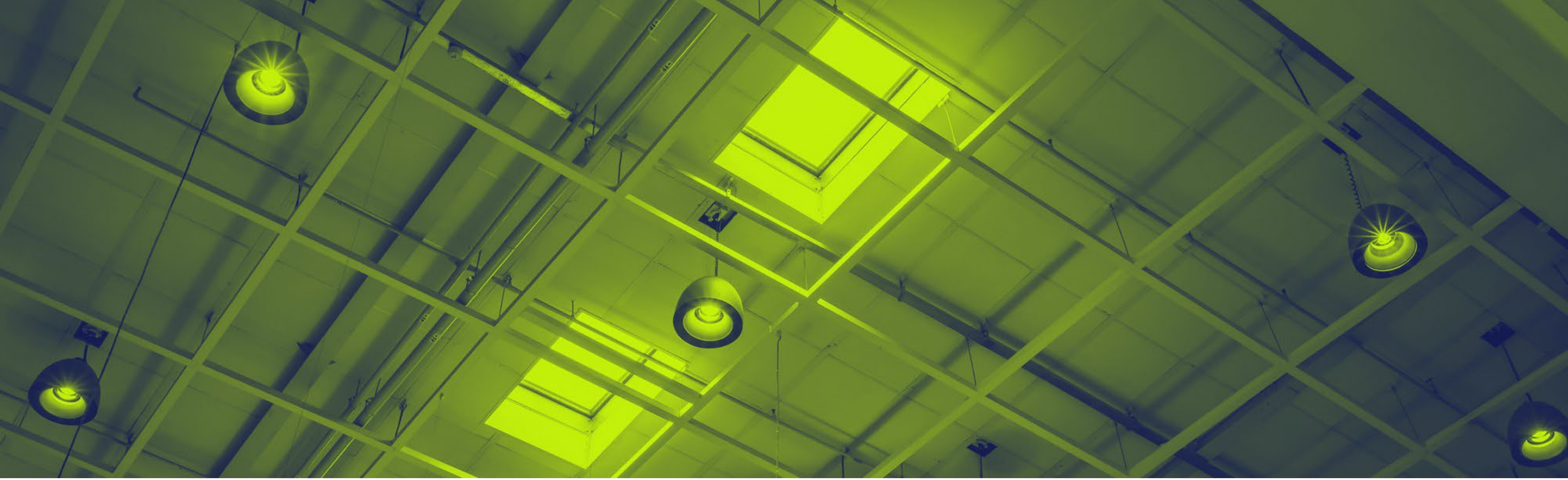

IEPEC 2022 – San Diego

Commercial Lighting: Insights on a Dynamic Market

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November 2, 2022

Introduction

What did we do, and why?

Georgia Power wanted to understand: what does the future of commercial lighting look like for our customers?

- How do businesses make decisions about lighting in that moment (in 2020)?
- How do they typically implement lighting projects – do they stage projects or complete whole-building retrofits?
- What opportunities have our EE programs missed?

Introduction

What do we know about LED penetration in commercial spaces in the Southeast?

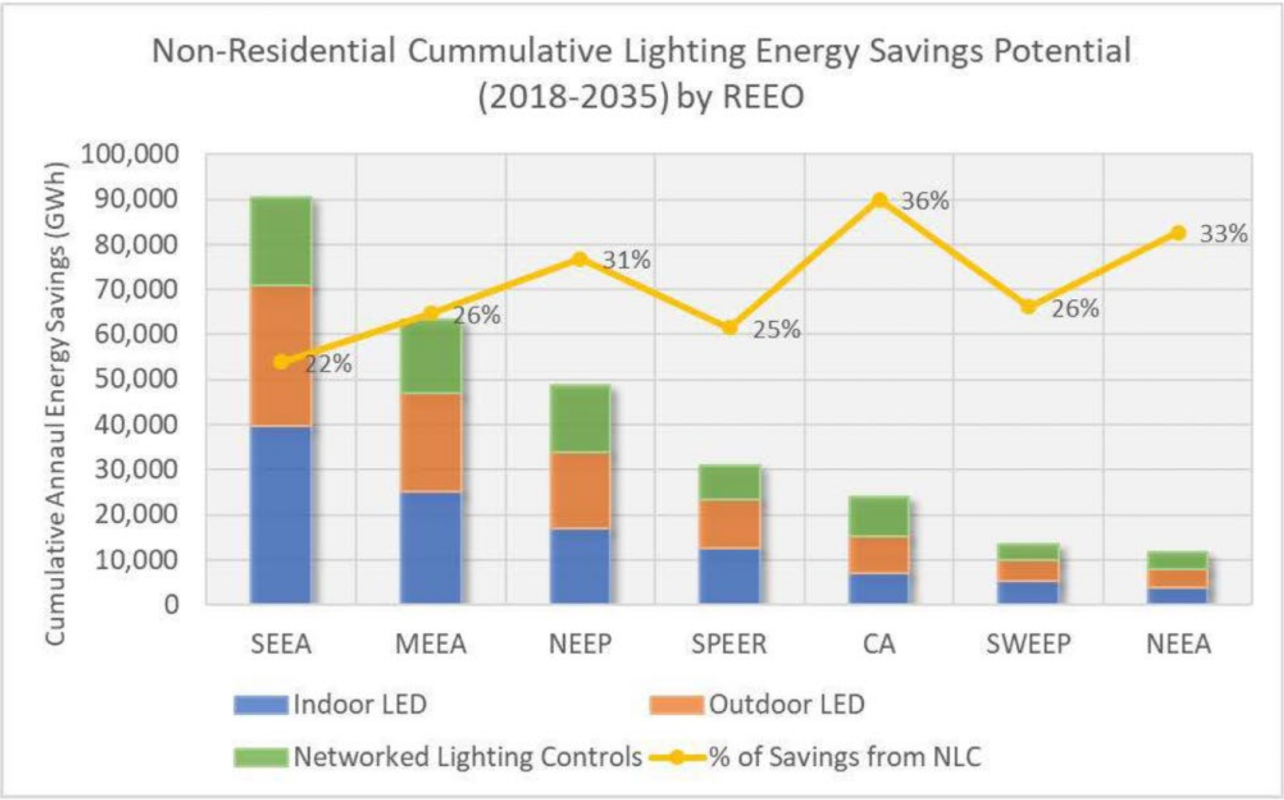


Figure 7: U.S. non-residential (C&I) lighting savings potential by REEO

https://www.designlights.org/resources/reports/report-energy-savings-potential-of-dlc-commercial-lighting-and-networked-lighting-controls/

