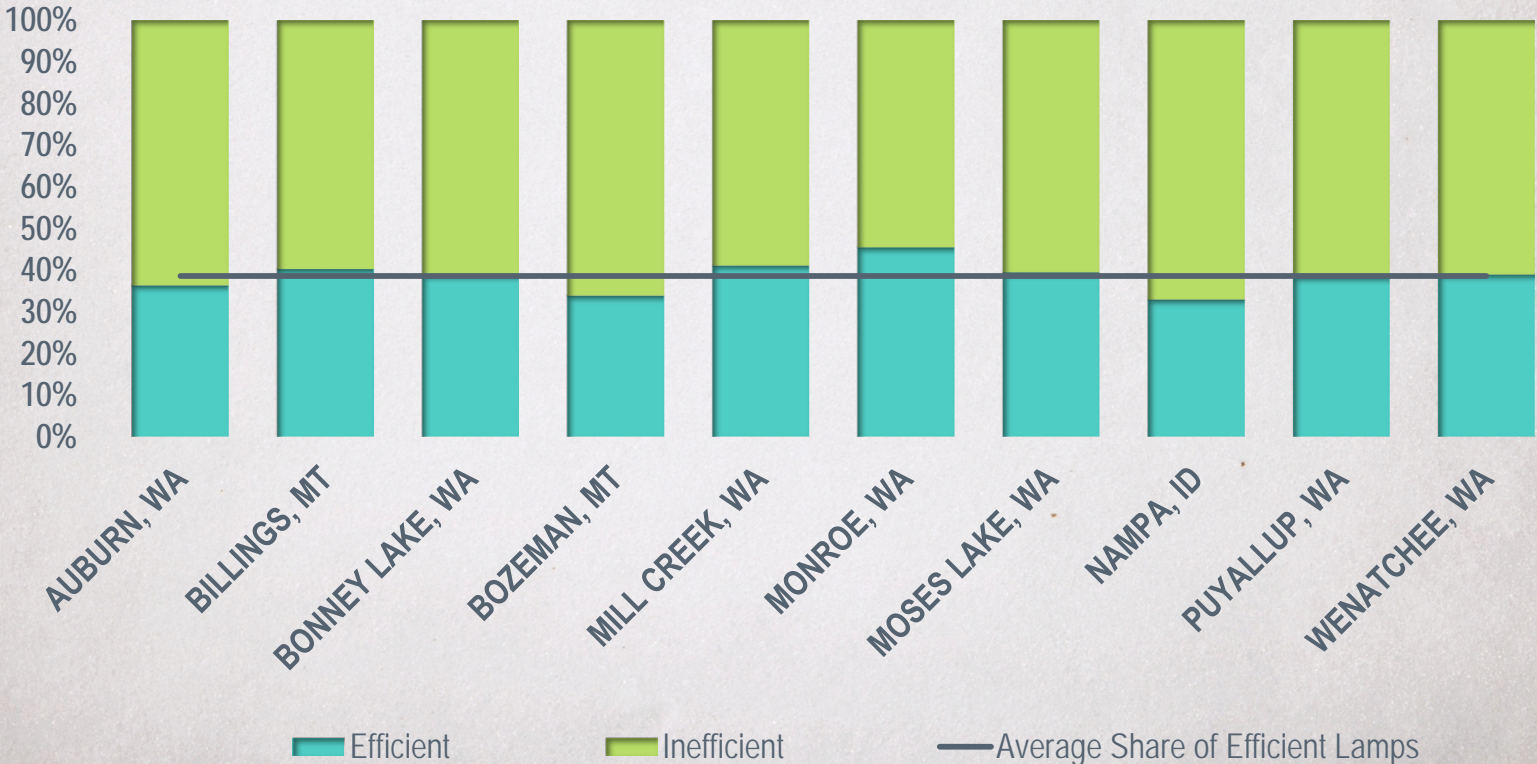
SHARE OF EFFICIENT LAMPS STOCKED BY STORE LOCATION

Home Depot



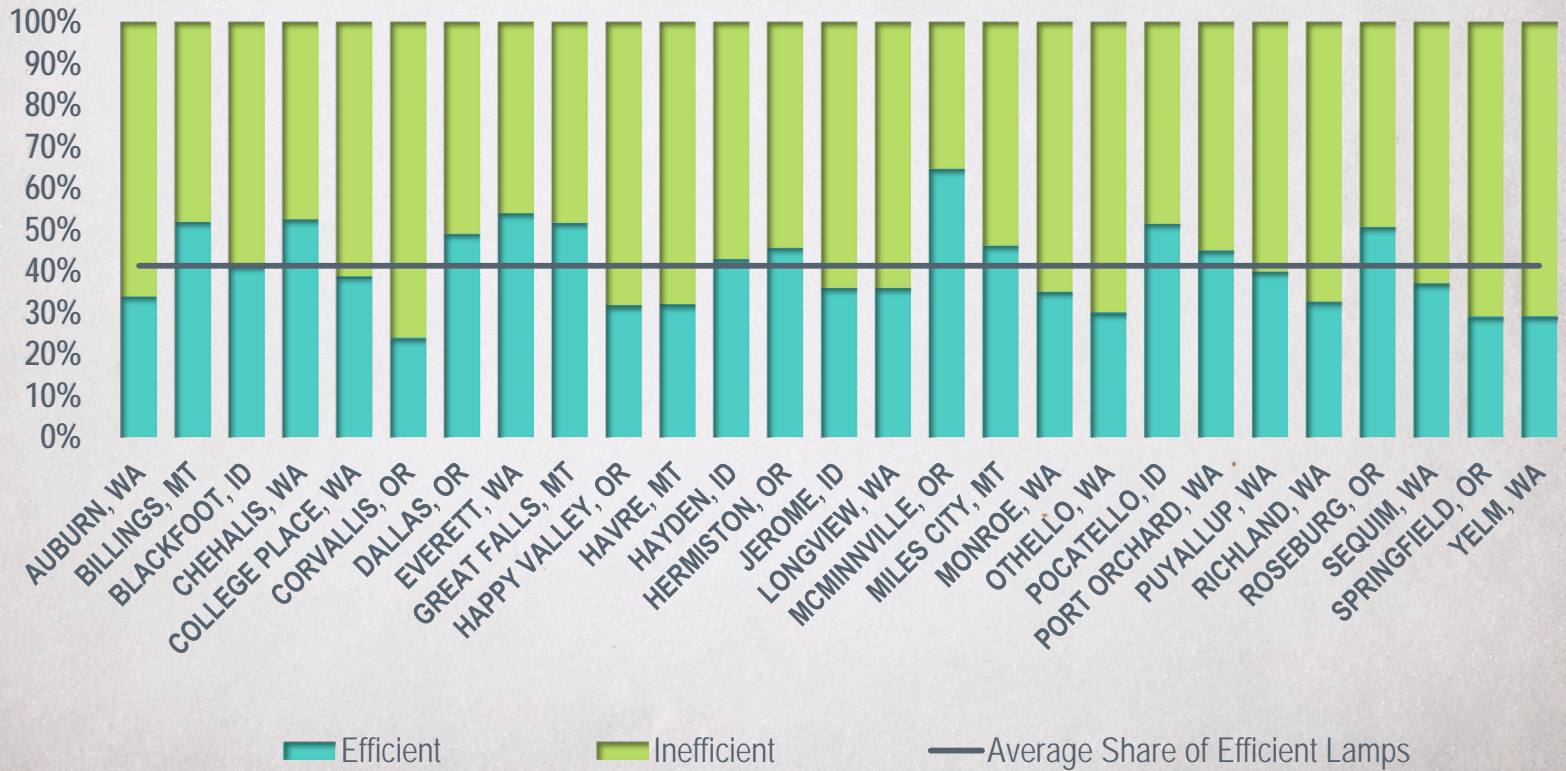
SHARE OF EFFICIENT LAMPS STOCKED BY STORE LOCATION

Lowe's

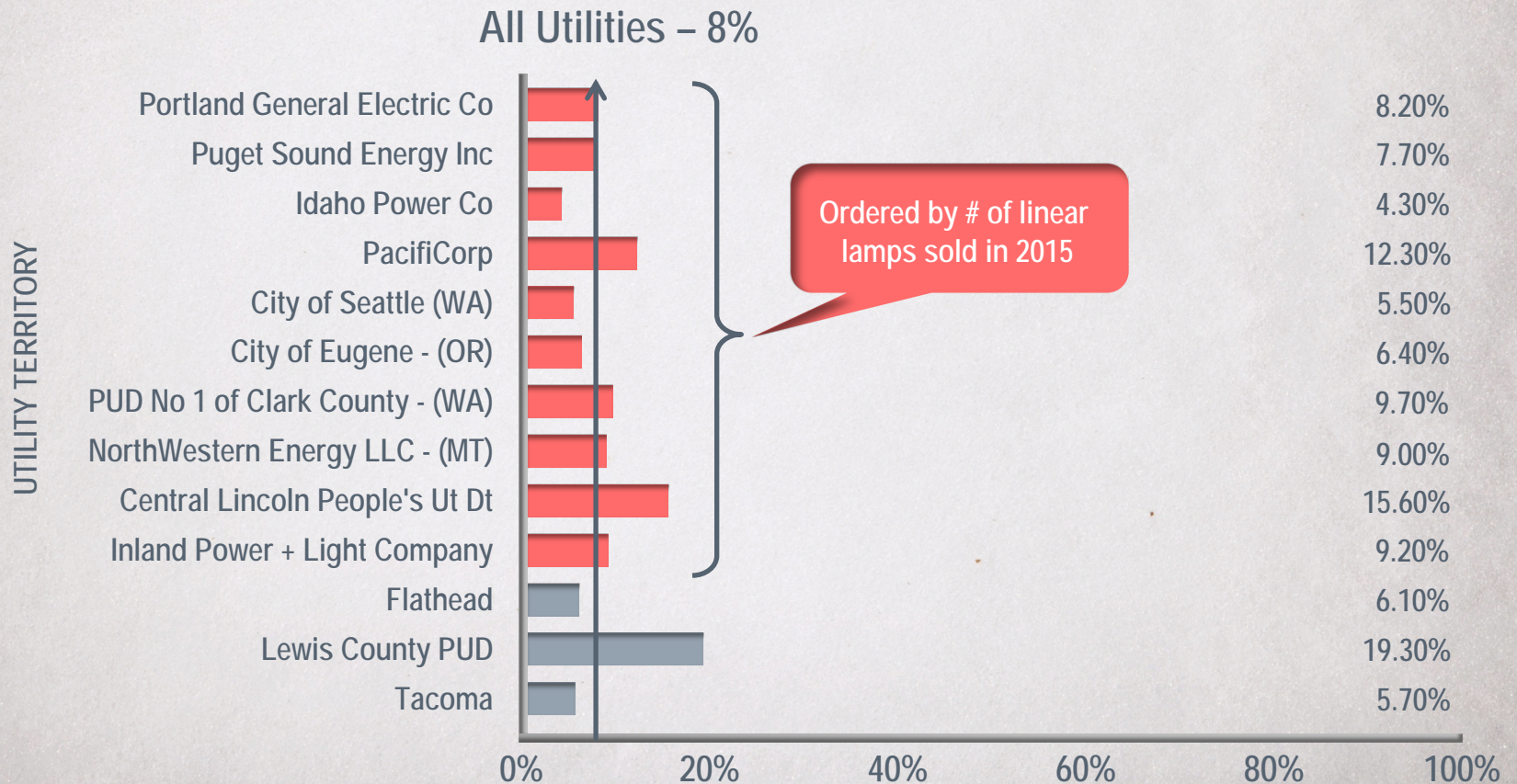


SHARE OF EFFICIENT LAMPS STOCKED BY STORE LOCATION

Walmart



T12s AS % OF ALL LINEAR LAMPS SOLD INTO TERRITORY



TAKE-AWAYS

1. THERE IS MORE CONSISTENCY THAN DIFFERENCES IN SUB-REGIONAL MARKETS
2. VINTAGE AND FUEL AVAILABILITY ARE DRIVERS OF DIFFERENCE
3. THE AVERAGE IS ONLY AN AVERAGE



**Feedback on Intro
to Momentum
Savings packet**



HVAC Research Findings
Brownbag, tomorrow 12pm

HVAC Market
Intelligence Report

www.bpa.gov/goto/HVAC

*What's New
& Upcoming*

Questions + Discussion



**Next Meeting:
June 29th, 9am**