November 2025 Quarterly Call

Nov. 5, 2025

Momentum Savings & Market Research





Agenda

- Team Updates
- Market Area Updates
- LightFair 2025
 - Key Takeaways
 - Overall Market Drivers
 - Specific Technology Trends
 - Remaining Energy Conservation Opportunities
- Wrap Up

Team Updates

- Hiring a Market Research Project
 Manager CFTE (full-time contractor
 employment, not federal employment)
- Requirements:
 - 8 years of professional experience
 - 5 years of energy conservation experience (EE and/or Demand Response (DR))
 - 3 years of project management experience
- Join our awesome team! Reach out to Joan at jwang@bpa.gov.

Market Research Team



Market Area Updates

Residential HVAC

Collaborate with BPA Evaluation Team to survey HVAC installers in 2026

Adjustable Speed Drives

Heavily engaged with NEEA's Motor Systems Stock Assessment to obtain data

Nonresidential Lighting

Published 2024 Northwest lighting distributor sales report and data

Commercial HVAC

Research on pause, but reviewing draft CBSA data in Nov-Dec 2025

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Conversations with 17 Lighting Manufacturers



Market trends to corroborate
Northwest sales data findings.



Gather technology trends and important market drivers.



Provide context for BPA's Nonresidential Lighting Market Model.



Identify remaining lighting potential for regional programs.



Key Takeaways



Future energy efficiency gains will come from controls and functionality rather than equipment efficacy.



Policy and economic changes will accelerate efficiency but could cause short-term volatility in the market.



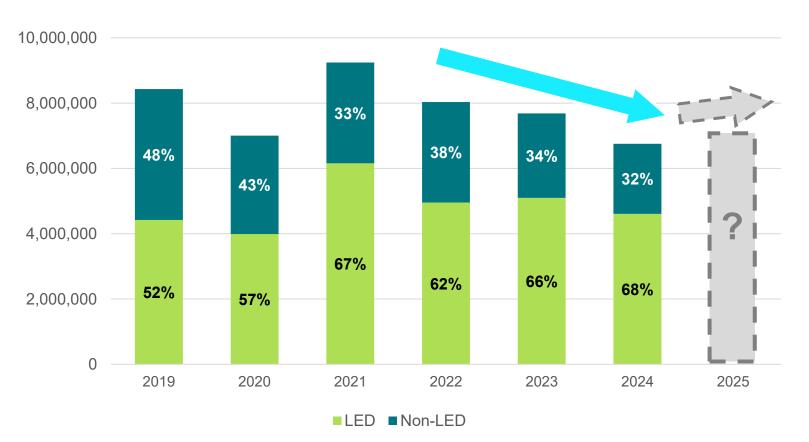
Rebates and education are key for driving adoption in lagging segments.

Overall Market Drivers



Market Drivers Impacting Northwest Lighting Sales

Northwest Unit Sales from 48 Distributors



- Economic uncertainty
- Higher interest rates
- Rebates/incentive changes in the NW
- OR and WA fluorescent bans

Source: 2024 Northwest Lighting Distributor Sales Report and Data

Tariffs a Top Concern for Manufacturers

- Manufacturers report shifting production out of China and exploring alternative materials and designs.
- One suggested tariffs could propel customers toward adopting more efficient lighting.



