



Tobacco Market Trends

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Notice

This presentation is based solely on an analysis conducted by Management Science Associates Inc. (MSAi) and does not necessarily reflect the opinion of any client. The definitions and analysis used in the presentation are based on general industry knowledge and typically represent the way a tobacco retailer may refer to the broad tobacco and nicotine delivery industry. Further, this presentation refers to tobacco and non-tobacco categories, that are often reported as cigarette only, cigars and pipe tobacco only, loose leaf only and electronic and other delivery systems only.

For purposes of this presentation, all of these categories are often referred to as one category using the phrase “nicotine delivery systems”, as that is a category grouping, that in MSAi’s experience, is used by most retail establishments. This presentation’s reference to “nicotine delivery systems” is in that context of the broadest retailer categorization of these various items.



Agenda

- ◆ Total US Nicotine Trends
- ◆ Growth & Decline of Nicotine Categories
- ◆ Trade Channel Analysis
- ◆ Google Trends
- ◆ Marijuana & CBD Oil Impact on Nicotine
- ◆ Menthol Cigarette Analysis
- ◆ Tobacco Flavor Restriction – Duluth, Minnesota
- ◆ Flavored Cigar Trend Analysis
- ◆ Flavored Vapor Trend Analysis
- ◆ Impact of SET Increases (DC & OK)

Terminology

Disposables

Closed non-refillable single use atomizer.



e-Liquid

Bottles which are used to refill mods, vaporizers, or other vaping system.



Cartridges

Closed non-refillable cartridges that are used with an atomizer.



Kits

Selling unit that contains multiple items such as charging unit or accessory as well as a cartridge or e-liquid bottle.



TOTAL US NICOTINE TRENDS

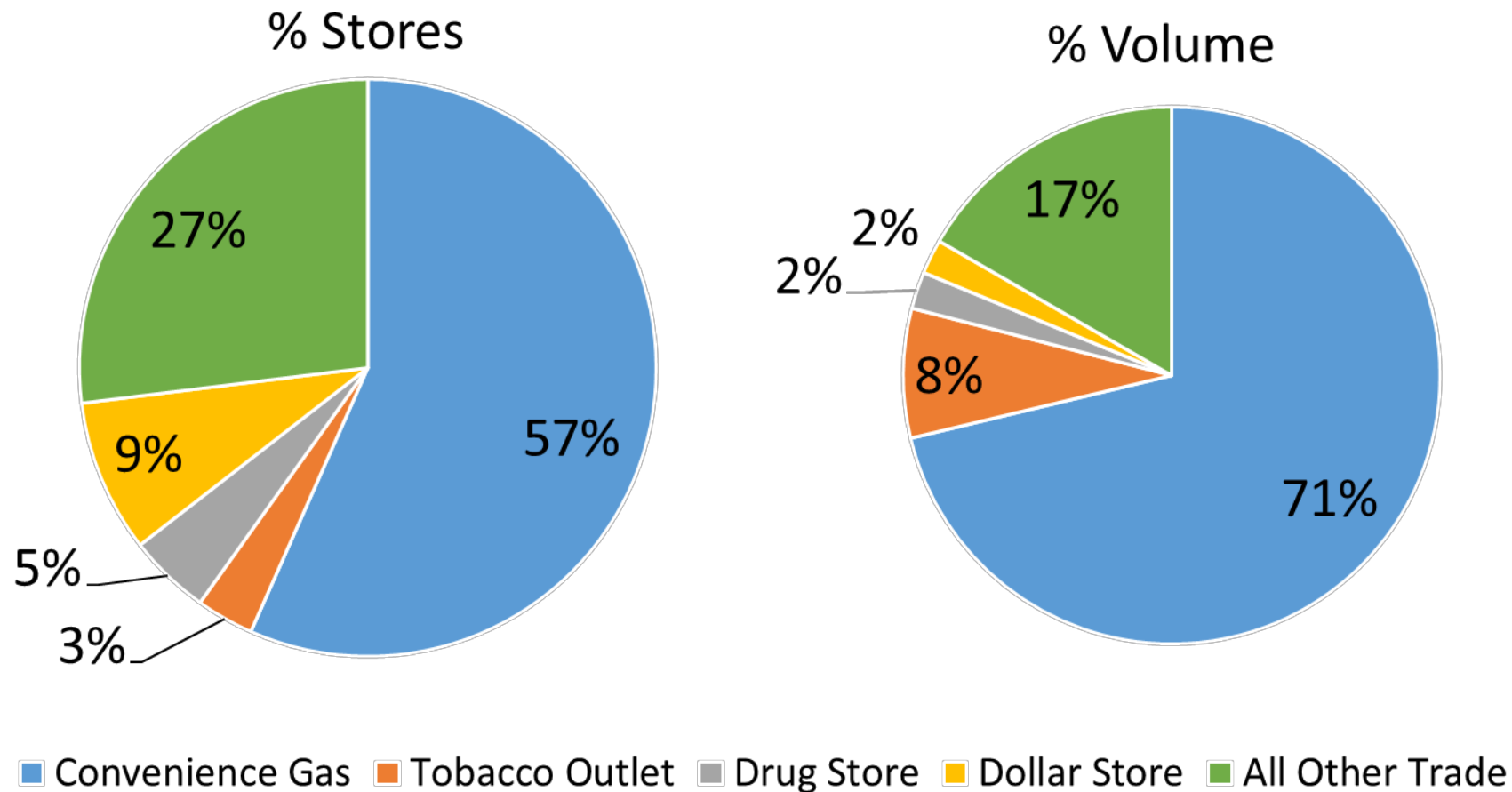
Total US Nicotine Trends



The following slides highlighting the Total US Nicotine Trends will use just under 300,000 stores summarizing shipment-to-retail volume for these stores.

Nicotine Distribution by Trade Class for US

52 Weeks Ending Q4-2018



Total US Nicotine Trends

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017

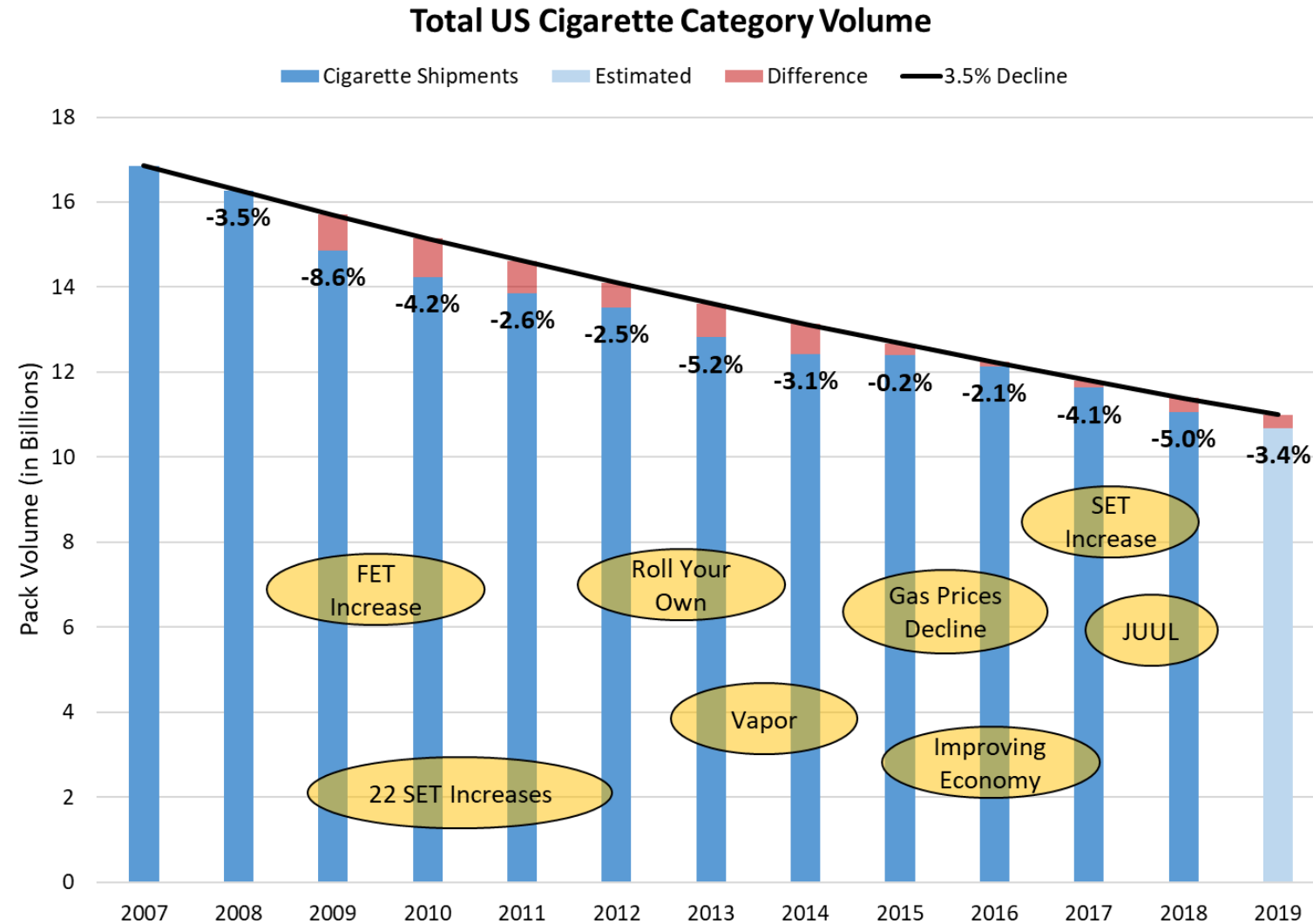
	All Outlets	Convenience Gas	Tobacco Outlets	Drug Stores	Dollar Stores	All Other Outlets
Volume	-1.9%	-1.4%	-2.0%	-13.3%	10.7%	-3.5%
Distribution	0.9%	1.0%	1.6%	-5.4%	21.4%	-4.0%
Item Count	-5.2%	-4.8%	-3.7%	-3.0%	-4.1%	-3.0%

Total US Nicotine Share

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017
Overall Total Nicotine Volume down 1.9%

	Q4-2017	Q4-2018	Change
Cigarettes	69.5%	67.3%	-5.0%
Large Cigars	17.8%	19.4%	7.2%
Little/Filtered Cigars	1.1%	1.1%	-2.8%
Moist	8.9%	9.0%	-0.6%
Papers/Tubes/Wraps	1.5%	1.5%	0.0%
Pipe Tobacco	0.3%	0.3%	-5.2%
Roll Your Own	0.2%	0.1%	-23.1%
Snus	0.3%	0.3%	3.3%
Vapor	0.6%	1.0%	76.6%

Overall Total US Cigarette Trends



Source: Shipment to Retail Data through Dec 2018

Overall Total US Cigarettes Trends

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017

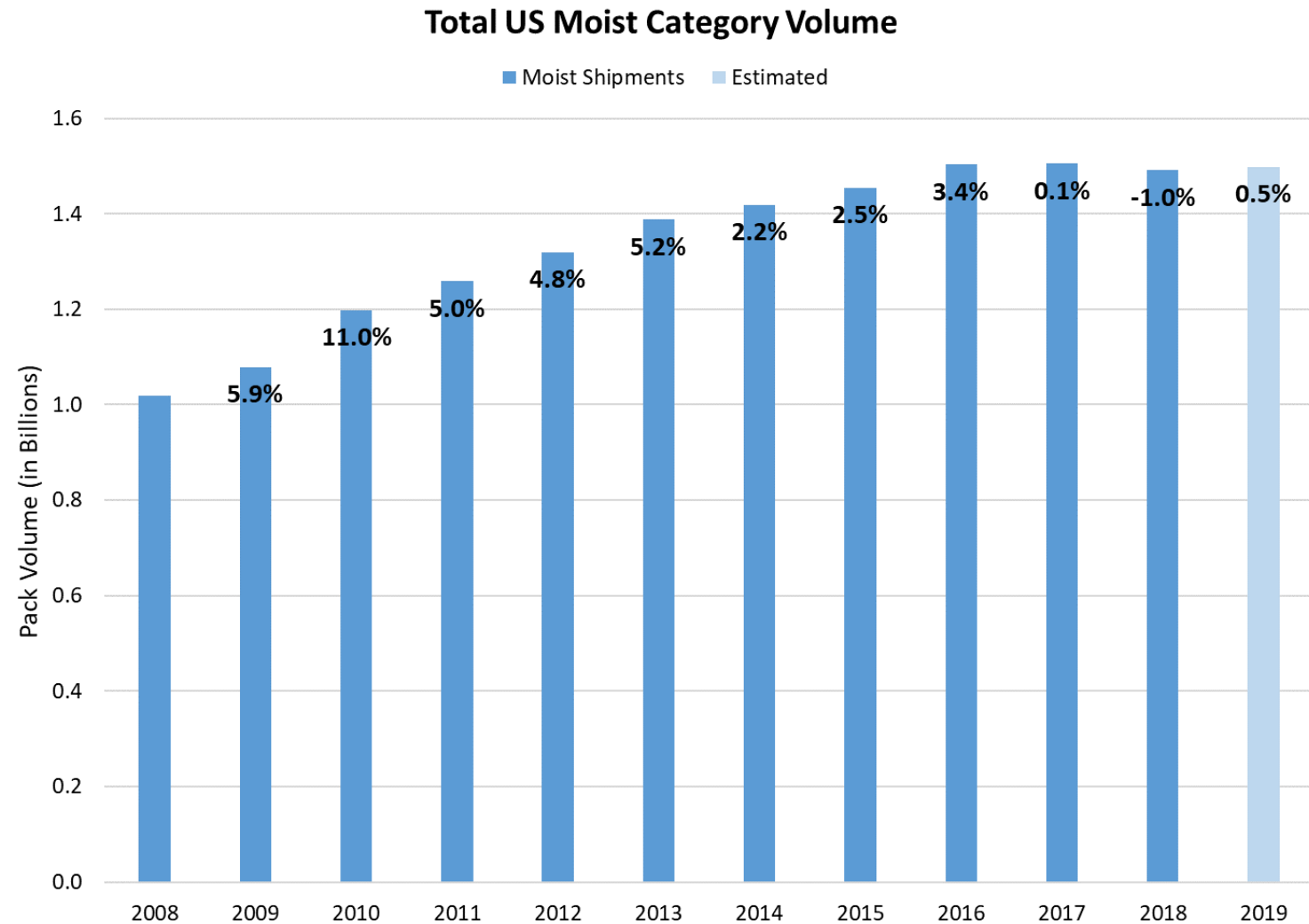
	All Outlets	Convenience Gas	Tobacco Outlets	Drug Stores	Dollar Stores	All Other Outlets
Volume						
Cigarettes	-5.0%	-4.6%	-3.9%	-14.5%	4.3%	-6.4%
Menthol	-4.3%	-4.1%	-2.4%	-13.8%	4.6%	-5.7%
Non-Menthol	-5.3%	-4.9%	-4.7%	-14.9%	4.1%	-6.8%
Distribution						
Cigarettes	-1.3%	-1.1%	0.1%	-4.3%	6.6%	-3.6%
Menthol	-1.1%	-1.1%	0.1%	-4.4%	6.3%	-2.9%
Non-Menthol	-1.3%	-1.1%	0.1%	-4.4%	6.6%	-3.6%
Items						
Cigarettes	-3.5%	-3.4%	-2.2%	-1.6%	-1.4%	-2.6%
Menthol	-2.4%	-2.1%	-1.4%	0.0%	1.5%	-1.4%
Non-Menthol	-4.1%	-4.1%	-2.5%	-2.5%	-3.8%	-3.4%

Overall Total US Cigar Trends

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017

	All Outlets	Convenience Gas	Tobacco Outlets	Drug Stores	Dollar Stores	All Other Outlets
Volume						
Large Cigars	7.2%	9.2%	9.9%	-3.2%	35.5%	1.8%
Little/Filtered Cigars	-2.8%	-3.7%	-4.2%	0.9%	33.2%	-4.8%
Distribution						
Large Cigars	2.7%	2.8%	4.7%	0.1%	18.9%	-3.6%
Little/Filtered Cigars	0.3%	-1.6%	0.9%	5.0%	23.2%	-6.8%
Items						
Large Cigars	0.4%	-0.4%	0.4%	-3.5%	-16.8%	-0.9%
Little/Filtered Cigars	-4.3%	-4.1%	-5.0%	-7.8%	13.2%	-4.7%

Overall Total US Moist Trends



Source: Shipment to Retail Data through Dec 2018

Overall Total US OTP Trends

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017

	All Outlets	Convenience Gas	Tobacco Outlets	Drug Stores	Dollar Stores	All Other Outlets
Volume						
Moist	-0.6%	-0.1%	-2.6%	-12.5%	44.9%	-3.0%
Snus	3.3%	2.8%	5.3%	-29.9%	-14.0%	13.0%
Roll Your Own	-23.1%	-14.5%	-9.5%	-0.1%	261.6%	-33.7%
Pipe Tobacco	-5.2%	-5.0%	-3.7%	-18.9%	46.8%	-9.7%
Papers/Tubes/Wraps	0.0%	1.3%	0.6%	-9.7%	111.1%	-5.4%
Distribution						
Moist	0.1%	-0.6%	-0.1%	-3.1%	33.4%	-2.8%
Snus	2.4%	1.9%	1.4%	-22.2%	-30.3%	14.5%
Roll Your Own	-8.7%	-10.4%	-3.8%	-3.2%	173.0%	-17.1%
Pipe Tobacco	3.3%	0.8%	1.7%	-20.7%	64.4%	-6.7%
Papers/Tubes/Wraps	3.8%	1.8%	2.6%	-4.8%	72.9%	-4.9%
Items						
Moist	-2.1%	-1.9%	-1.6%	-1.3%	2.8%	-2.5%
Snus	-7.5%	-5.0%	-10.0%	-4.3%	-27.5%	-8.7%
Roll Your Own	-4.8%	-9.0%	-7.2%	-18.1%	-34.3%	-9.1%
Pipe Tobacco	-2.6%	-2.5%	-2.7%	-3.7%	11.5%	-5.0%
Papers/Tubes/Wraps	9.1%	9.0%	10.6%	-1.8%	7.0%	8.2%

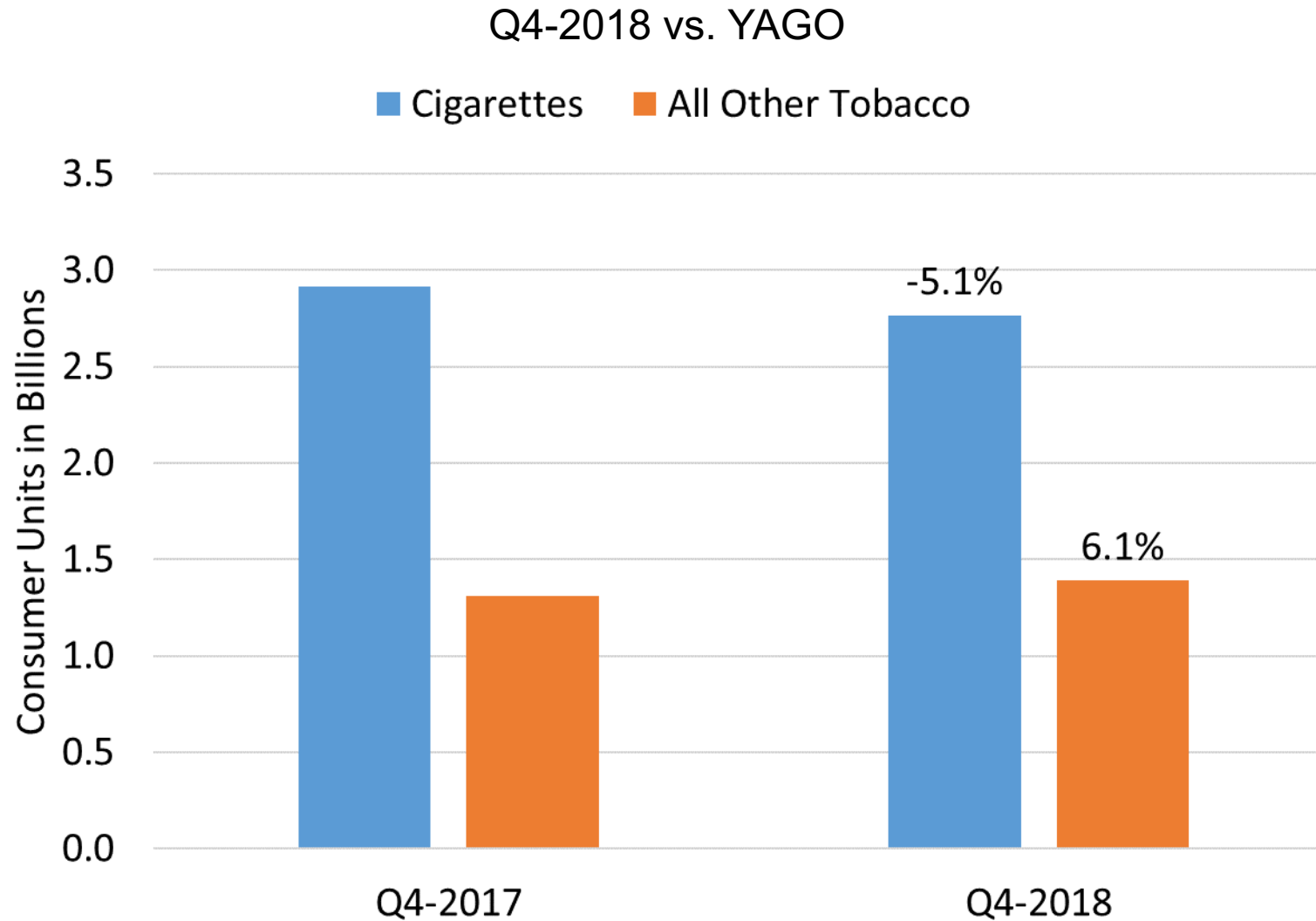
Overall Total US Vapor Trends

% Change 52 Weeks Ending Q4-2018 vs. 52 Weeks Ending Q4-2017

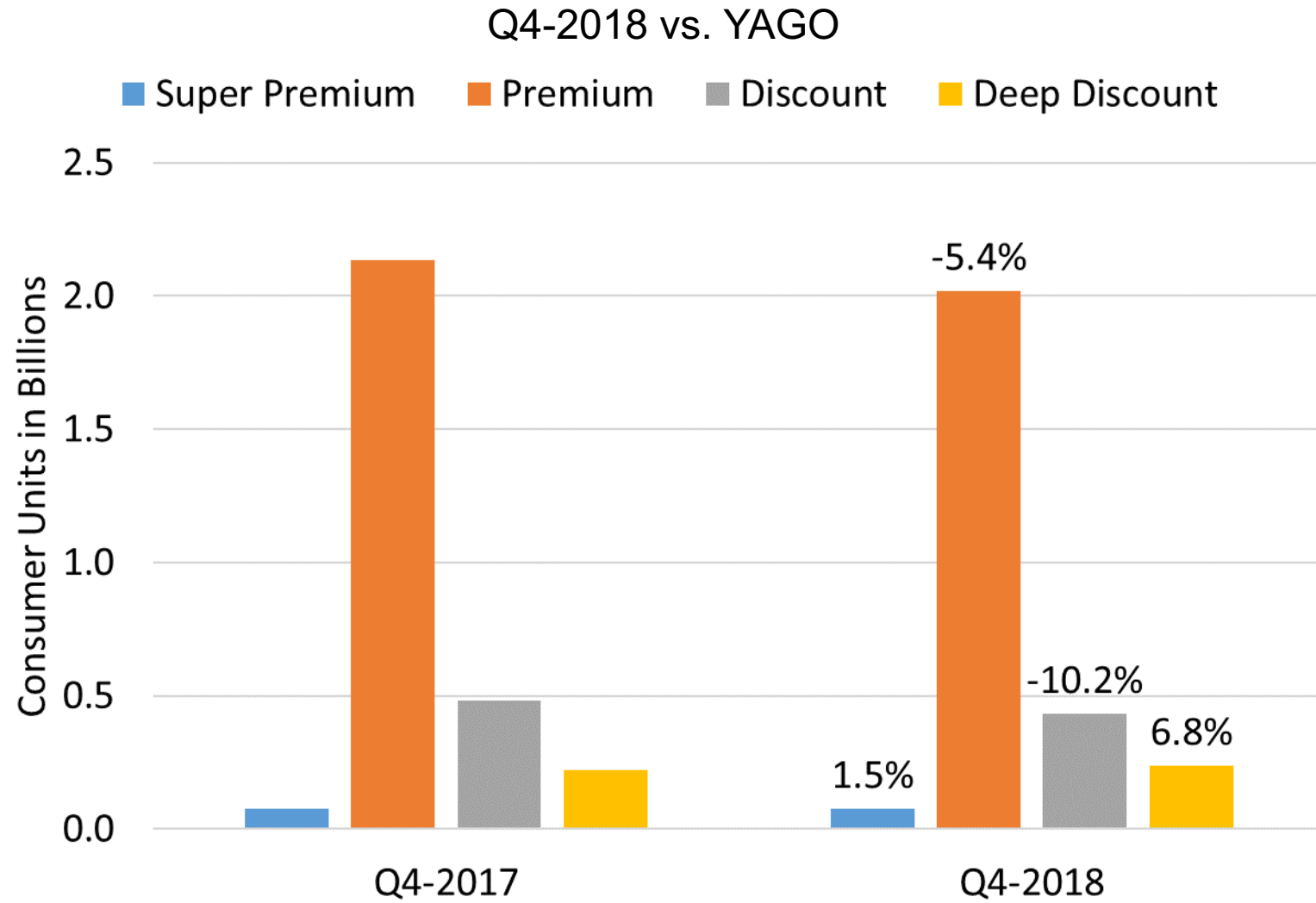
	All Outlets	Convenience Gas	Tobacco Outlets	Drug Stores	Dollar Stores	All Other Outlets
Volume						
Cartridges	95.2%	104.1%	87.2%	21.4%	-86.7%	84.0%
Disposables	1.5%	-7.4%	-11.1%	28.1%	1785.4%	-24.2%
Kits	80.3%	79.6%	172.8%	-0.4%	-82.2%	103.0%
e-Liquid	-41.9%	-45.1%	-10.9%	-75.8%	-	-65.2%
Distribution						
Cartridges	11.3%	13.6%	15.3%	6.7%	-81.7%	-0.3%
Disposables	11.3%	13.8%	-2.9%	13.7%	-34.1%	-5.5%
Kits	33.6%	37.4%	41.8%	9.2%	-76.0%	12.5%
e-Liquid	-51.5%	-56.3%	-14.0%	-63.0%	-23.5%	-54.1%
Items						
Cartridges	13.2%	23.8%	15.8%	17.5%	-44.6%	11.4%
Disposables	-29.8%	-28.3%	-27.9%	5.2%	-21.8%	-27.2%
Kits	-3.3%	-3.2%	-6.8%	-1.5%	-27.8%	-5.3%
e-Liquid	-17.4%	-28.2%	-13.3%	-25.5%	-45.2%	-19.4%

