fresh MUSHROOMS

FRESH MUSHROOM FOODSERVICE PERFORMANCE

APRIL 2024

Methodology

A read on mushroom supplies through broadline distributors

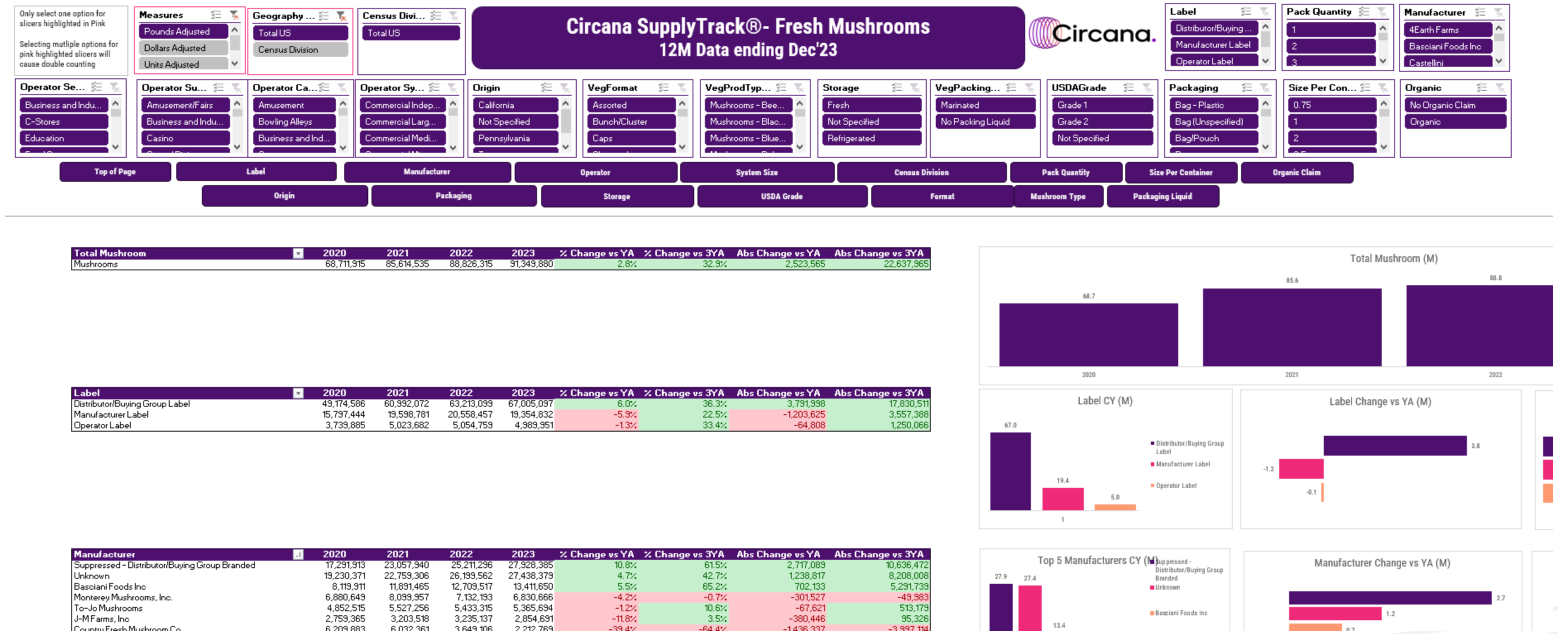
- Tracking mushroom sales in retail is done through point-of-sale data in addition to projections
- Measuring mushroom sales in foodservice is far harder, as it is a meal ingredient in most cases
- Best read: The NPD Group Supply Track (now Circana)
  - What is it: analysis of the invoices sent out by the broadline distributors to foodservice operators.
  - What does it cover: 90% of the broadline business, but not specialty/cash 'n carry or ecommerce
  - Broadline business coverage is about 41% of all foodservice distribution
- Report detail:
  - Three years of annual trend data
    - Could be used hand-in-hand with the midyear 2022 data pull to develop a longer trendline
  - Excel dashboard deliverable

Research insights provided

- Mushroom sales in dollars, pounds and units (cases)
- Includes all releasable product attributes within Fresh Mushroom category:
  - Type, including assorted
  - Whole vs. processed, such as sliced, chopped, caps, etc.
  - Organic vs. not
- Ability to review sales by:
  - Census division
  - Label type
  - Operator category
  - System size
- What it doesn't include:
  - Specialty (produce) wholesalers, which likely represent a greater share of specialty and organic mushrooms in addition to having a different client mix

How to use?

