

WAREHOUSE

OPERATIONS TRENDS STUDY



CONDUCTED BY

PRG
PEERLESS RESEARCH GROUP

Logistics
MANAGEMENT



Introduction and Methodology

- This research was conducted by the Peerless Research Group on behalf of *Logistics Management* and *Modern Materials Handling* magazine, and marks our fourteenth annual *Evaluation of Warehouse Operations & Trends* survey.
- The study was conducted to evaluate current activities and to assess any trends in the evolution of warehouses and distribution-center facilities and operations.
- Specific areas of investigation include:
 - Nature of distribution center's operations
 - Size of distribution center and scope of distribution activities
 - Areas for possible expansion
 - Distribution center systems and technologies in use
 - Means for measuring productivity
 - Actions taken to manage warehouse operating costs
 - Events that cause disruptions in distribution center operations
- The report compares this year's findings to 2024, 2023 and 2022 results. In each wave, the survey was administered via email invitation to subscribers of *Logistics Management* magazine. Respondents were qualified for being involved in decisions as they pertain to their company's distribution center operations.
- As incentive to respond, individuals participating in the survey were offered the chance to enter a raffle for one of two \$100 Amazon gift cards.

- A disposition of each study follows:

	Field dates	Usable surveys	+/- @ 90% confidence level
2022	September, 2022	156	6.6%
2023	September, 2023	119	7.6%
2024	August, 2024	108	7.9%
2025	August, 2025	101	8.2%

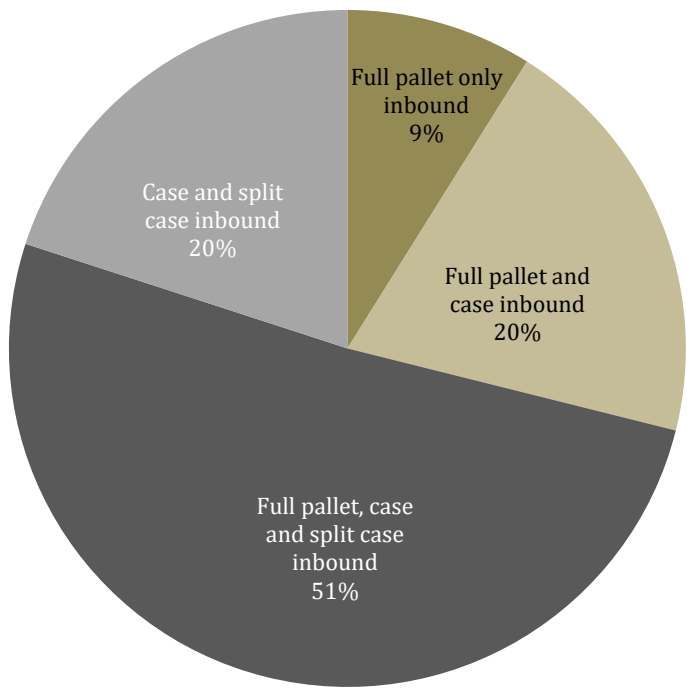


Size and Scope of Distribution Center Network and Operations



Nature of DC's Inbound/Outbound Operation

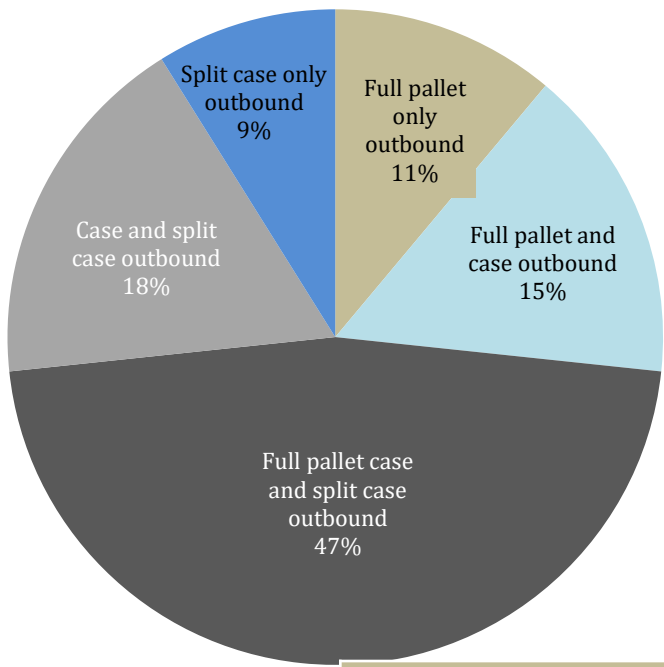
2025 Inbound:



2024 Results:	
Full pallet only inbound	23%
Full pallet and case inbound	23%
Full pallet, case and split case inbound	48%
Case and split case inbound	6%

What is the nature of your distribution center's inbound operation?

2025 Outbound:

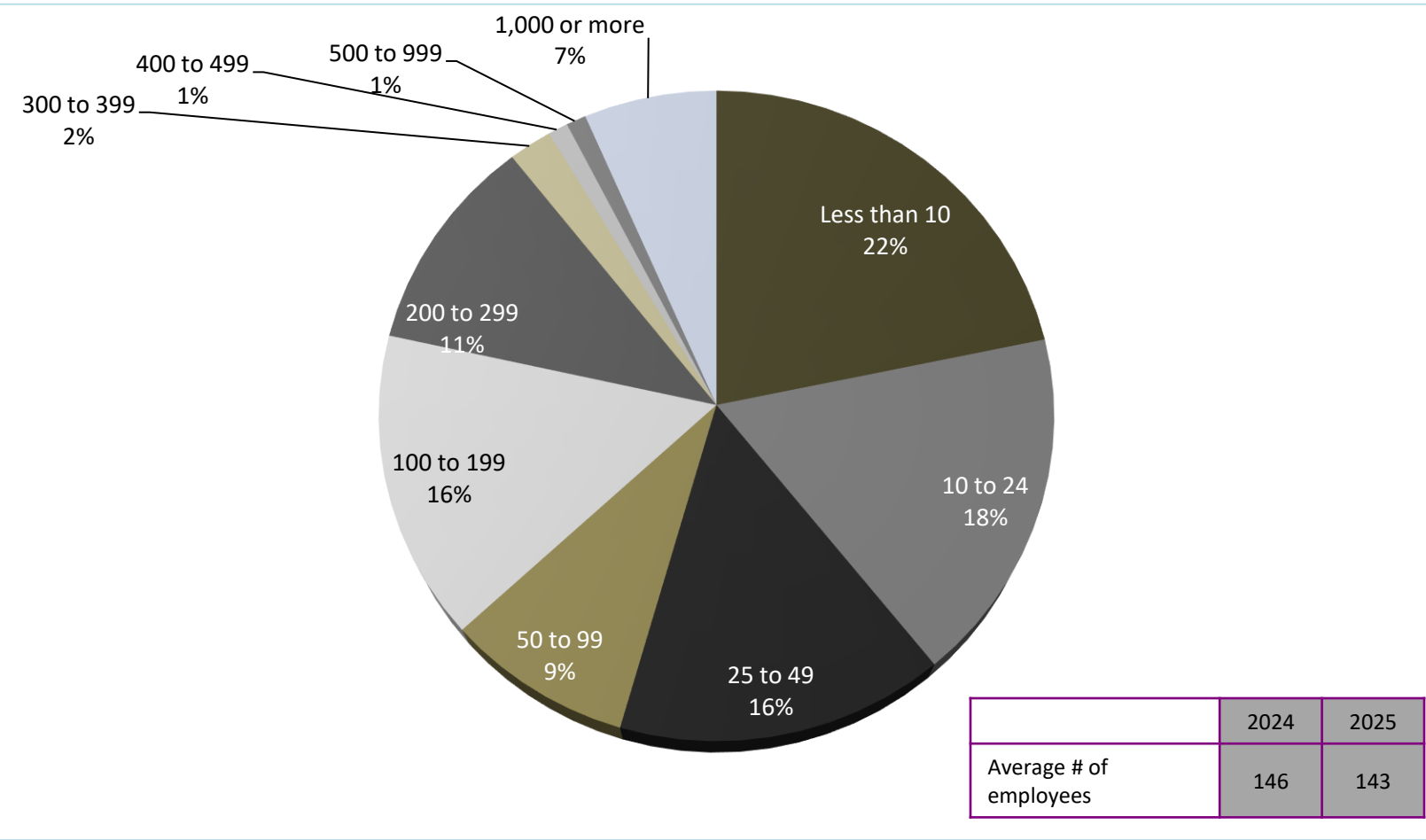


2024 Results:	
Full pallet only outbound	17%
Full pallet and case outbound	11%
Full pallet case and split case outbound	35%
Case and split case outbound	31%
Split case only outbound	6%

In what quantities are individual items picked for outbound orders?



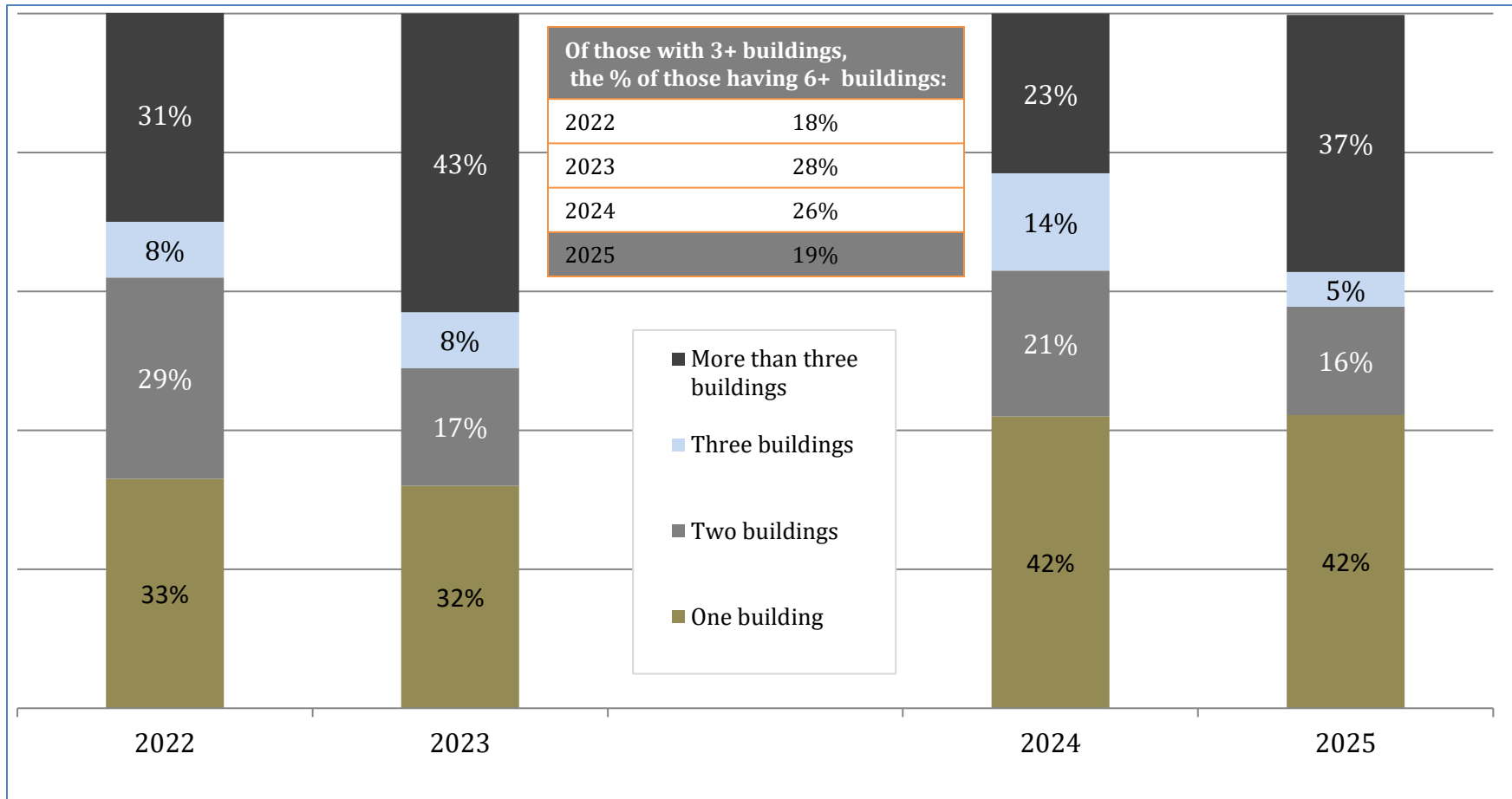
Number of Employees in Company's Main Warehouse



What is the total number of employees in your company's main warehouse?



Size of Distribution Center Network: **Number of Buildings**



How many buildings are in your distribution network?