Research Methodology - 2020

Tracking Data and Market Characterizations

7

Interviews with Distributors

7

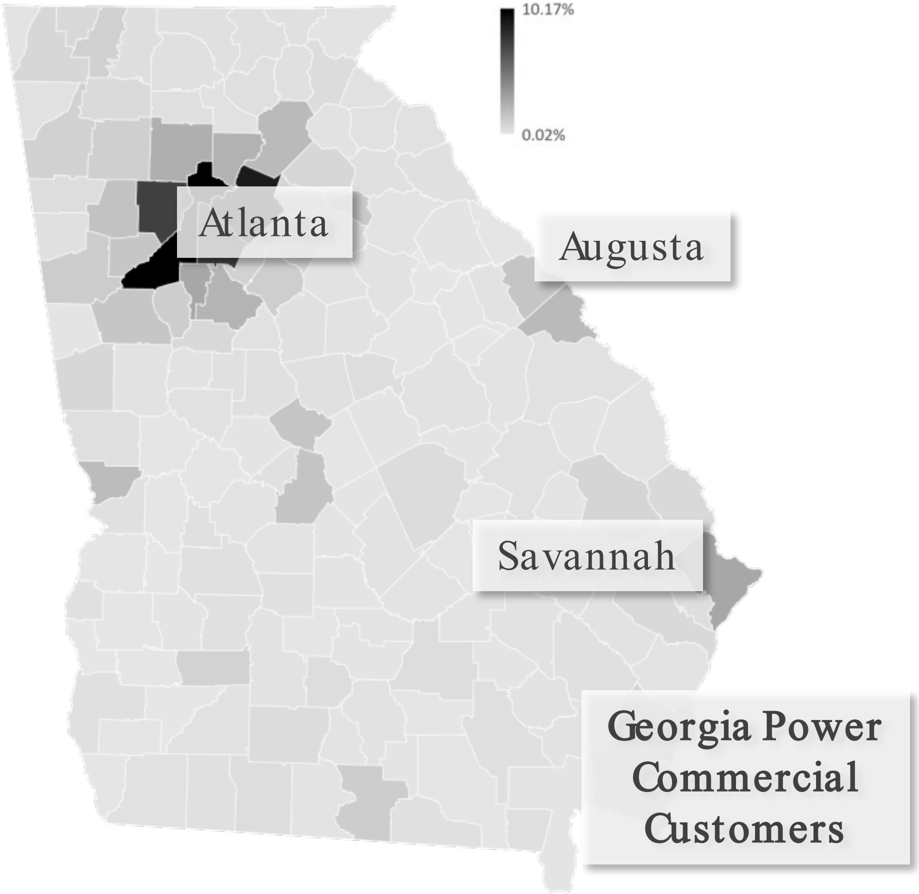
Interviews with Contractors

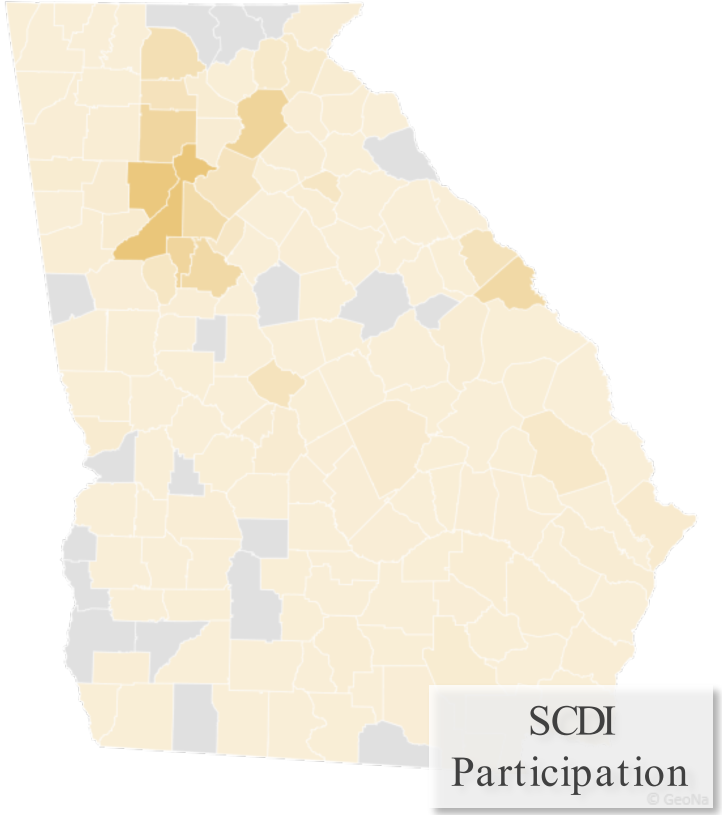
312

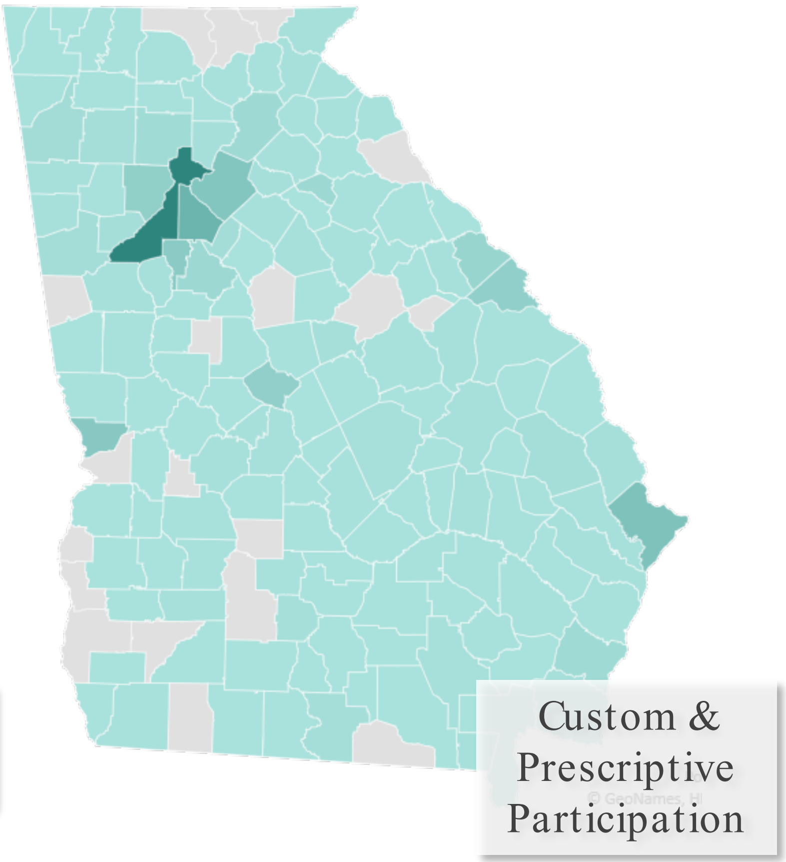
Business Customer Surveys

Tracking Data Analysis

Program Participation

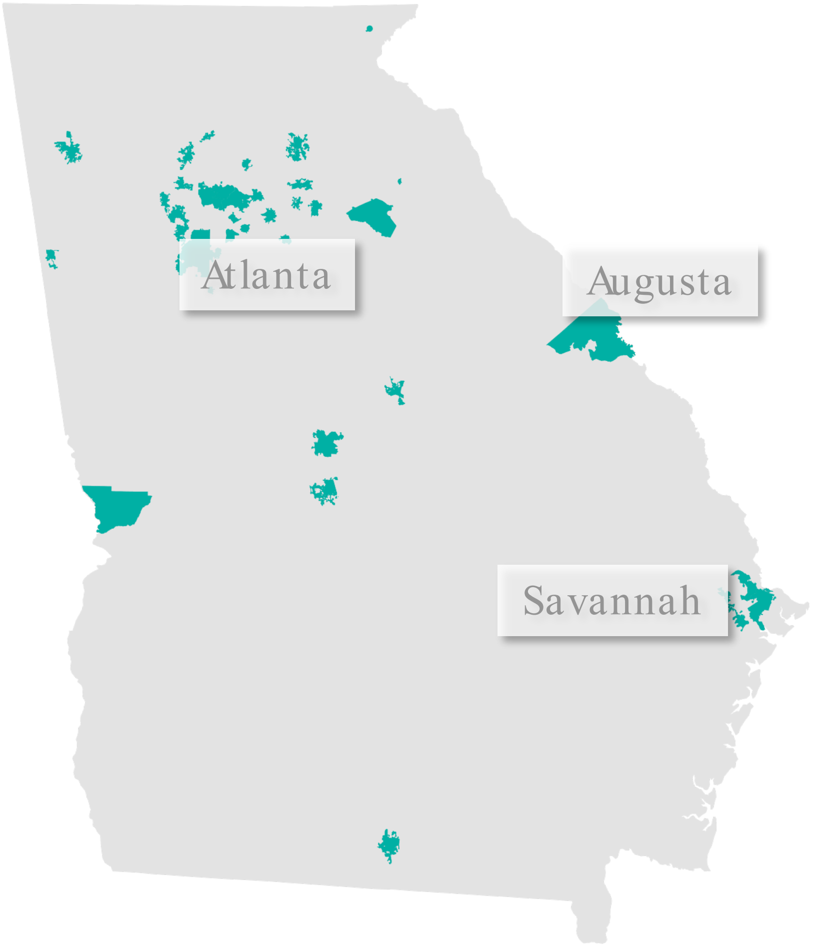




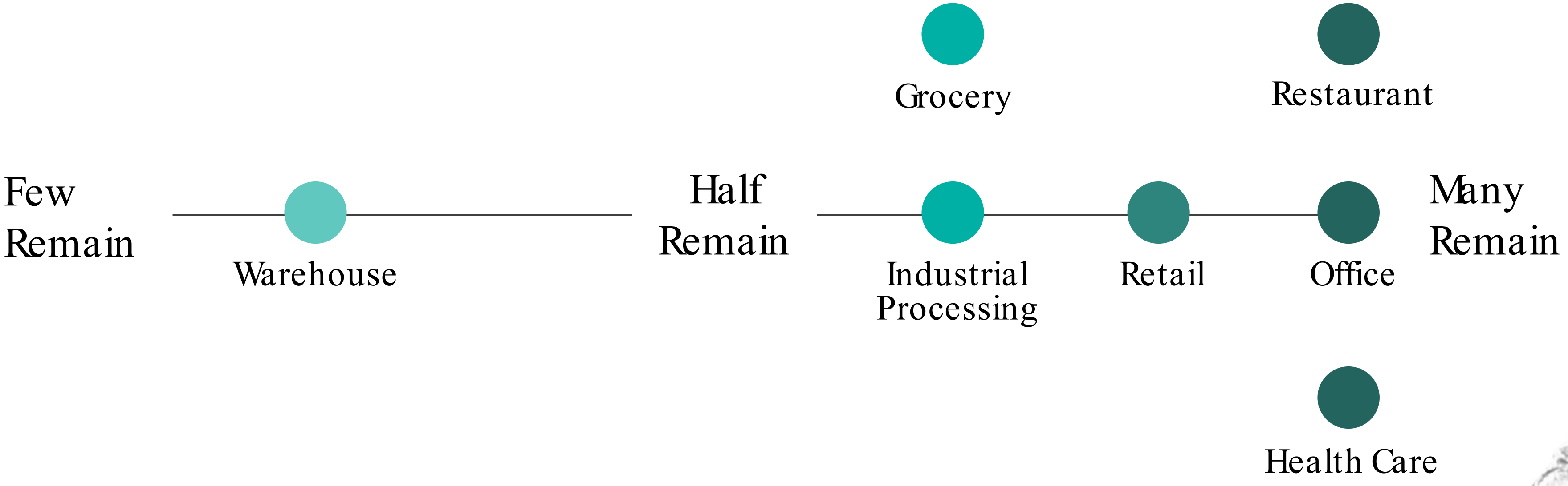


Tracking Data Analysis

Contractor Coverage



Tracking Data Analysis



Methodology

Surveys

Region

35% of respondents' facilities are in the major metropolitan area, while the rest were distributed throughout the state.

Facility size

64% of respondents have facilities that are 5,000 square feet or less.

Number of employees

76% of respondents have 1 – 10 employees.

Own vs. lease facility

Respondents were just as likely to lease their facility as they were to own it.

Responsible for electric bill

99% of respondents (including 145 of 146 customers who rent) are responsible for paying their electric bill.