- Key highlights in this presentation
- Lots of detail in the Excel spreadsheet
- Use the filters at the top to review details by region, type, etc. in the tables down below



DEEP DIVE INTO SALES

DOLLARS, UNITS, VOLUME

VOLUME BY CHANNEL

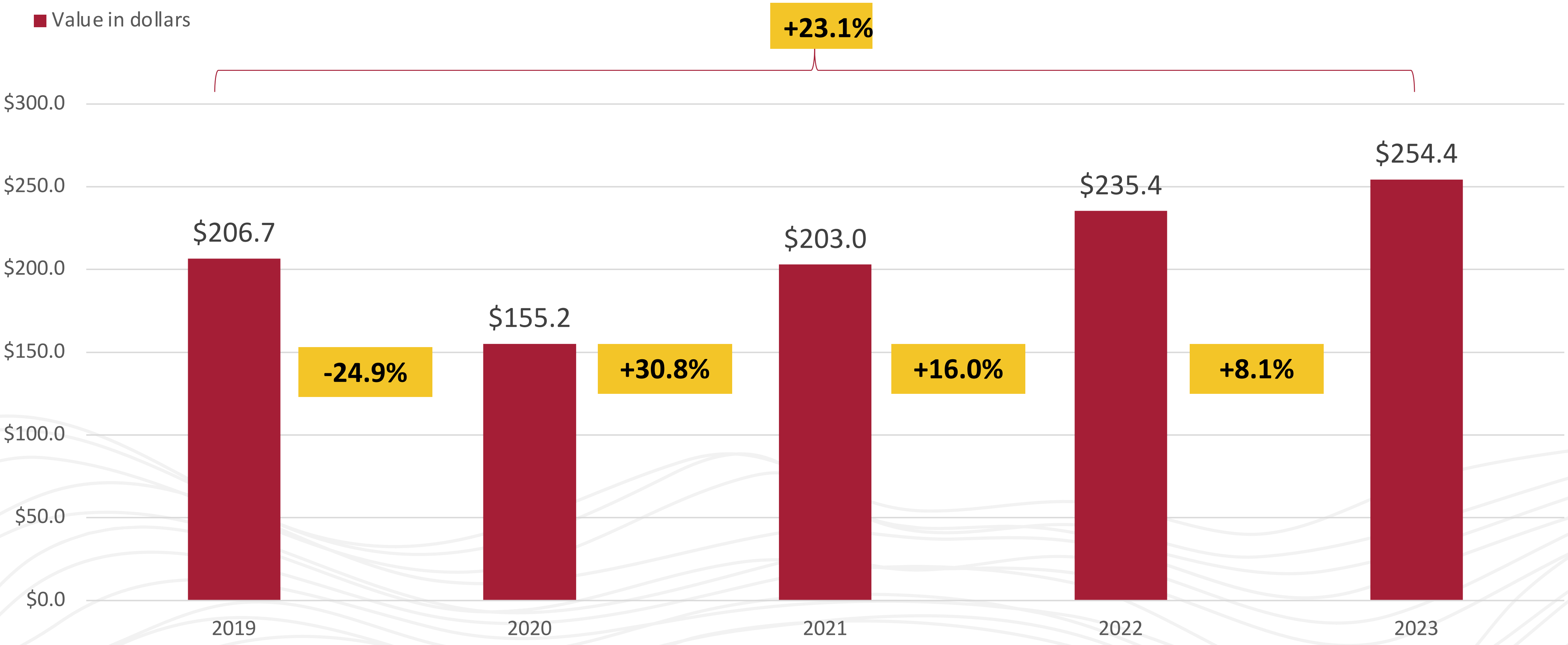
Key findings

- Dollar gains reflect substantial inflation over the past four years
- Pound sales continue to recover from the 2020 dip, but still trend below 2019 levels
  - Finding pockets of growth by channel, type, region, etc.
- FSR and QSR make up the vast amount of broadliner pounds
  - FSR is losing share in favor of QSR
  - In FSR, bars/grills are gaining, but pizza is losing ground
  - In QSR, Chinese and chicken restaurants are gaining. Pizza had a few tough years, but some recovery in 2023
  - K-12 is a very small but growing area