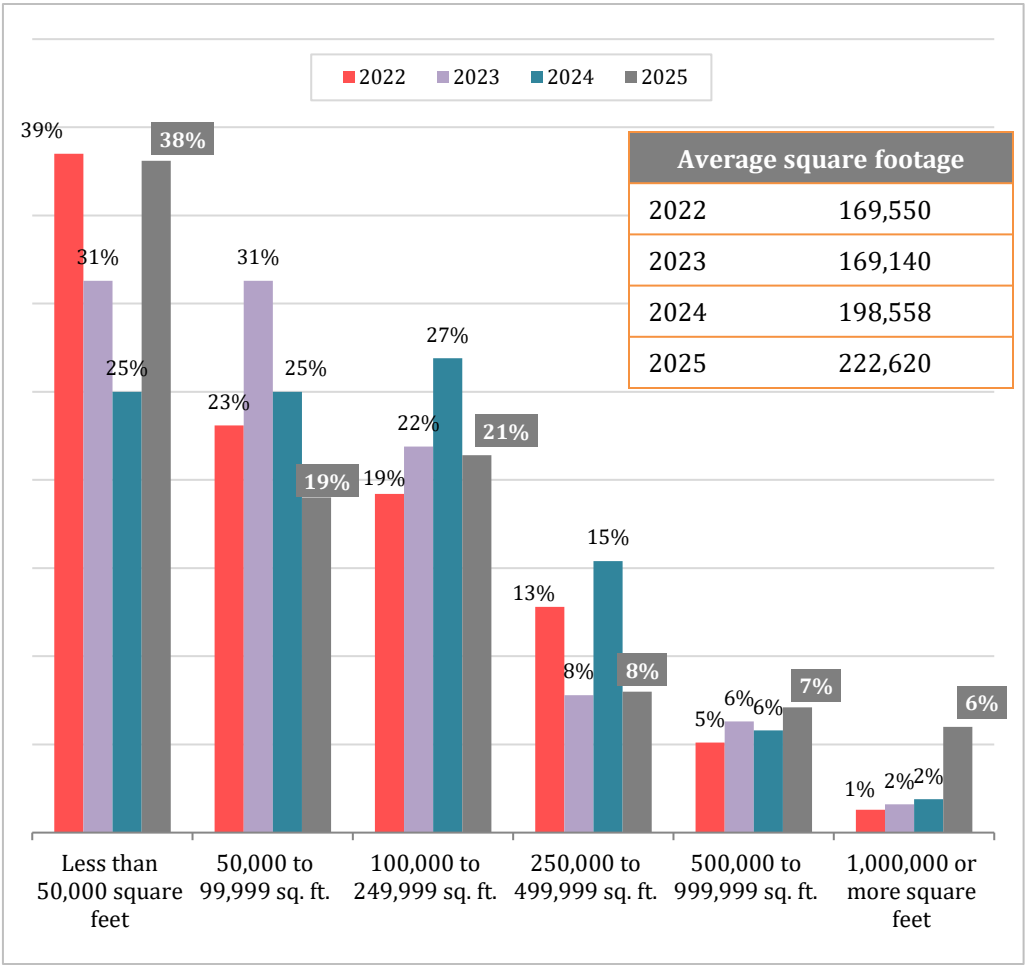
Size of Distribution Center Network: **Total Square Footage**

	2022	2023	2024	2025
Less than 25,000 sq. ft.	18%	19%	11%	27%
25,000 – 49,999 sq. ft.	10%	11%	23%	7%
Less than 50,000 sq. ft. <i>(net)</i>	28%	30%	33%	34%
50,000 to 99,999 sq. ft.	13%	10%	15%	11%
100,000 to 249,999 sq. ft.	27%	22%	21%	13%
250,000 to 499,999 sq. ft.	14%	13%	8%	12%
500,000 to 999,999 sq. ft.	5%	8%	8%	7%
1,000,000 to 1,999,999 sq. ft.	4%	6%	8%	6%
2,000,000+ sq. ft.	10%	11%	8%	17%
Average square footage	570,395	479,565	408,020	588,050
Median square footage	250,000	250,000	250,000	250,000

What is the approximate TOTAL aggregate square footage of all buildings in your distribution center network?



Size of Distribution Center Network: Most Common Square Footage



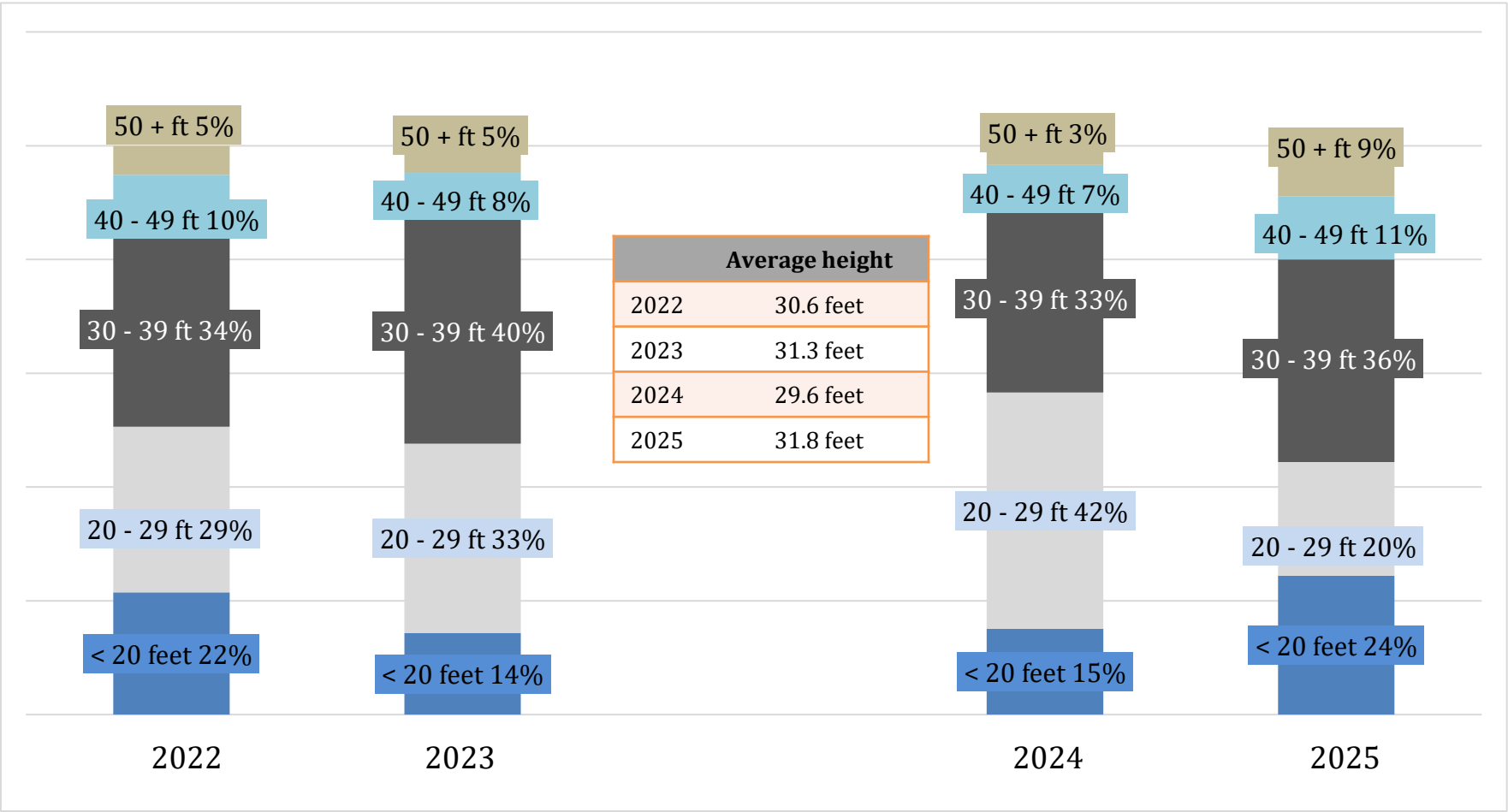
Among the buildings in your network, what is the most common square footage?

Most common sq. footage if . . .	Network is 3 buildings or less	Network is 4 buildings +
Less than 50,000 sq. ft.	55%	22%
50,000 – 99,999 sq. ft.	17%	13%
100,000 – 249,999 sq. ft.	21%	19%
250,000 – 499,999 sq. ft.	4%	20%
500,000 – 999,999 sq. ft.	2%	18%
1,000,000 + sq. ft.	1%	8%

Average sq. footage	Network is < 3 buildings	Network is 4 buildings +
2025	205,500	788,350
2024	220,000	811,200
2023	227,100	423,315
2022	252,727	787,500



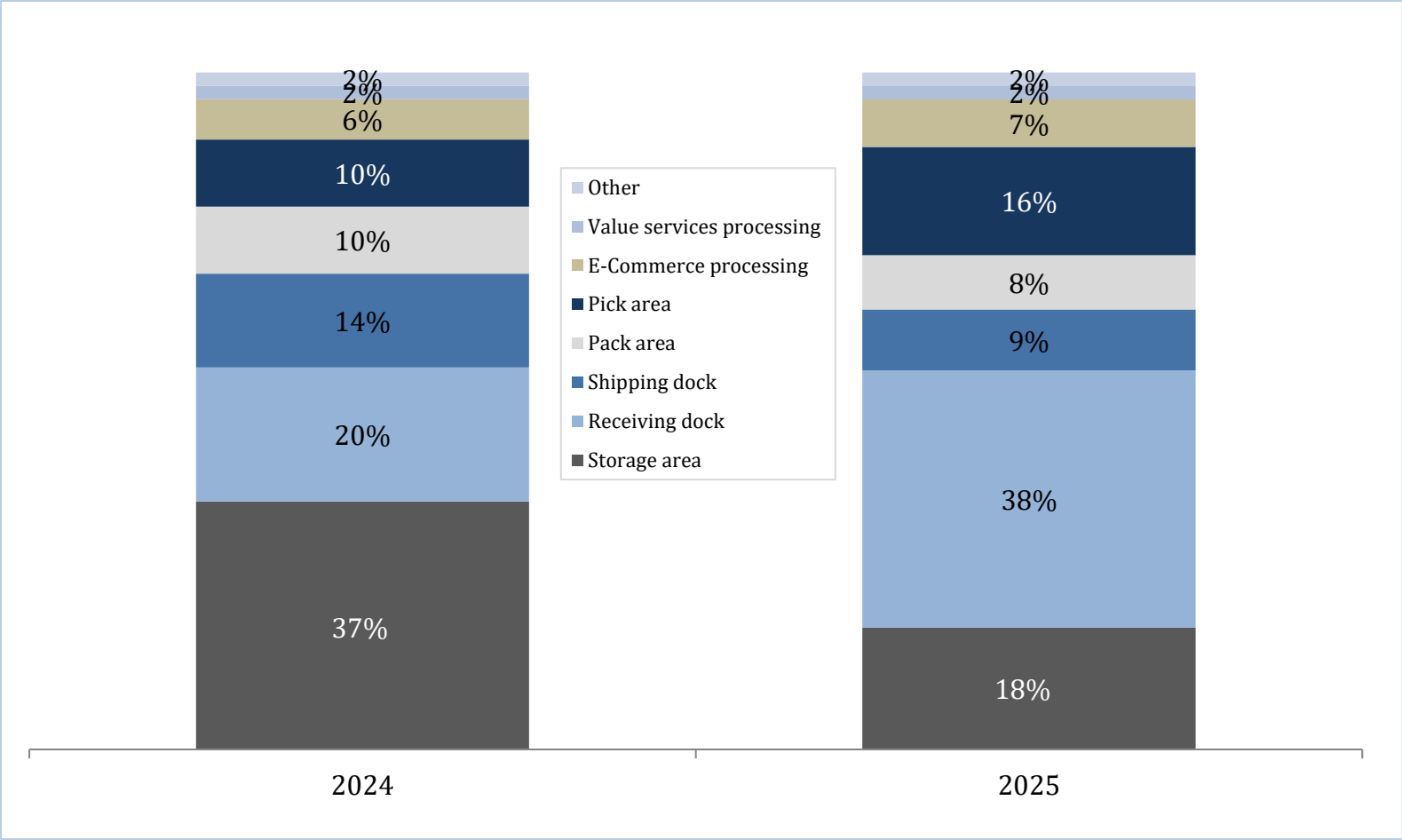
Size of Distribution Center Network: **Clear Height of Buildings**



What is the most common clear height?