Study Limitations

This study is not:

This study is not intended to estimate achievable or technical potential, or provide information on lighting baselines

This study also did not focus on number of sockets, but rather the individual business level

This study was:

This study was intended to provide insight on lighting installation and stocking practices during a snapshot in time, to understand groups to target outreach and marketing, as well as insights on how to best work with customers to implement projects

*Note: business surveys were completed during October 2020, and this should be considered when interpreting results

Methodology

Definitions

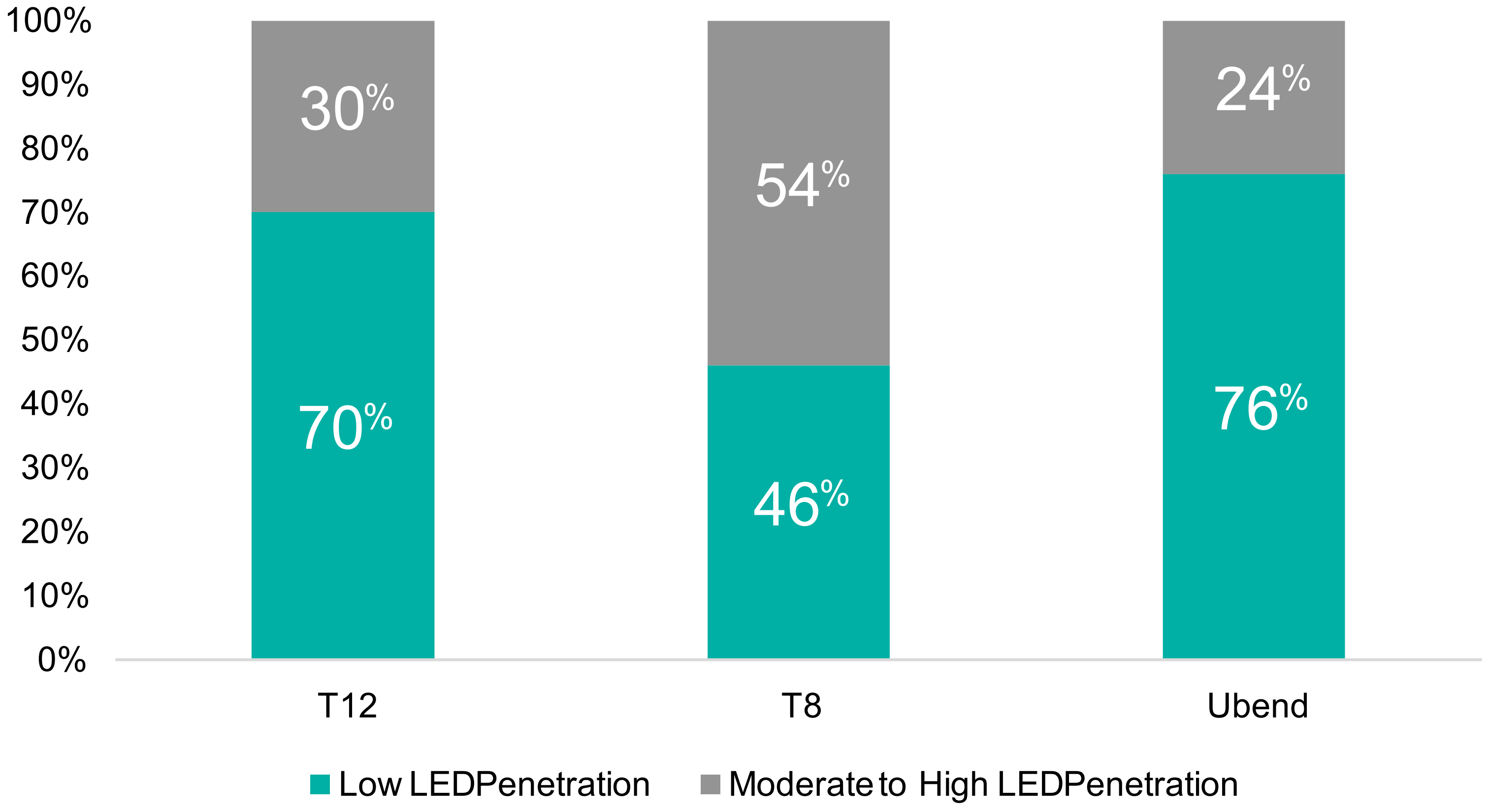
Category	Definition (self-report estimate)
Low LED Penetration	Less than 25% of lighting mix in facility is LED
Moderate to High LED Penetration	25% or more of lighting mix in facility is LED

During the survey, we provided visuals/pictures of various types of lighting to help customers.

T8/T12 – when we refer to T8/T12 lighting, we are including both fluorescent tubes and the LED replacements for these types of lighting