Source: Circana SupplyTrack 2024

Foodservice mushroom dollar sales history

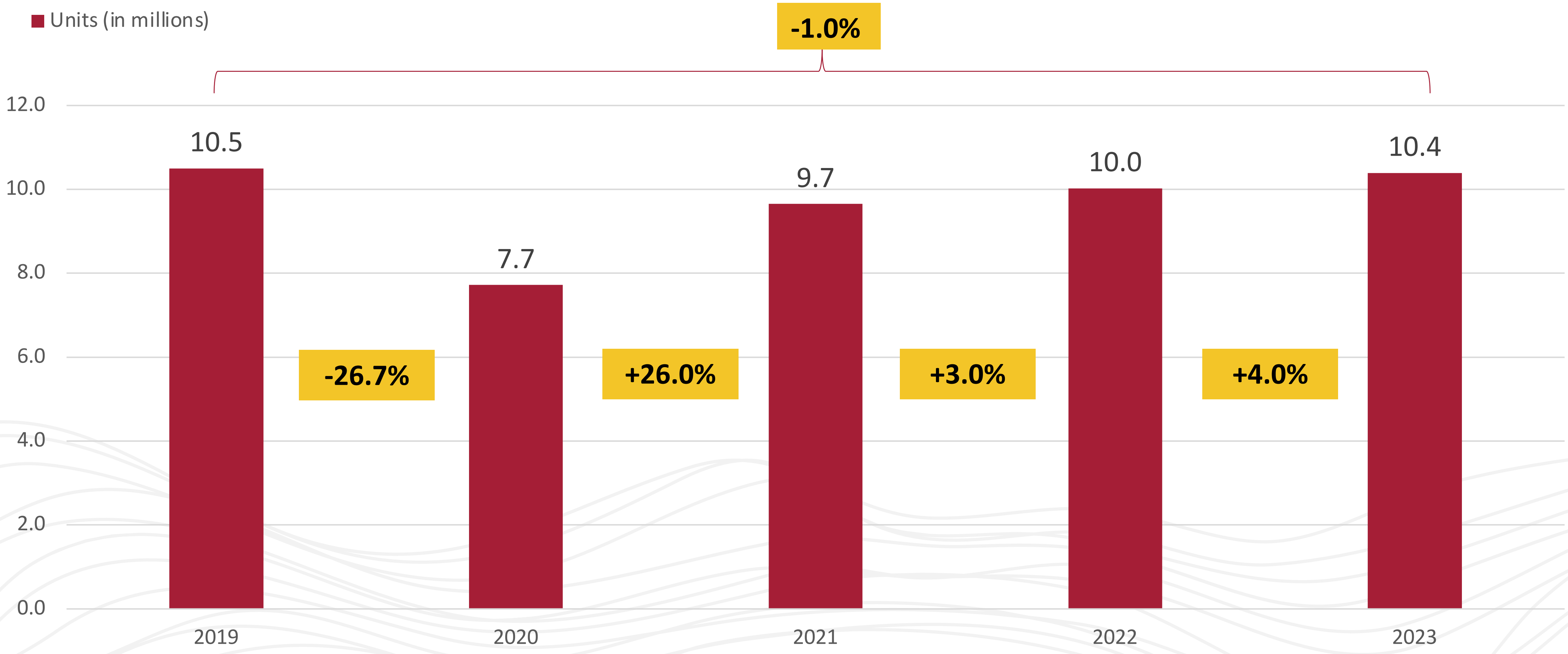
Inflation boosted dollars about pre-pandemic levels



Source: Circana SupplyTrack 2024

Foodservice mushroom unit sales history

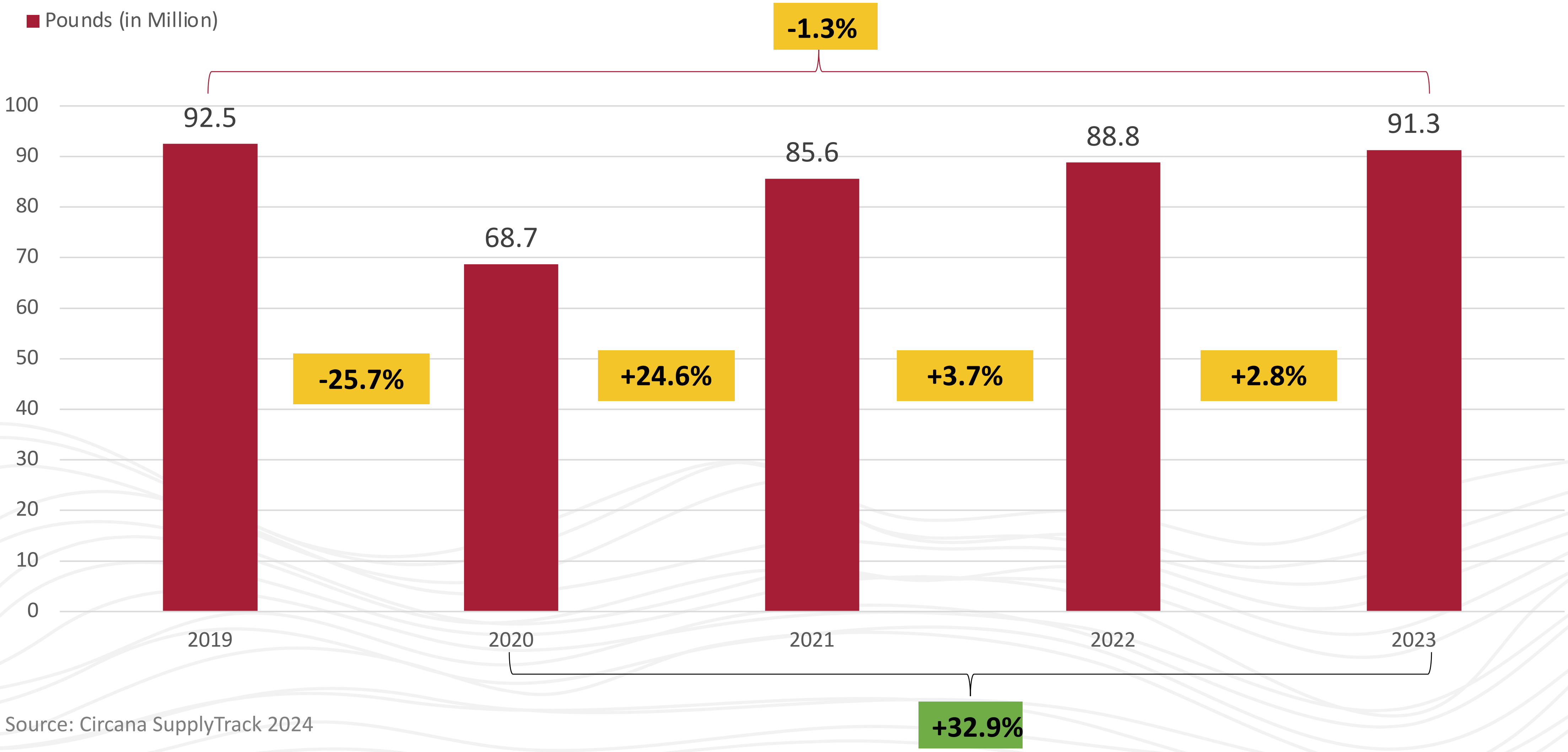
Building back, but still below pre-pandemic levels