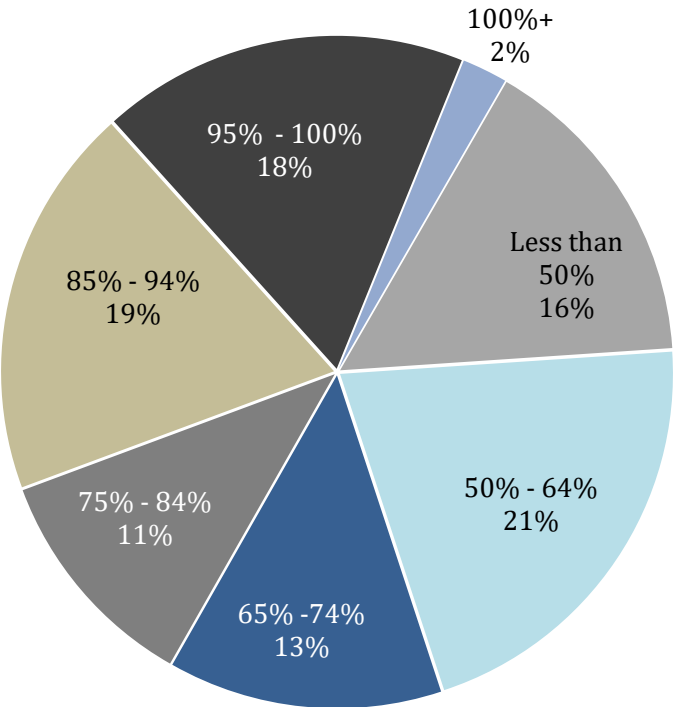
Space utilization: The most congested area in warehouses



Which area in your warehouse is the most congested in terms of square footage (space)?



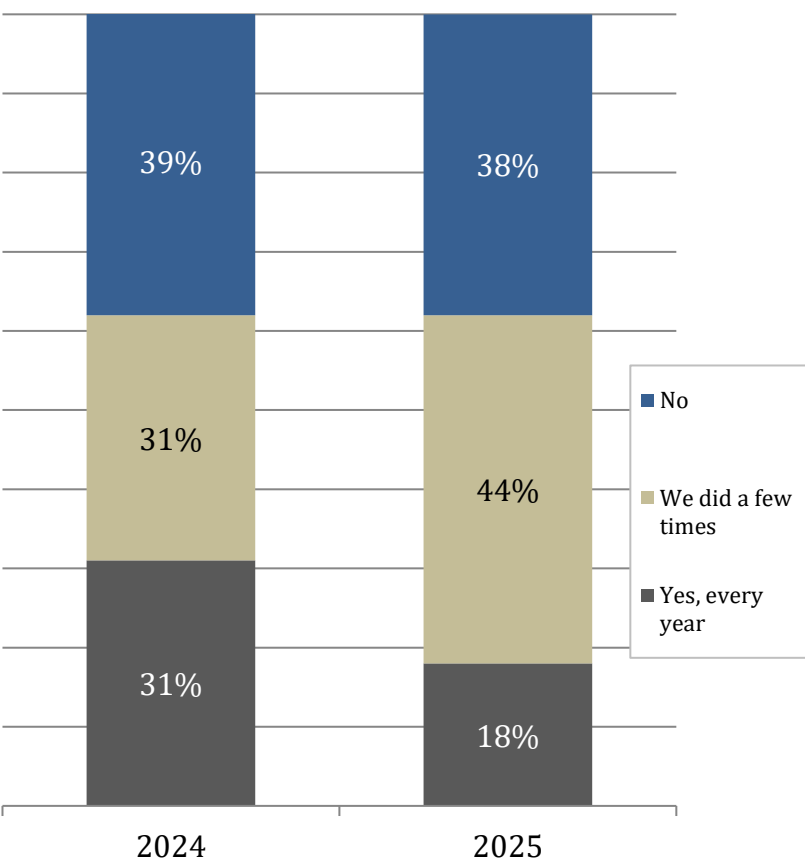
Peak warehouse space utilization



Average % of peak space used:	
2024	73.2%
2025	75.0%

And, what do you estimate your peak warehouse space utilization (pallet storage capacity utilization) will be in 2025?

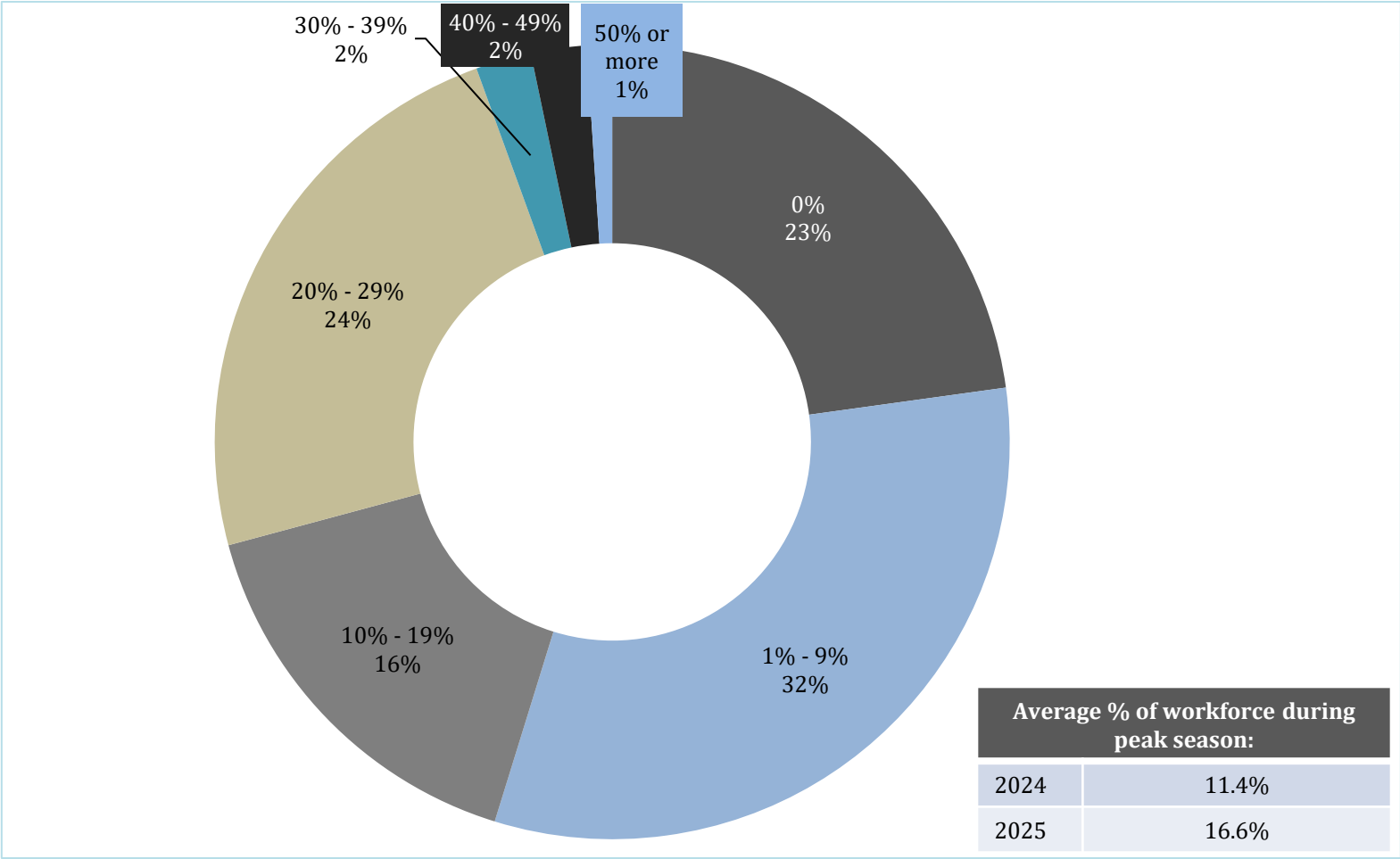
Leasing additional space during peak season



In the past five years, have you utilized additional/outside space during peak season?



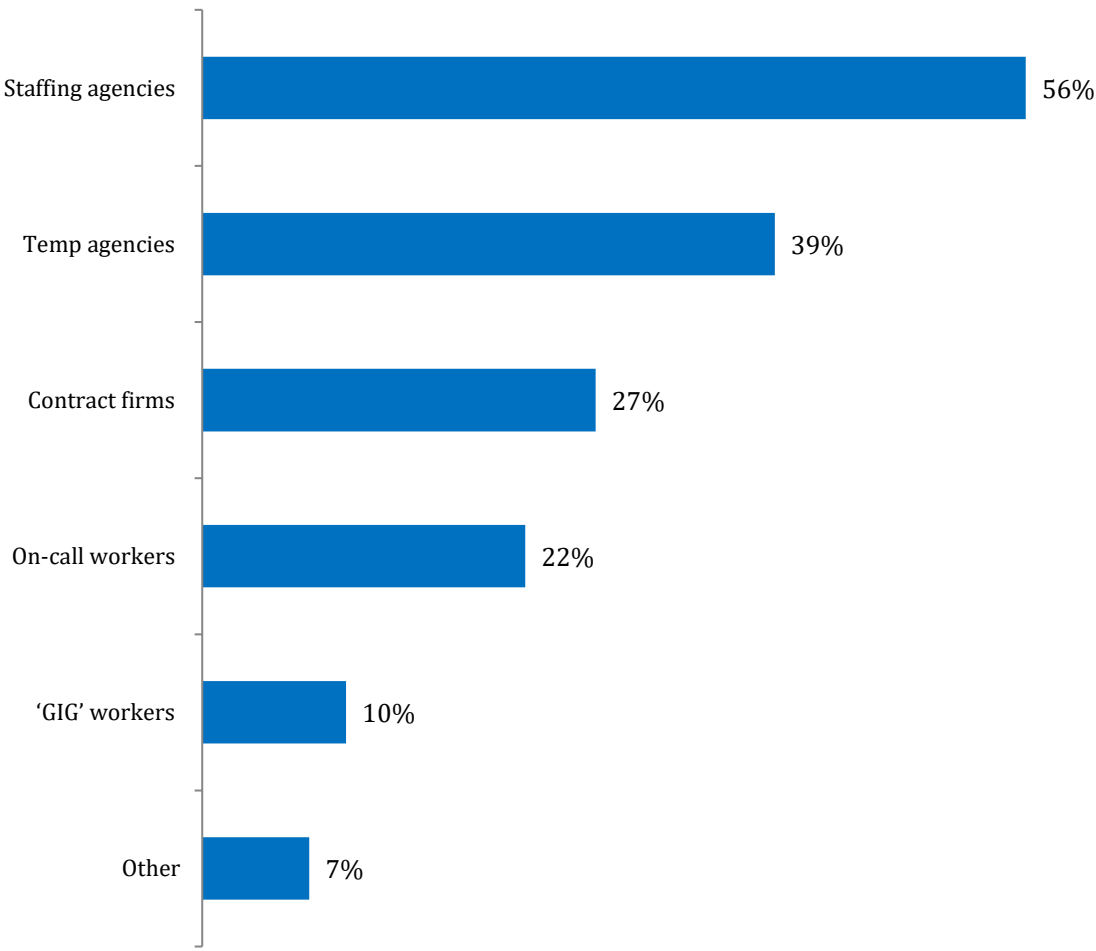
Percent of workforce who are temporary during *peak* volume periods



What percentage of your workforce are temporary employees during peak volume periods?