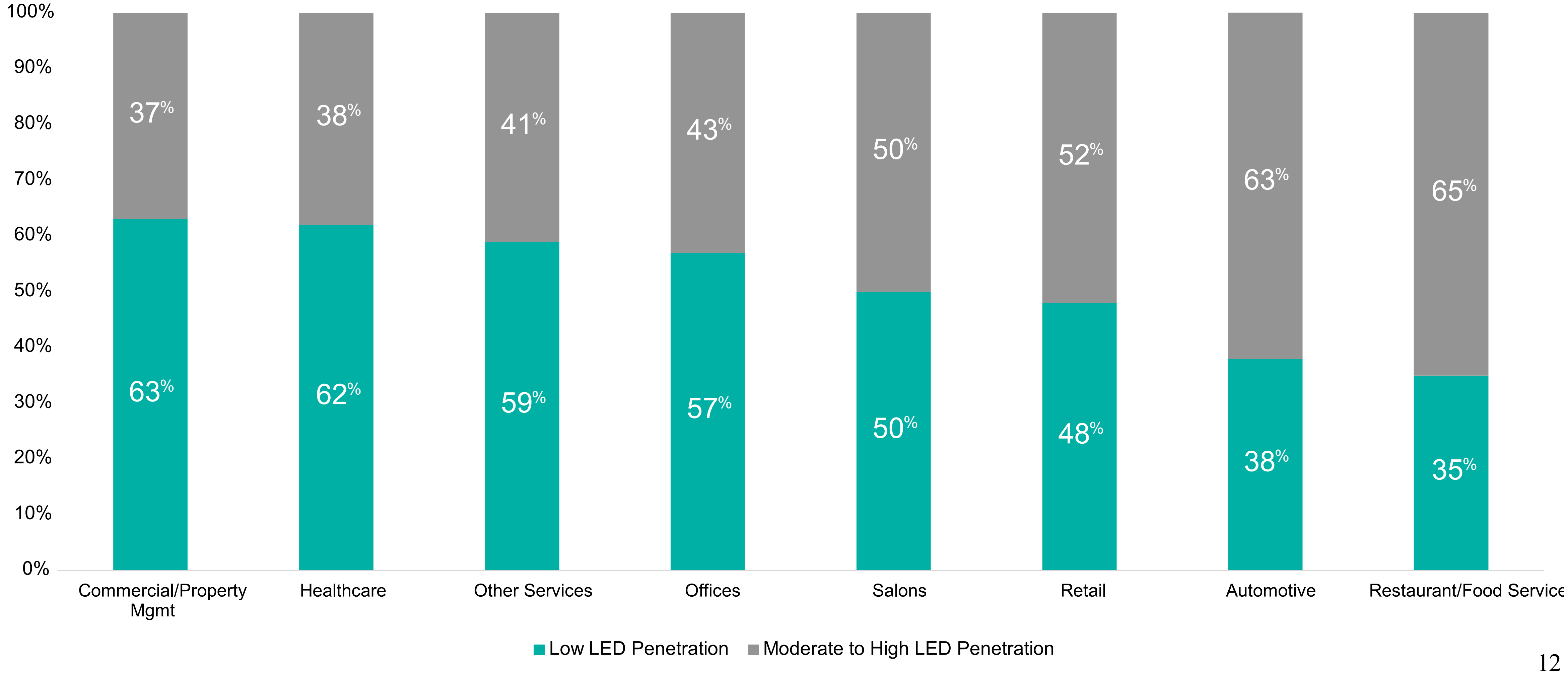
Results

Linear Bulb Type



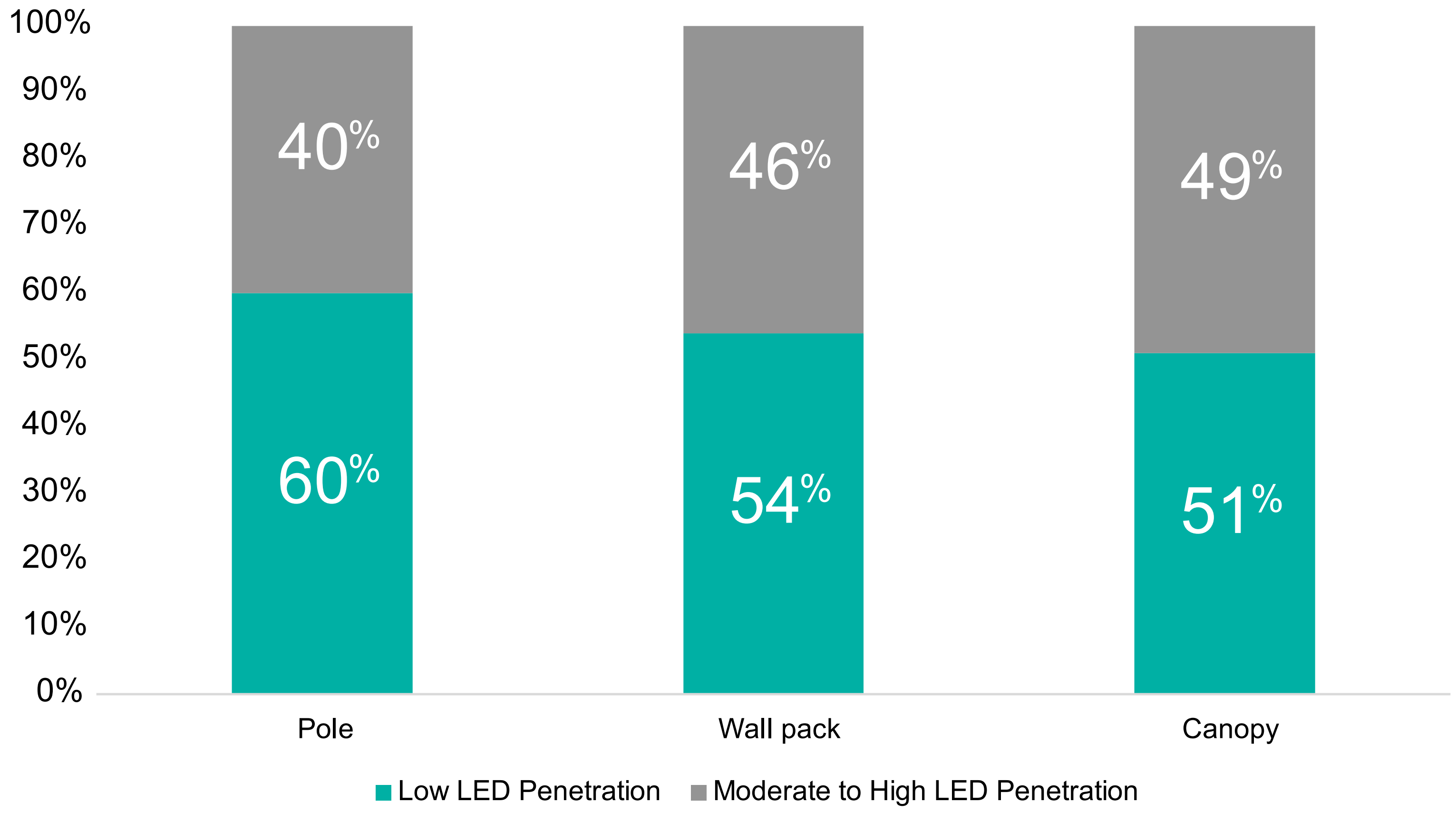
Results

Linear LED Penetration by Business Type



Results

Exterior Lighting Penetration



Results

Decision-Making

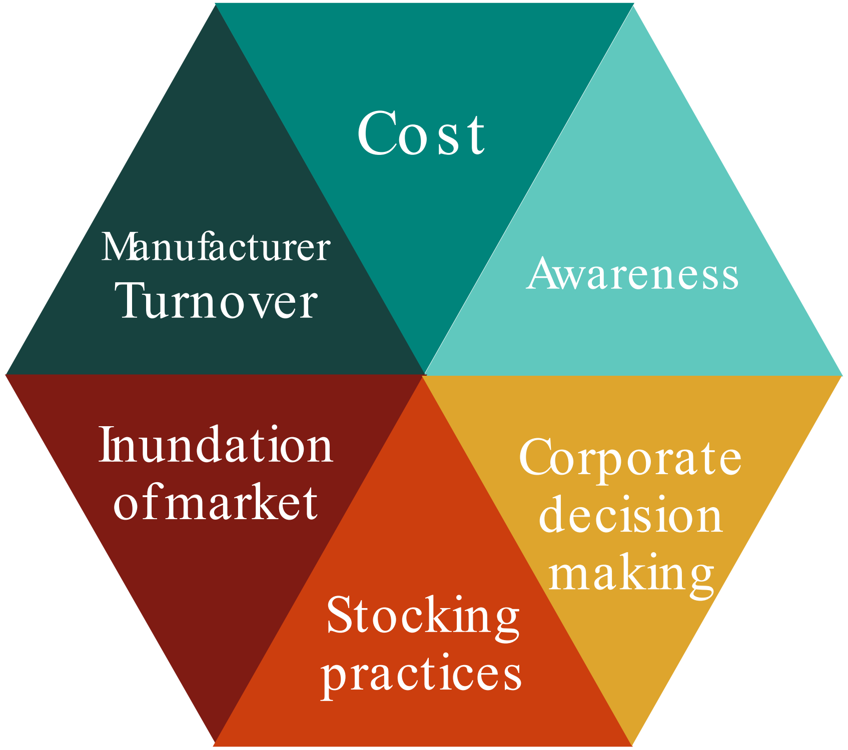
Some businesses stage projects, while others tend to complete whole building retrofits