GROWTH AND DECLINE OF NICOTINE CATEGORIES

Cigarettes vs. All Other Tobacco



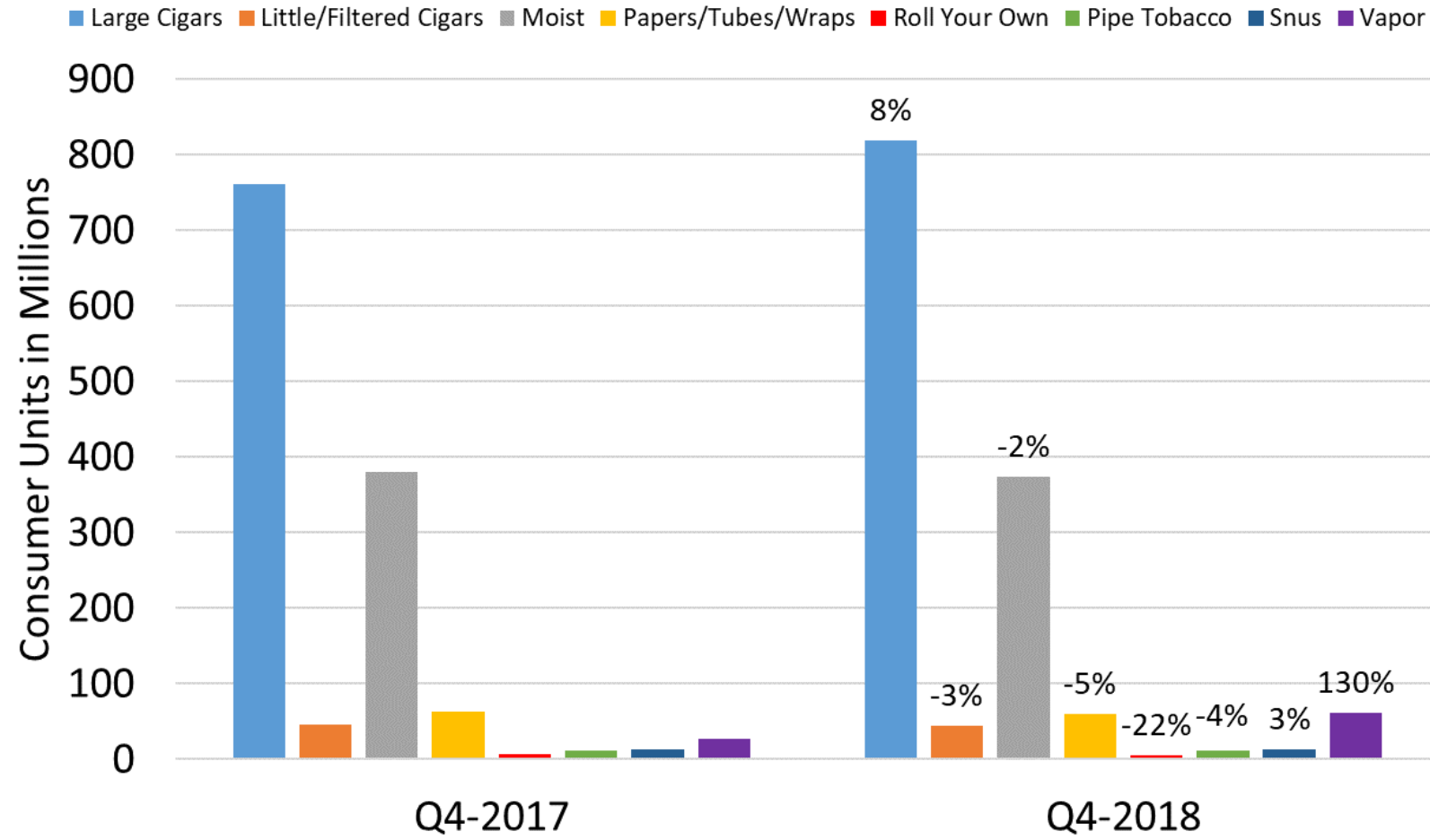
Price Tiers within Cigarettes



Overall Cigarettes down 5.1%

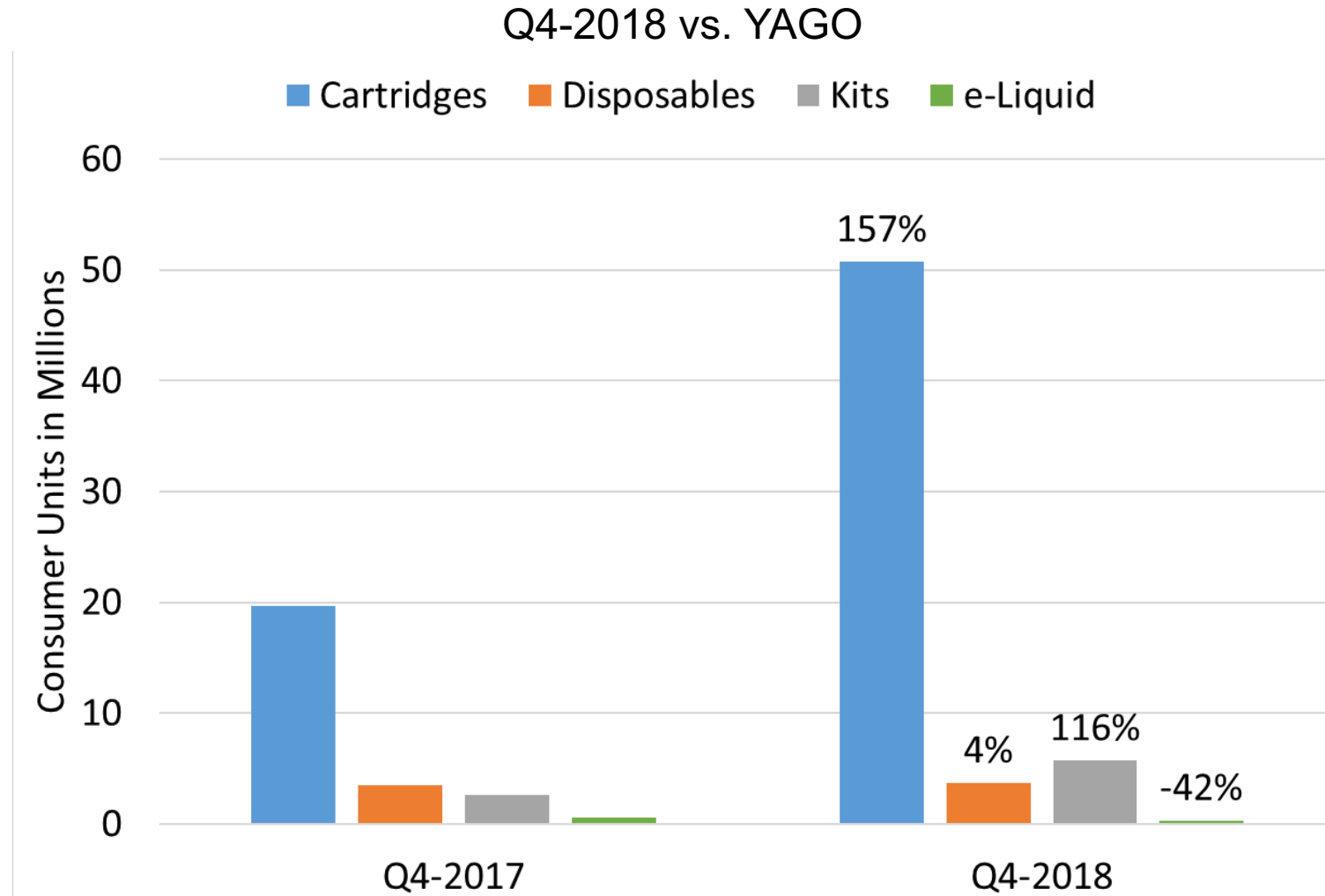
Breakdown of All Other Tobacco

Q4-2018 vs. YAGO



All Other Tobacco up 6.1%

Overview of Vapor Category

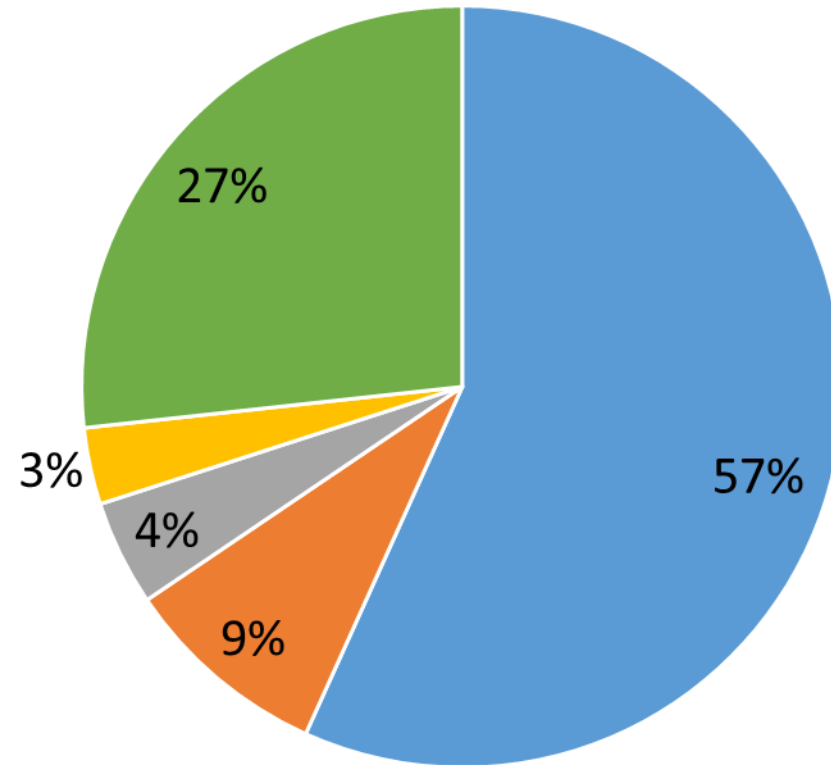


Vapor up 130%

TRADE CHANNEL ANALYSIS

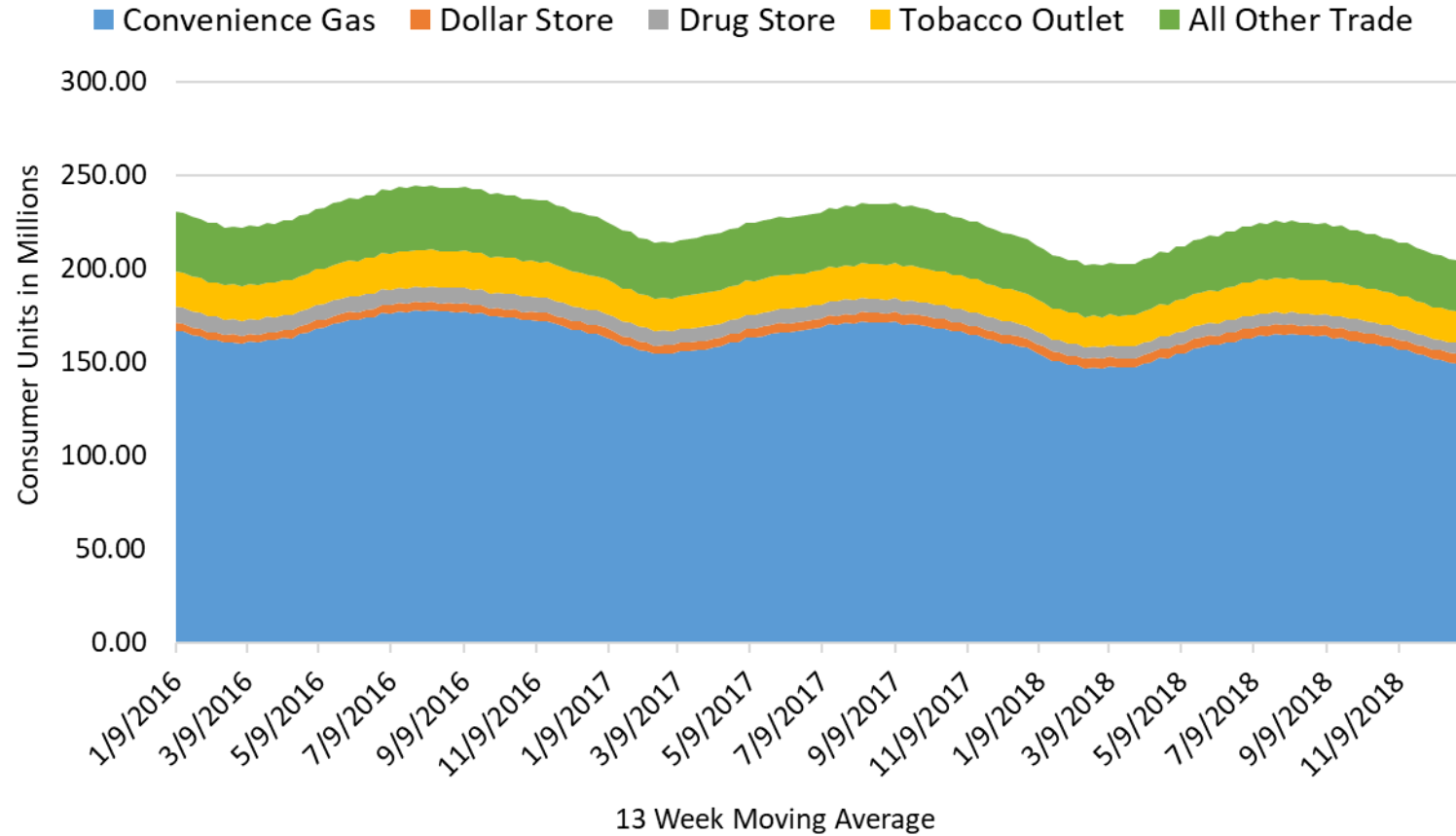
Cigarette Distribution

■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-1,864	1,471	-801	3	-3,187
% Change	-1%	7%	-7%	0%	-4%

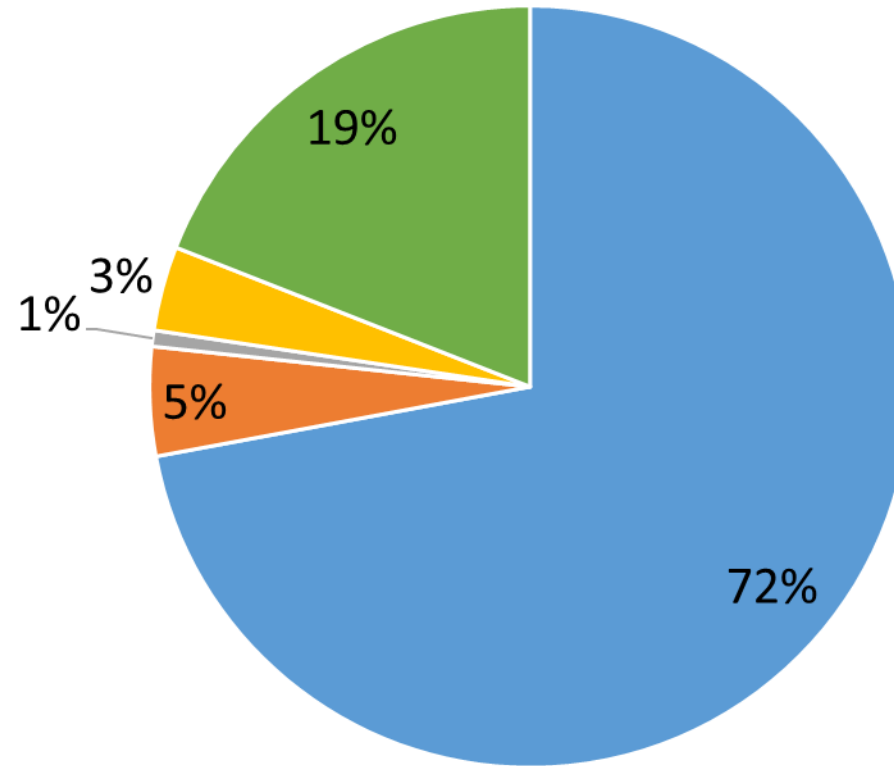
Cigarette Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-106,468,890	3,297,212	-14,093,735	-7,069,408	-23,824,903
% Change	-5%	5%	-15%	-3%	-6%

Moist Distribution

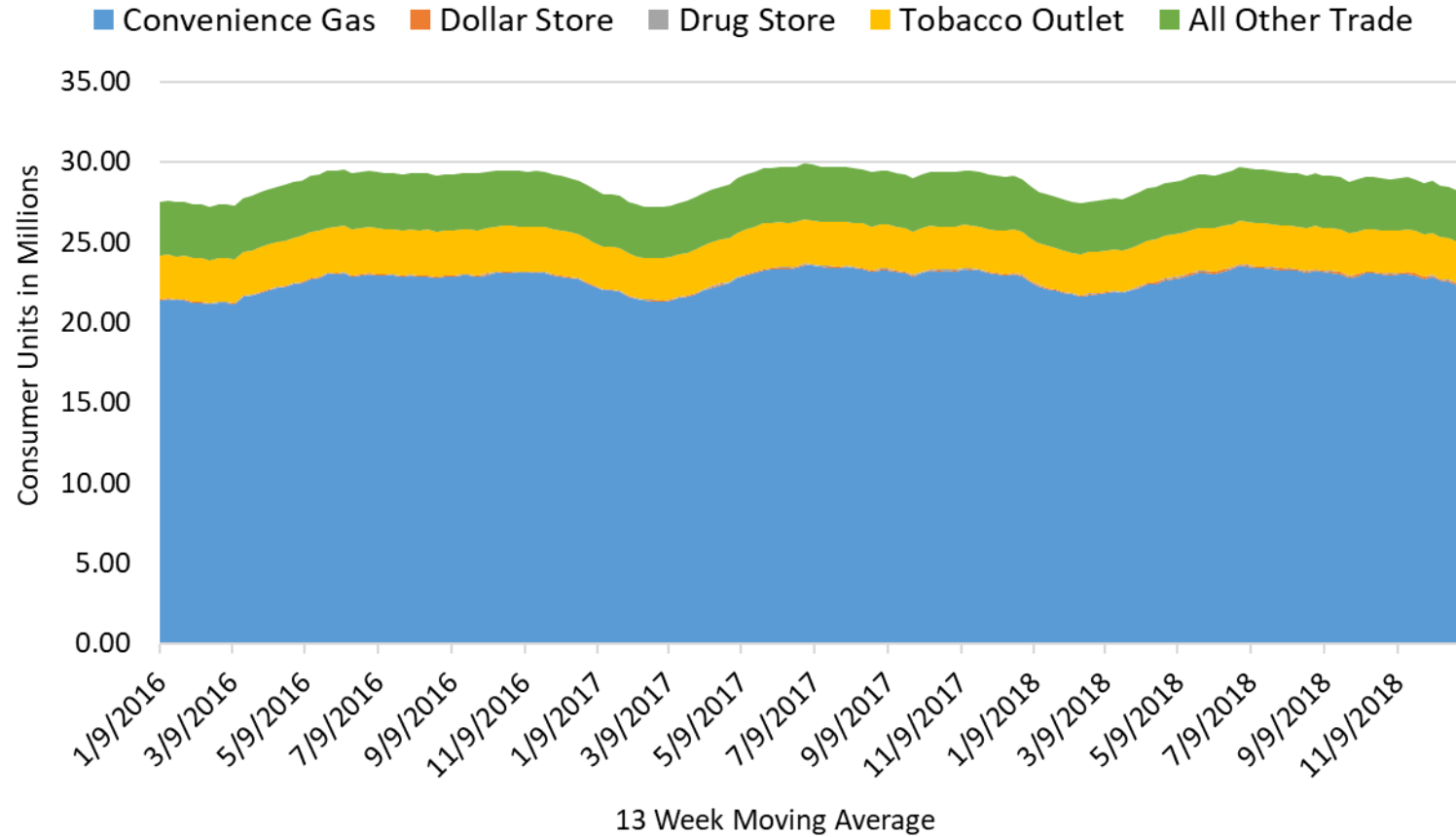
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-1,033	2,394	78	-8	-1,056
% Change	-1%	45%	7%	0%	-3%

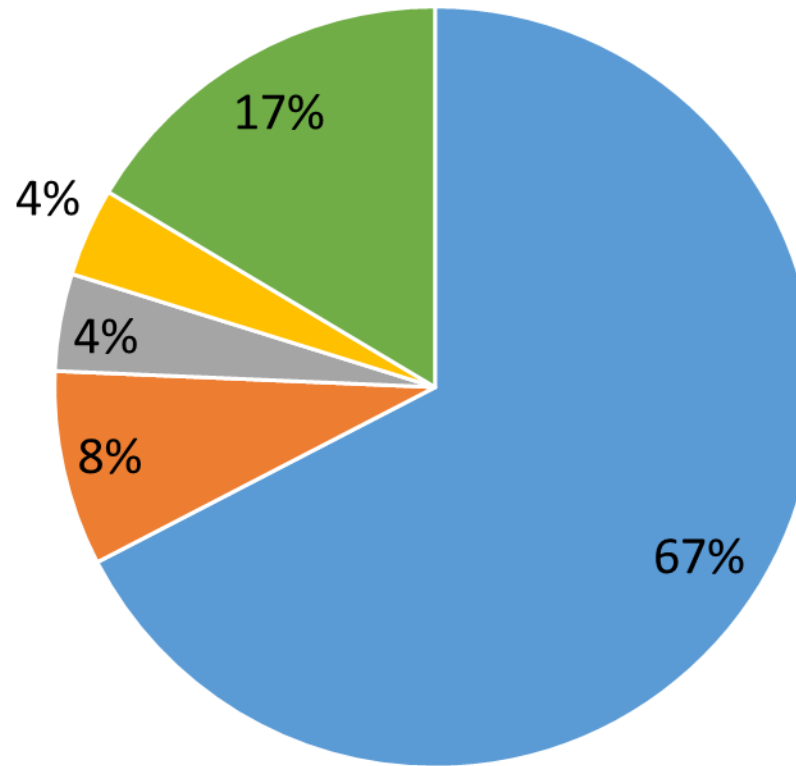
Moist Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-3,577,449	396,212	-62,358	-647,117	-2,091,128
% Change	-1%	47%	-16%	-2%	-5%

Large Cigar Distribution

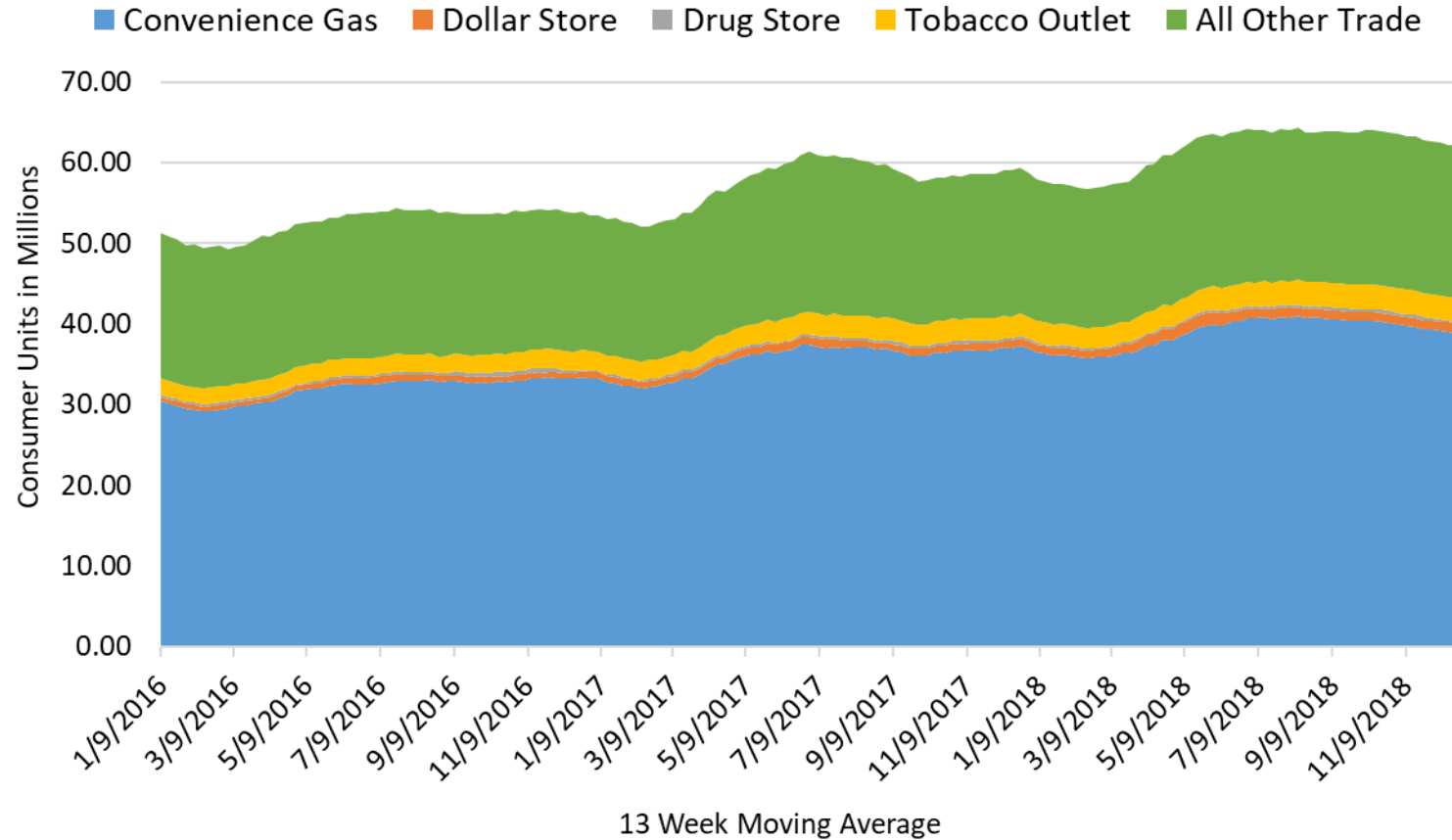
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	2,517	1,995	-79	264	-847
% Change	2%	17%	-1%	4%	-3%

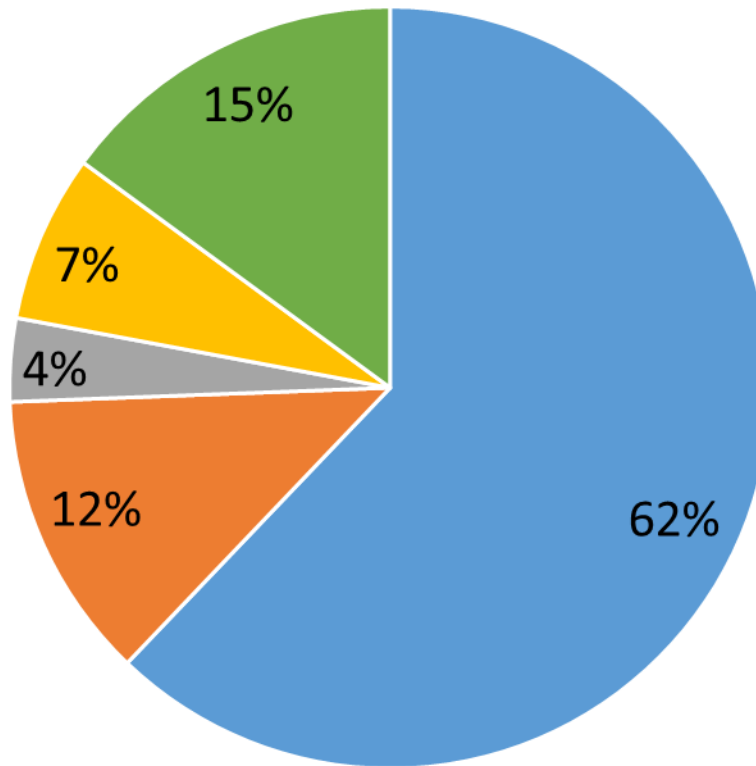
Large Cigar Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	37,219,158	3,101,604	-348,336	3,047,948	14,649,588
% Change	8%	27%	-8%	9%	6%

Little/Filtered Cigar Distribution

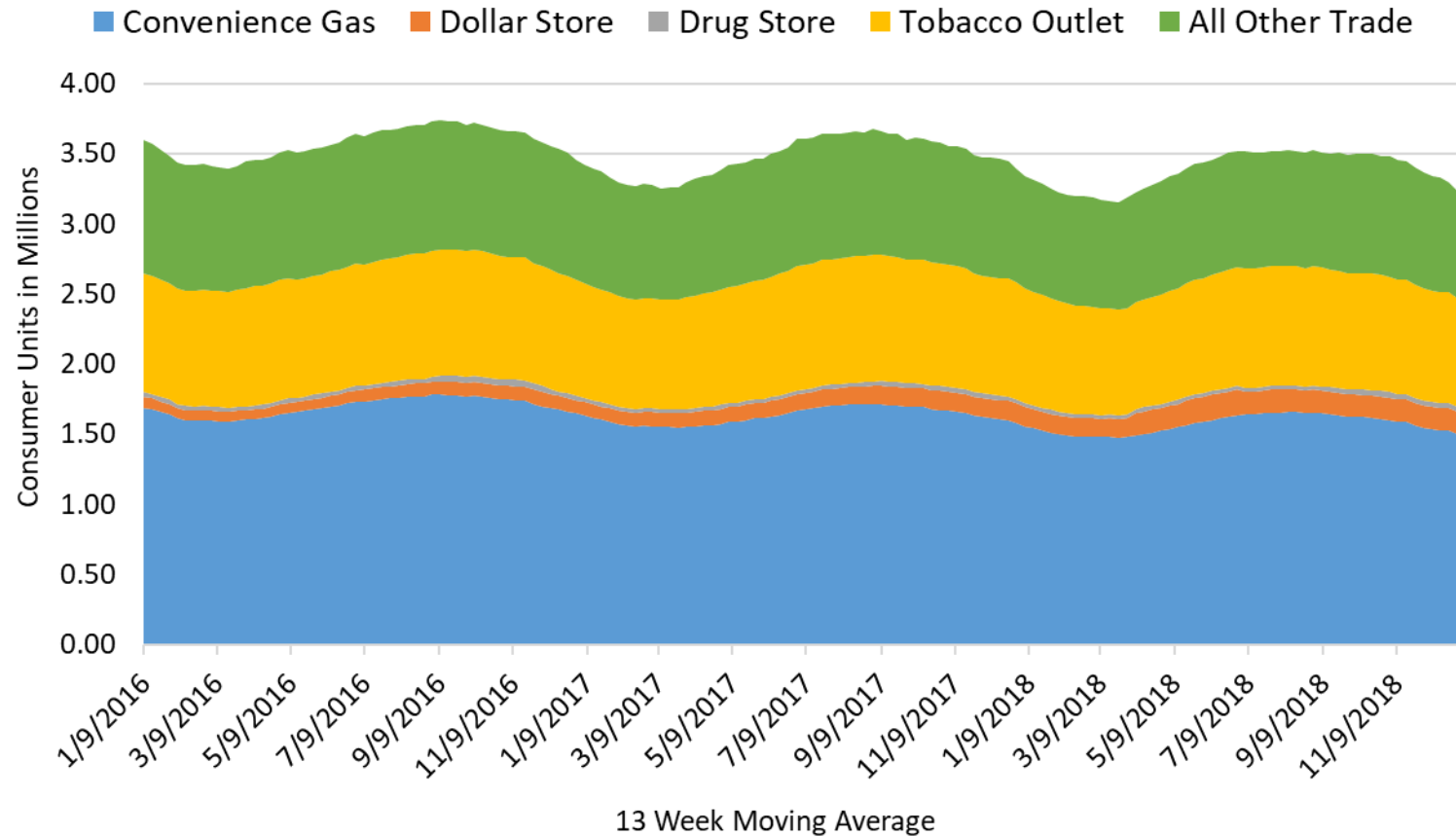
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-1,001	1,065	280	51	-503
% Change	-2%	15%	13%	1%	-5%