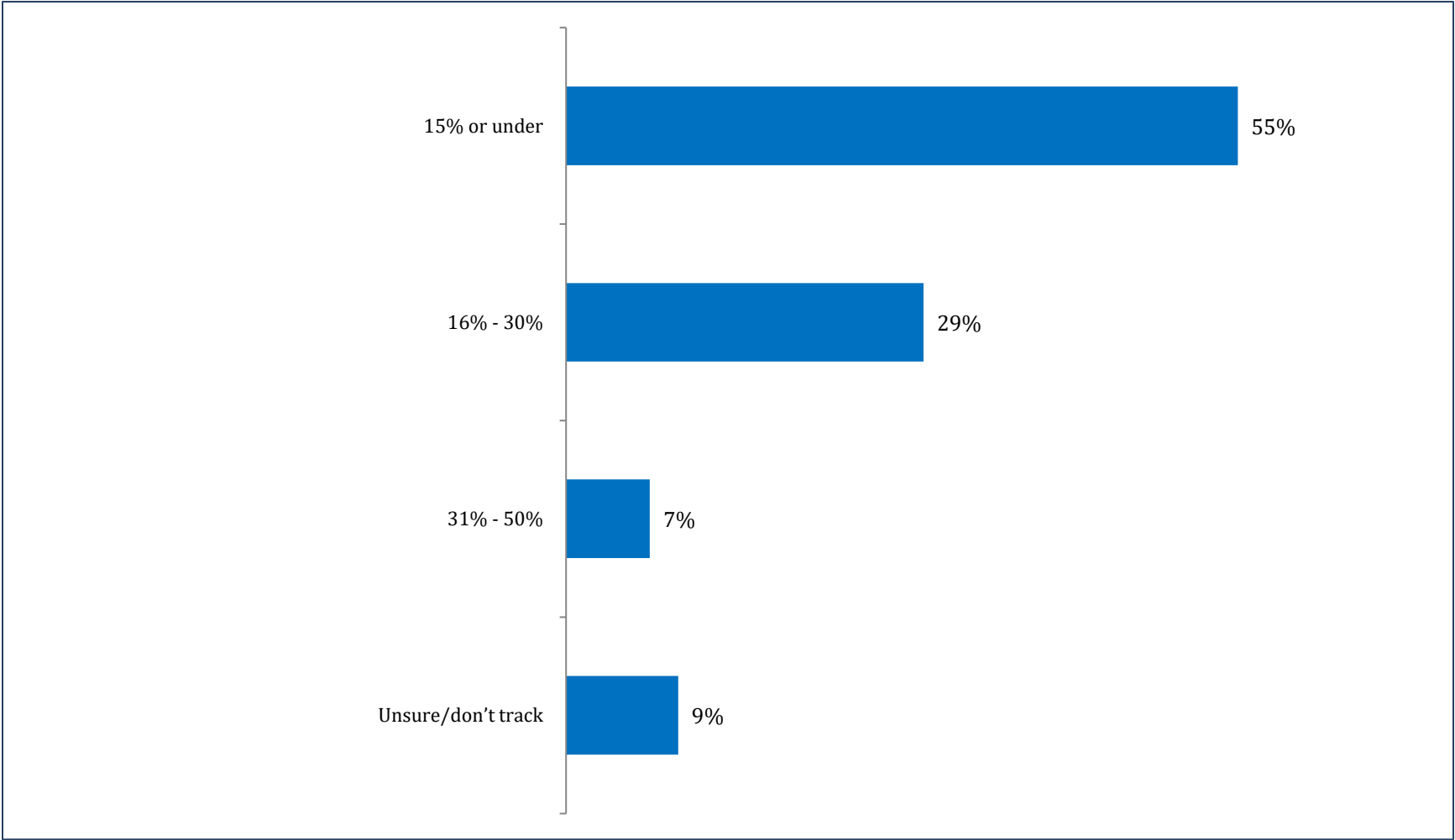
Alternative Labor Resources to Handle Average and/or Peak Volumes



*Multiple answers accepted



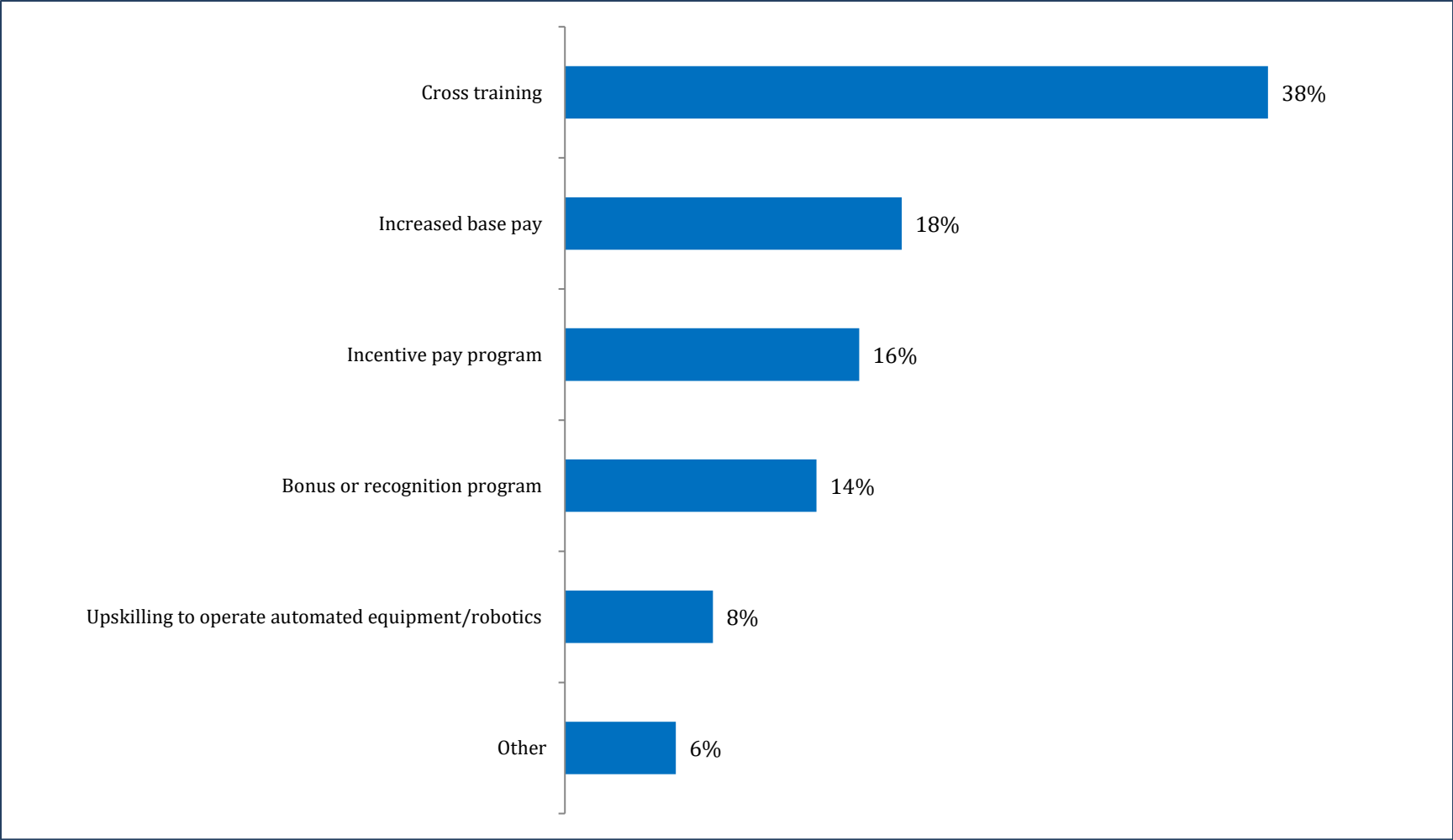
Annual Employee Turnover Rate



What is your annual employee turnover rate?



Retention Improvement Labor Management Practices



What labor management practices do you use to improve retention?



Scope of Distribution Center Operations: **Annual Inventory Turns**

	2022	2023	2024	2025
Less than 1.0	10%	5%	4%	8%
1.0 to 2.9	18%	23%	22%	20%
3.0 to 4.9	24%	16%	27%	28%
5.0 to 6.9	15%	10%	16%	12%
7.0 to 8.9	10%	15%	9%	10%
9.0 to 11.9	7%	13%	13%	9%
12.0 to 17.9	6%	3%	2%	8%
18.0 to 23.9	3%	2%	2%	3%
24.0 or greater	7%	13%	4%	4%
Average	7.1	8.2	6.5	6.3

Approximately how many inventory turns do you have annually?



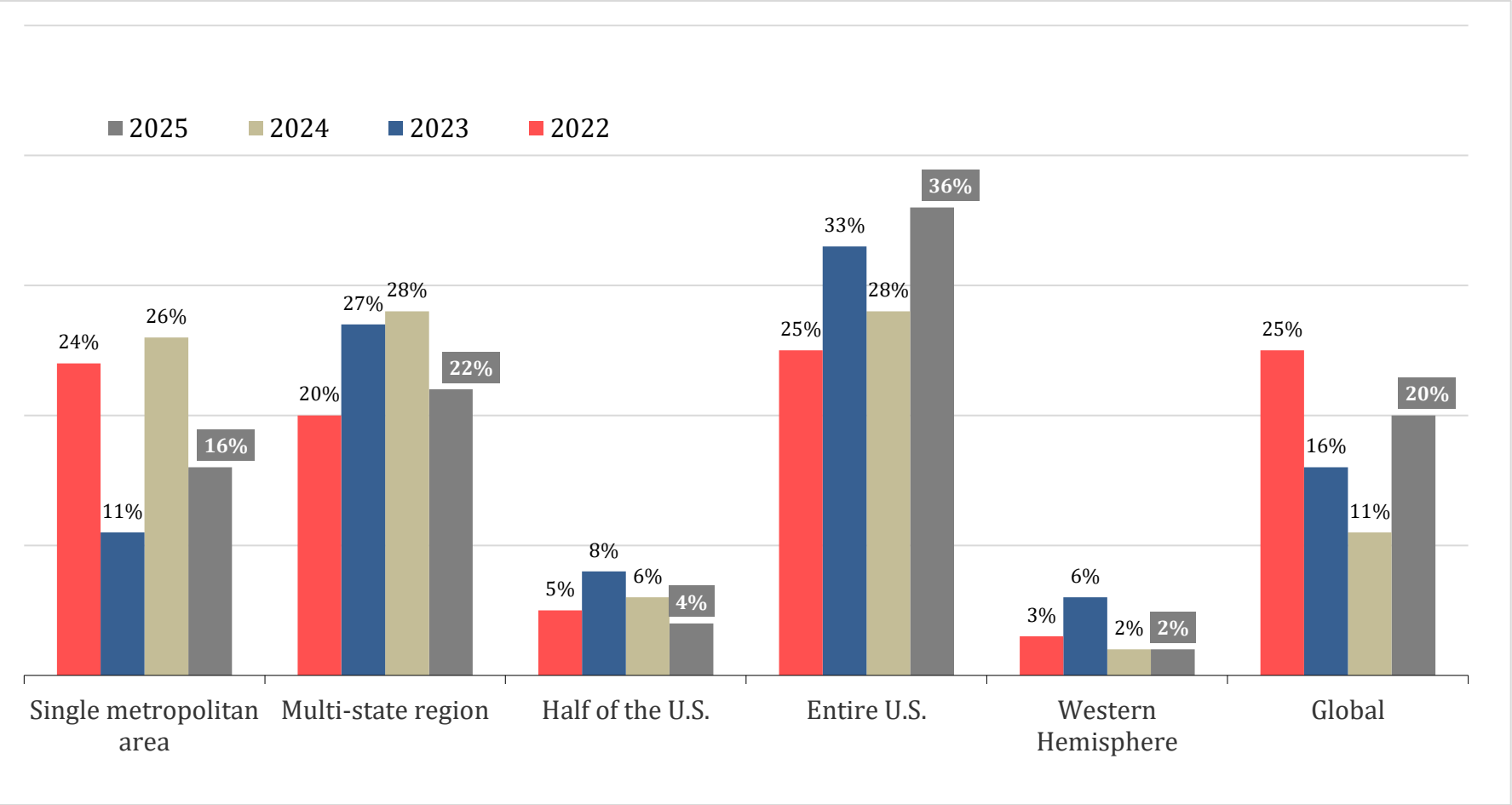
Scope of Distribution Center Operations: **Number of SKUs**

	2022	2023	2024	2025
Less than 100	19%	24%	15%	15%
100 to 499	19%	11%	16%	18%
500 to 999	9%	11%	19%	10%
1,000 to 2,499	9%	13%	17%	15%
2,500 to 4,999	18%	5%	9%	8%
5,000 to 9,999	5%	13%	5%	6%
10,000 to 19,999	5%	15%	9%	11%
20,000 to 49,999	9%	2%	7%	9%
50,000 – 74,999	1%	5%	2%	5%
75,000 or more	6%	2%	15%	3%
Average	10,371	8,494	7,790	9,565

Approximately how many SKUs do you carry?



Scope of Distribution Center Operations: **Areas of Service**

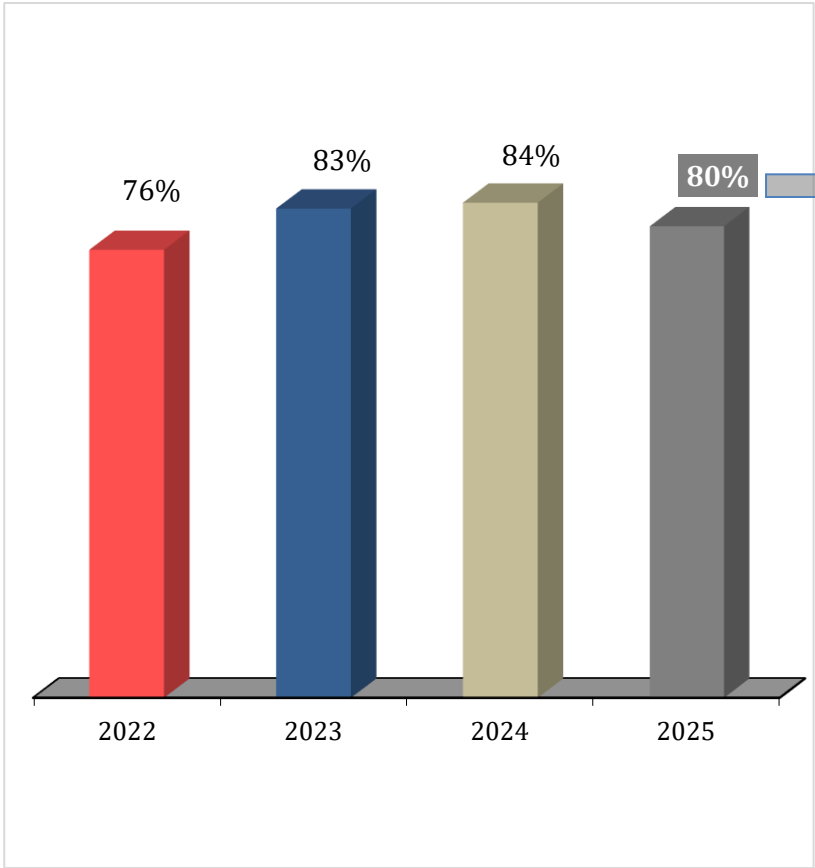


What is the geographic scope of your distribution center operations?