Staged	
	Budget = Limited
	Testing product
	Controls opportunity

Whole Building Retrofit	
	Budget = Robust
	Immediate need
	Small facility

Results

Barriers to overall LED Adoption



Cost
Still the main barrier holding customers back from upgrading

Awareness
Both of LED technologies themselves, as well as available EE programs

Corporate
Branch locations aren't able to make their own decisions

Stocking
Many wait for lighting to fail and are then limited by what's quickly available

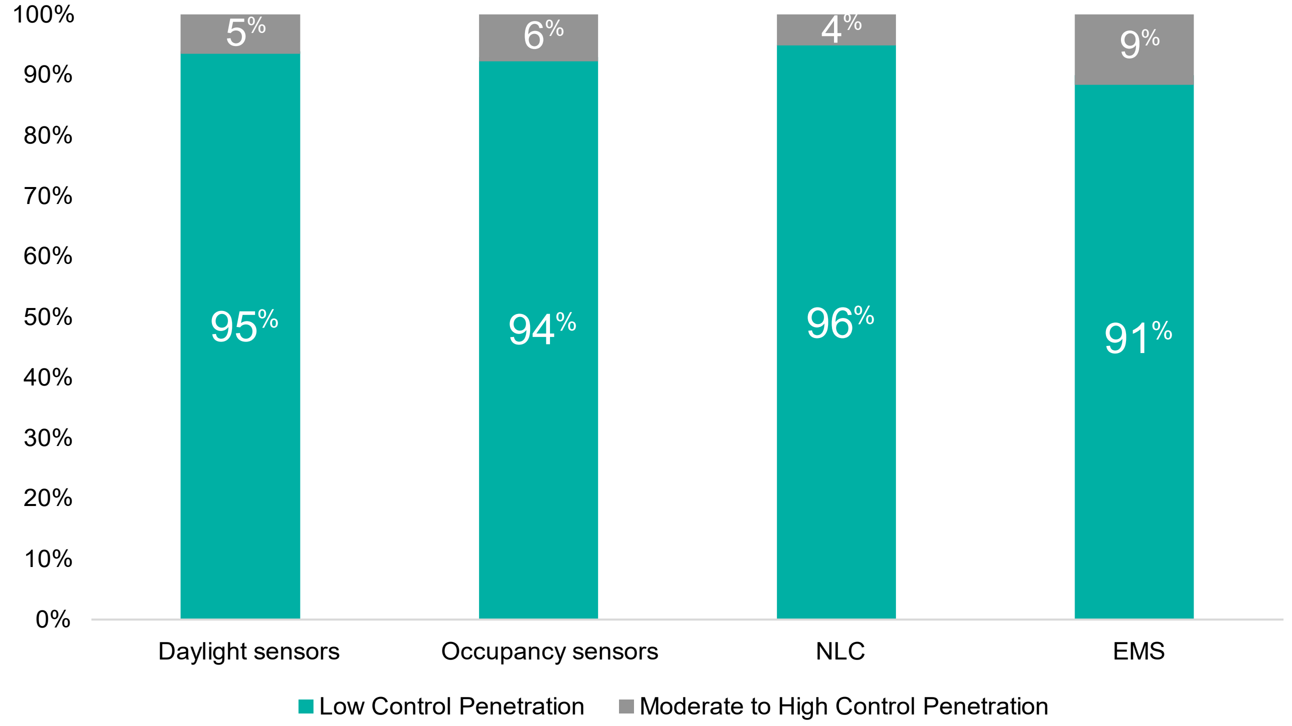
Market Inundation
Many brands/manufacturers make the LED market confusing

Manufacturer Turnover
New manufacturers entering the LED market make market actors apprehensive

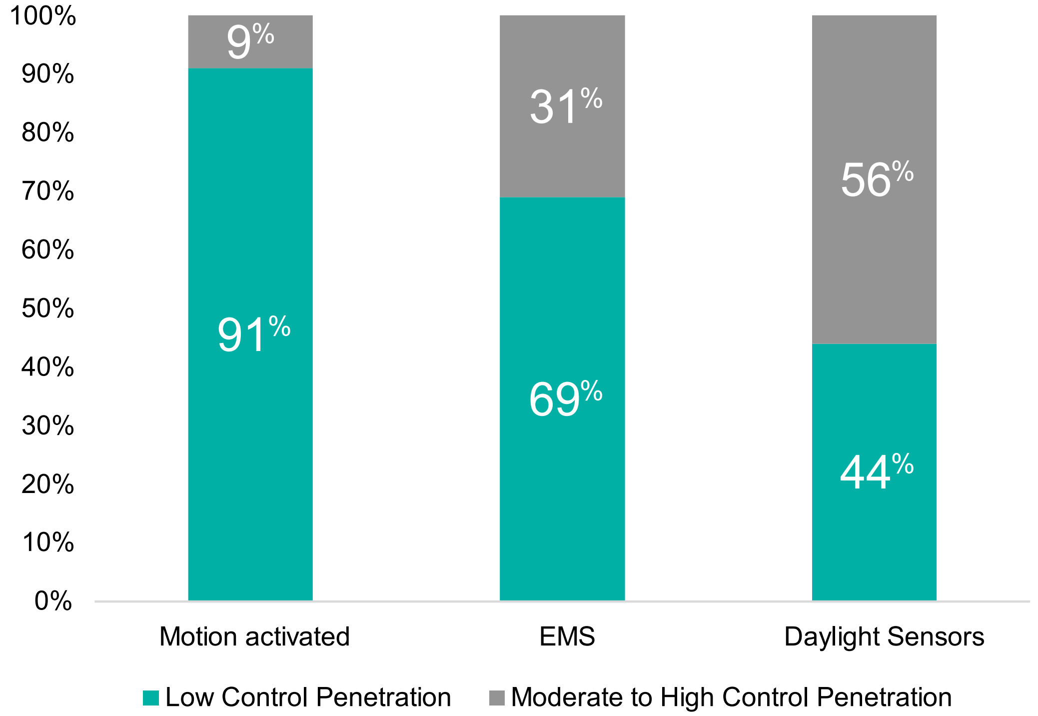
Results

Controls

Interior Controls



Exterior Controls



Results

2022 Check In - Future Considerations

- Followed up with n=17 respondents from the original survey in fall 2022 as part of a follow up research study to understand the current landscape and value proposition for commercial customers to engage with EE programs.
- Also interviewed n=13 active and inactive contractors.

Supply chain/ future-proofing	Inflation/ economic uncertainty
Understaffing	Program awareness

Key Takeaways

Remaining Potential Among Participants

Controls Leapfrog

Markets Tranforming =Non-uniformly

WHAT NEXT?