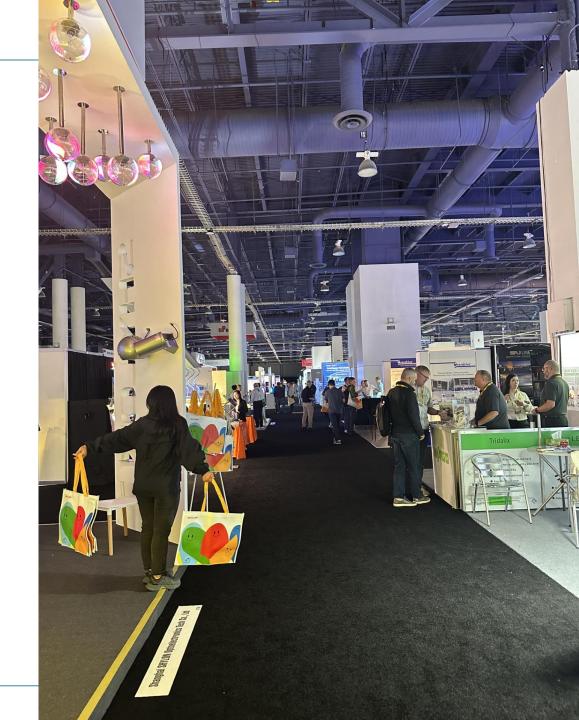
Product Quality Concerns Post Pandemic

- Product quality has taken a hit as a result of the pandemic and economic concerns.
- Quality testing declined during the pandemic.
- Some manufacturers have observed "race to the bottom" pricing in other companies.
- Contractors also appear less interested in quality products.



Lower quality products tend to burn out faster, which could negatively impact perceptions of LED.

Specific Technology Trends



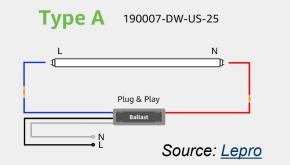
TLEDs sales remain strong due to easy installation, lower maintenance, cost, and flexibility.

- TLEDs reached 44% of all LED sales in 2024 NW sales data
- Manufacturers also reported steering customers toward Type B TLEDs for higher efficiency and lower maintenance needs.

TLED Types

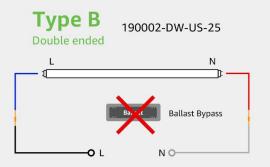
Type A "Plug and Play":

- Simplest installation
- Less efficient

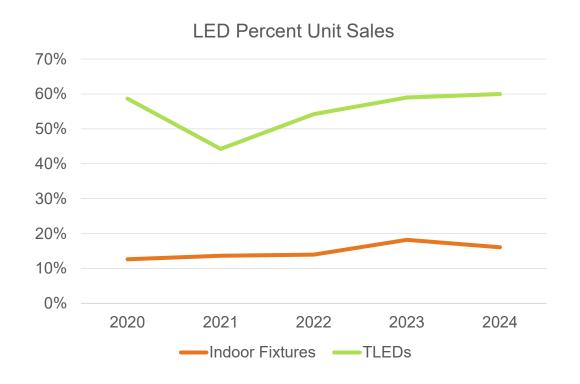


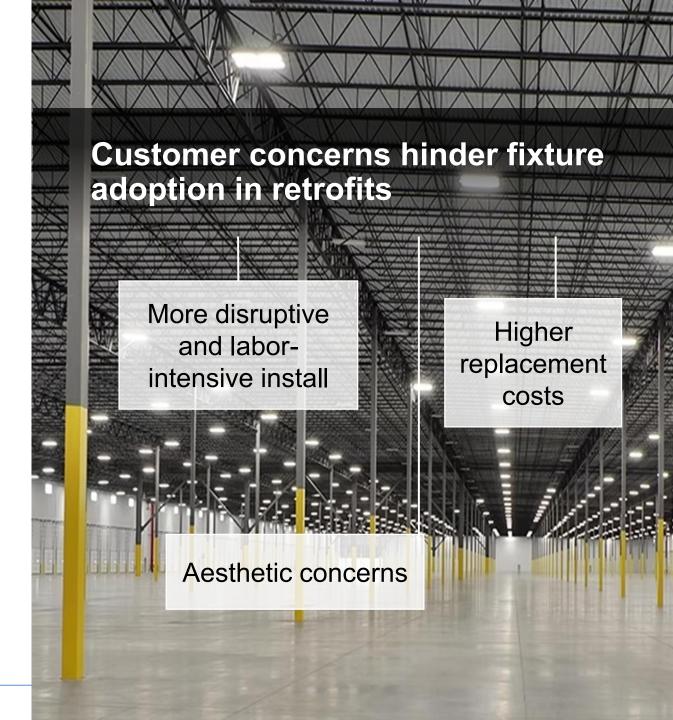
Type B "Ballast Bypass":