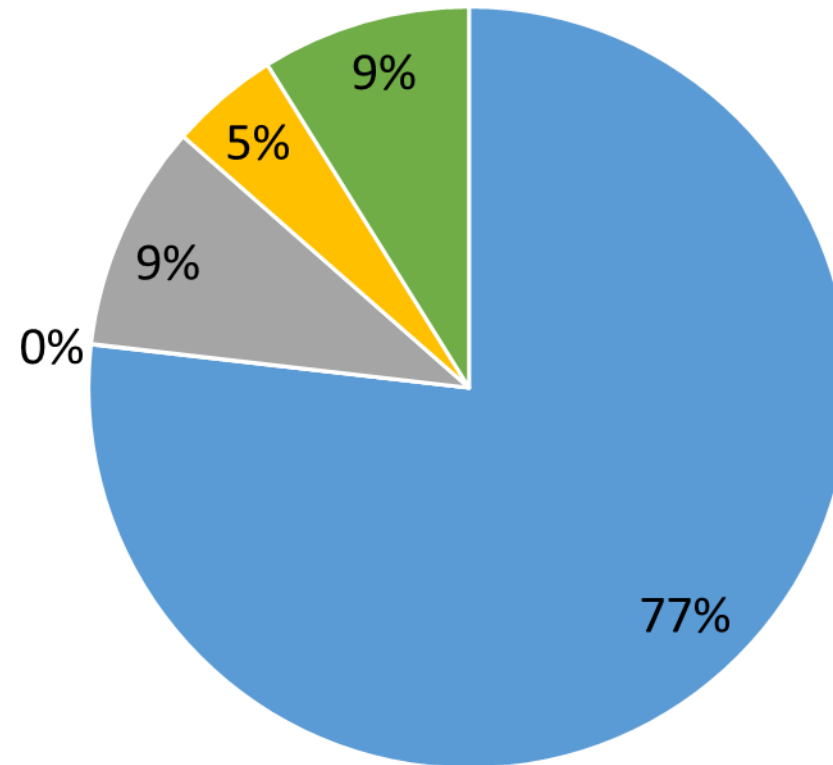
Little/Filtered Cigar Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-925,916	321,210	34,600	-645,291	-223,840
% Change	-4%	18%	8%	-6%	-2%

Closed Vapor (e-Cigarettes) Distribution

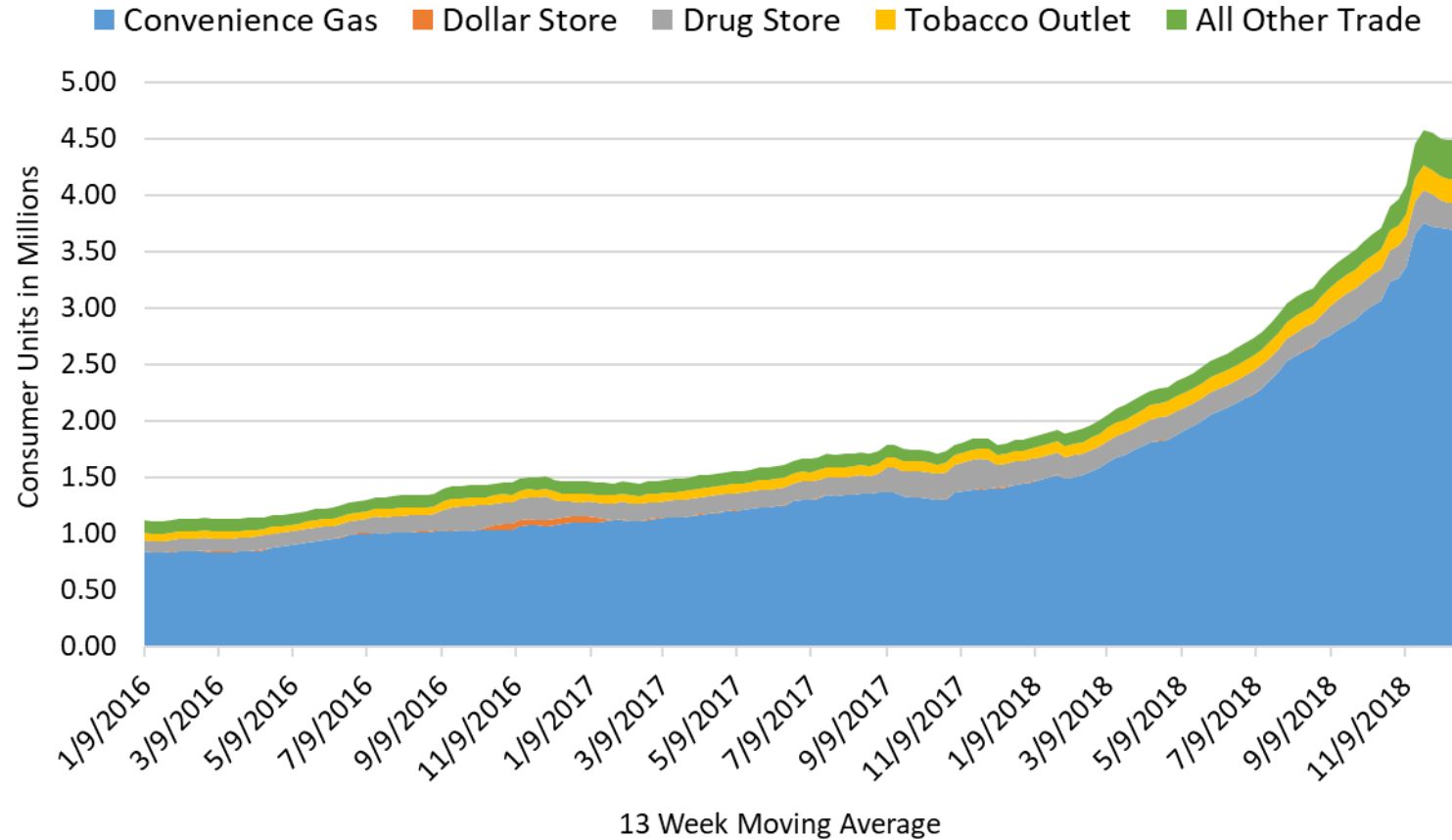
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	10,850	-163	-158	632	1,277
% Change	19%	-86%	-2%	18%	19%

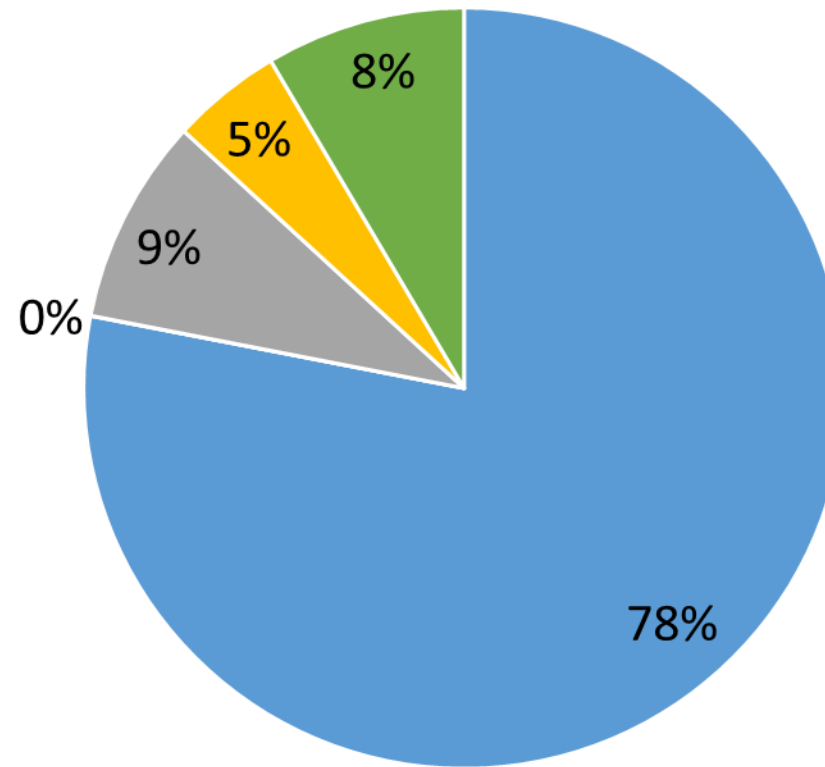
Closed Vapor Distribution



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	27,002,775	-22,514	470,869	1,362,324	2,345,568
% Change	152%	-99%	16%	117%	190%

Cartridge Distribution

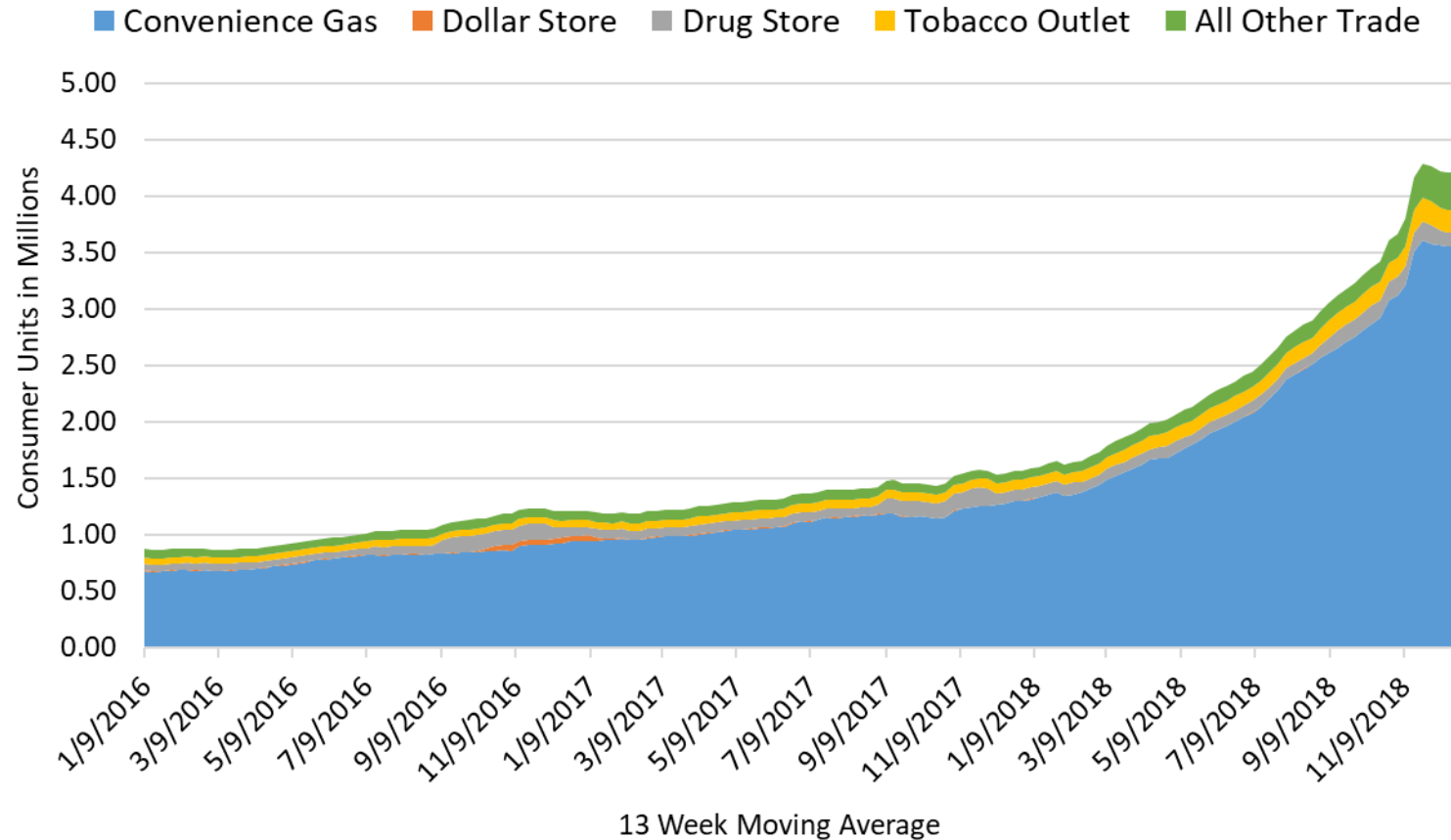
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	12,059	-176	221	706	1,452
% Change	22%	-94%	3%	21%	25%

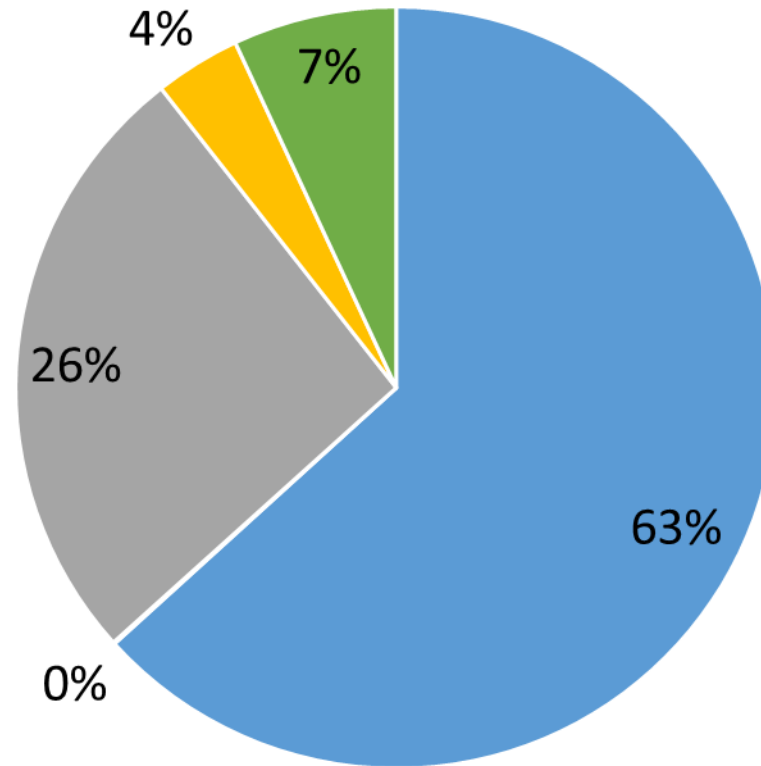
Cartridge Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	26,994,852	-22,866	252,918	1,371,008	2,401,592
% Change	170%	-100%	15%	132%	238%

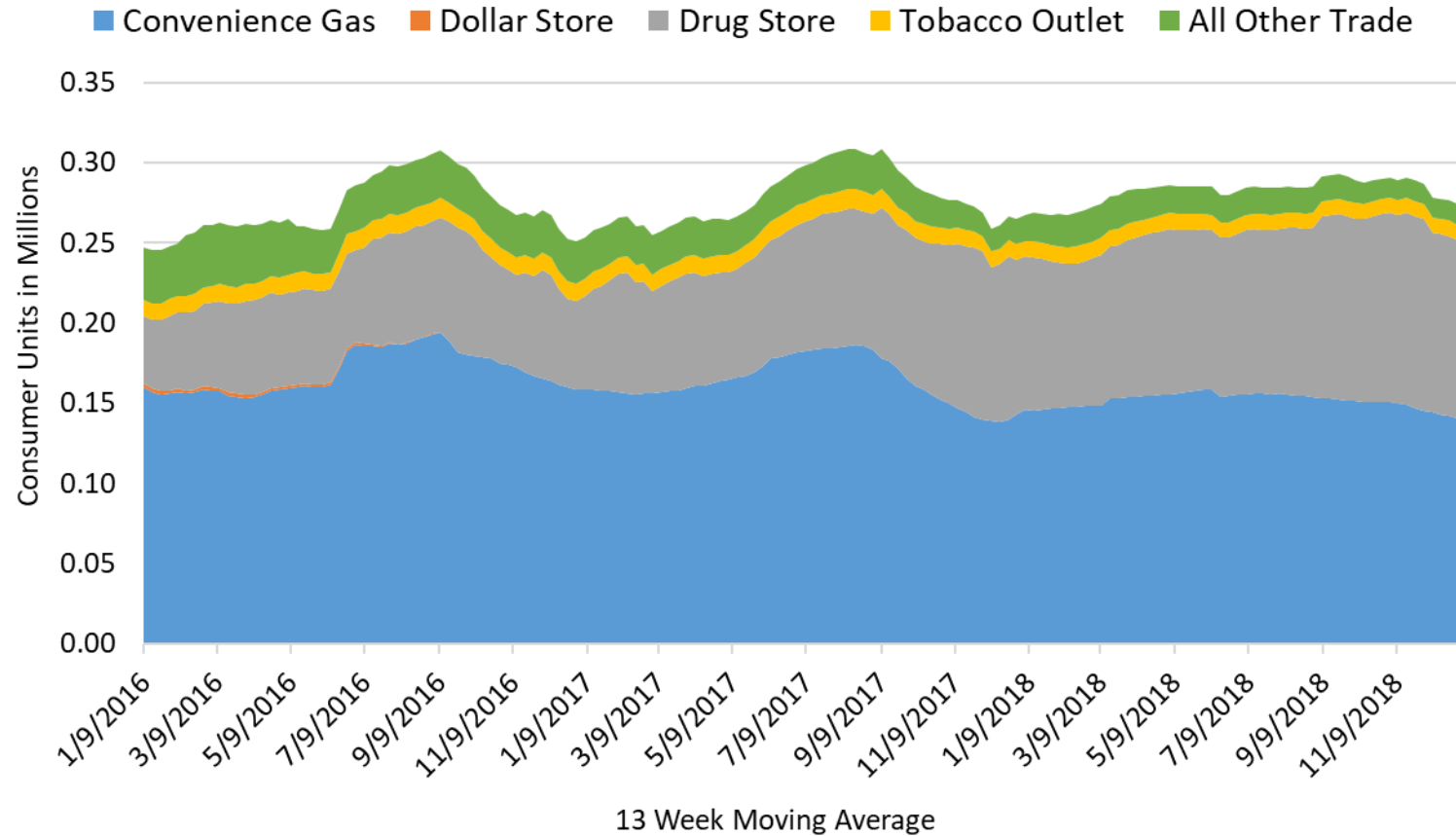
Disposable Distribution

■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	1,287	14	205	-18	-89
% Change	10%	588%	4%	-2%	-5%

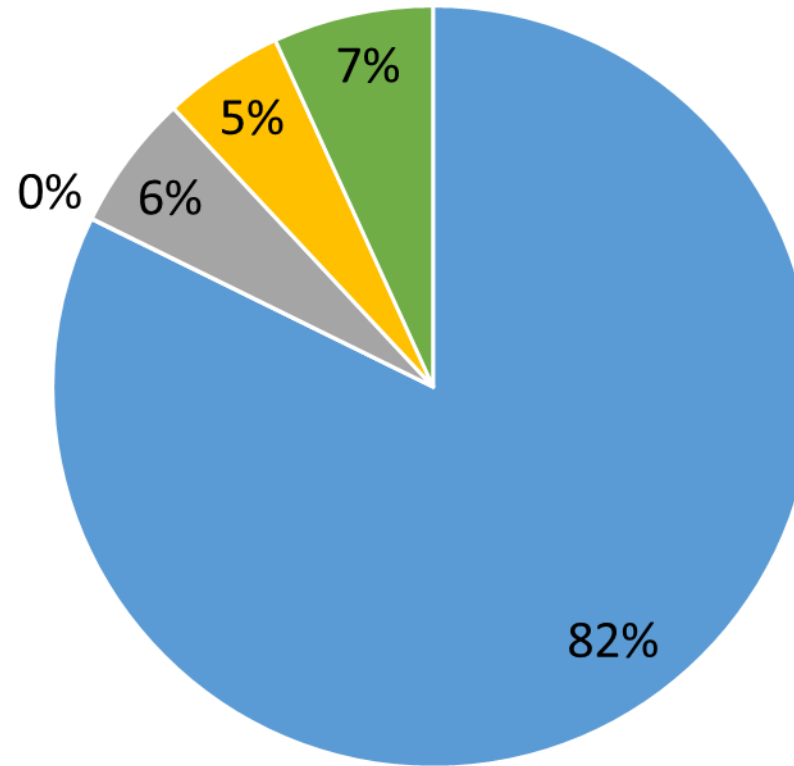
Disposable Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	7,922	20	217,951	-8,685	-56,024
% Change	0%	25000%	17%	-7%	-25%

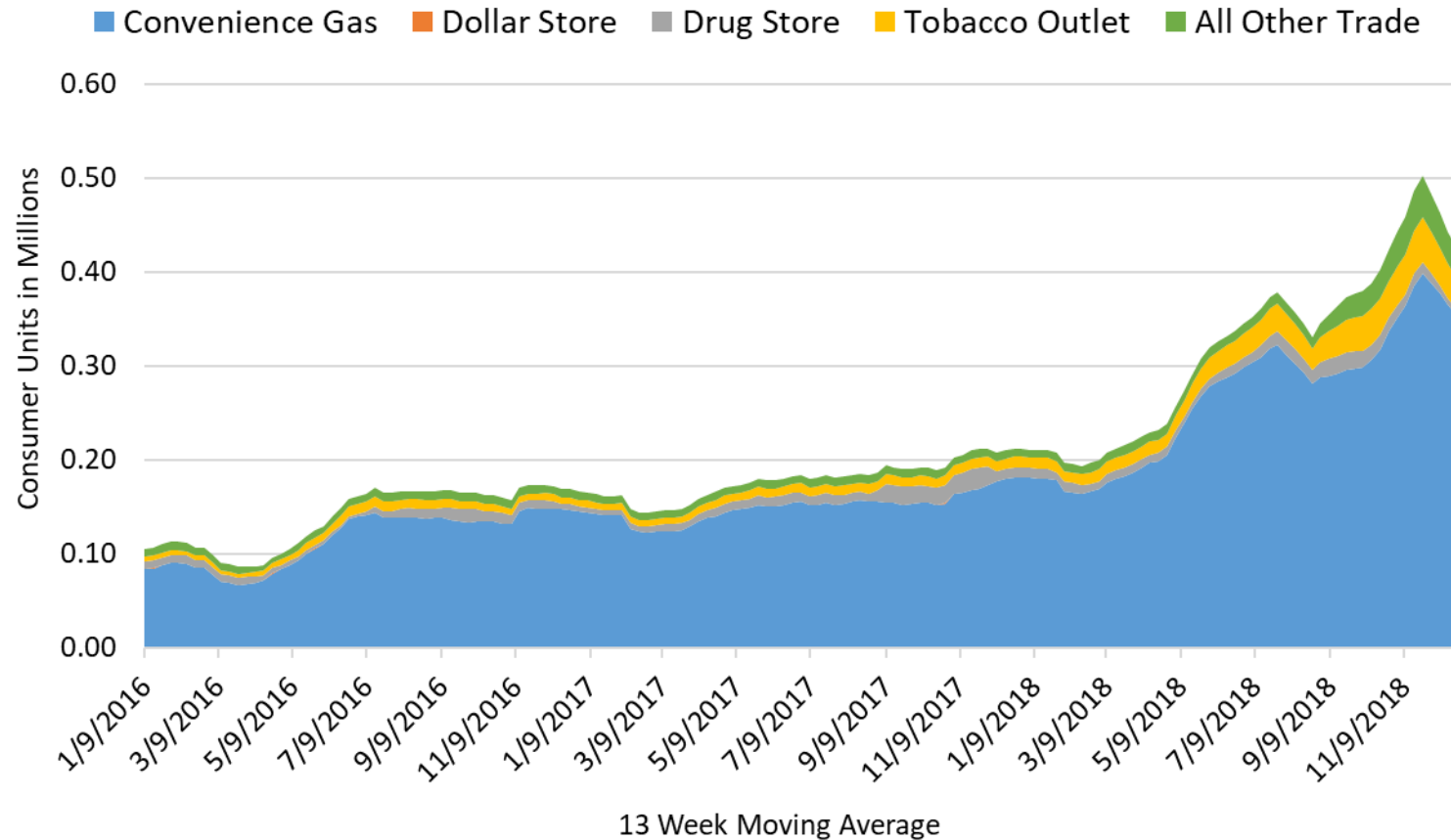
Kit Distribution

■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



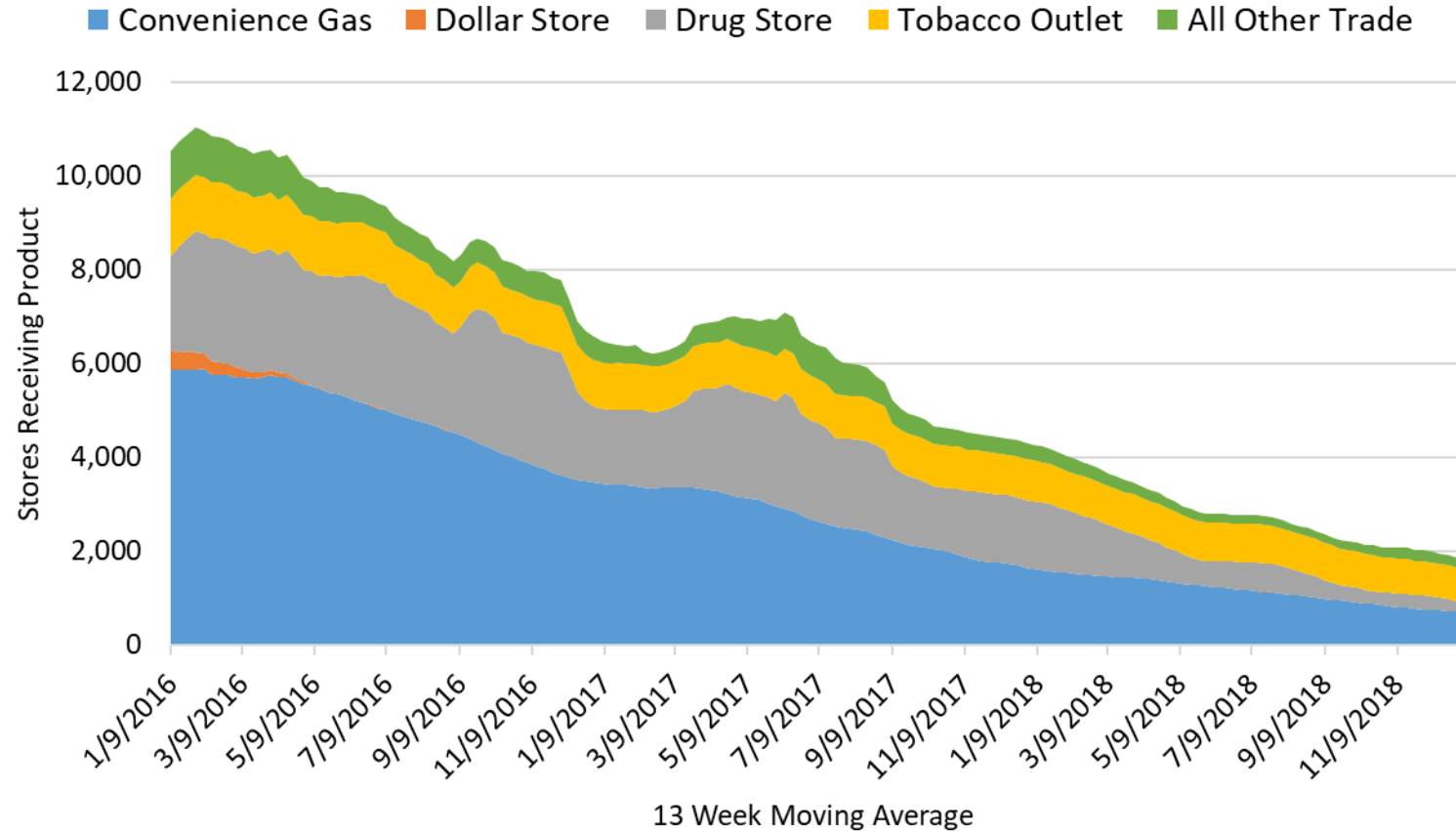
Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	10,239	1	-367	581	1,121
% Change	45%	15%	-14%	39%	70%