Source: Circana SupplyTrack 2024

Foodservice mushroom pound sales history

Up for the last three years, but still below 2019 levels



Source: Circana SupplyTrack 2024

Mushroom sales by channel (pounds)

QSR is holding at an elevated level, while FSR continues to decline

Total mushroom pounds	92.5M	68.7M	85.6M	88.8M	91.3M
Share of total pounds	**2019 share**	**2020 share**	**2021 share**	**2022 share**	**2023 share**
Full Service Restaurants (FSR)	60.0%	57.9%	58.6%	57.1%	56.3%
Quick Service Restaurants (QSR)	22.0%	26.6%	26.5%	26.7%	27.4%
Non-commercial	10.0%	10.4%	9.5%	10.2%	10.3%
Lodging/Casino	5.0%	3.0%	3.1%	3.5%	3.5%
Recreation	2.0%	1.6%	1.8%	2.0%	2.1%
Retail foodservice	1.0%	0.5%	0.5%	0.5%	0.5%

Source: Circana SupplyTrack 2024

Mushroom channel shares (pounds)

Historical patterns cover a wide range

+32.9%

Increase in pound sales
Total U.S.
Total mushrooms
2020-2023

Operator	2020	2021	2022	2023	% Change vs YA	% Change vs 3YA
Full Service Restaurants (FSR)	39.8M	50.2M	50.7M	51.4M	+1.3%	+29.2%
Quick Service Restaurants (QSR)	18.3M	22.7M	23.7M	25.0M	+5.6%	+36.7%
Healthcare	3.4M	3.4M	3.5M	3.8M	+7.7%	+11.9%
Lodging/Casino	2.0M	2.7M	3.1M	3.2M	+2.2%	+57.6%
Recreation	1.1M	1.5M	1.8M	1.9M	+9.4%	+77.3%
Other Non-Commercial	812K	1.1M	1.3M	1.4M	+6.2%	+76.4%
Education	830K	1.1M	1.3M	1.4M	+4.6%	+68.1%
Other Retail	969K	1.2M	1.4M	1.2M	-13.6%	+24.6%
Business and Industry	488K	525K	640K	725K	+13.2%	+48.4%
C-Stores	379K	482K	423K	426K	+0.6%	+12.3%
Government	291K	357K	382K	423K	+10.8%	+45.5%
Food Stores	361K	407M	446K	413K	-7.4%	+14.6%
Not Specified	11K	16K	16K	11K	-30.6%	+3.8%

Source: Circana SupplyTrack 2024

Full-service restaurant deep dive (pounds)

Midscale family style and pizza are losing some share

Total mushroom pounds	39.8M	50.2M	50.7M	51.4M
Share of FSR	**2020 share**	**2021 share**	**2022 share**	**2023 share**
Casual dining	**81.5%**	**81.0%**	**81.1%**	**81.2%**
Bar & grill	27.7%	29.4%	29.6%	30.6%
Pizza	13.8%	11.9%	11.6%	11.5%
Italian	8.8%	8.2%	7.9%	8.1%
Mexican	7.2%	7.3%	7.3%	7.4%
Asian Japanese (hibachi)	5.8%	5.8%	5.8%	5.7%
Steak	5.8%	5.8%	5.4%	5.4%
Asian Chinese	4.0%	4.3%	5.0%	5.0%
Midscale family style	**15.9%**	**16.1%**	**15.8%**	**15.5%**
Midscale buffets	**1.2%**	**1.3%**	**1.5%**	**1.6%**
Fine dining	**1.5%**	**1.6%**	**1.7%**	**1.7%**

Source: Circana SupplyTrack 2024

Quick-service restaurant deep dive (pounds)