- More complex installation
- More efficient

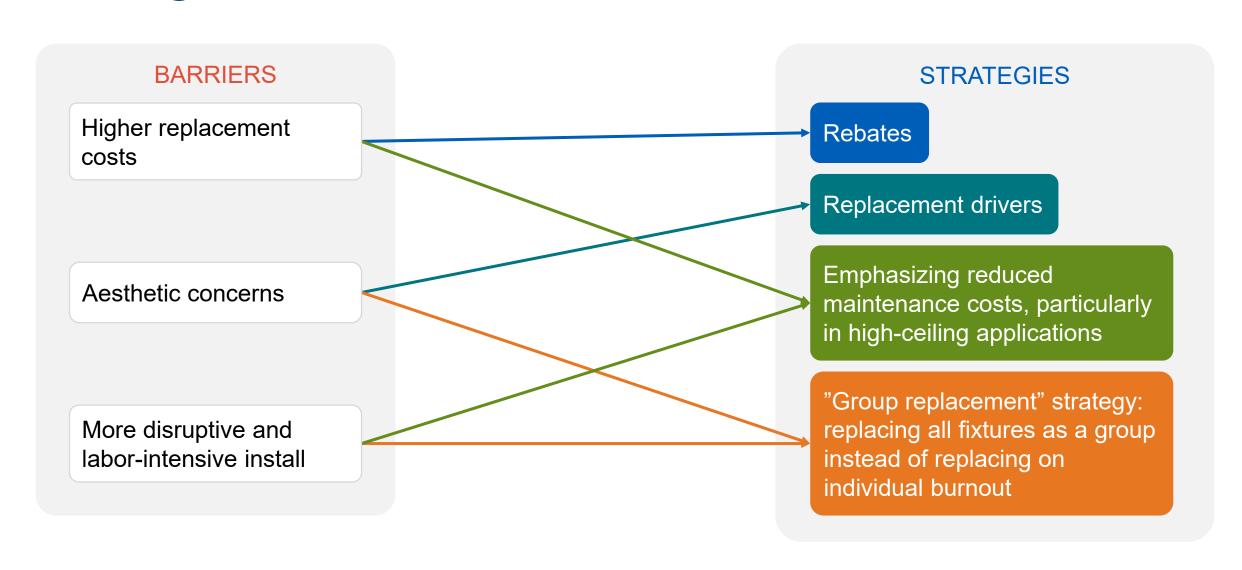


Retrofits still skew toward lamps over fixtures





Strategies to address barriers to fixture retrofits



LED to LED replacements are growing

LED replacements are typically **reactive**, as 1st gen LED reach the end of their lifespan.

 Typically occurs as ballasts/drivers in Type A replacements burn out.

> "LED lamps don't die, but ballasts do."

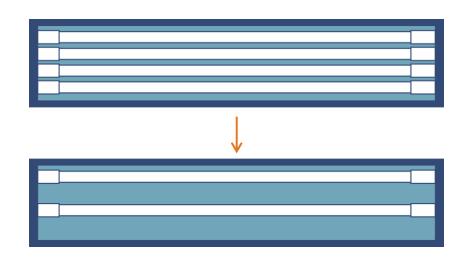
But some customers are **proactively** upgrading to newer, more efficient LED.

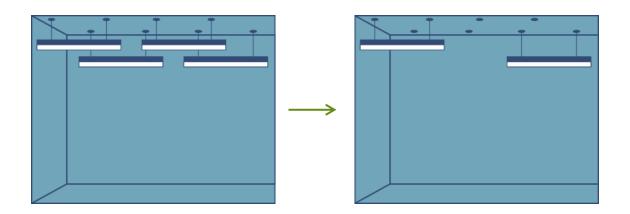
"Between 1st or 2nd gen LED and current LED, you can get another ~50% savings."