Distribution Center Expansion Plans

Planning to expand over next 12 months:



Areas for expansion:

	2022	2023	2024	2025
Number of SKUs	25%	22%	27%	25%
Number of employees	41%	37%	14%	25%
Overall square footage	32%	33%	25%	33%
Annual inventory turns	24%	33%	16%	15%
Area of service	19%	18%	21%	18%
Number of buildings	24%	17%	23%	10%
Height of buildings	9%	7%	11%	9%
Other	3%	2%	2%	5%

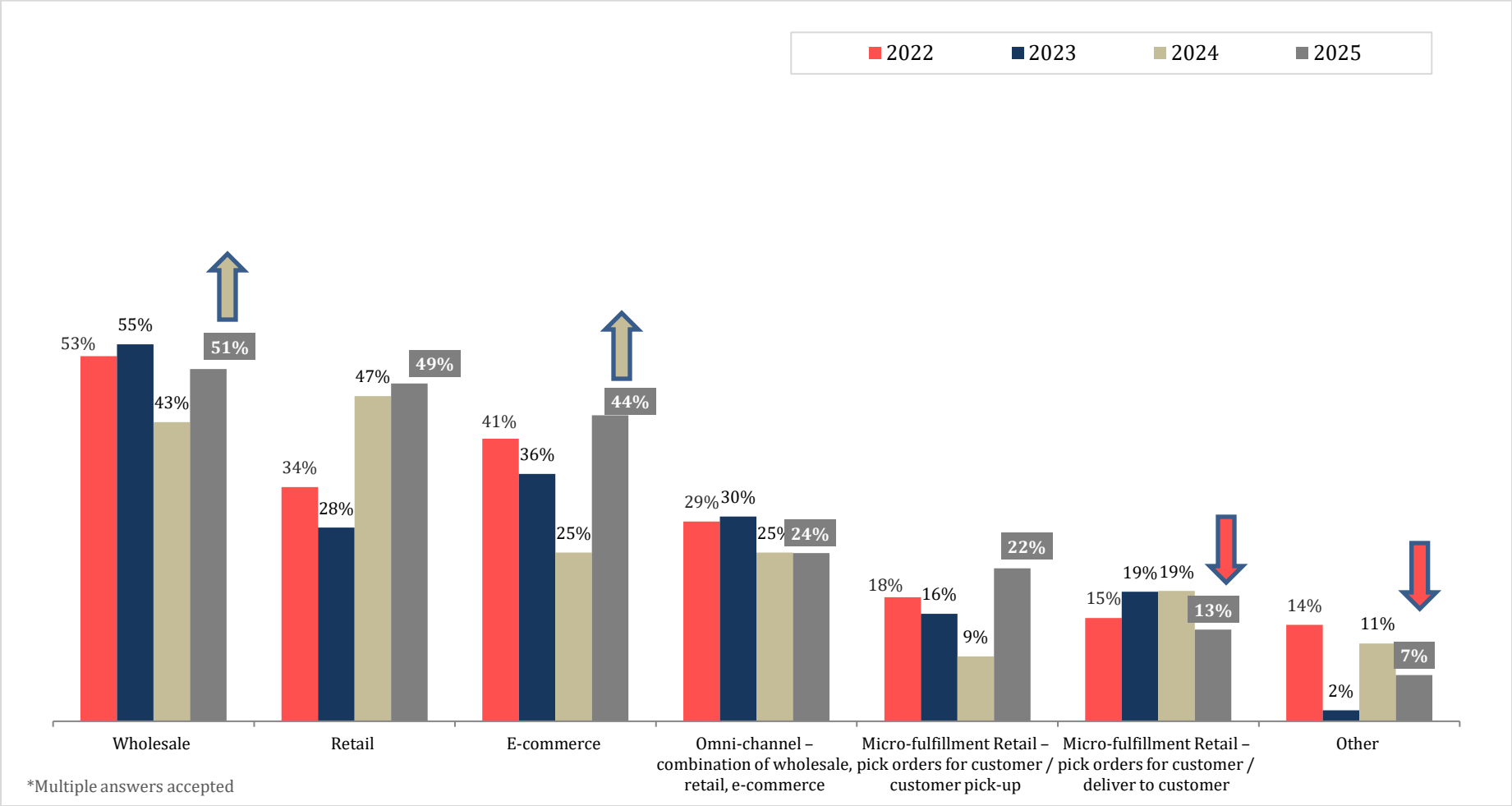
*Multiple answers accepted

Based on those planning expansion

Within the next 12 months, in which area(s) are you considering or planning to expand your distribution center operations?



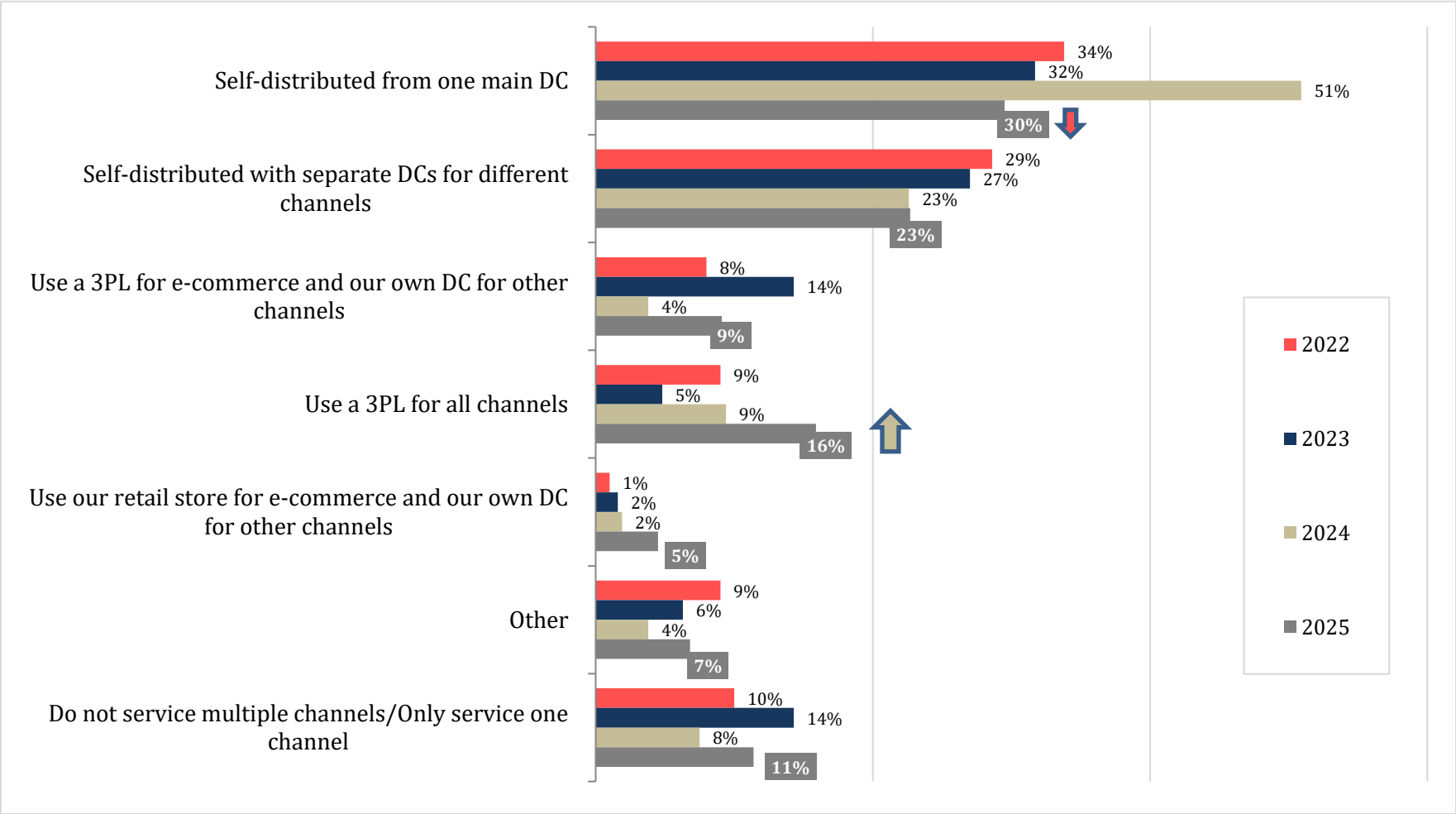
Market channels serviced by company



What market channels does your company service?



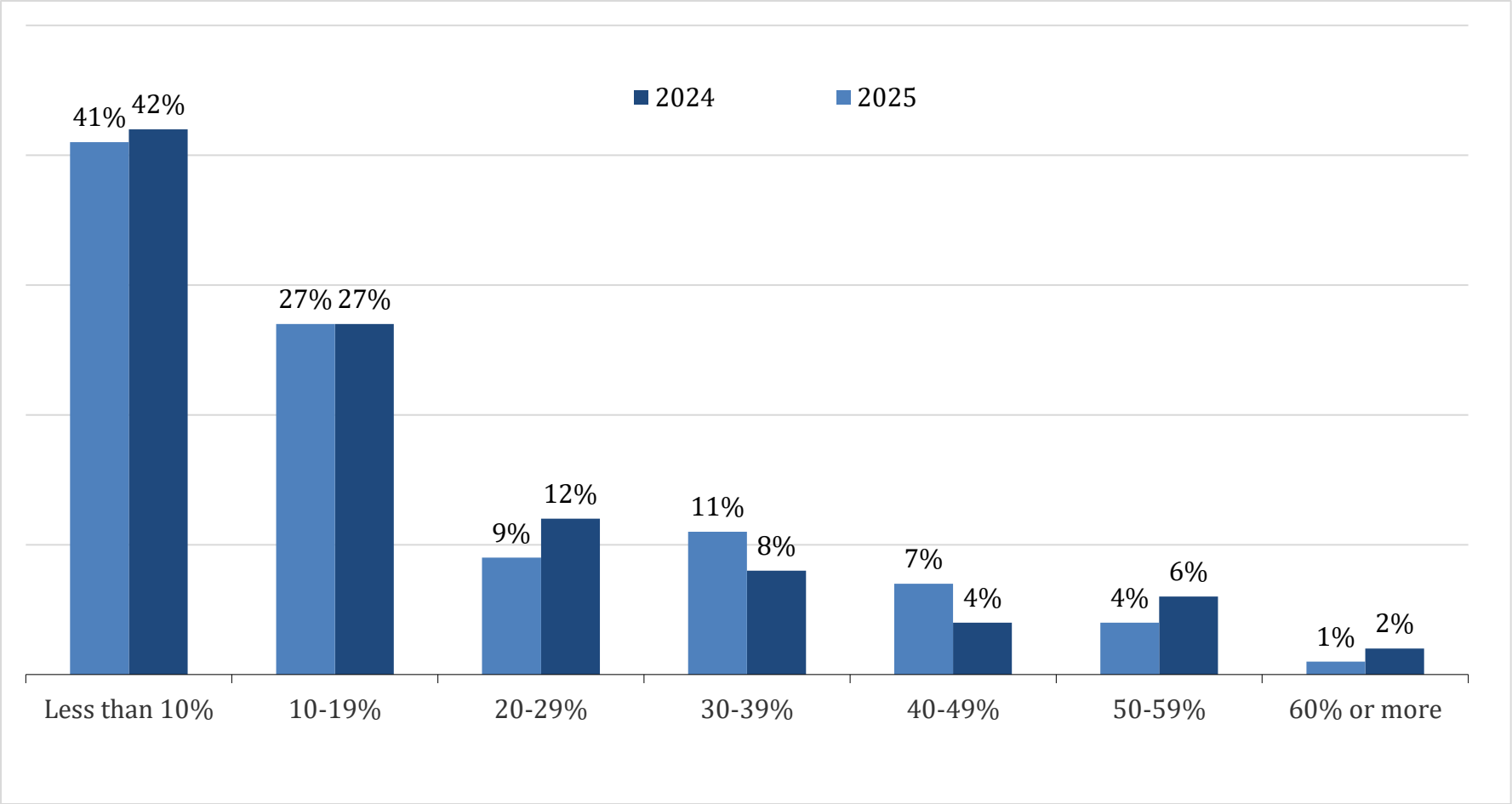
How multiple channels are being fulfilled



If you are servicing multiple channels, how are they fulfilled?