Kit Volume



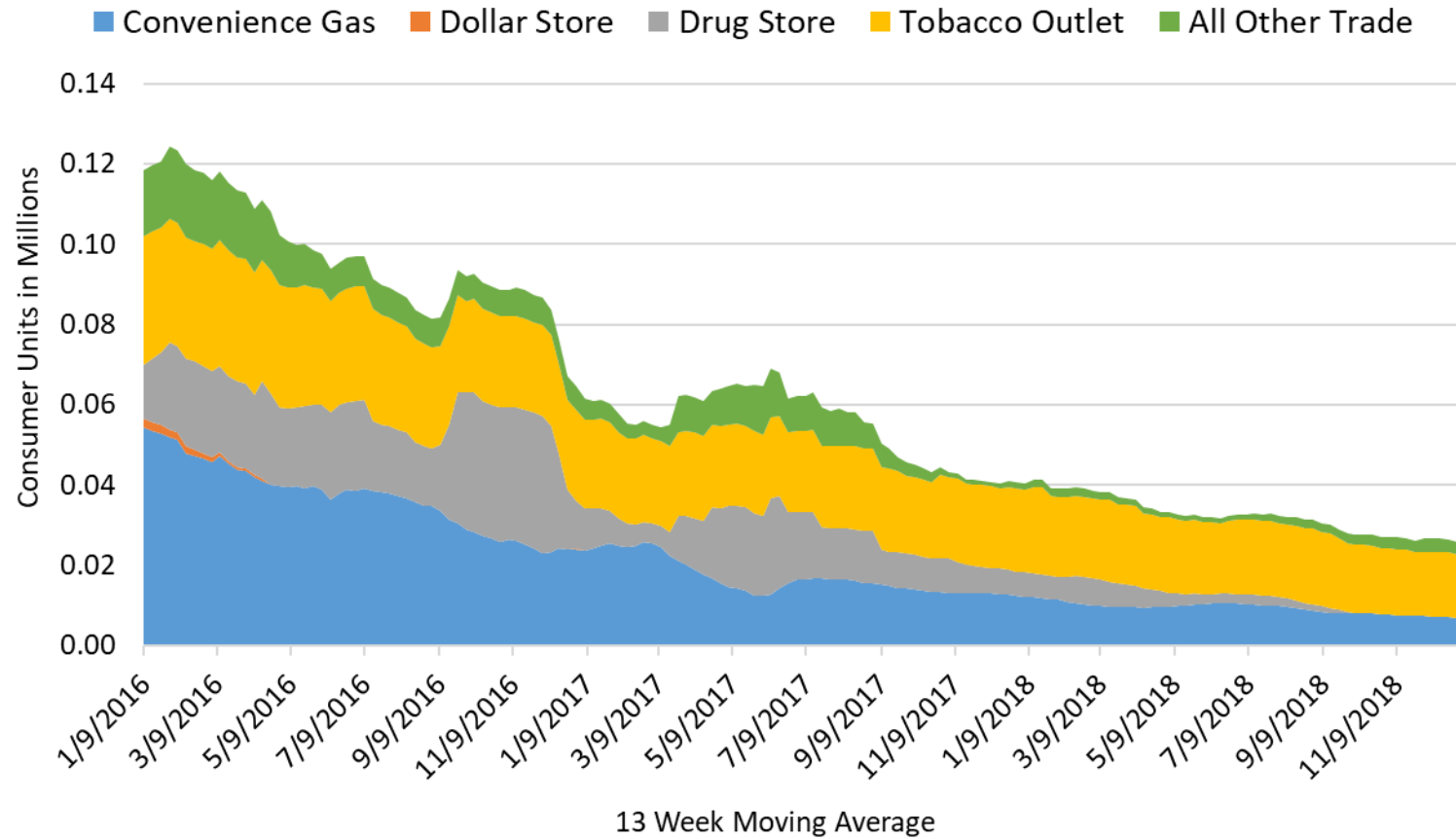
Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	2,421,483	-186	-71,320	373,085	345,311
% Change	111%	-88%	-32%	265%	314%

e-Liquid Distribution



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-1,057	0	-1,134	-146	-140
% Change	-57%	0%	-80%	-16%	-39%

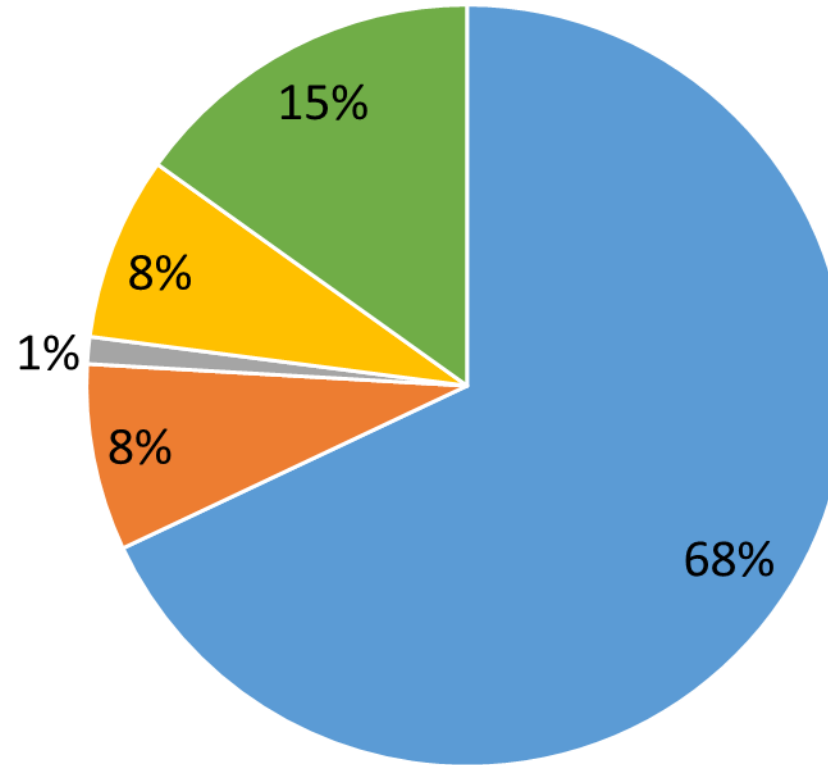
e-Liquid Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-73,319	36	-96,142	-48,427	16,921
% Change	-43%	0%	-100%	-18%	79%

Papers/Tubes/Wraps Distribution

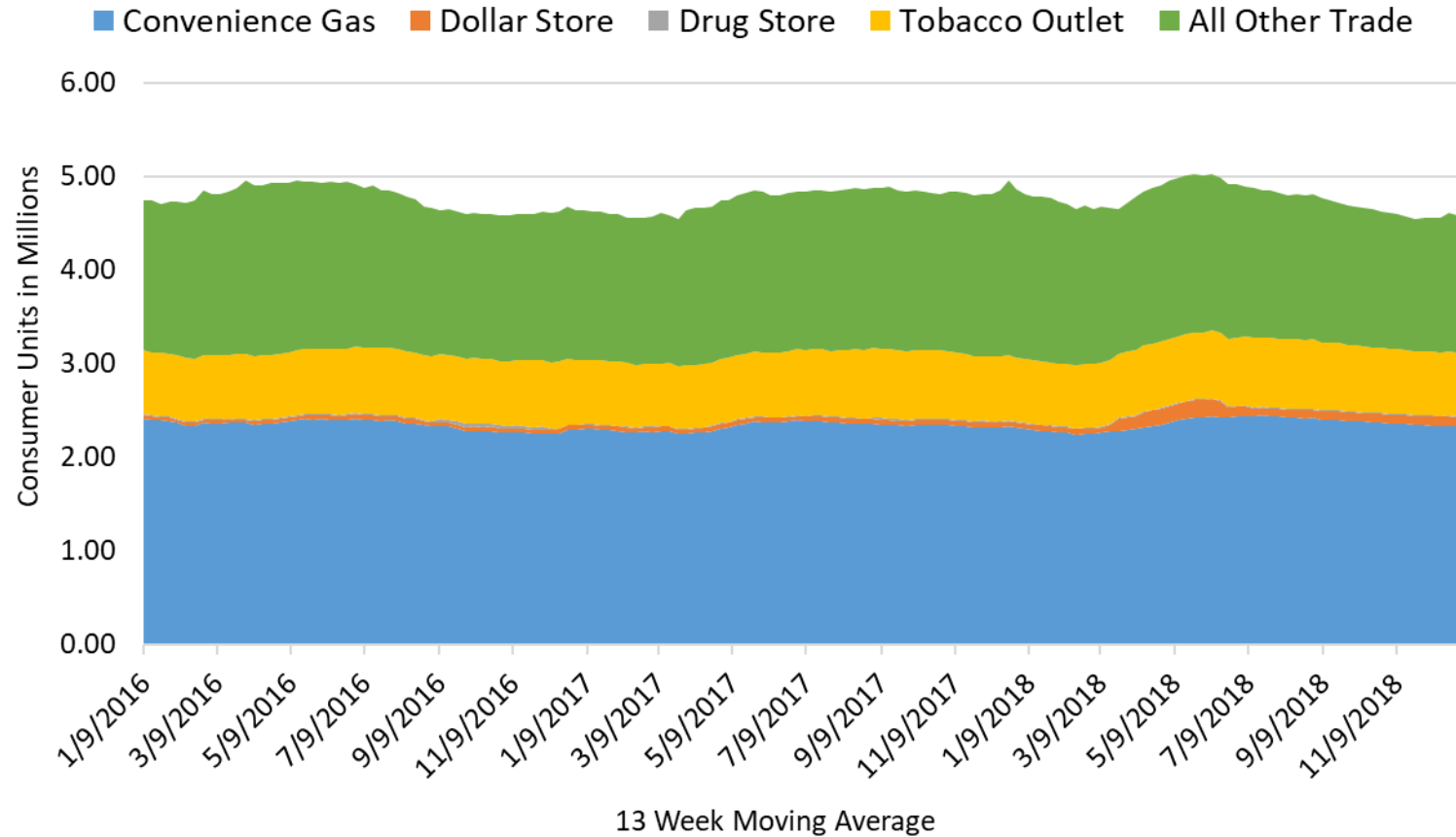
■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	119	2,104	-81	99	-379
% Change	0%	76%	-10%	2%	-4%

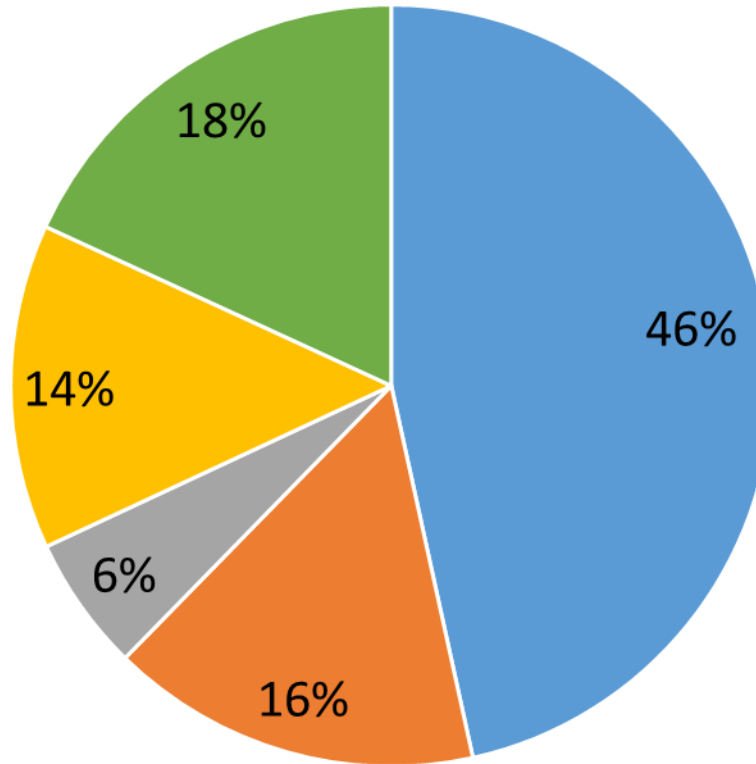
Papers/Tubes/Wraps Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	286,639	566,151	-42,434	-249,469	-3,624,525
% Change	1%	81%	-21%	-3%	-16%

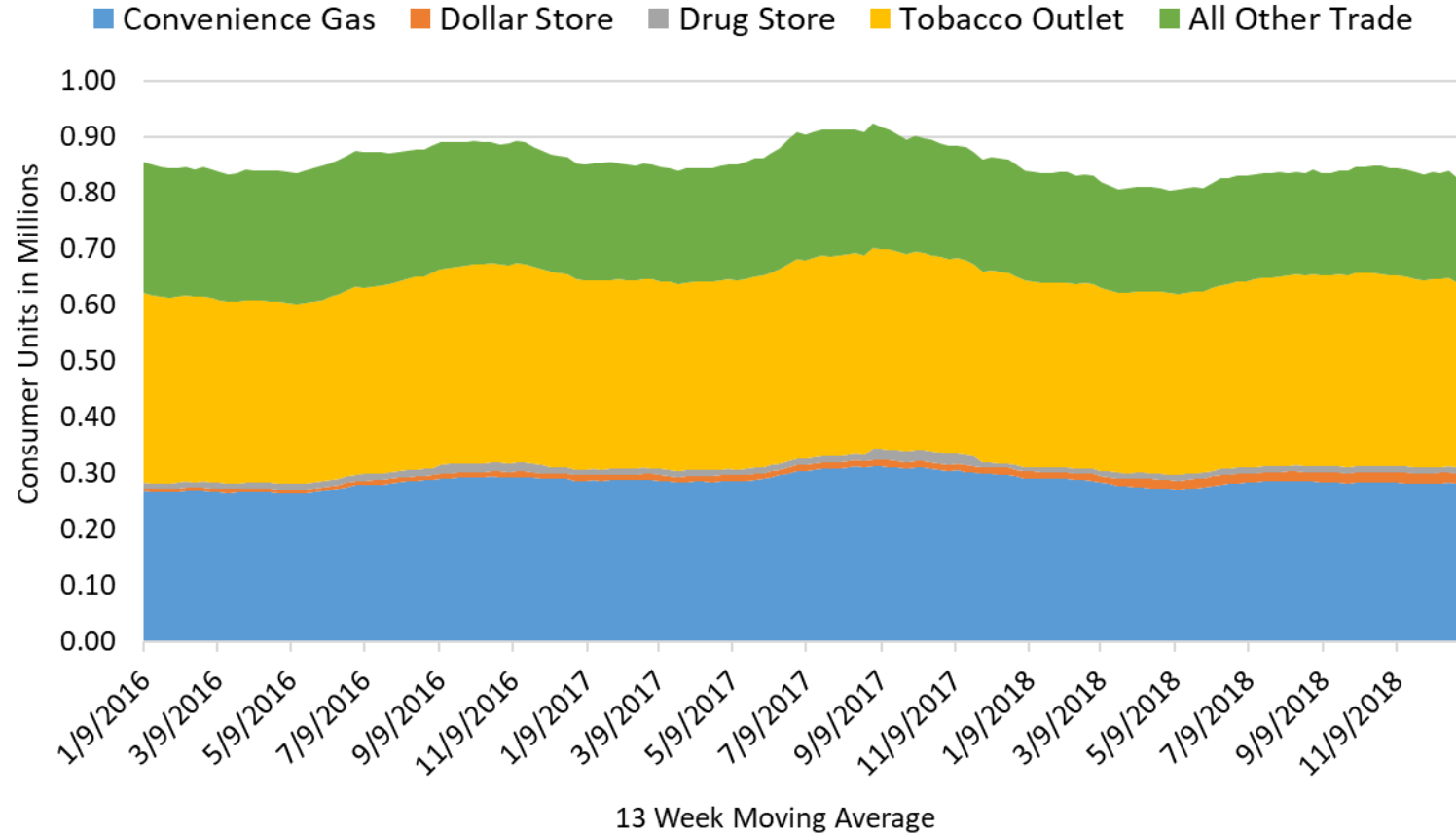
Pipe Tobacco Distribution

■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	39	2,550	-329	90	-416
% Change	0%	81%	-14%	2%	-6%

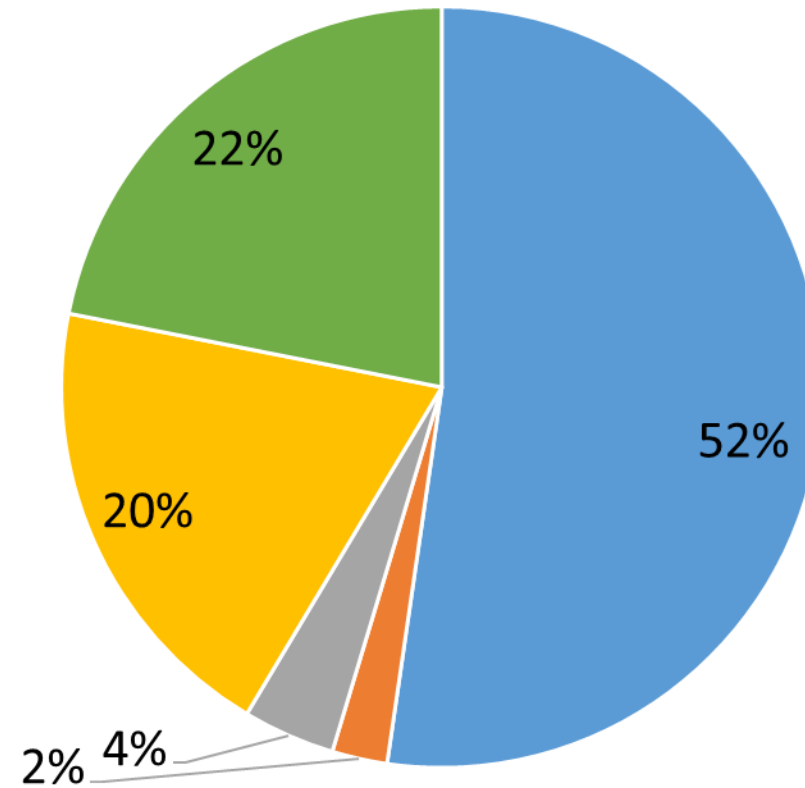
Pipe Tobacco Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-261,528	88,999	-54,620	-87,601	-151,193
% Change	-7%	59%	-28%	-2%	-6%

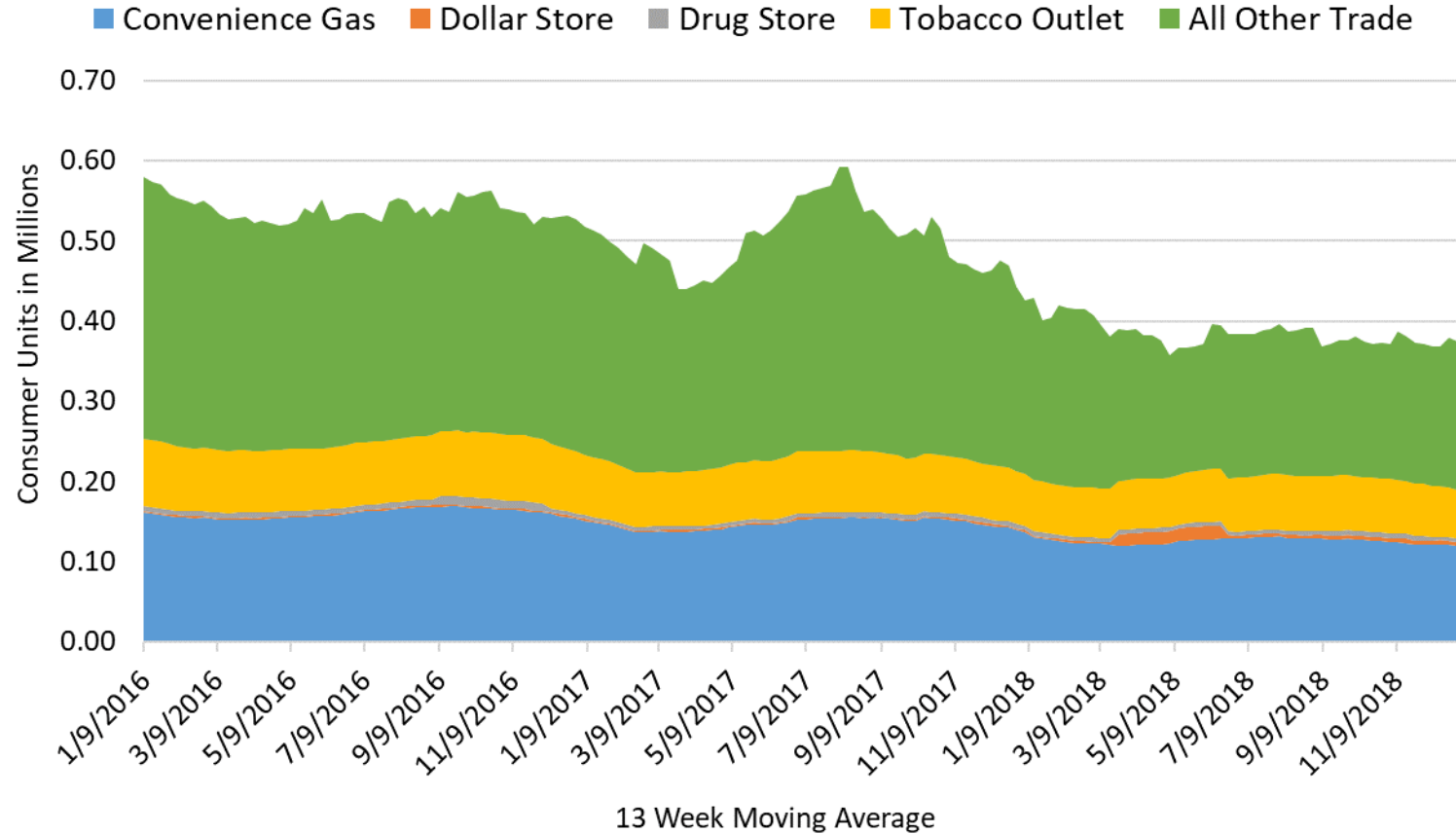
Roll Your Own Distribution

■ Convenience Gas ■ Dollar Store ■ Drug Store ■ Tobacco Outlet ■ All Other Trade



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-1,232	201	15	-106	-573
% Change	-12%	99%	2%	-3%	-13%

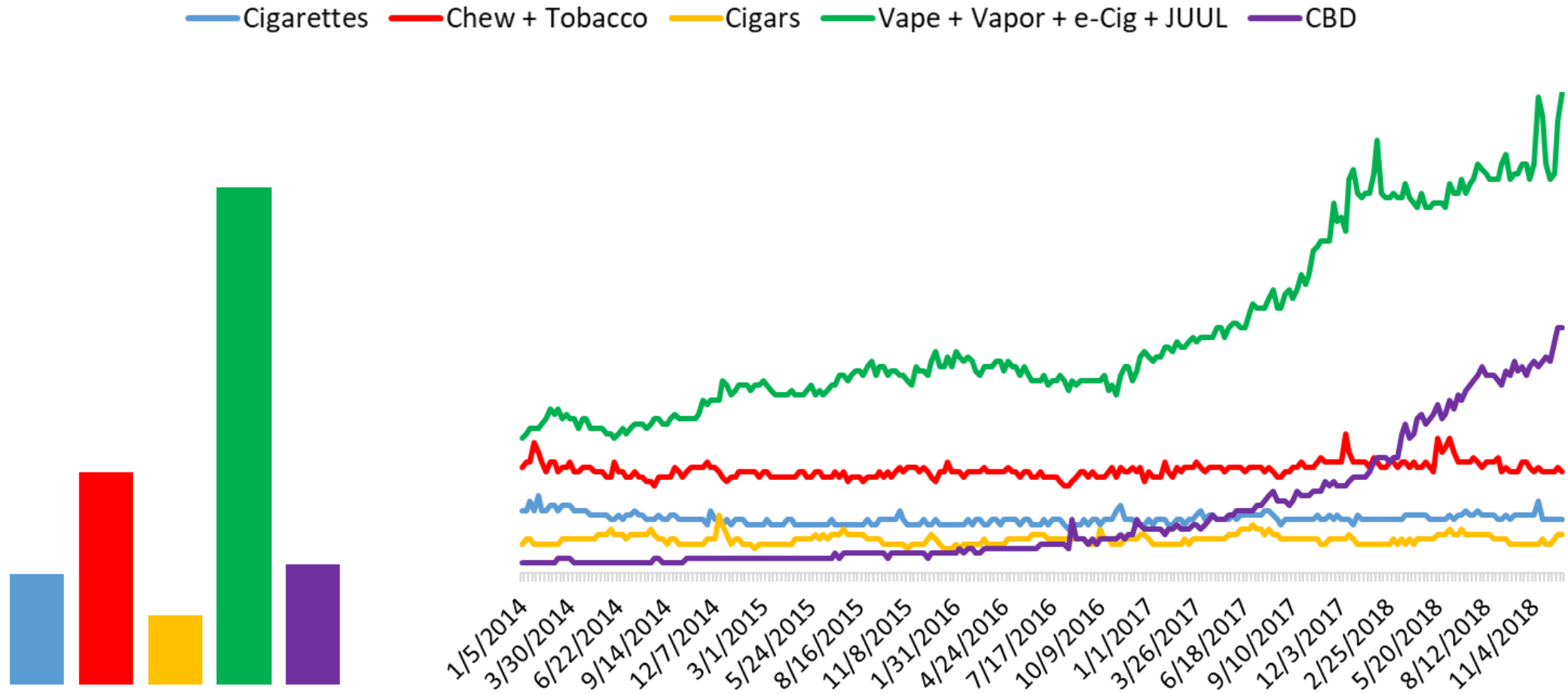
Roll Your Own Volume



Q4 '18 vs. YAGO	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Change	-329,475	36,873	-4,383	-48,835	-1,045,396
% Change	-17%	143%	-6%	-5%	-31%

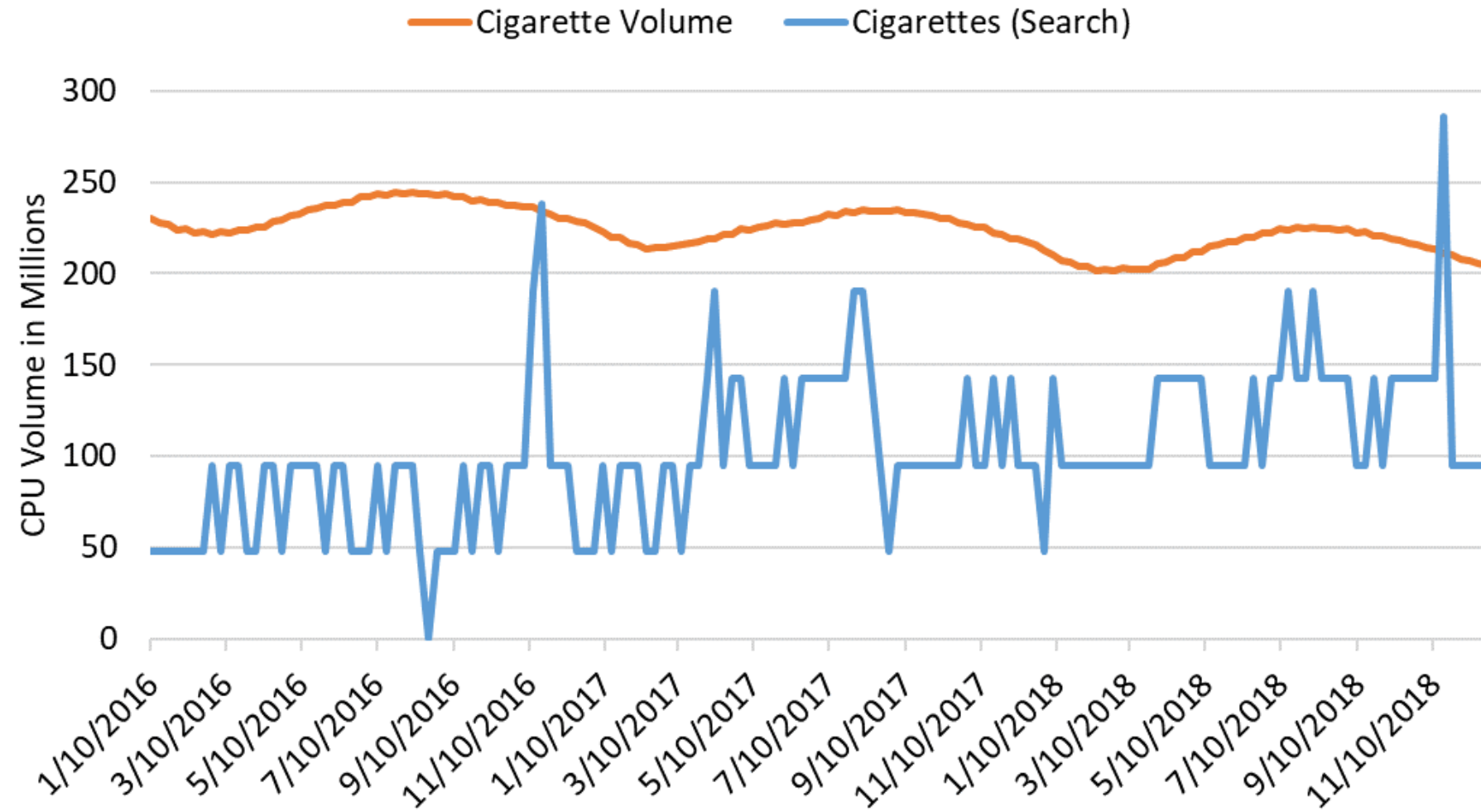
GOOGLE TREND ANALYSIS

Overall Google Trends



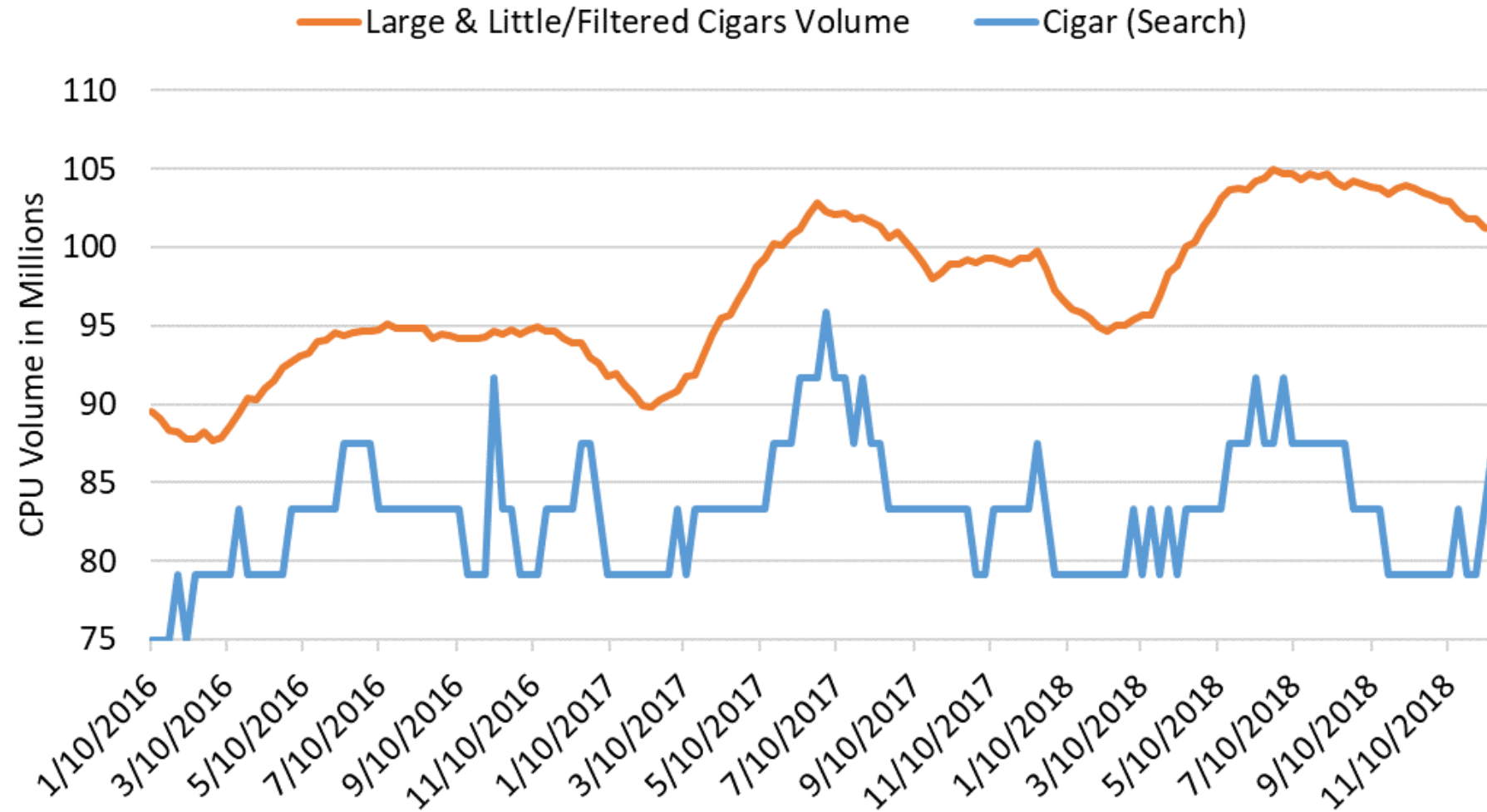
Google Trend Data as of January 18th, 2019