In QSR specialty, bigger formats drive growth. In sandwich, hamburger lost while subs gained

Total mushroom pounds	18.3M	22.7M	23.7M	25.0M
Share of QSR	**2020 share**	**2021 share**	**2022 share**	**2023 share**
QSR specialty (pizza, Chinese, etc.)	**59.1%**	**56.8%**	**56.7%**	**63.4%**
Pizza/Italian	39.4%	35.5%	33.7%	39.4%
Asian Chinese	5.1%	7.4%	7.3%	8.0%
Varied menu	3.5%	3.2%	3.5%	4.0%
Chicken	1.3%	1.3%	2.3%	2.4%
Asian Japanese	3.2%	2.7%	2.4%	2.3%
Mexican	1.6%	1.6%	2.2%	1.9%
Salad/soup	1.3%	1.4%	1.5%	1.6%
QSR Sandwich	**38.7%**	**41.0%**	**41.0%**	**39.5%**
Hamburger	26.5%	26.0%	24.9%	23.2%
Sub/deli/bakery	10.7%	13.4%	14.5%	14.8%
QSR Snack (Coffee, bakery, etc.)	**2.2%**	**2.2%**	**2.3%**	**2.8%**

Source: Circana SupplyTrack 2024

Non-commercial deep dive (pounds)

Excluding Lodging/Casino, Recreation and Retail Foodservice

Total mushroom pounds	**7.1M**	**8.1M**	**9.0M**	**9.4M**
Share of non-commercial	**2020 share**	**2021 share**	**2022 share**	**2023 share**
Healthcare	47.1%	41.5%	38.7%	40.1%
Education	11.6%	13.3%	14.8%	14.9%
Other retail	13.6%	14.7%	15.5%	12.9%
Business & industry	6.8%	6.4%	7.1%	7.7%
C-stores	5.3%	5.9%	4.7%	4.5%
Government	4.1%	4.4%	4.2%	4.5%
Other	11.6%	13.9%%	15.1%	15.3%

Source: Circana SupplyTrack 2024

Education deep-dive (pounds)

College dining represents the vast majority of pounds in the education channel

Total mushroom pounds	830K	1.1M	1.3M	1.4M
Share of non-commercial	**2020 share**	**2021 share**	**2022 share**	**2023 share**
College/university	78.6%	79.9%	78.0%	78.1%
Primary/secondary schools	16.7%	15.7%	17.8%	17.3%
Vocational/trade schools	3.5%	3.4%	3.2%	3.4%
Preschool and daycare	1.2%	1.1%	1.0%	1.2%

Source: Circana SupplyTrack 2024

SALES BY TYPE

SEGMENTS

ORGANIC

Key findings

- White mushrooms make up 64% of sales in pounds
  - Higher than in retail (56-58%) as the switch to brown has progressed faster
  - This is an interesting finding -> did operators move back to white for a better cost/pound?
  - Recovery to pre-pandemic levels in line with the total
- Specialty mushrooms outgrew the total. However, exotics represents a very small part of the total pound sales, in line with retail shares
  - Shiitake is the largest of the exotics, at 1.1%
  - Mixed is 0.9% and Oyster is 0.4%. All others combined are 0.1%
  - Note that specialty mushrooms will be more likely to run through specialty wholesalers
- Whole is 53% of total pound sales
- Organic is 0.1% of total pound sales, but will be higher among specialty wholesalers

Source: Circana SupplyTrack 2024

Mushroom types (pounds)

Growth among smaller varieties outpaces the total, but white drive majority share

+32.9%

Increase in pound sales Total U.S. mushrooms 2020-2023

Mushroom Type	2020	2021	2022	2023	% Change vs YA	% Change vs 3YA
White/Button/Silver Dollar	45.2M	54.6M	56.6M	58.6M	+3.5%	+29.8%
Mushrooms (Unspecified)	12.4M	15.7M	15.3M	15.9M	+3.8%	+28.1%
Brown (ports and crimini)	9.5M	13.2M	14.7M	14.5M	-1.2%	+52.1%
Shiitake	753K	955K	953K	1.0M	+7.7%	+36.3%
Mixed/Blend	555K	733K	785K	780K	-0.6%	+40.5%
Oyster	232K	315K	352K	389K	+10.4%	+67.4%
Black Trumpet	14K	22K	30K	41K	+36.9%	+202.0%
Maitake/Hen of the Woods	14K	24K	30K	34K	+13.2%	+147.6%
Beech Brown	8K	13K	20K	20K	-3.7%	+139.2%
Other exotics	23K	25K	17K	19K	+7.1%	-21.1%

Source: Circana SupplyTrack 2024

Mushroom types share of total (pounds)

Share of whites remains around 64%, higher than in retail. Browns remain at around 16% and despite triple-digit growth, exotics <3%