Future Proofing + Supply Chain Challenges

Understand your Territory with Available Data

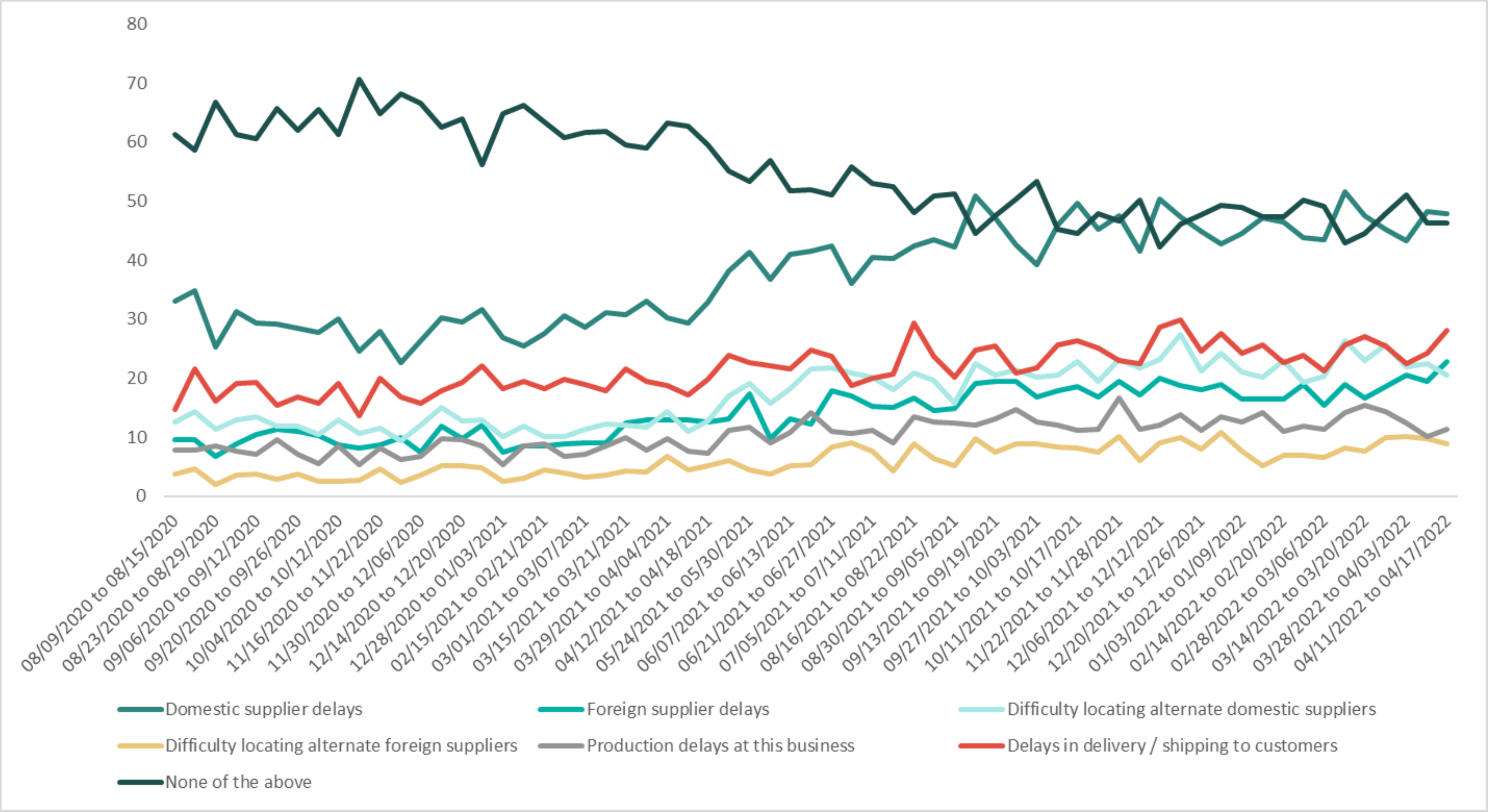
Questions?

WE’VE GOT ANSWERS

APPENDIX

Supply Chain Challenges

- Many small businesses have been significantly impacted by increasing supply chain disruptions and most expect this to continue for at least 5 months or longer.
- The need to identify new supply chain options has increased over time since the COVID-19 pandemic started
- Small businesses in Georgia have reported more production or supply chain difficulties or delays since the beginning of the COVID-19 pandemic. In particular, domestic supplier delays have risen considerably.