Cigarettes Google Trends



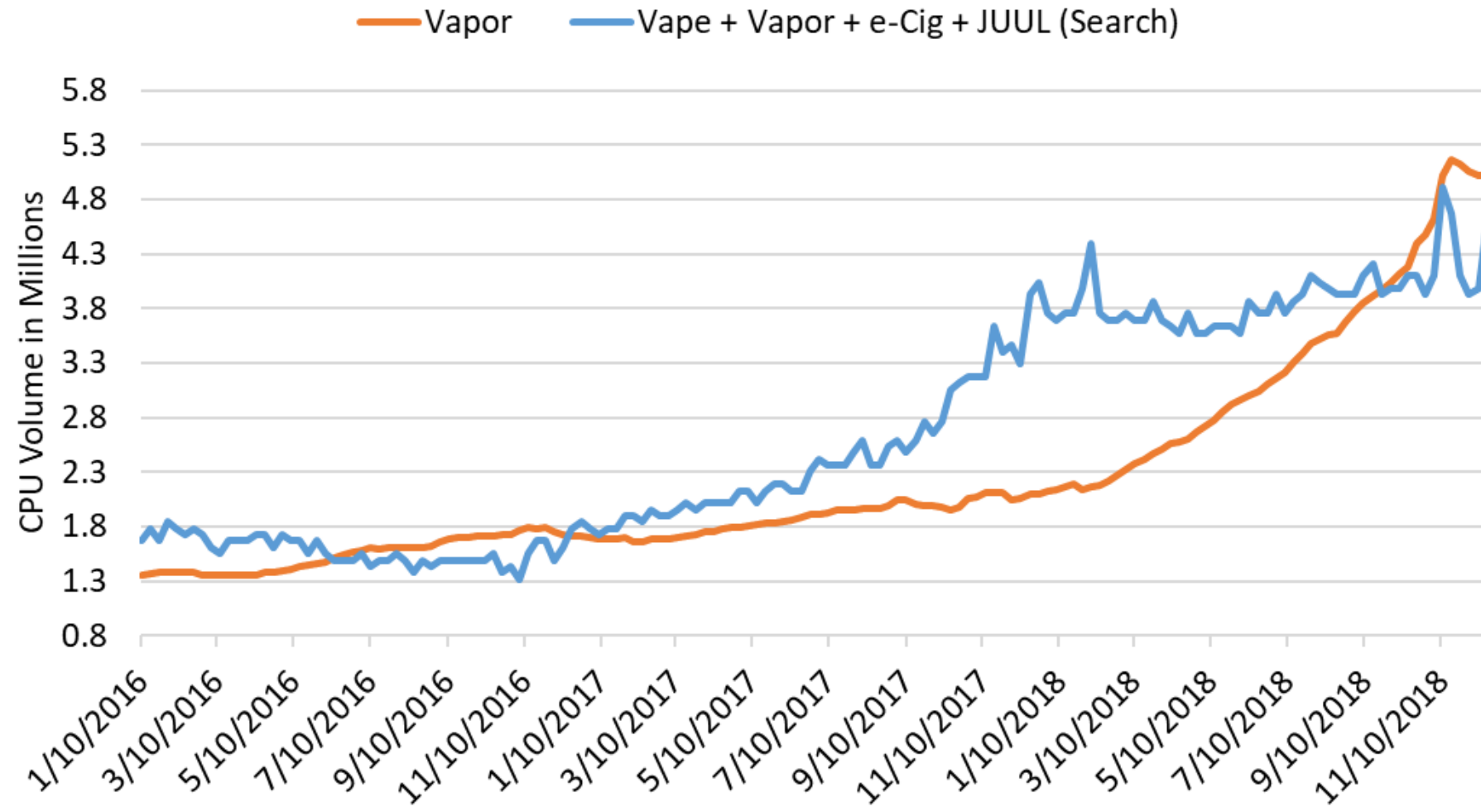
Google Trend Data as of January 18th, 2019

Large & Little/Filtered Cigars Google Trends



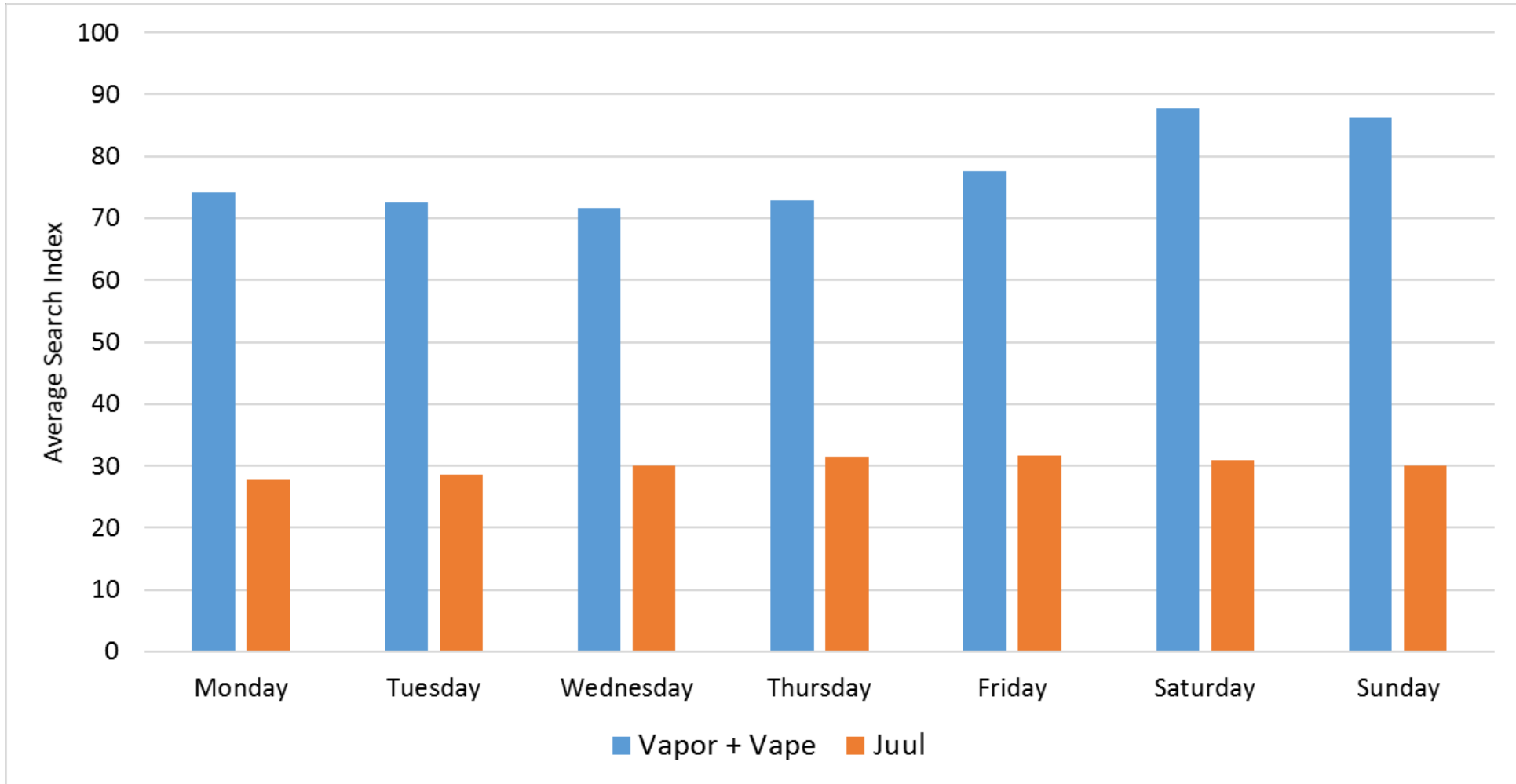
Google Trend Data as of January 18th, 2019

Vapor Google Trends



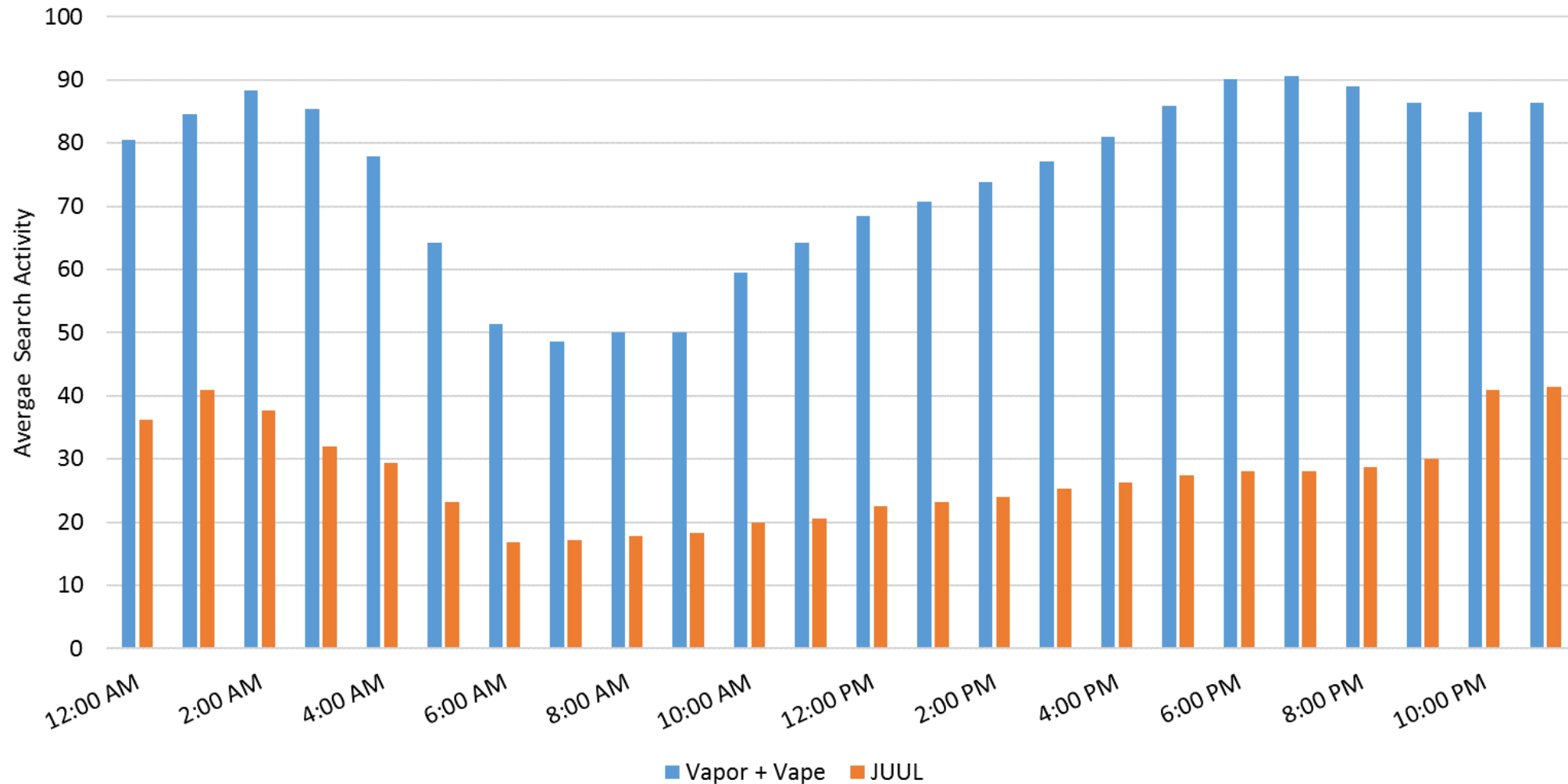
Google Trend Data as of January 18th, 2019

Daily Vapor Google Trends



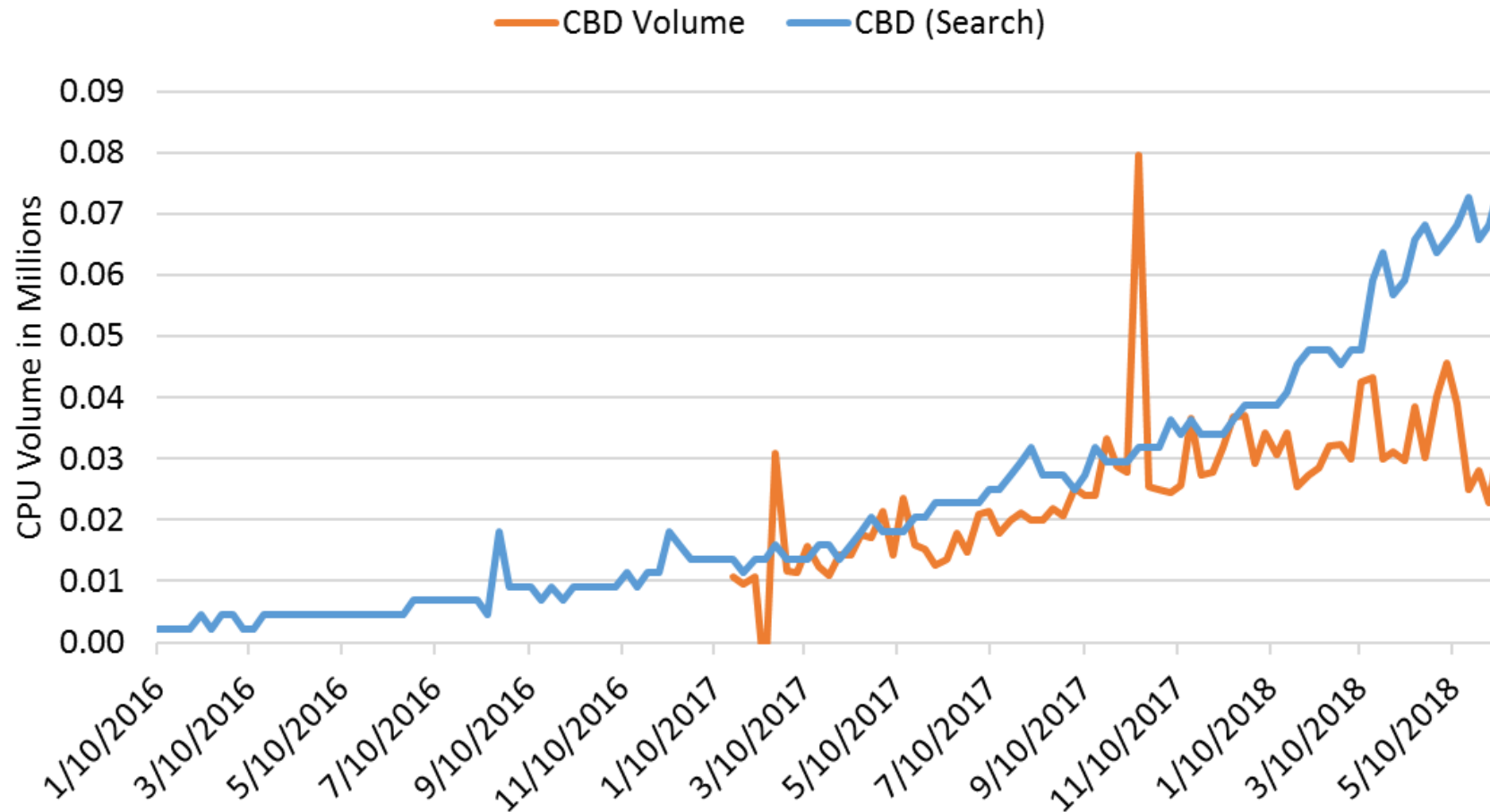
Google Trend Data as of January 18th, 2019

Hourly Vapor Google Trends



Google Trend Data as of January 18th, 2019

CBD Google Trends

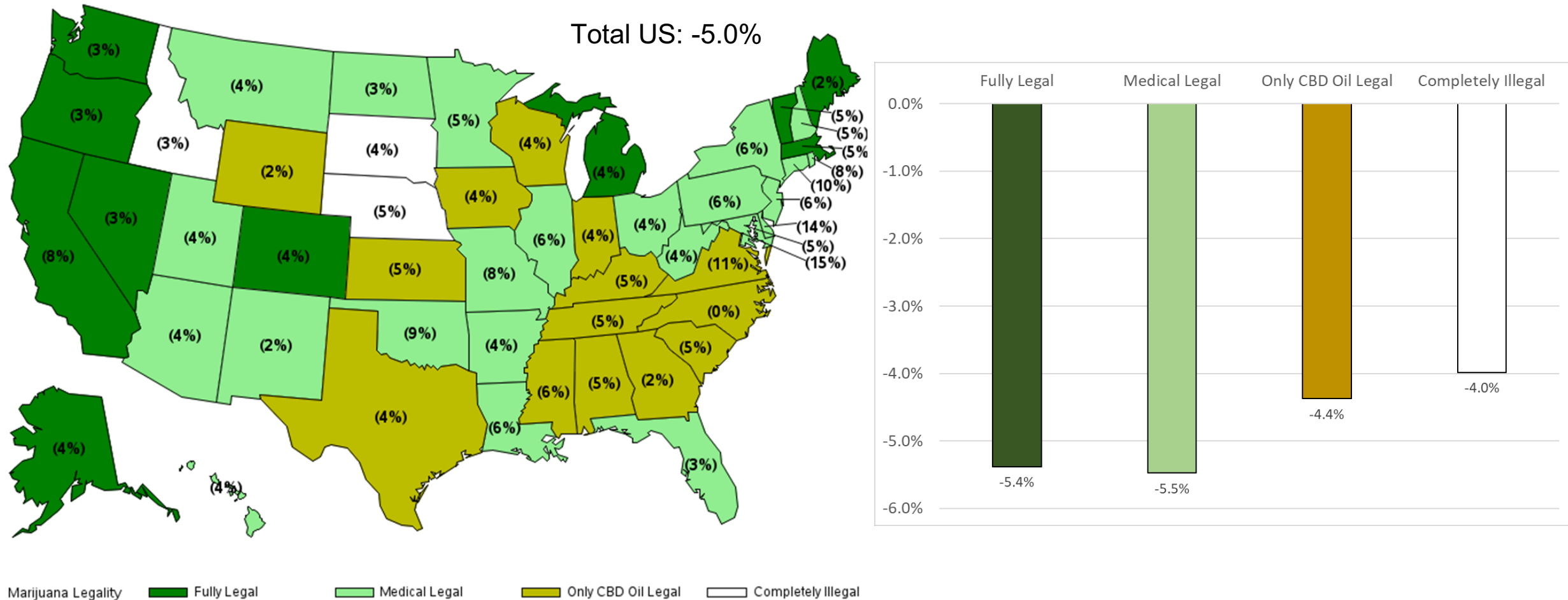


Google Trend Data as of January 18th, 2019

MARIJUANA & CBD OIL IMPACT ON NICOTINE

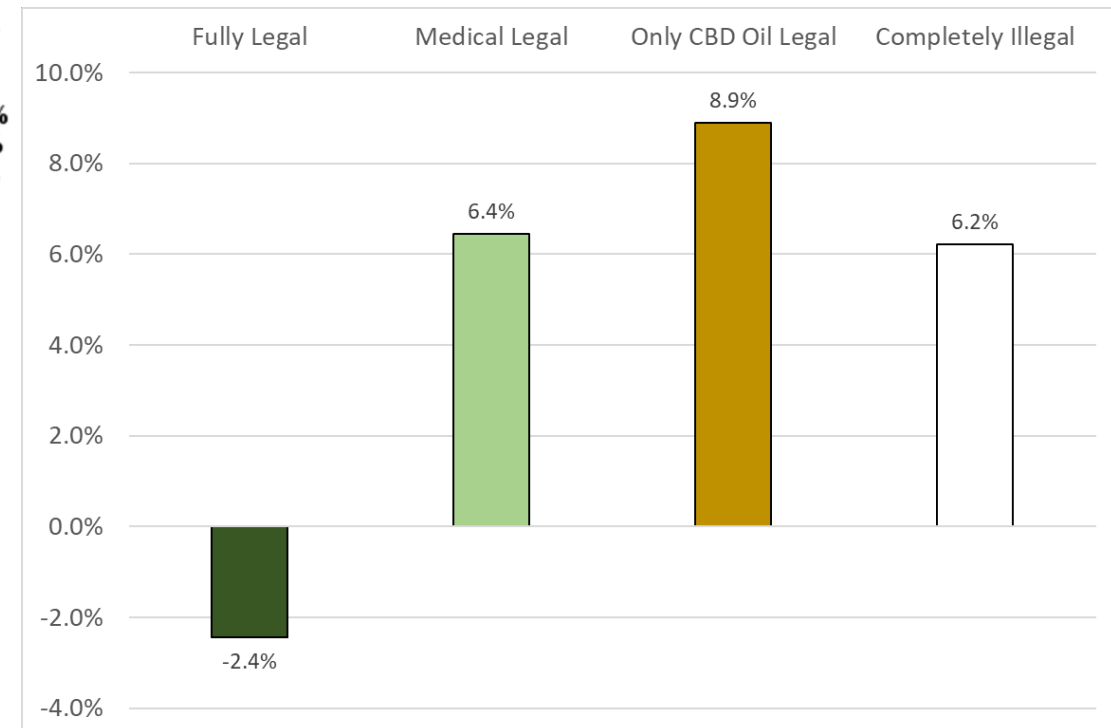
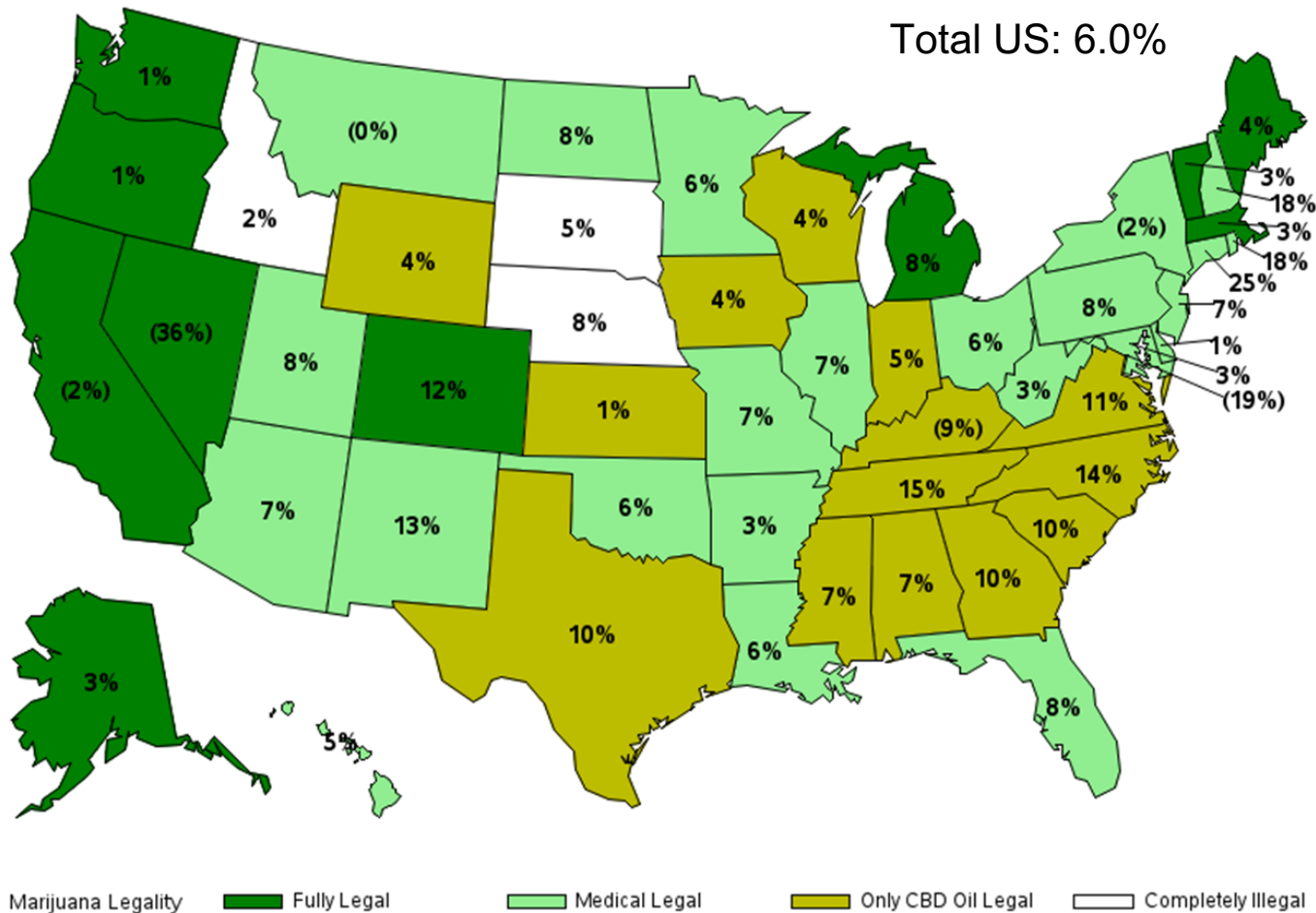
Cigarette Volume Changes by State Marijuana Legality