Total mushroom pounds	**68.7M**	**85.6M**	**88.8M**	**91.3M**
	2020 share	**2021 share**	**2022 share**	**2023 share**
White/Button/Silver Dollar	65.7%	63.7%	63.8%	64.2%
Mushrooms (Unspecified)	18.0%	18.4%	17.2%	17.4%
Brown (ports and crimini)	13.9%	15.4%	16.6%	15.9%
Shiitake	1.1%	1.1%	1.1%	1.1%
Mixed/Blend	0.8%	0.9%	0.9%	0.9%
Oyster	0.3%	0.4%	0.4%	0.4%
Other exotics	0.1%	0.1%	0.1%	0.1%

Source: Circana SupplyTrack 2024

Mushroom formats (pounds)

Whole makes up 51% of volume

Format	2020	2021	2022	2023	% Change vs YA	% Change vs 3YA
Whole	36.2M	44.1M	45.3M	46.9M	+3.6%	+29.6%
Sliced/Cut/Wedge	30.2M	37.3M	38.4M	39.6M	+3.1%	+31.1%
Caps	1.3M	2.4M	3.3M	3.1M	-5.0%	+142.9%
Stems/Pieces	870K	1.6M	1.7M	1.5M	-10.6%	+73.7%
Not Specified	81K	82K	54K	131K	+142.8%	+61.1%
All other	112K	128K	118K	117K	-0.9%	+4.5%

Source: Circana SupplyTrack 2024

Mushroom format share of total (pounds)

Growing share of caps in the longer term, though a small segment that may already have peaked

Total mushroom pounds	**68.7M**	**85.6M**	**88.8M**	**91.3M**
	2020 share	**2021 share**	**2022 share**	**2023 share**
Whole	52.6%	51.5%	51.0%	51.3%
Sliced/Cut/Wedge	43.9%	43.6%	43.2%	43.3%
Caps	1.9%	2.8%	3.7%	3.4%
Stems/Pieces	1.3%	1.8%	1.9%	1.7%
Not Specified	0.1%	0.1%	0.1%	0.1%

Source: Circana SupplyTrack 2024

Top selling by type and format (pounds)

White sliced/cut/wedged has grown the most YOY and vs. 3YA

	2020	2021	2022	2023	Share of pounds	% Change vs YA	% Change vs 3YA	Abs Change vs YA	Abs Change vs 3YA
Total mushroom pounds	**68.7M**	**85.6M**	**88.8M**	**91.3M**	**100%**	**+2.8%**	**+32.9%**	**+2,523,565**	**+22,637,965**
White whole	24.4M	28.7M	29.6M	30.3M	33%	+2.5%	+24.3%	+734,701	+5,938,962
White sliced/cut/wedged	20.7M	25.8M	27.0M	28.2M	31%	+4.7%	+36.7%	+1,261,157	+7,576,544
Portabella/baby bella sliced/cut/wedge	3.5M	4.3M	4.3M	4.1M	5%	-4.4%	+19.1%	-188,868	+659,636
Crimini whole	2.4M	3.0M	3.3M	3.5M	4%	+6.2%	+46.3%	+207,029	+1,114,031
Portabella caps	1.2M	2.3M	3.2M	3.0M	3%	-5.4%	+151.1%	-172,075	+1,822,855
Portabella/baby bella whole	1.9M	2.2M	2.2M	2.0M	2%	-8.8%	+3.9%	-196,425	+75,284
Crimini sliced/cut/wedge	420K	580K	771K	962K	1%	+24.9%	+129.3%	+191,573	+542,600
Shiitake whole	587K	745K	760K	831K	1%	+9.4%	+41.5%	+71,394	+243,565

Source: Circana SupplyTrack 2024

White mushroom sales summary (pounds)

- Largest seller, at 58.6 million pounds through the broadline distributors
  - Growth year-on-year and versus three years ago
- Whole represents 52% of pound sales
  - Sliced/cut/wedge 48%
  - Both whole and sliced gained in pound sales year-on-year
- The South Atlantic is the largest region, at 22% of pound sales
- Full-service restaurants represent 60.4% of white mushroom pound sales
  - Driven by casual dining at 48.8% of total white mushroom pounds
- Quick service restaurants represent 23.7% of white mushroom pound sales
  - Specialty QSR and Pizza/Italian are the biggest QSR subchannels
- 77% of white mushroom pound sales are 160 ounce packages
  - Followed by 80 ounce at 21.0%

Source: Circana SupplyTrack 2024

Portabella/bella sales summary (pounds)

- Sales of a little over 10 million pounds through the broadline distributors
  - Above-average growth vs. 3 years ago, but down in pounds year-on-year
  - Regional distribution is similar to total mushrooms
- 80 ounce containers is, by far, the most prevalent way of selling portabellas/bellas, representing 90% of sales
- 41% of pound sales are sliced/cut
  - 30% are caps, ahead of whole that represents 20% of sales
  - All formats lost ground year-on-year in terms of pounds
- QSR is the biggest channel, representing 55% of pound sales, driven by sandwich and hamburger restaurants
  - FSR represents 30% of pound sales

Source: Circana SupplyTrack 2024

Crimini mushroom sales summary (pounds)