De-lamping efforts are uncommon and primarily focus on reducing lamps, not fixtures

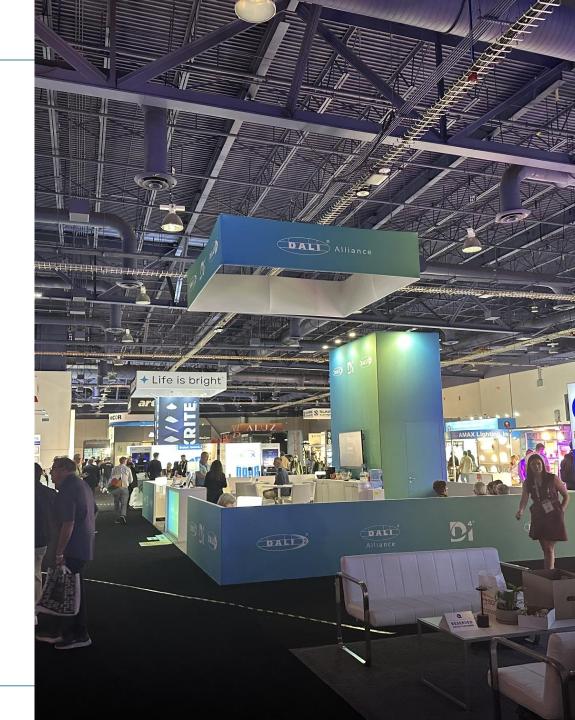
Reducing number of lamps per fixture







Areas of Remaining Energy Conservation Opportunities



Large manufacturers still selling legacy products while demand persists

Inefficient lighting made up ~30% of 2024 Northwest sales data

Inefficient lighting is most prevalent in:

- ✓ Leased spaces
- ✓ Older industrial/warehouse buildings
- ✓ Older retail and rural small business
- ✓ Non-selling business types



LEDs are reaching equipment efficiency threshold

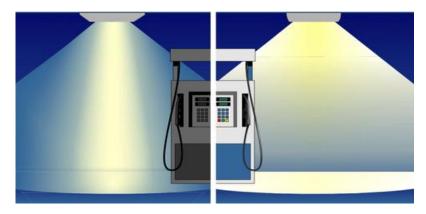


Manufacturers' focus is shifting to optics, ease of use, and controls.

Optics and field adjustability are top areas of focus

Optics

 Used to optimize lighting and occasionally reduce the number of fixtures needed.



Source: Jarvis Lighting

Customers value "future-proofed" lighting solutions that can adapt to future needs

Field-Adjustability

 Allows contractors and end-users to customize settings on-site.



Source: Light Now

Controls mentioned as a key area of remaining potential

Codes, rebates, and future-proofing are key drivers of controls adoption

Code requirements steer customers toward more advanced, "future-proofed" controls

Rebates help push customers toward luminaire level lighting controls

EMBEDDED LIGHTING CONTROLS

Get 3 products in 1



In the NW, fixtures with **embedded controls** are often the more affordable option due to rebates

Manufacturers identified two distinct customer preferences for controls:

Simple and affordable

- Standalone and field-installable controls
- Lower upfront cost
- Easy to install
- More common in:
 - K-12 schools
 - Warehouses
 - Retrofits



Source: Wattstopper

Advanced and high-tech

- Embedded and networked controls
- Higher energy savings
- Future-proofed
- More common in:
 - Higher-ed
 - Healthcare
 - New construction
 - High-HOU spaces



Source: EC&M

Thank You for Attending

See you Feb. 4th at the next quarterly call

Contact

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https://www.bpa.gov/energy-and-services/efficiency/market-research-and-momentum-savings