Cigarettes YOY % Volume Change, 2018 vs. 2017



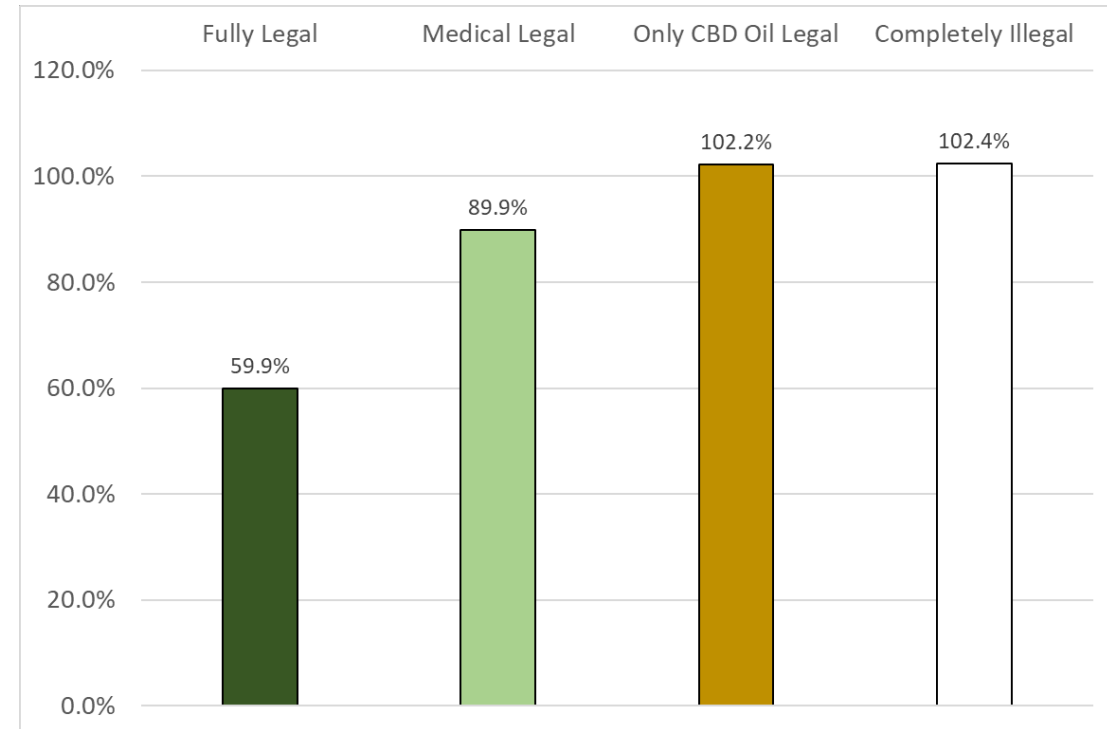
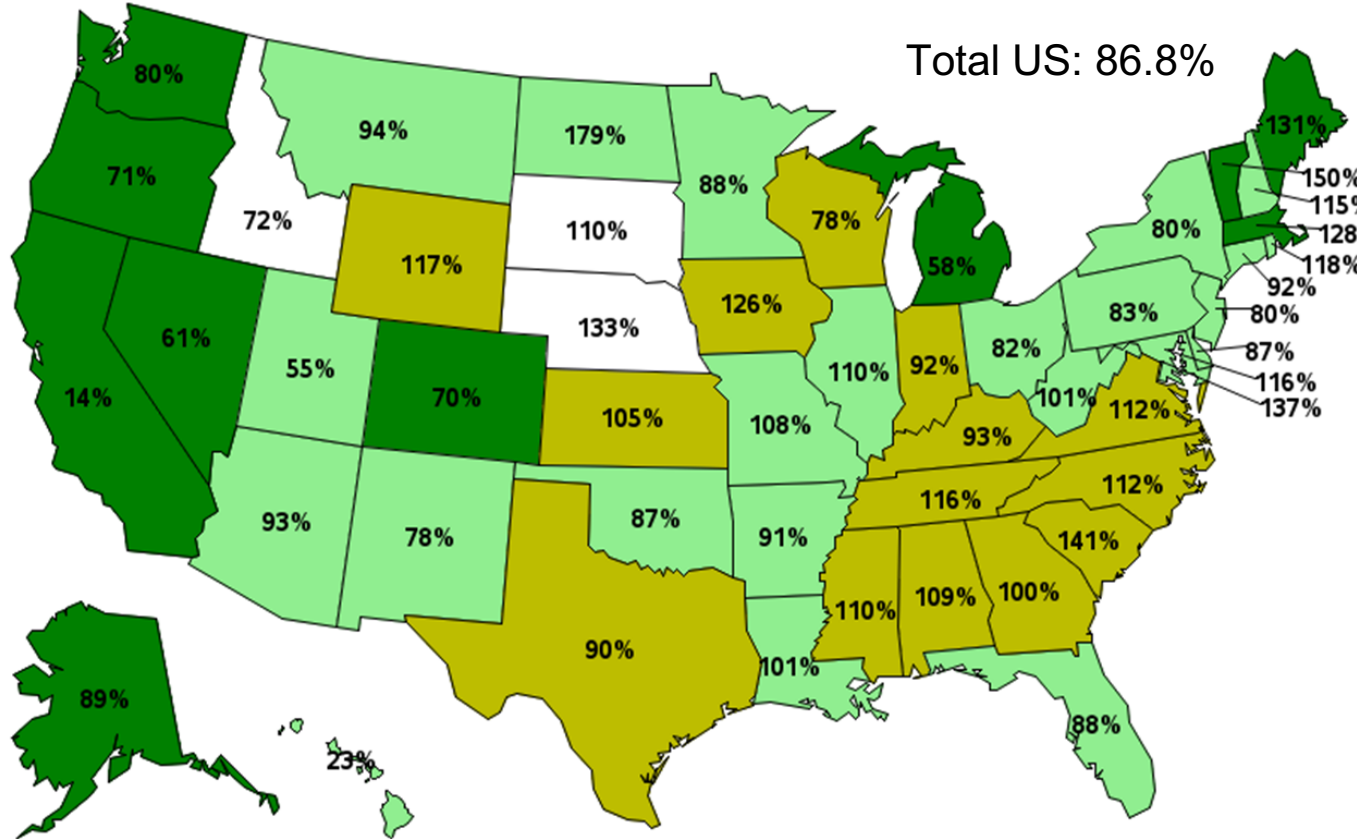
Cigar Volume Changes by State Marijuana Legality

Cigar YOY % Volume Change, 2018 vs. 2017



Vapor Volume Changes by State Marijuana Legality

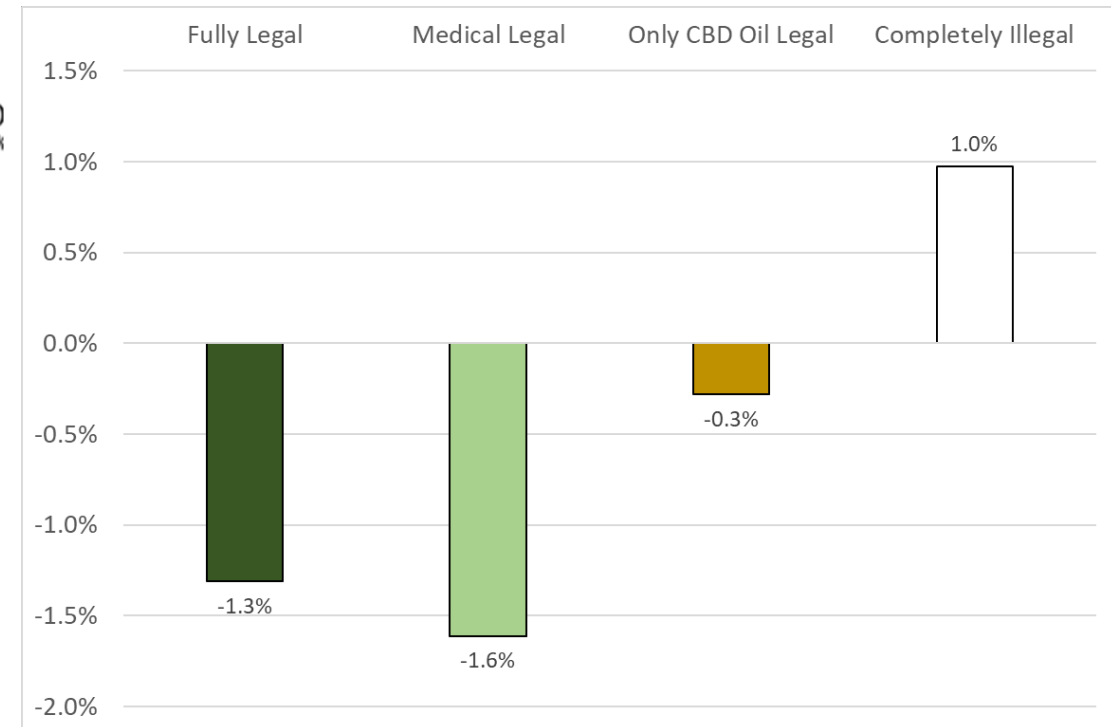
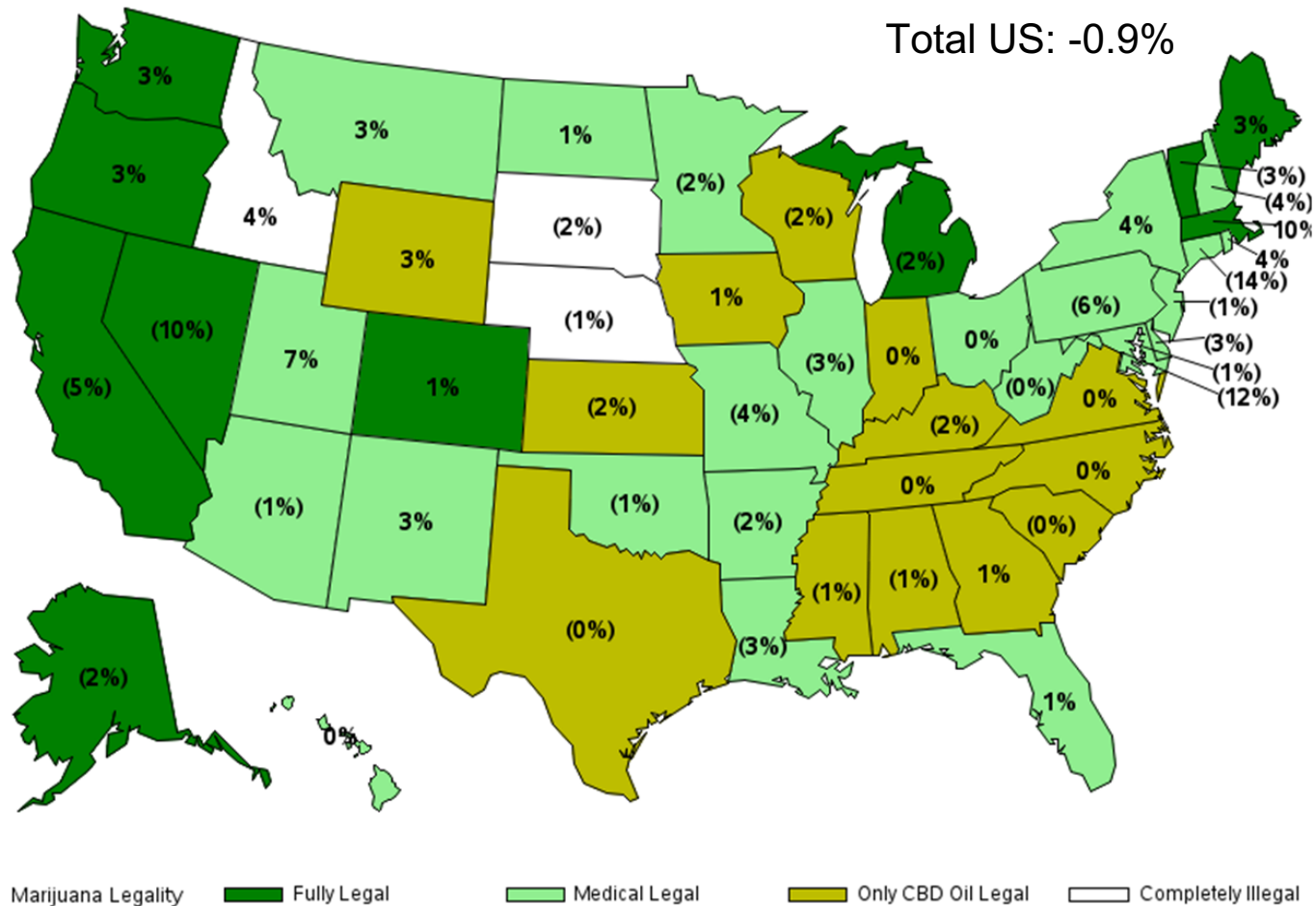
Vapor YOY % Volume Change, 2018 vs. 2017



Marijuana Legality ■ Fully Legal ■ Medical Legal ■ Only CBD Oil Legal ■ Completely Illegal

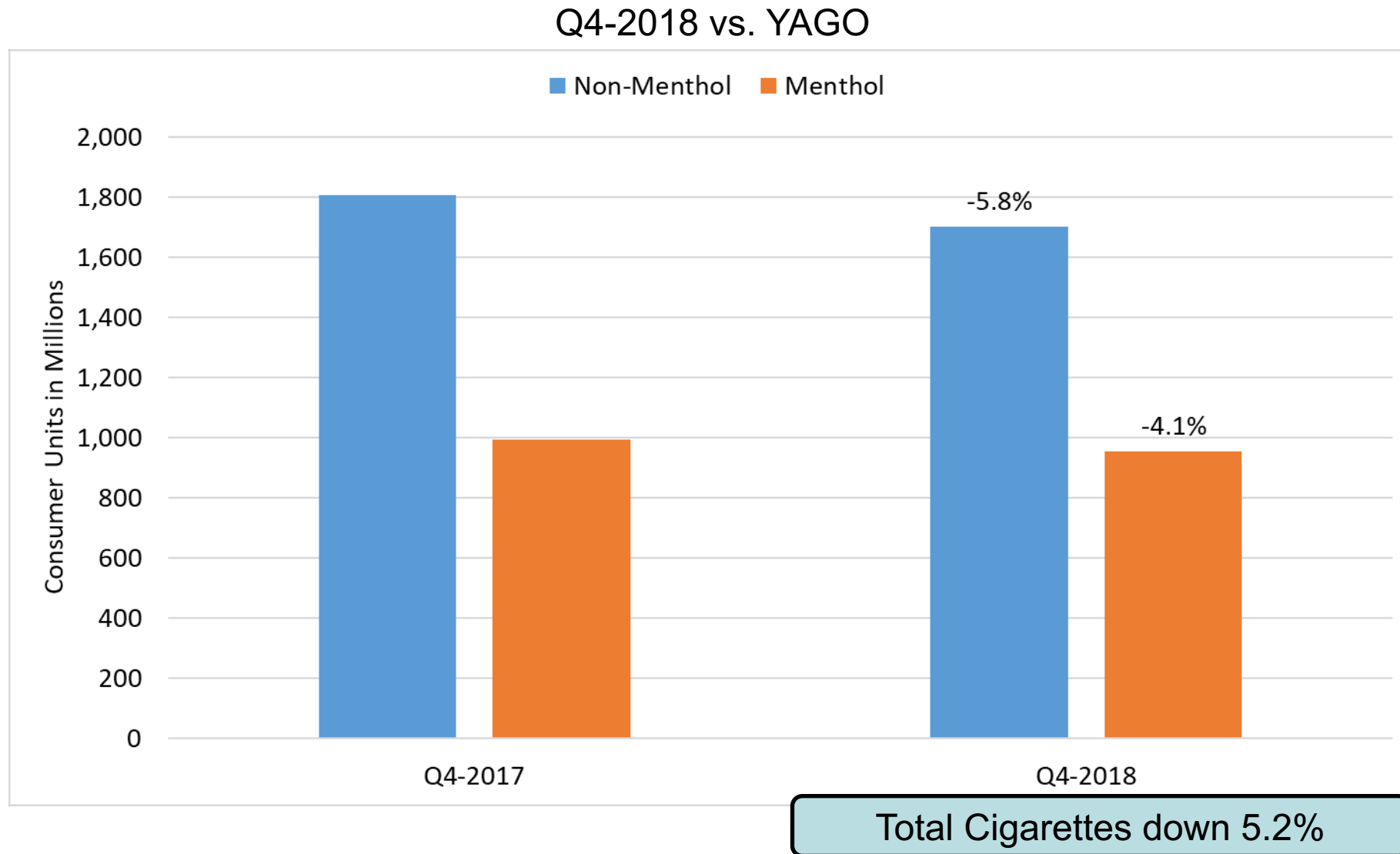
OTP Volume Changes by State Marijuana Legality

OTP YOY % Volume Change, 2018 vs. 2017



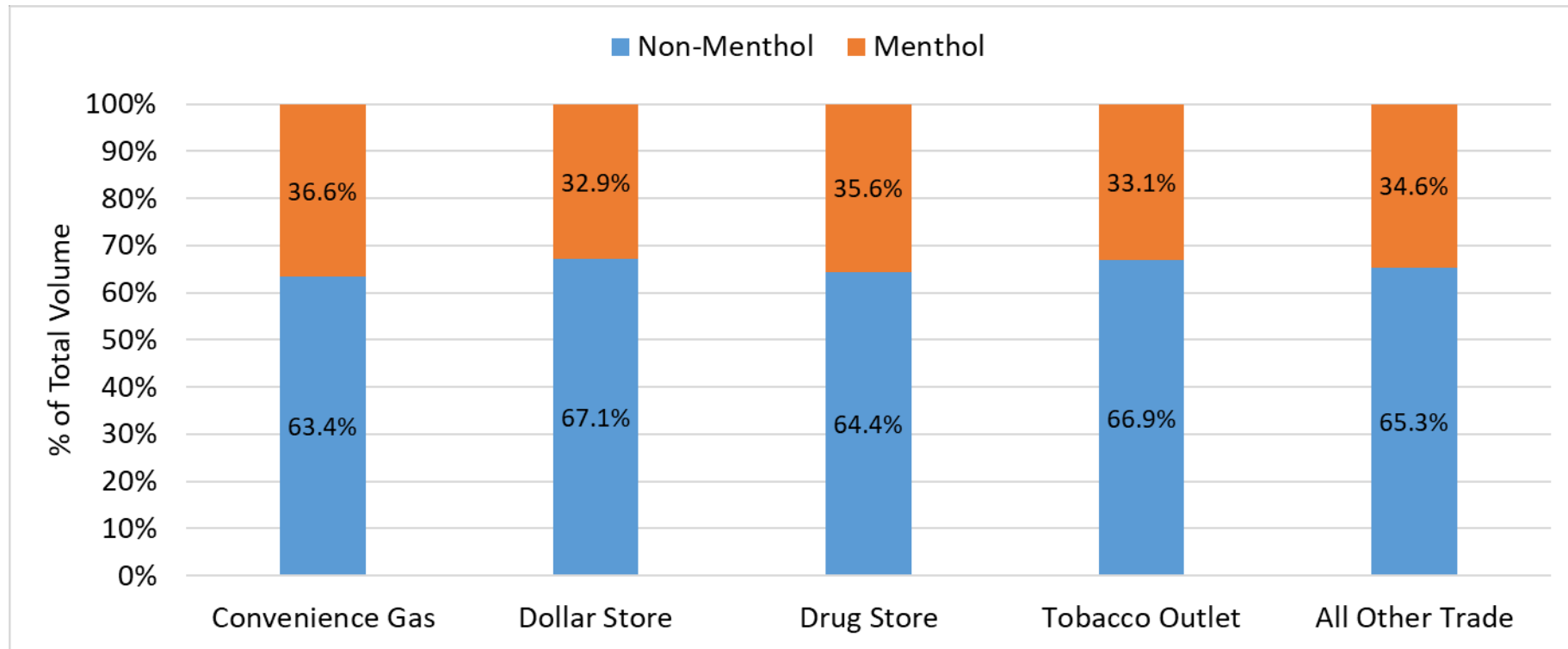
MENTHOL CIGARETTES TRENDS ANALYSIS

Cigarette Volume by Flavor Type



Cigarette Volume by Flavor Type and Trade Channel

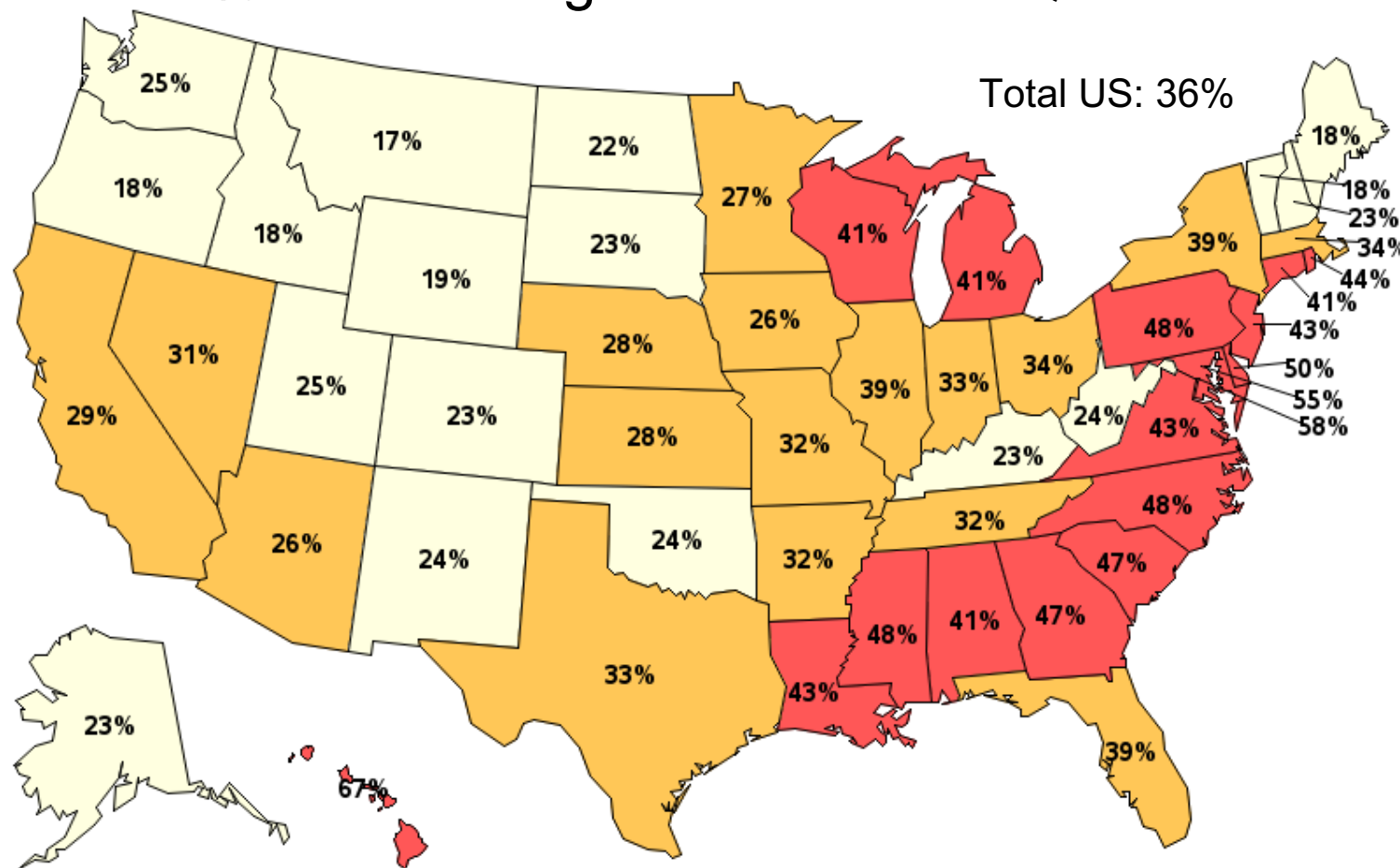
Share of Trade Channel Volume by Flavor Type, Q4-2018



Flavor	Q4-2018 vs. YAGO				
	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Non-Menthol	-5.8%	5.3%	-15.7%	-4.7%	-6.0%
Menthol	-4.1%	6.6%	-14.5%	0.3%	-5.4%

Menthol Cigarettes Volume by State

% Menthol Cigarettes Volume Q4-2018

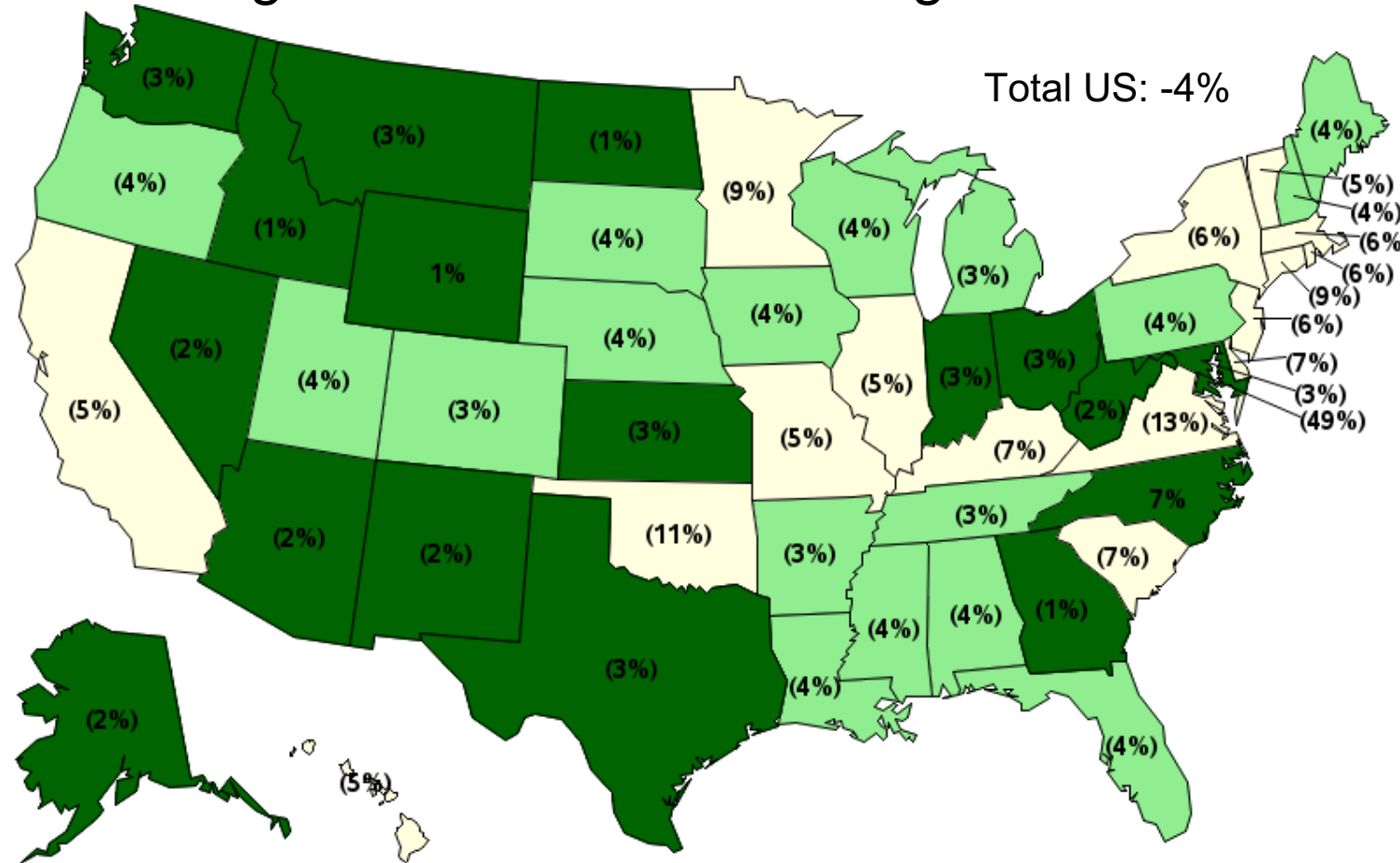


Percent Cigarettes Menthol

16.8% - 25.2%	26.4% - 38.9%	40.6% - 67.2%
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Menthol Cigarettes Growth by State

Menthol Cigarettes Volume % Change Q4-2018 vs YAGO



Cigarettes Menthol YOY % Change

(48.6%) - (4.5%)

(4.4%) - (3.3%)

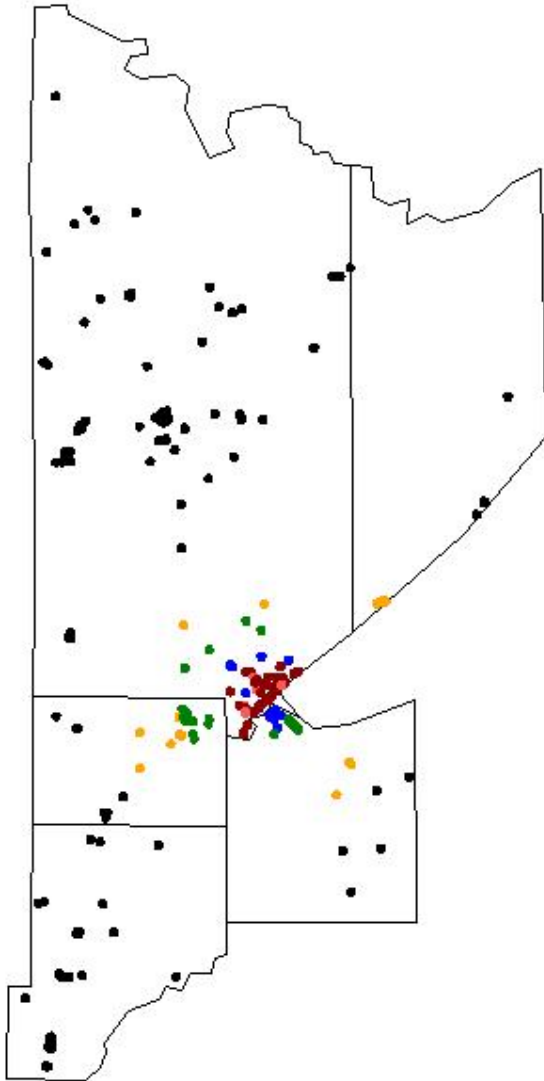
(3.3%) - 6.6%

TOBACCO FLAVOR RESTRICTION DULUTH, MINNESOTA

Flavored Tobacco Restriction

- ◆ Effective June 1st, 2018, Duluth, Minnesota restricted the sale of flavored products to adult only smoke shops. Such items are:
 - Menthol Cigarettes
 - Wintergreen / Mint Moist Tobacco
 - Chocolate, Vanilla, Candy or Fruit Vapor Items
- ◆ Only stores that prohibit persons under the age of 18 from entering at all times AND derive at least 90% of their revenue from the sale of tobacco can sell flavored tobacco products.

Flavored Tobacco Restriction



- ◆ Red – Flavored Products Banned (69 Stores)
- ◆ Light Red – Less than 1 Mile (14 Stores)
- ◆ Blue – Less than 5 Miles (29 Stores)
- ◆ Green – Less than 10 Miles (32 Stores)
- ◆ Yellow – Less than 25 Miles (20 Stores)
- ◆ Black – Greater than 25 Miles (185 Stores)

Impact on Cigarettes

% Change in Volume (July '18 through Dec '18 vs. Jan '18 through June '18)

	<u>Total</u>	<u>Restricted Stores</u>	<u><= 1 Mile</u>	<u><= 5 Miles</u>	<u><= 10 Miles</u>	<u><= 25 Miles</u>	<u>> 25 Miles</u>
Total	4.9%	-18.1%	53.2%	9.7%	9.5%	6.4%	6.4%
Non-Menthol	6.2%	3.4%	12.4%	4.8%	8.7%	5.5%	6.6%
Menthol	0.2%	-99.2%	156.3%	26.0%	12.8%	10.3%	5.5%

- ◆ Overall Cigarette volume increased by 4.9% in the post time period, with a majority of the increase from non-menthol cigarettes.
- ◆ While Menthol volume virtually went away in Restricted Stores, stores within 1 Mile and within 5 miles saw substantial increase in volume.
- ◆ Restricted Stores saw an increase of 3.4% for non-menthol, but not as much as the other stores used in the analysis.