- 4.5 million pounds sold through the broadline distributors
  - Any Baby Bella label/invoice references were coded under portabellas
  - Big increase in pounds year-on-year (+9.7%) and over the past three years (+58.2%)
  - Sales gained in all regions, with the Mountain and South Atlantic regions being the biggest selling areas
- 71% is sold in 80 ounce and 28% in 160 ounce containers
- 79% are sold in whole, 22% in sliced
  - Both areas are growing with above-average % growth for sliced
- FSR is the biggest selling area, at 50.3% of sales, driven by casual dining
- QSR represents 21% of sales

Source: Circana SupplyTrack 2024

Shiitake mushroom sales summary (pounds)

- 1.0 million pounds sold through the broadline distributors
  - Growth area in pounds both year-on-year (+7.7%) and over the past three years (+36.3%)
  - Sales gained in all regions, with much higher penetration in the South Atlantic and East North Central than in other regions
    - These are also the biggest selling regions, mirroring the patterns seen at retail where specialty sales is driven by the mushrooms loyalists
- 67% is sold in 48 ounce and 30% in 80-ounce containers
  - Smaller package sizes than white or browns
- 81% are sold in whole
- FSR is the biggest selling area, at 60.2% of sales, driven by casual dining
- QSR represents 10% of sales, far less than white and brown shares

Source: Circana SupplyTrack 2024

Summary channel by type, format and region

- The South Atlantic area is important across channels
- White mushrooms are the biggest seller across all channels, but practices differ for format with FSR being more likely to purchase whole

		FSR	QSR	Lodging/Casino
Mushroom Type	Top Volume	White	White	White
	Top Growing*	White	White	White
	(vs. YA)	+414K pounds YOY	+1.2M pounds YOY	+139K pounds YOY
Format	Top Volume	Whole	Sliced/cut/wedge	Whole
	Top Growing	Whole	Whole	Sliced/cut/wedge
	(vs. YA)	+562K pounds YOY	+865K pounds YOY	+85K pounds YOY
Region	Top Volume	South Atlantic	South Atlantic	Mountain
	Top Growing	South Atlantic and	South Atlantic and	Pacific and
	(vs. YA)	East North Central	Pacific	South Atlantic

*Excluding Unspecified and based on absolute pounds, not % growth

Source: Circana SupplyTrack 2024

Organic versus conventional (pounds)

A small slice of the pie

Total mushroom pounds	7.1M	8.1M	9.0M	9.4M
	2020 share	**2021 share**	**2022 share**	**2023 share**
Conventional	99.9%	99.9%	99.9%	99.9%
Organic	0.1%	0.1%	0.1%	0.1%

Organic pound sales:
+4.9% vs. YA
+65.4% vs. YA

Conventional pound sales:
+2.8% vs. YA
+32.9% vs. YA

Source: Circana SupplyTrack 2024

Package size (in ounces)

Consolidation into three main package sizes: 160, 80 and 48 ounces

Size Per Container (Ounces)	2020	2021	2022	2023	% Change vs YA	% Change vs 3YA	Abs Change vs YA	Abs Change vs 3YA
160	43.7M	52.7M	59.9M	58.3M	6.1%	33.4%	3,340,146	14,592,946
80	20.3M	26.7M	27.9M	28.1M	0.7%	38.1%	188,472	7,753,006
48	1.3M	1.5M	1.6M	1.7M	10.2%	31.3%	159,280	408,996
320	851K	927K	915K	742K	-18.9%	-9.0%	-173,251	-73,463
3.5	3K	627K	655K	564K	-13.9%	16584.6%	-91,132	560,890
110	233K	290K	289K	282K	-2.3%	21.1%	-6,586	49,293
4	296K	395K	327K	276K	-15.5%	-6.6%	-50,813	-19,555
400	840K	1.1M	937K	256K	-72.6%	-69.5%	-680,680	-583,361
240	245K	321K	284K	225K	-20.8%	-8.3%	-59,013	-20,320
24	165K	197K	213K	222K	4.3%	34.5%	9,070	57,064
128	79K	112K	122K	104K	-14.9%	32.1%	-18,252	25,332