E-Commerce Channel Growth in Past 12 Months



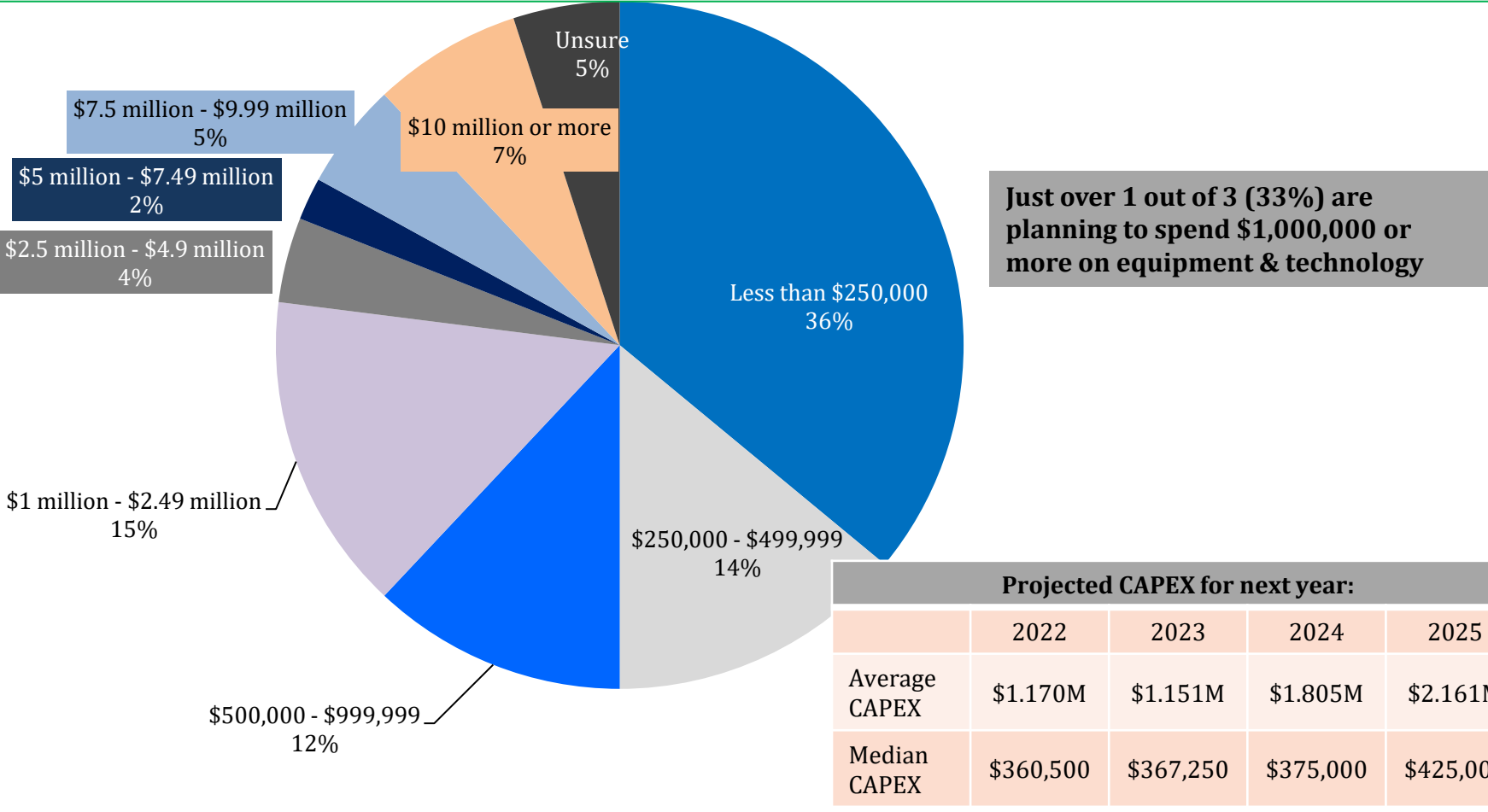
By what percentage has the E-Commerce channel grown in the past 12 months?



Systems and Technologies in Use



Estimated capital expenditures for warehousing equipment and technology in 2024



And, what do you estimate your capital expenditures for warehousing equipment and technology were in 2024? And will be in 2025?



Warehouse Management Systems in use

	2022	2023	2024	2025
Using a Warehouse Management System (NET)	79%	84%	93%	87%
Legacy WMS (basic WMS, homegrown & developed in-house)	28%	32%	33%	50%
ERP with a WMS module	36%	31%	38%	25%
Best-of-breed WMS	10%	13%	13%	23%
Labor planning functionality (LMS)	12%	15%	13%	10%
Slotting functionality	3%	12%	22%	18%
On-demand/Cloud/SaaS	5%	12%	4%	13%
WCS/WES-based system	3%	8%	13%	12%
Goods To Person (GTS)	Not asked	10%	7%	9%
Shuttles	Not asked	7%	4%	8%
None or minimal	21%	16%	7%	13%

*Multiple answers accepted

What Warehouse Management System (WMS) is currently in use at your distribution center? September 2025



Materials Handling Systems in Use

	2025
Fork lifts	83%
Push Carts	58%
Conveyors / Sorters	43%
Autonomous Forklifts	13%
Shuttles / ASRS	18%
Auto-Store	14%
Put-Walls	10%
AGVs/AMRs	18%
Carousels / VLMs	15%
Other	5%

*Multiple answers accepted

What types of material handling systems are currently in use at your distribution center?



Picking Technologies in Use

	2022	2023	2024	2025
Paper-based	53%	56%	44%	40%
RF hand-held	50%	48%	54%	51%
Voice	6%	21%	12%	17%
Pick to Light	15%	12%	16%	25%
Other	9%	5%	7%	3%

*Multiple answers accepted

What kinds of picking technologies are currently in use at your distribution center?



Order Filling Techniques in Use

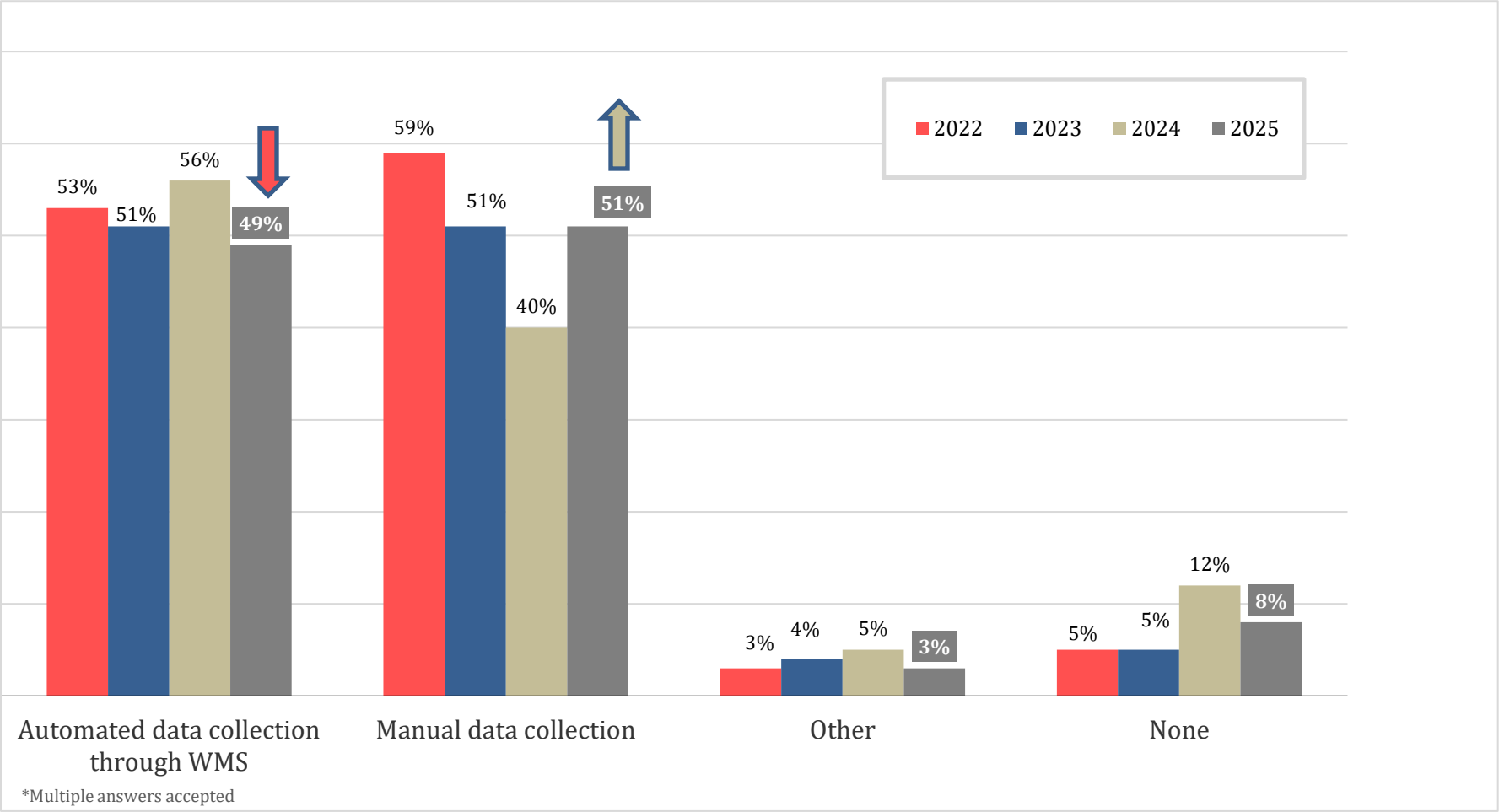
	2022	2023	2024	2025
Single order picking	61%	62%	58%	65%
Batch picking	29%	39%	44%	48%
Zone picking	24%	30%	22%	25%
Cross docking	20%	18%	14%	28%
Wave picking	20%	18%	19%	18%
“Put” to order	15%	8%	20%	20%
Put-wall system	6%	7%	5%	10%
Continuous order release/waveless picking	--	--	14%	15%
Picking by product category	--	--	24%	23%
Other	0%	2%	2%	0%

*Multiple answers accepted

Which kinds of order filling techniques are currently in use at your distribution center?



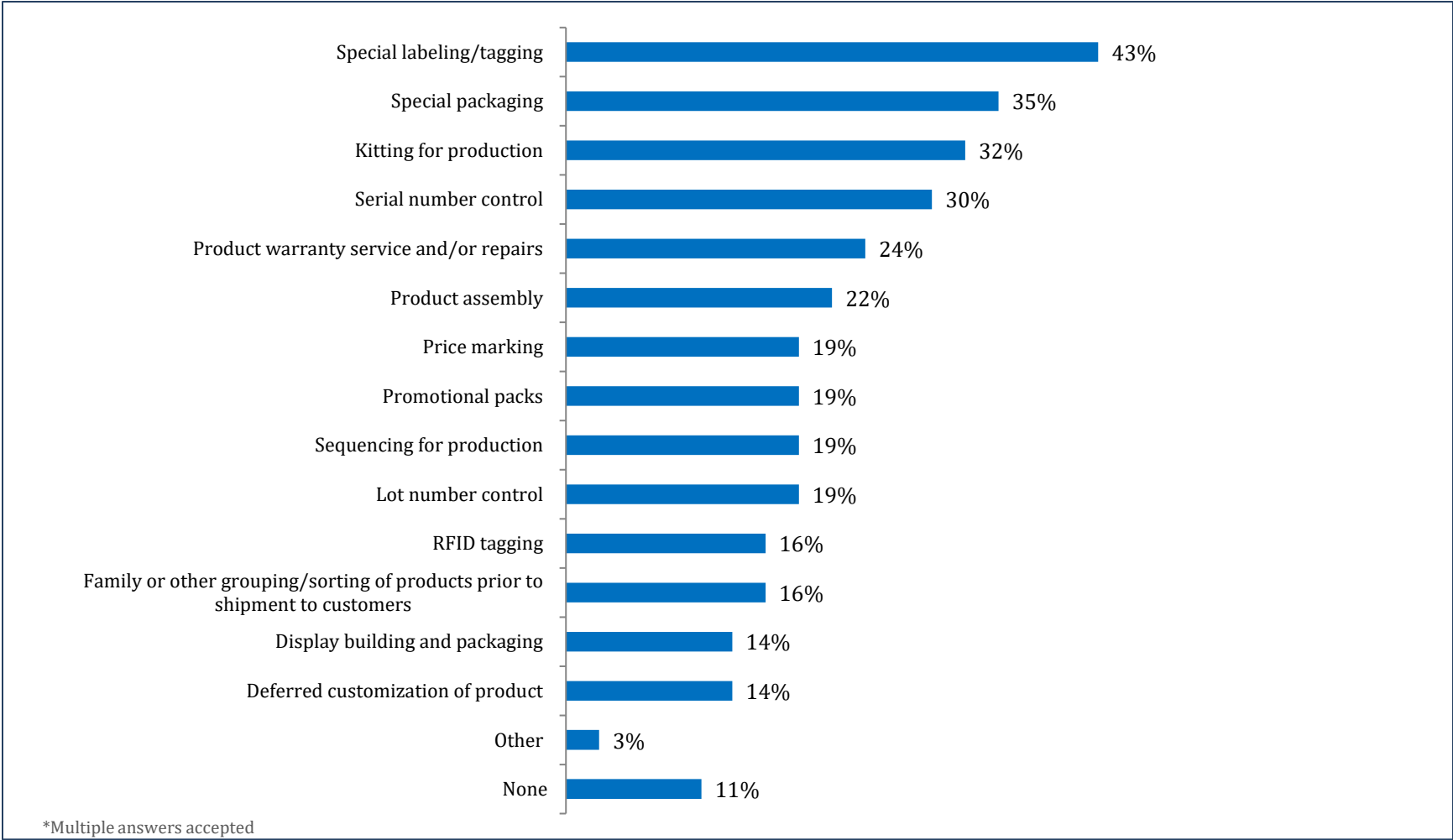
Data Collection Methods Used to Gauge Productivity