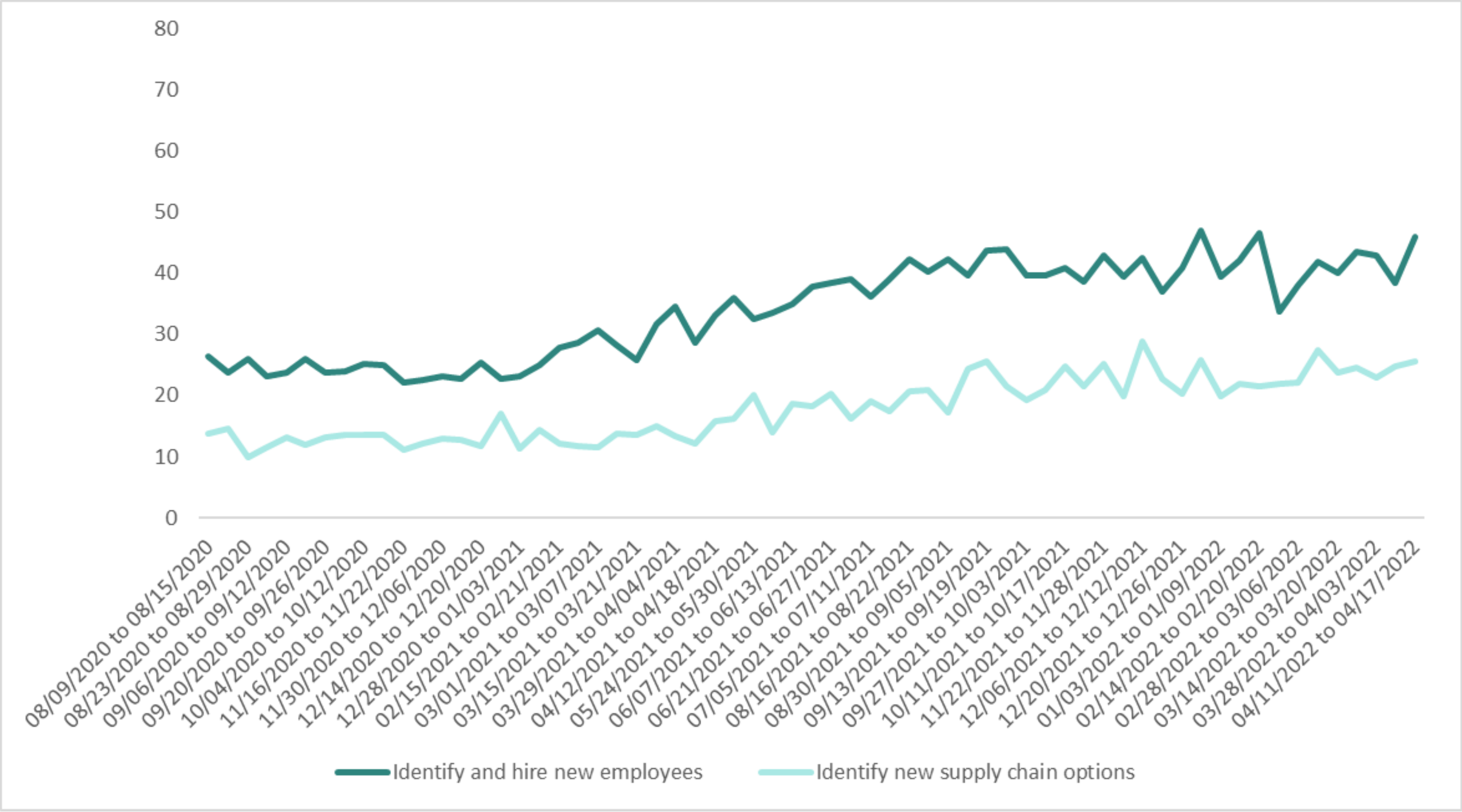


https://portal.census.gov/pulse/data/#weekly

U.S. Census Bureau, Small Business Pulse Survey

Staffing Shortages

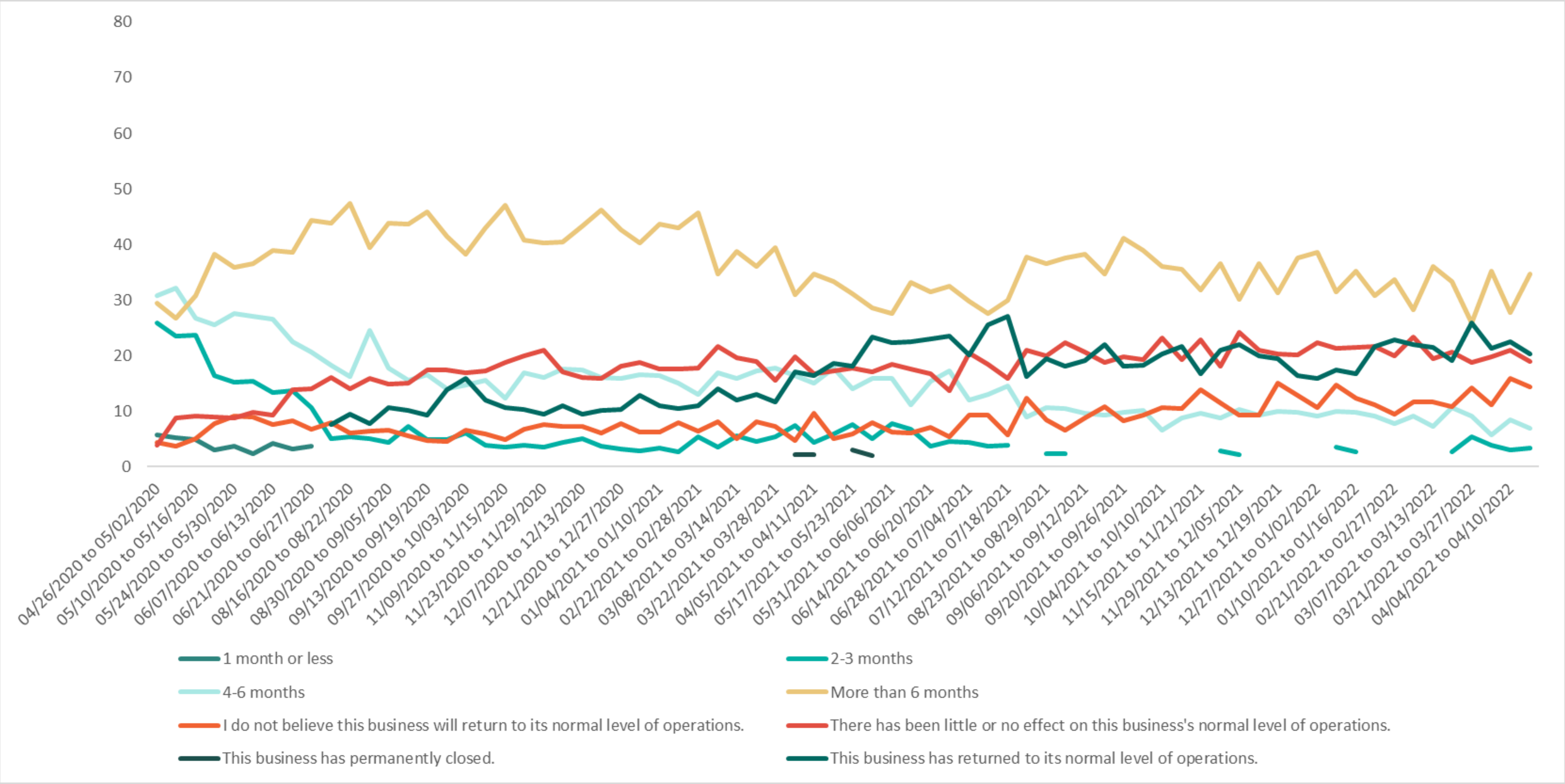
- Many (42%) small businesses reported significant or moderate staffing shortages.
- Most small business owners are responding to staffing shortages by working more hours themselves and by increasing wages.
- The need to identify and hire new employees has increased over time since the COVID-19 pandemic started in 2020.



https://portal.census.gov/pulse/data/#weekly
U.S. Census Bureau, Small Business Pulse Survey

Future Outlook

- Since May 2020, many small businesses continue to estimate that it will take 6 months or more before their business returns to its normal level of operations.



https://portal.census.gov/pulse/data/#weekly
U.S. Census Bureau, Small Business Pulse Survey

Methodology

Surveys

Business Type	Survey Respondents - Count	Survey Respondents %	Population %
Office	78	25%	33%
Other Services	78	25%	25%
Commercial or mixed-use property management	36	12%	1%
Healthcare (including medical office or hospital)	30	10%	7%
Restaurant or food service	28	9%	8%
Retail space	28	9%	18%
Automotive	19	6%	3%
Warehouse, wholesaler, or storage	8	3%	1%
Industrial or manufacturing	7	2%	3%
Total	312	100%	100%