Impact on Moist

% Change in Volume (July '18 through Dec '18 vs. Jan '18 through June '18)

	<u>Total</u>	<u>Restricted Stores</u>	<u><= 1 Mile</u>	<u><= 5 Miles</u>	<u><= 10 Miles</u>	<u><= 25 Miles</u>	<u>> 25 Miles</u>
Total	0.5%	-53.8%	62.6%	13.0%	9.6%	12.3%	3.8%
Tobacco	9.0%	34.7%	6.0%	1.2%	6.6%	5.9%	2.3%
Wintergreen	-3.6%	-98.3%	81.4%	20.0%	10.6%	16.2%	5.4%
Mint	-5.5%	-100.6%	89.0%	17.1%	12.8%	20.5%	2.2%
All Other	3.6%	-37.9%	83.7%	10.1%	9.6%	0.1%	-5.9%

- ◆ In total, Moist had very little to no increase in the post time period.
 - Tobacco flavored styles though did see an increase of 9% across all stores.
- ◆ Restricted stores saw a reduction in total moist volume of 53.8%. However, Tobacco styles saw an increase of 34.7%.
- ◆ Stores within a mile of restricted stores saw an increase of over 80% for wintergreen and mint styles.

Impact on Snus

% Change in Volume (July '18 through Dec '18 vs. Jan '18 through June '18)

	<u>Total</u>	<u>Restricted Stores</u>	<u><= 1 Mile</u>	<u><= 5 Miles</u>	<u><= 10 Miles</u>	<u><= 25 Miles</u>	<u>> 25 Miles</u>
Total	1.7%	-85.0%	99.6%	32.0%	13.6%	44.1%	8.3%
Tobacco	-35.4%	13.8%	-165.2%	-162.5%	640.0%	-129.4%	-34.3%
Mint	0.6%	-100.1%	104.7%	32.9%	15.1%	45.1%	8.4%
All Other	17.6%	6.8%	53.8%	32.8%	-1.1%	46.0%	14.8%

- ◆ Tobacco flavored Snus items saw an increase of 13.8% in volume within stores with the flavor restriction.
- ◆ Overall Mint flavored Snus items saw a small 0.6% increase in the post time period.
 - Stores within 1 mile, had a 100% increase in volume.

Impact on Vapor

% Change in Volume (July '18 through Dec '18 vs. Jan '18 through June '18)

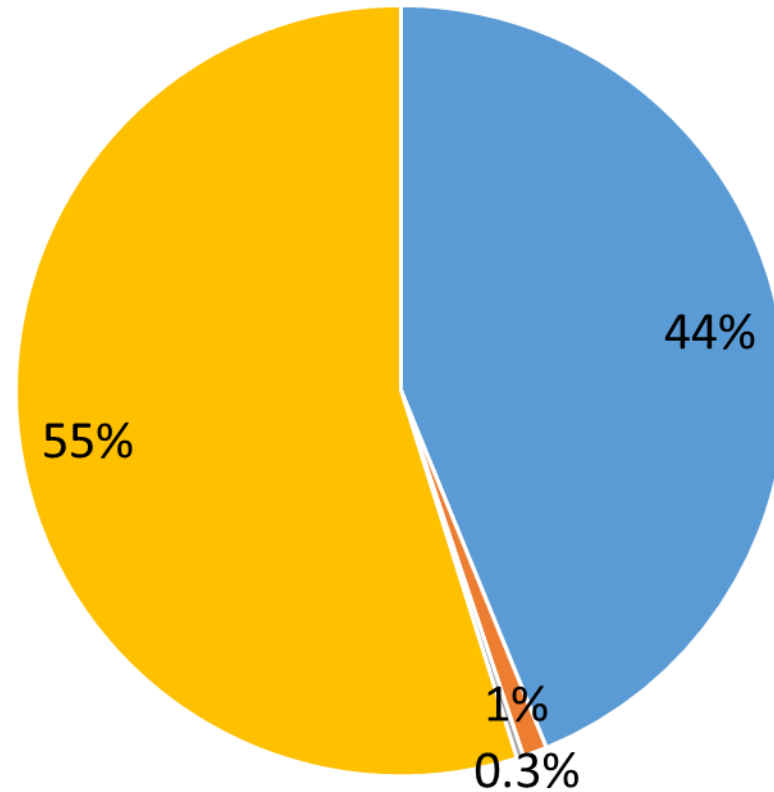
	<u>Total</u>	<u>Restricted Stores</u>	<u><= 1 Mile</u>	<u><= 5 Miles</u>	<u><= 10 Miles</u>	<u><= 25 Miles</u>	<u>> 25 Miles</u>
Total	91.2%	-29.6%	200.0%	125.1%	106.7%	69.7%	85.4%
Tobacco	39.3%	59.2%	37.8%	19.5%	68.3%	25.0%	46.0%
Menthol	66.2%	-120.3%	251.1%	117.8%	64.6%	86.6%	52.8%
All Other	151.9%	-109.4%	275.4%	295.2%	150.3%	102.8%	121.7%

- ◆ Overall Vapor volume increased by 91.2%.
 - Restricted flavor stores saw an almost 30% decrease in volume.
- ◆ Tobacco Vapor items saw an overall increase of 39.3%, however for flavor restricted stores the increase was 59.2%.

FLAVORED CIGAR TRENDS ANALYSIS

Total Cigar Volume Share by Flavor Type

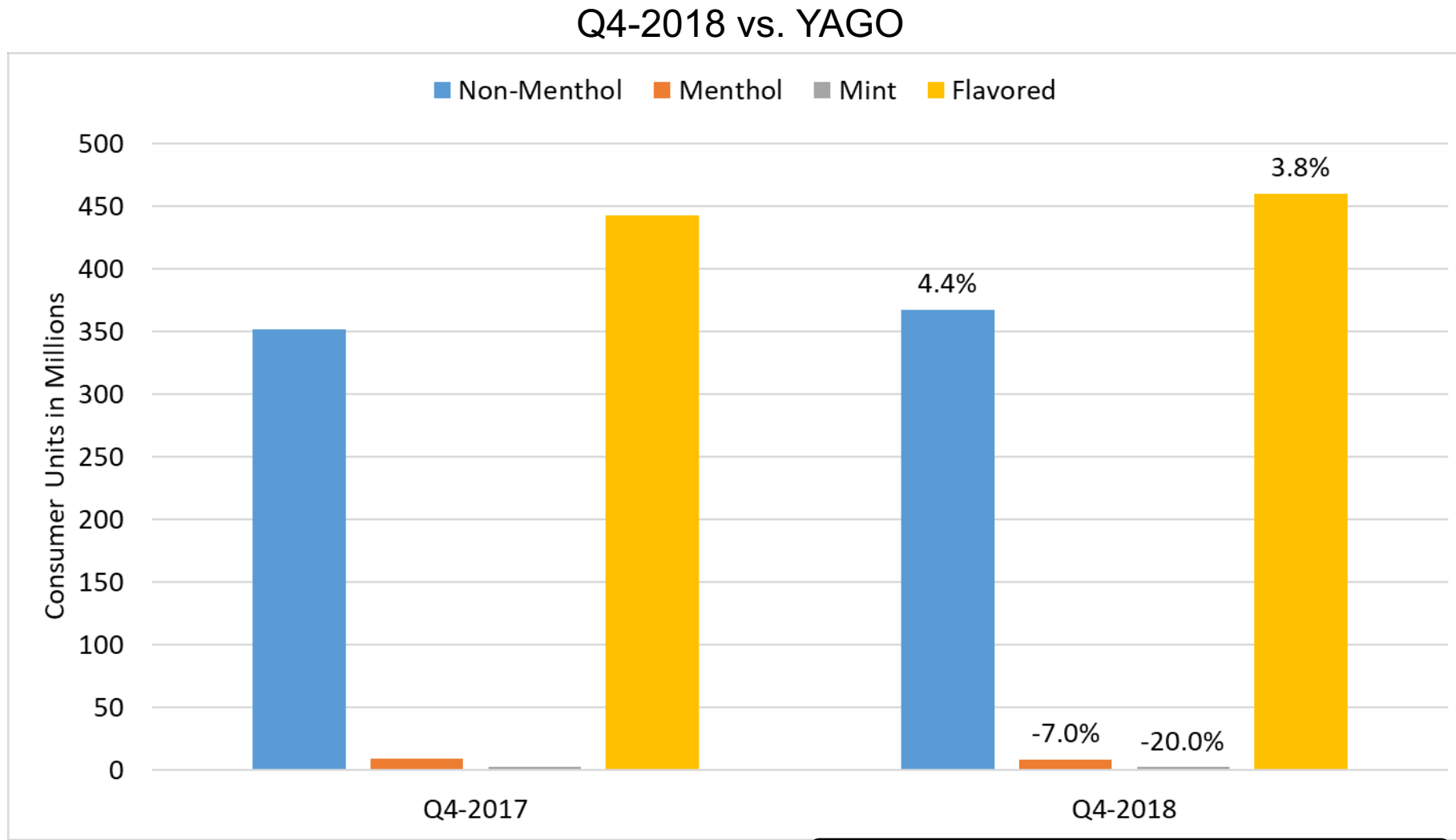
■ Non-Menthol ■ Menthol ■ Mint ■ Flavored



13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Mint	Flavored
Change	31,430,901	15,652,088	-634,650	-592,112	17,005,575
% Change	3.9%	4.4%	-7.0%	-20.0%	3.8%

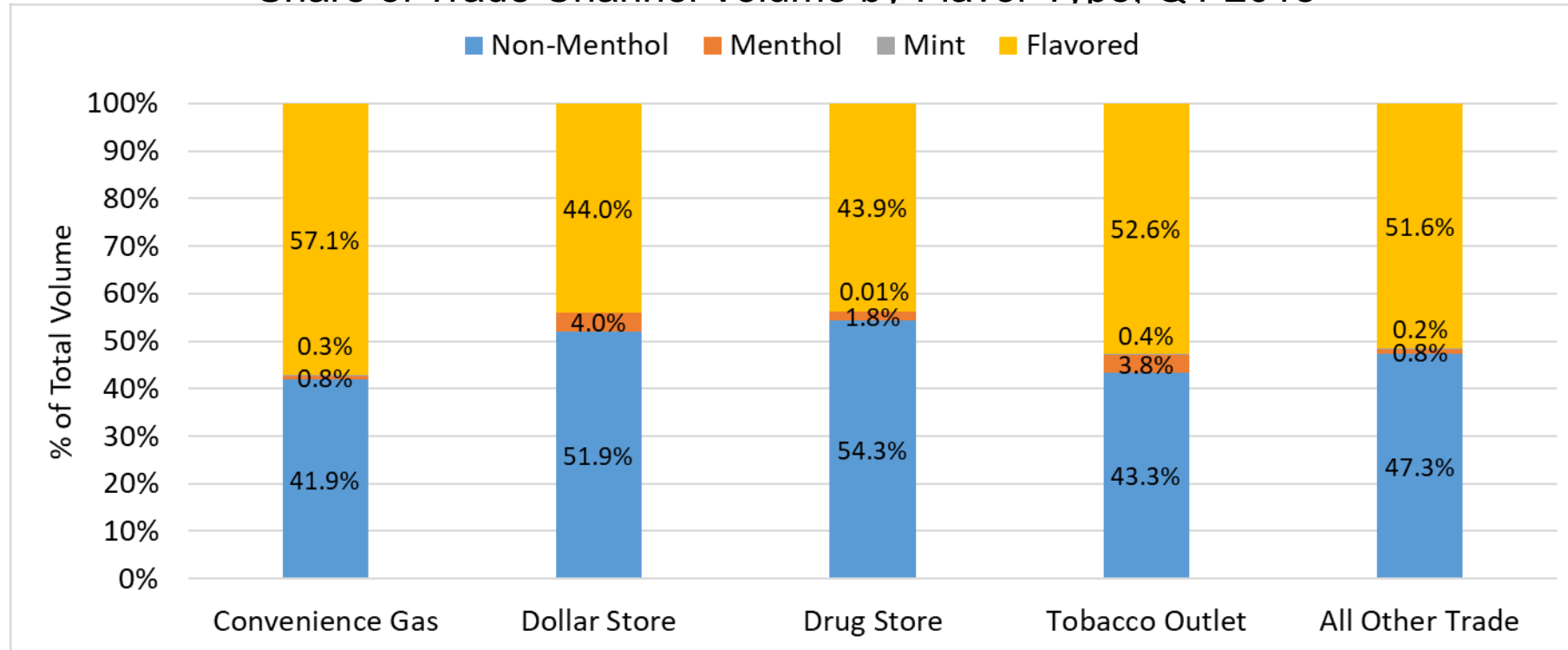
Total Cigar Volume by Flavor Type



Total Cigar up 3.9%

Total Cigar Volume by Flavor Type and Trade Channel

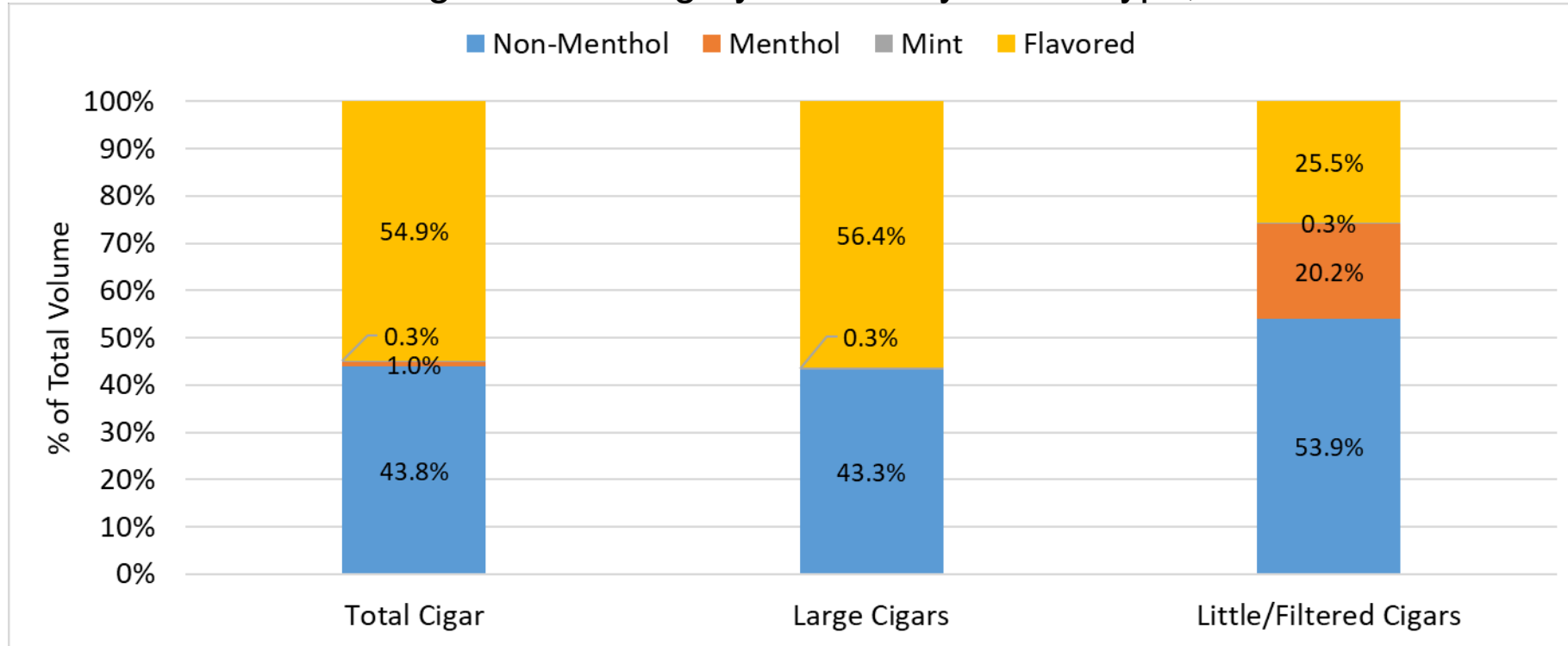
Share of Trade Channel Volume by Flavor Type, Q4-2018



Q4-2018 vs. YAGO					
Flavor	Convenience Gas	Dollar Store	Drug Store	Tobacco Outlet	All Other Trade
Non-Menthol	3.2%	17.6%	-1.6%	-2.4%	7.3%
Menthol	-4.0%	-1.6%	5.3%	-6.4%	-14.4%
Mint	-12.1%	0.0%	100.0%	-0.8%	-37.9%
Flavored	4.2%	31.8%	-7.0%	5.7%	1.5%

Cigar Volume by Flavor Type and Sub-Category

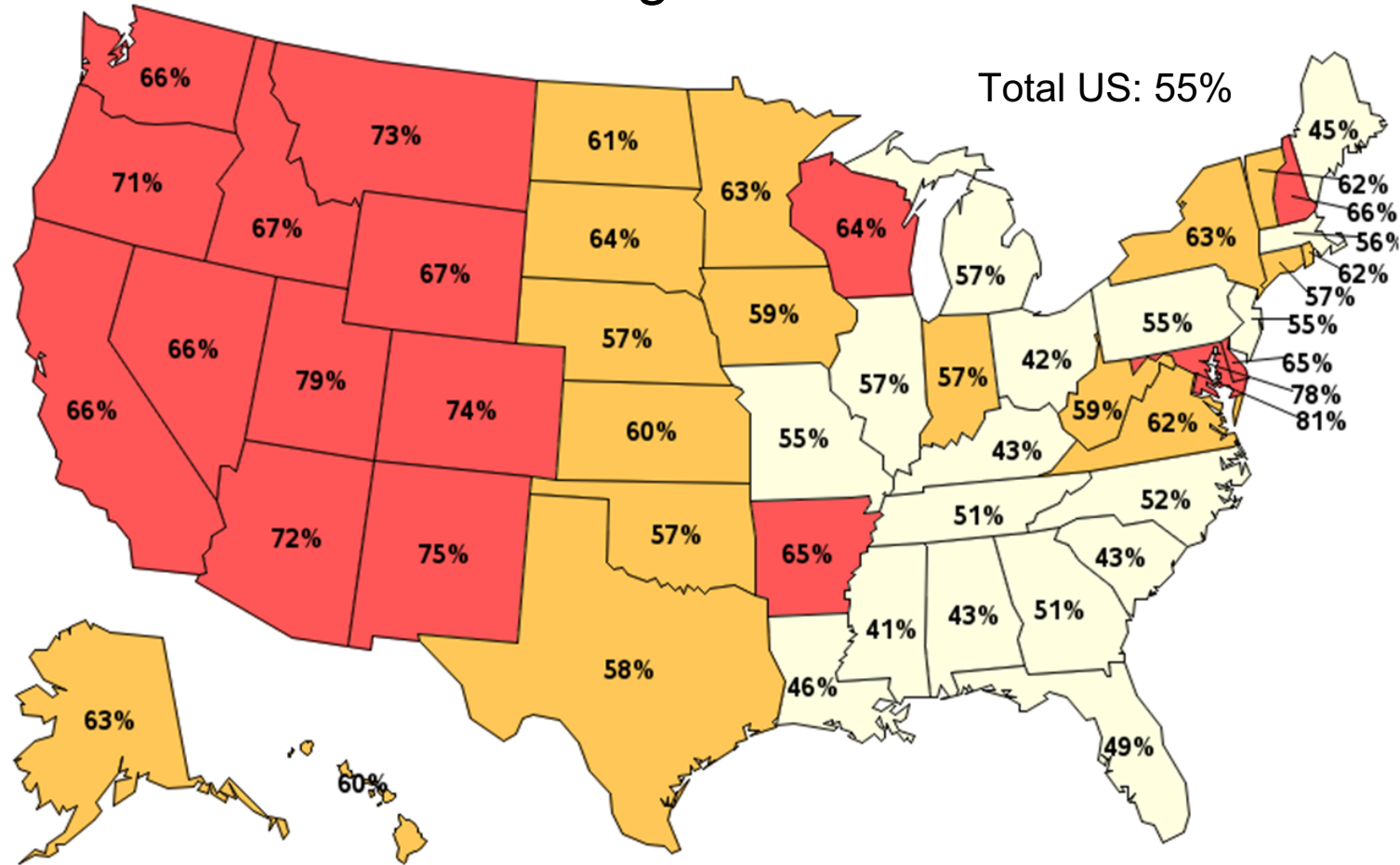
Share of Cigar Sub-Category Volume by Flavor Type, Q4-2018



Flavor	Q4-2018 vs. YAGO		
	Total Cigar	Large Cigars	Little/Filtered Cigars
Non-Menthol	4.4%	5.0%	-3.3%
Menthol	-7.0%	-15.6%	-7.0%
Mint	-20.0%	-22.2%	45.9%
Flavored	3.8%	4.1%	-6.4%

Flavored Cigar Volume by State

% Flavored Cigar Volume Q4-2018

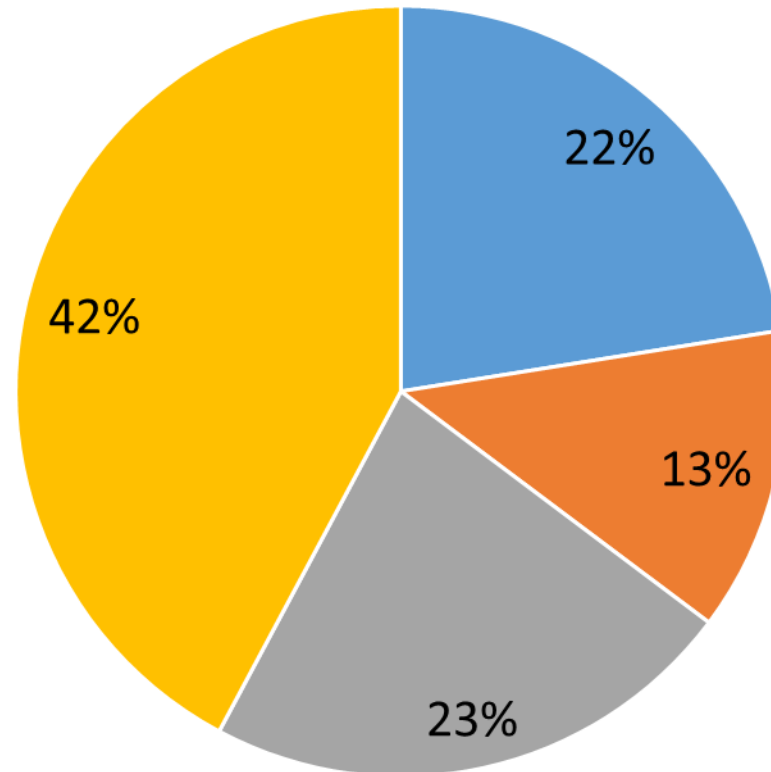


Percent Cigar Flavored 41.1% - 56.7% 56.8% - 63.6% 64.0% - 80.8%

FLAVORED VAPOR TRENDS ANALYSIS

Total Vapor Volume Share by Flavor Type

■ Non-Menthol ■ Menthol ■ Mint ■ Flavored

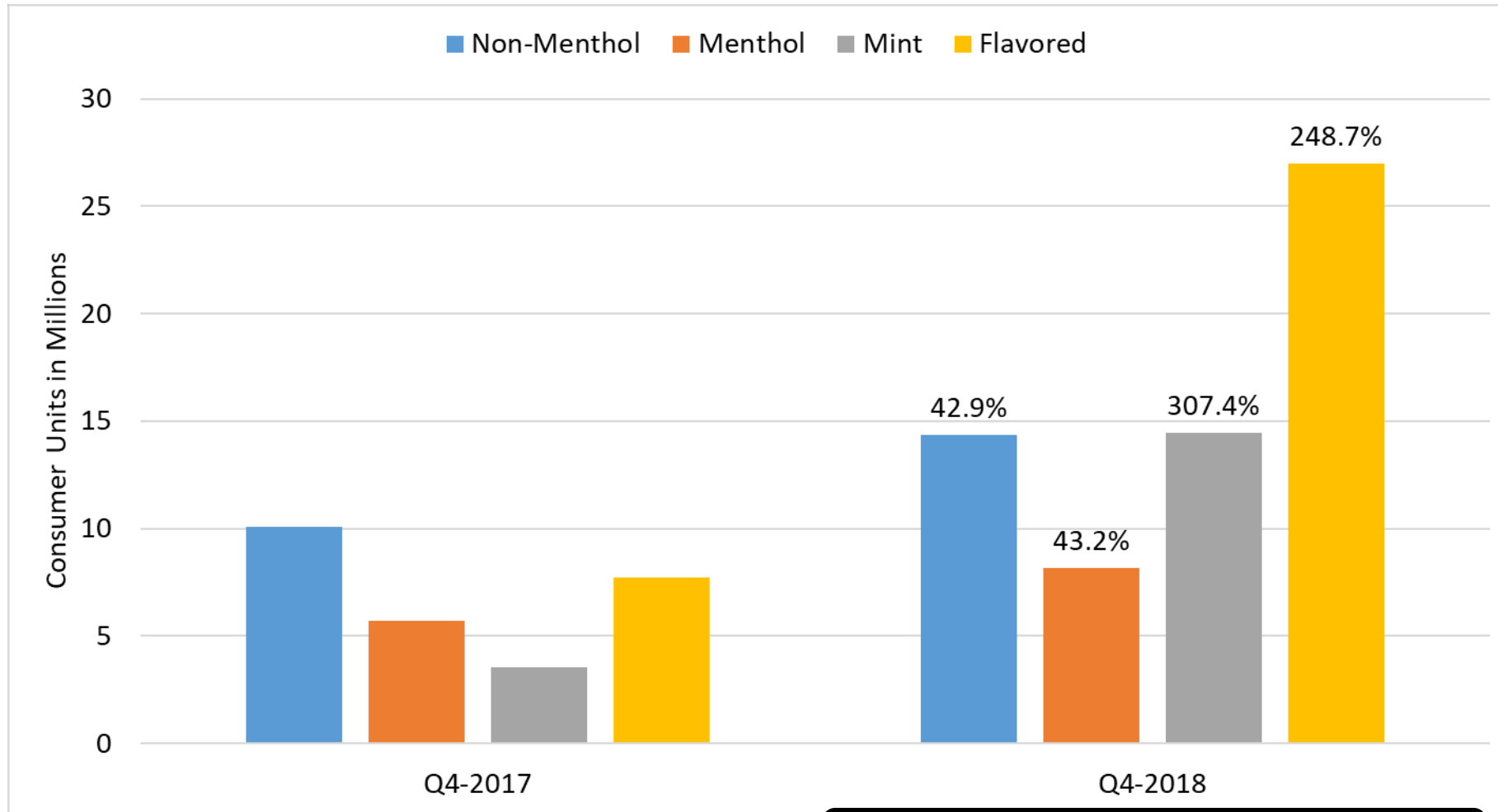


13 Weeks Ending Q4-2018

Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Mint	Flavored
Change	36,910,555	4,314,456	2,463,355	10,897,728	19,235,016
% Change	136.5%	42.9%	43.2%	307.4%	248.7%