What data collection methods does your organization use to gauge productivity?



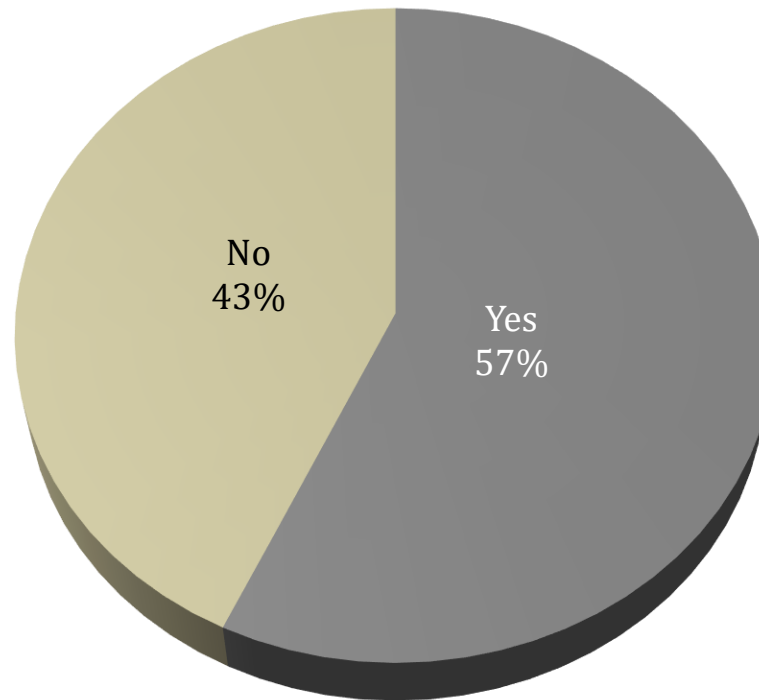
Additional Value-Added Services Offered to Customers



What additional or value-added services do your offer to customers?



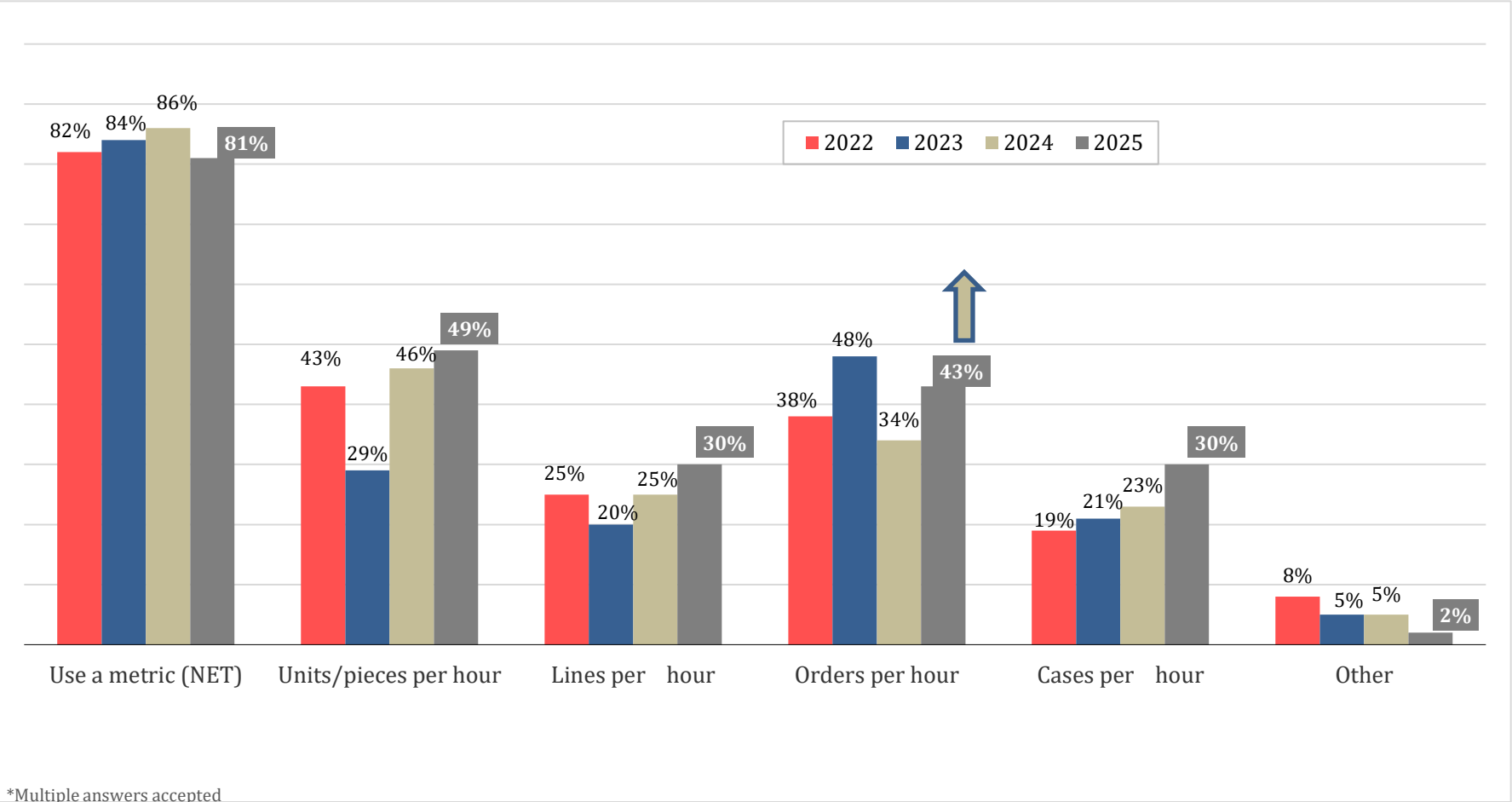
Do you have 100% SKU weight and dims in your Item Master?



Do you have SKU weight and dims in your Item Master?



Productivity Metrics in Use

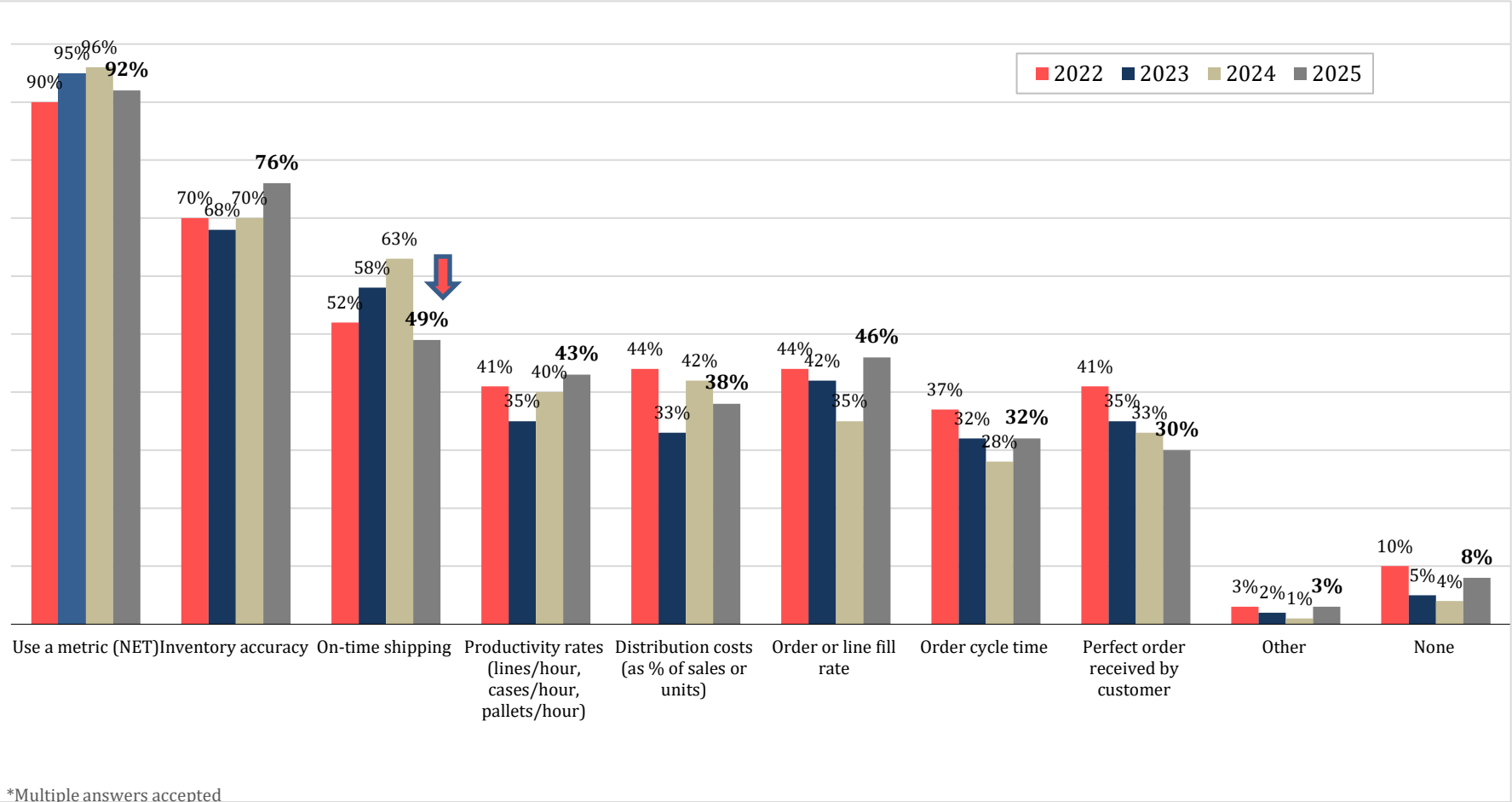


*Multiple answers accepted

And, which metrics do you use to gauge productivity?



Metrics Used to Collect/Manage Warehouse Operations

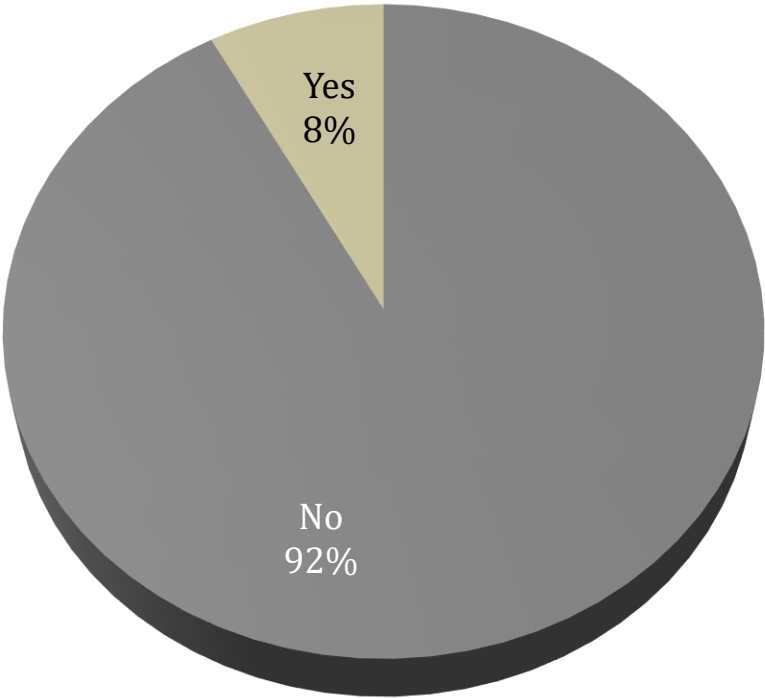


*Multiple answers accepted

What metrics does your company collect/manage within your warehouse operations?