Source: Circana SupplyTrack 2024 | only the top sellers over 100K shown

REGIONAL INSIGHTS

TOTAL MUSHROOMS

BY SEGMENT

Key findings

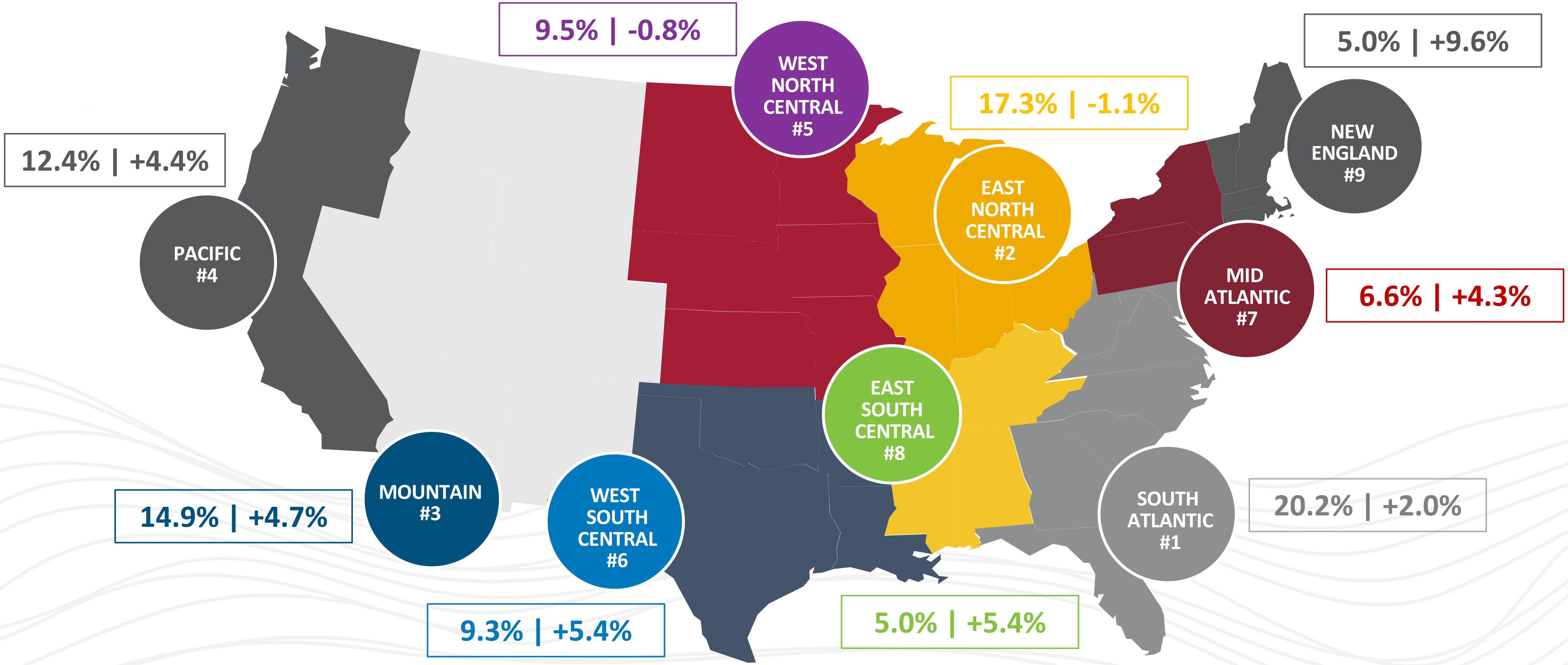
- Regional shares and growth are likely affected by broadline market distribution
- Variation in YOY performances is wide, from -0.9% to +9.6%
- While not the highest % growth, the size of the South Atlantic market delivered the highest absolute growth of +4.8 million pounds
- White mushrooms are the top seller in all regions

Source: Circana SupplyTrack 2024

Mushrooms by region (pounds)

Mountain, Pacific and West South Central add the most new pounds vs. YA

Pound Share and Share Chg vs YA



Source: Circana SupplyTrack 2024

While the % change is smaller, absolute pound growth is highest in the South Atlantic

Census Division	2020	2021	2022	2023	% Change vs YA	% Change vs 3YA	Abs Change vs YA	Abs Change vs 3YA
South Atlantic	13.7M	17.1M	18.1M	18.5M	+2.0%	+34.8%	+365,072	+4,763,001
East North Central	12.2M	15.0M	15.9M	15.8M	-1.1%	+28.7%	-173,078	+3,517,956
Mountain	10.3M	13.0M	13.0M	13.6M	+4.7%	+31.4%	+605,893	+3,246,692
Pacific	7.9M	10.5M	10.8M	11.3M	+4.4%	+42.1%	+476,692	+3,344,579
West North Central	6.7M	8.4M	8.7M	8.7M	-0.8%	+28.7%	-66,716	+1,928,991
West South Central	6.5M	7.9M	8.0M	8.5M	+5.4%	+29.4%	+435,138	+1,921,564
Middle Atlantic	4.6M	5.6M	5.8M	6.0M	+4.3%	+30.4%	+251,226	+1,410,119
East South Central	3.4M	4.2M	4.3M	4.6M	+5.4%	+34.3%	+233,646	+1,166,933
New England	3.2M	3.9M	4.1M	4.5M	+9.6%	+41.8%	+395,627	+1,338,219

Source: Circana SupplyTrack 2024

Create the best benchmarks for your unique market

- Sort by:
  - Region
  - Pounds, dollars or units
  - Operator segment
  - Operator sub-segment
  - Operator category
  - Operator system (commercial/non-commercial)
  - Origin
  - Format (whole, cut, sliced, etc.)
  - Type
  - Packaging size and units/box
  - Grade
  - Label

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