Experienced “Catastrophic” Events in Last 2 Years



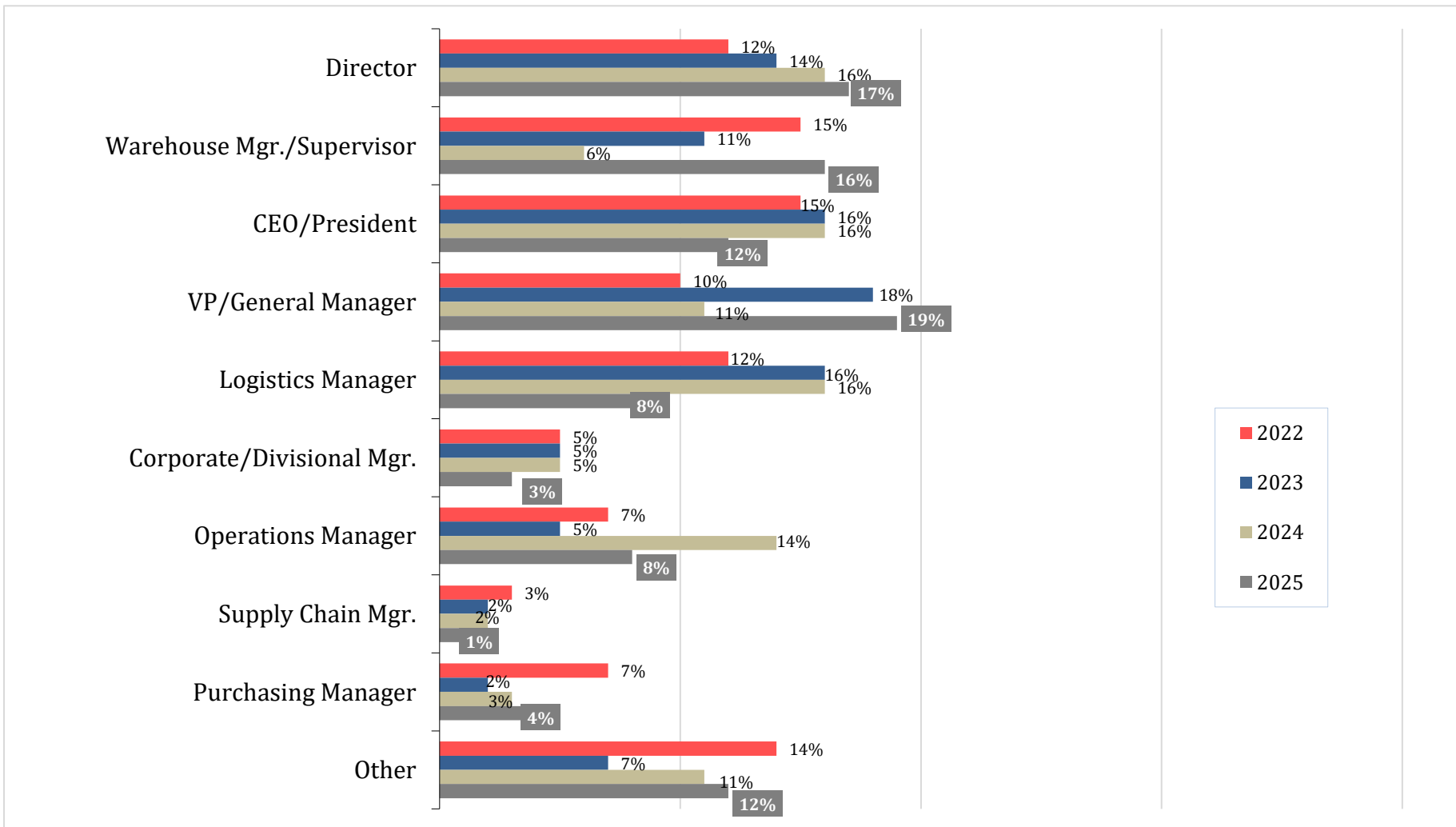
Has any part of your supply chain experienced any "catastrophic" events in the last 2 years (i.e. earthquakes, hurricanes or other extreme weather events, hackers, labor strikes, supplier failures, etc.)?



Respondent and Company Profile



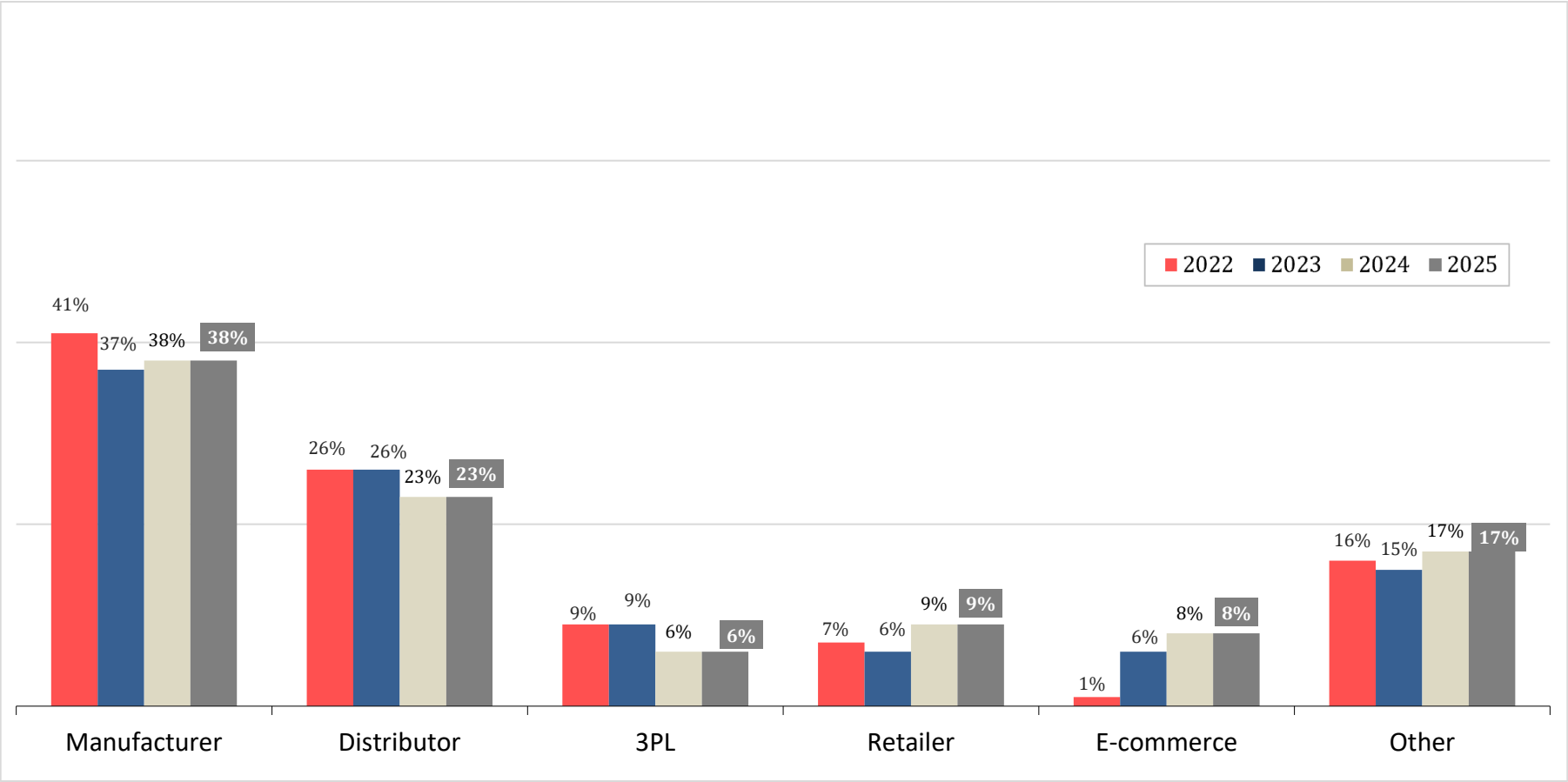
Job Title/Function



Which of the following best describes your job title/function?



Type of Business



Please indicate which of the following best describes your company.



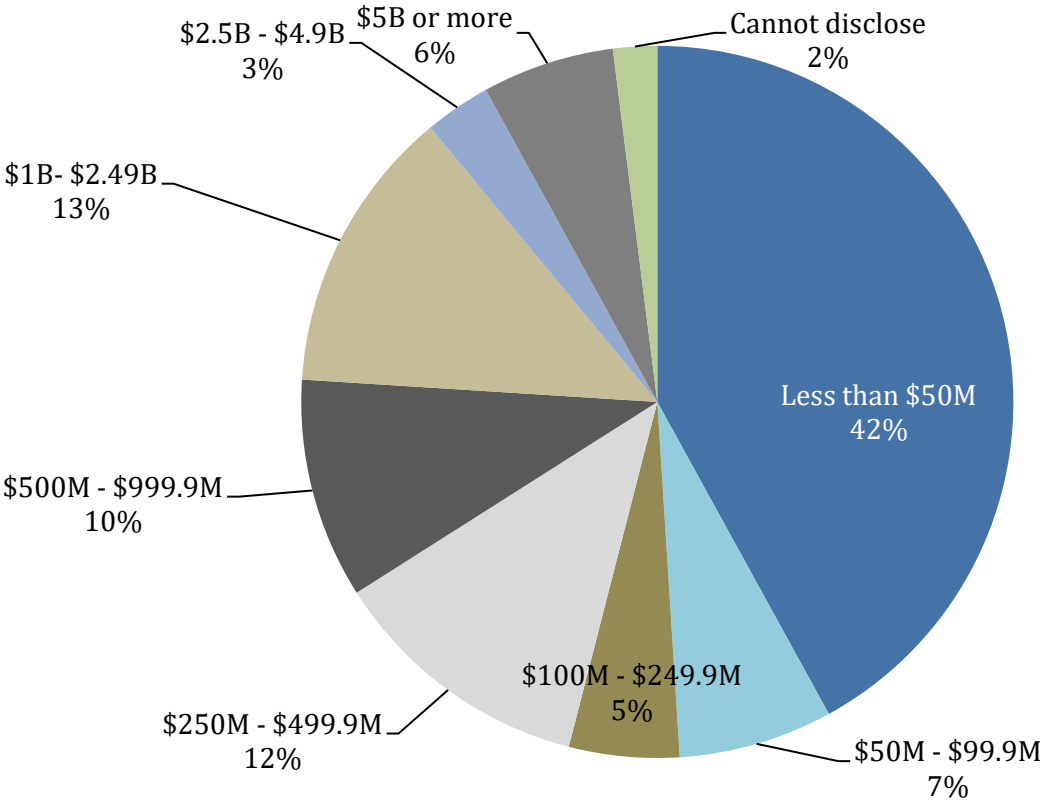
Primary Business at Location

	2022	2023	2024	2025
Food & Grocery	13%	19%	14%	9%
Building, Construction & HVAC Materials	5%	3%	8%	11%
Automotive, Aerospace and Aviation	10%	5%	4%	4%
General Merchandise	5%	6%	2%	7%
Electronics, Computers and Software	5%	3%	4%	10%
Pharmaceutical/Health Care/Medical Devices	6%	6%	8%	4%
Paper, Packaging and Office Supplies	1%	5%	6%	3%
Furniture and Appliances	3%	3%	2%	5%
Fabricated metals	6%	3%	8%	3%
Electrical supplies	6%	4%	7%	4%
Agriculture	1%	2%	4%	2%
Parts and Equipment	5%	3%	5%	1%
Apparel, Shoes, Accessories	3%	2%	3%	2%
Rubber, Plastics, Ceramics, etc.	--	1%	2%	2%
Other (<i>includes sporting goods, Industrial, energy, etc.</i>)	15%	20%	23%	33%

What is the primary product at your location?



Annual Revenues



	2023	2024	2025
Average revenues	\$778M	\$774M	\$753M
Median revenues	\$175M	\$100M	\$150M

What do you estimate your company’s overall sales or revenues were in 2024?