Total Vapor Volume by Flavor Type

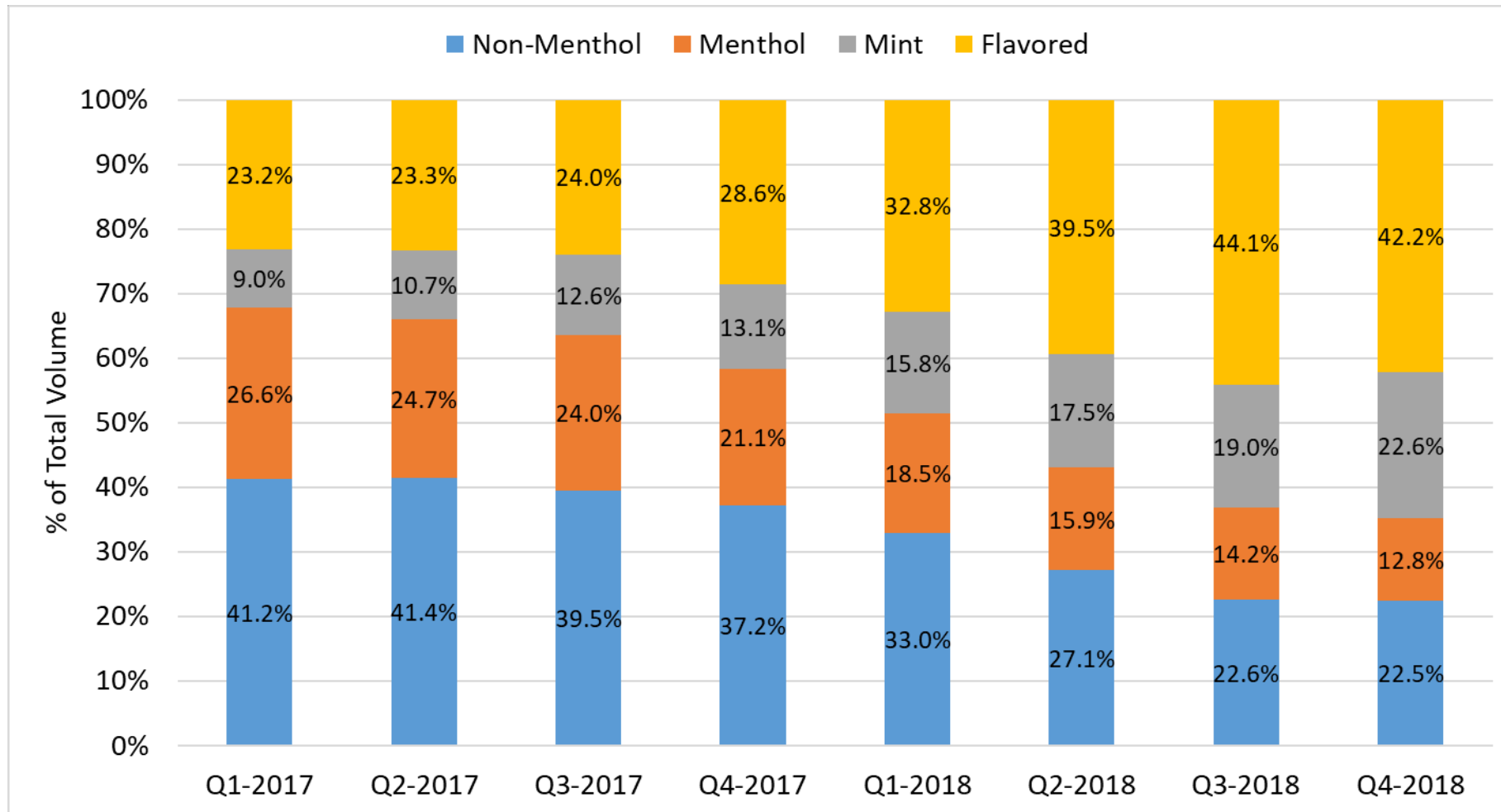
Q4-2018 vs. YAGO



Total Vapor up 136.5%

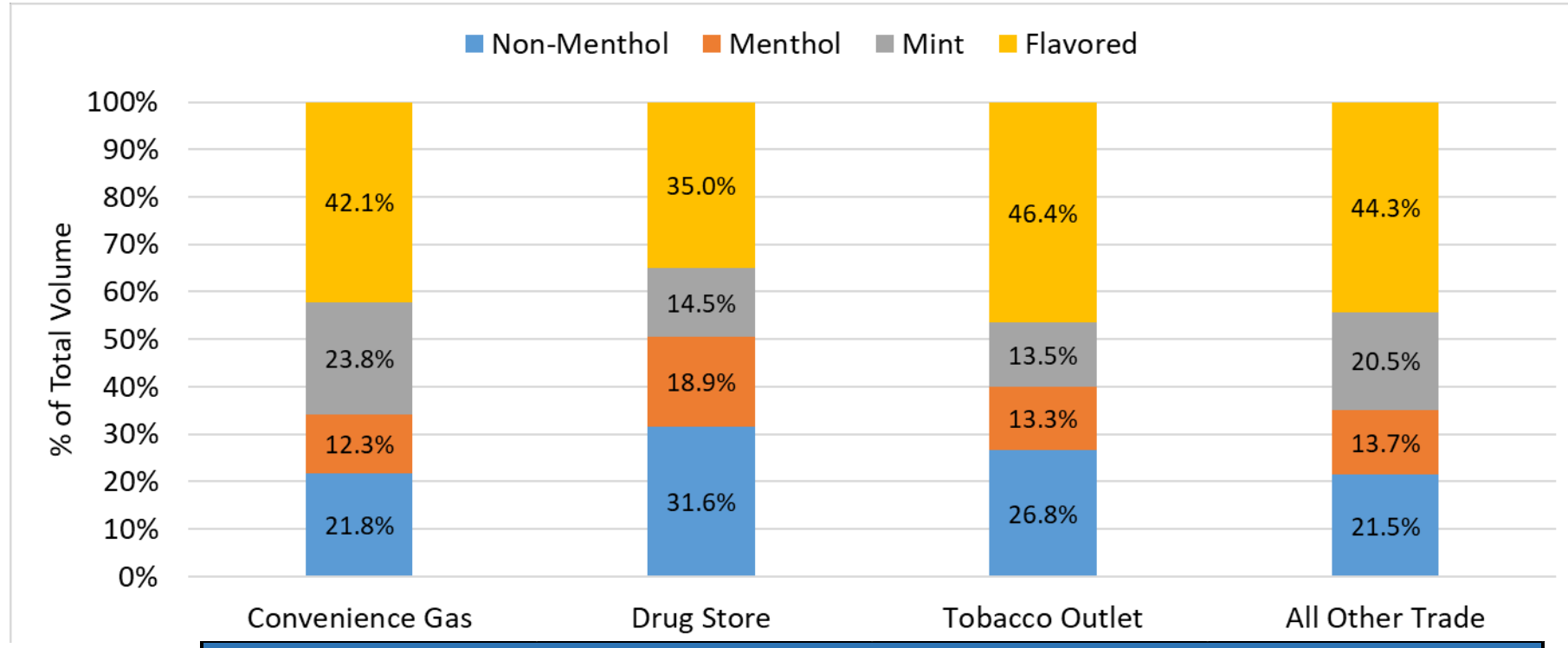
Total Vapor Volume by Flavor Type

Share of Volume by Flavor Type



Total Vapor Volume by Flavor Type and Trade Channel

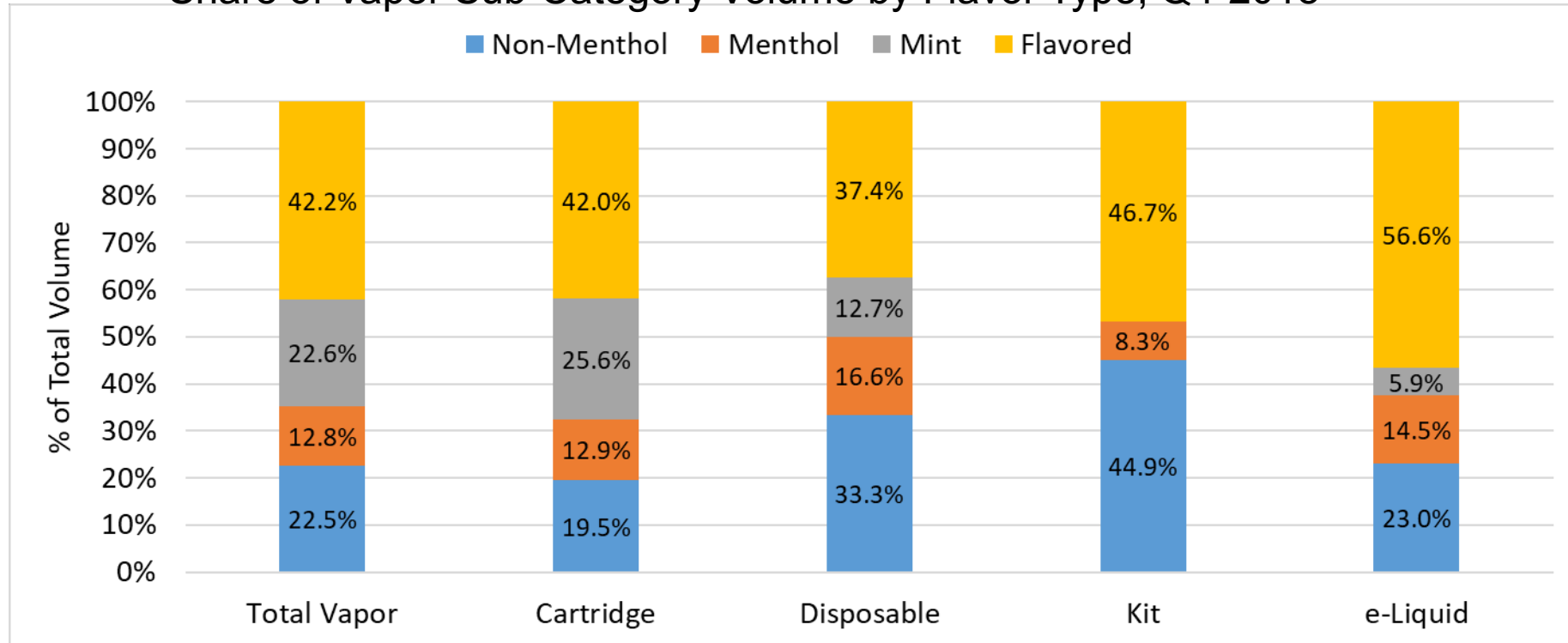
Share of Trade Channel Volume by Flavor Type, Q4-2018



Q4-2018 vs. YAGO				
Flavor	Convenience Gas	Drug Store	Tobacco Outlet	All Other Trade
Non-Menthol	46.2%	7.4%	23.9%	80.2%
Menthol	44.5%	-6.8%	39.9%	149.2%
Mint	311.0%	145.9%	181.0%	561.6%
Flavored	276.8%	3.5%	223.1%	580.4%

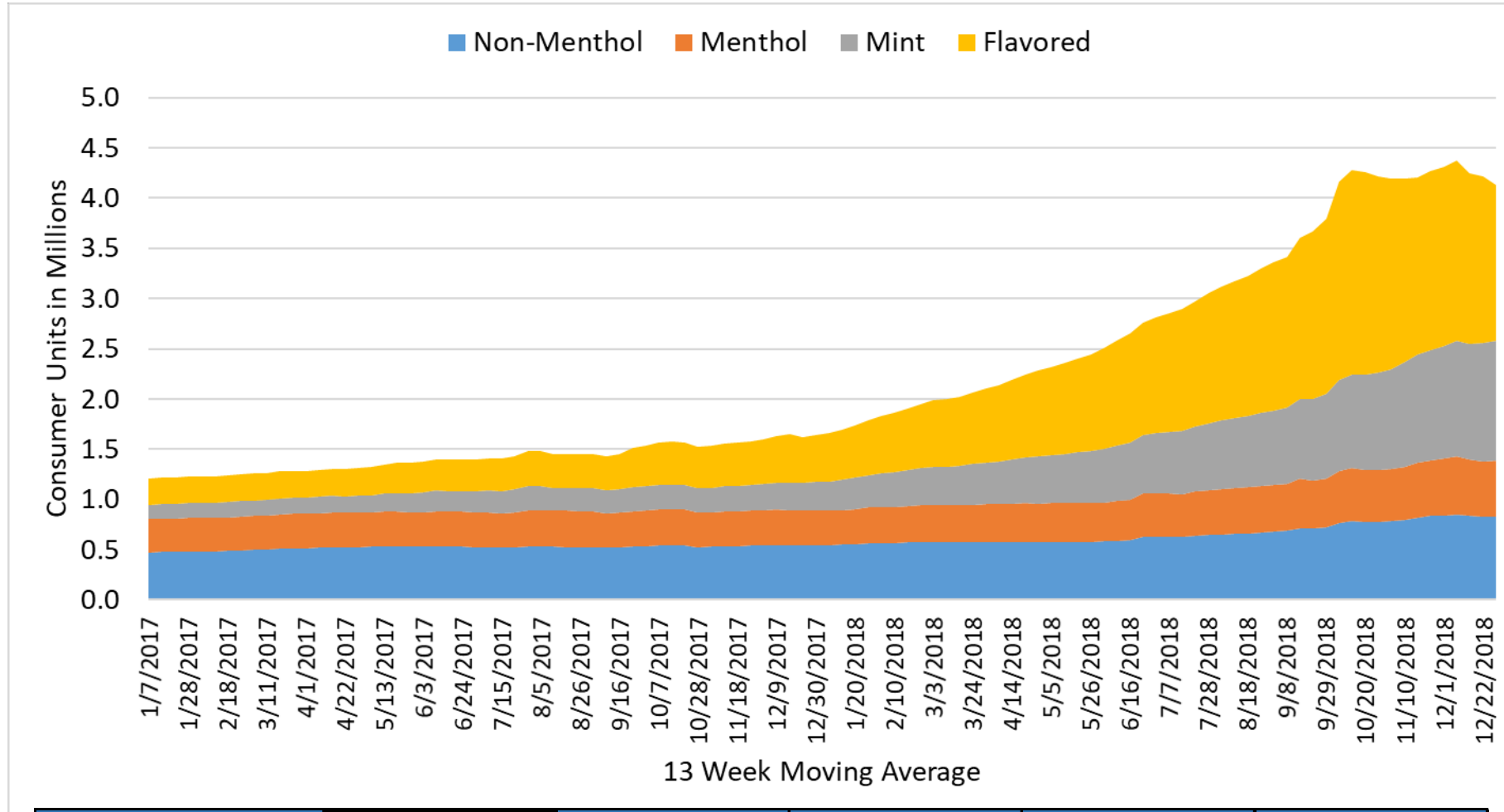
Vapor Volume by Flavor Type and Sub-Category

Share of Vapor Sub-Category Volume by Flavor Type, Q4-2018



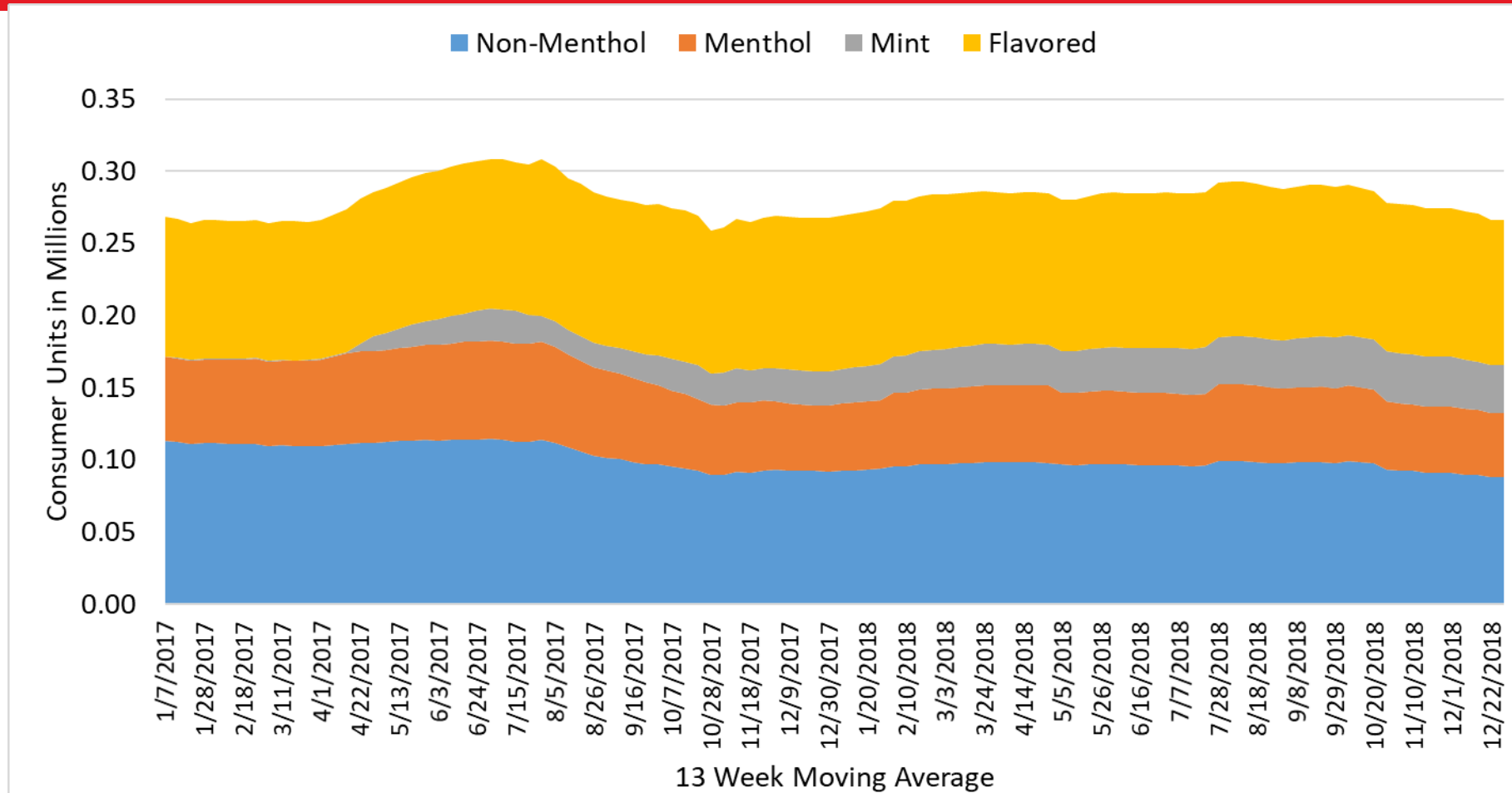
Q4-2018 vs. YAGO					
Flavor	Total Vapor	Cartridge	Disposable	Kit	e-Liquid
Non-Menthol	42.9%	53.9%	-0.1%	35.6%	-47.8%
Menthol	43.2%	56.6%	-5.9%	6.5%	-65.7%
Mint	307.4%	332.4%	54.1%	0.0%	-12.3%
Flavored	248.7%	308.4%	-0.1%	372.6%	-31.6%

Cartridge Volume by Flavor Type



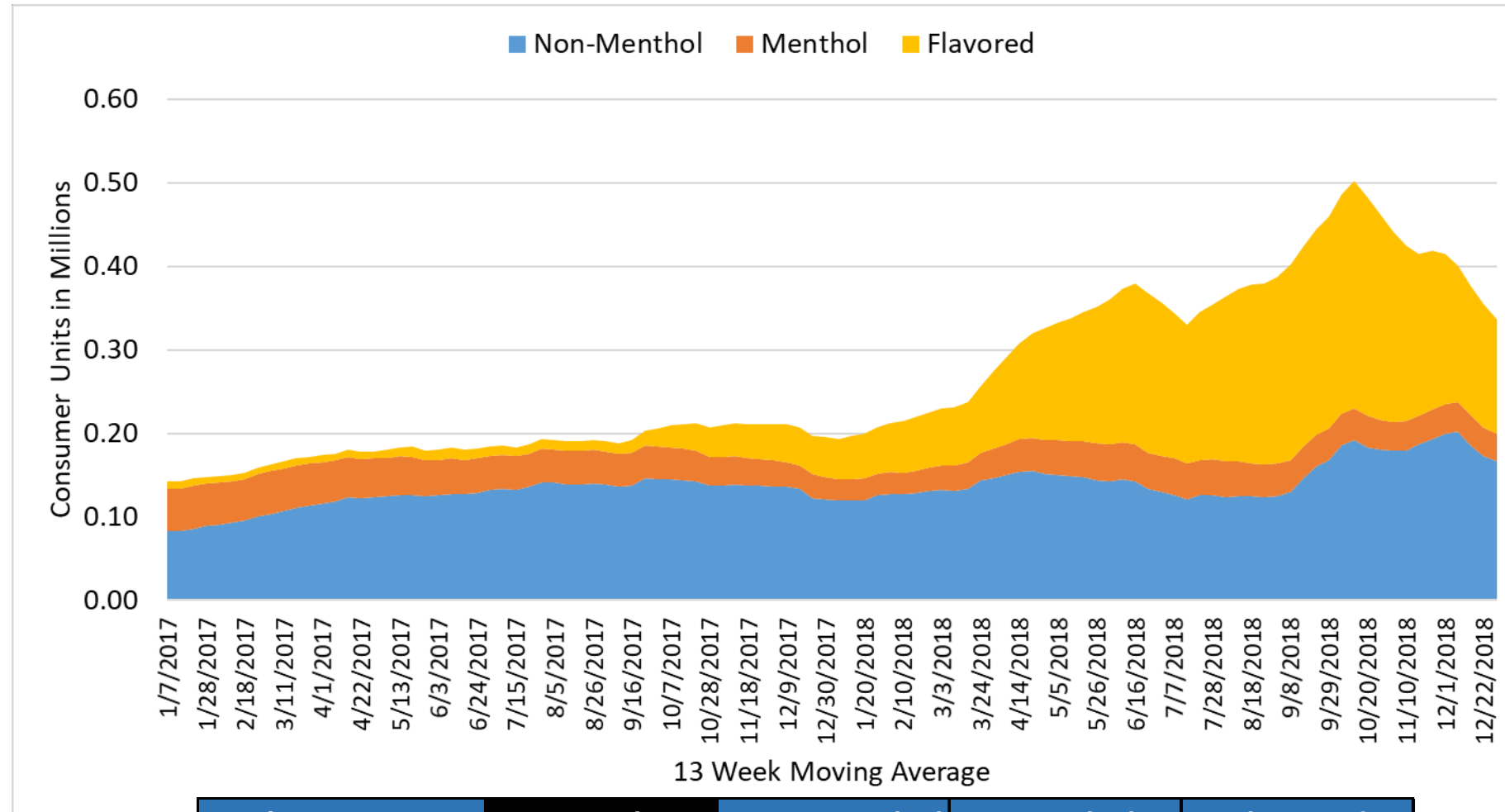
Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Mint	Flavored
Change	34,366,053	3,742,303	2,556,780	10,741,863	17,325,107
% Change	169.2%	53.9%	56.6%	332.4%	308.4%

Disposable Volume by Flavor Type



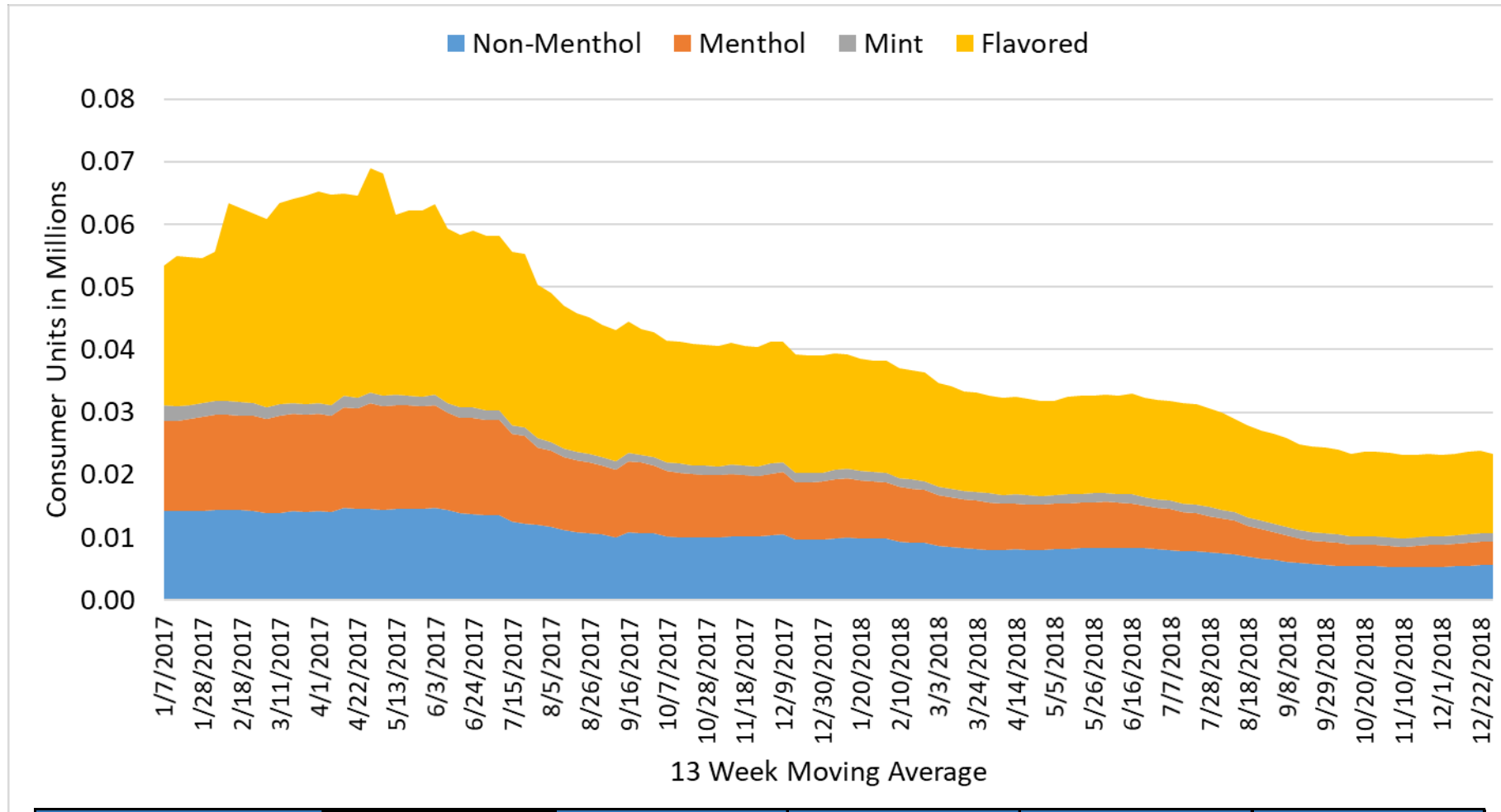
Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Mint	Flavored
Change	118,170	-1,683	-37,203	158,355	-1,299
% Change	3.4%	-0.1%	-5.9%	54.1%	-0.1%

Kit Volume by Flavor Type



Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Flavored
Change	2,654,174	636,891	27,406	1,989,906
% Change	96.7%	35.6%	6.5%	372.6%

e-Liquid Volume by Flavor Type



Q4 '18 vs. YAGO	Total	Non-Menthol	Menthol	Mint	Flavored
Change	-227,843	-63,054	-83,628	-2,463	-78,698
% Change	-43.1%	-47.8%	-65.7%	-12.3%	-31.6%

IMPACT OF SET INCREASES

Overall Impact of Cigarette SET Increases

In 2018, SET increases occurred in Kentucky, Oklahoma, and DC.

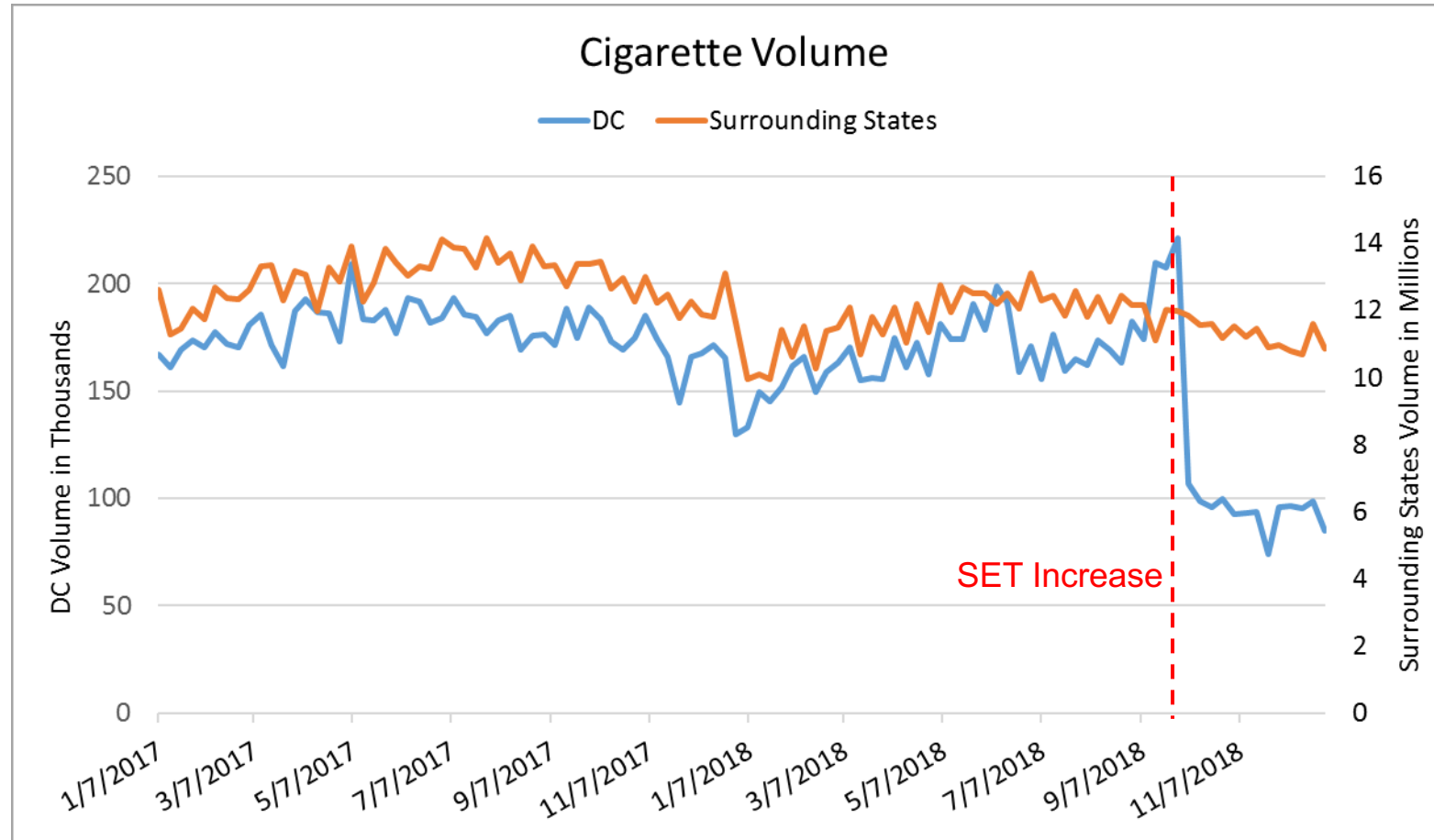
Kentucky and Oklahoma saw significant increases in excise dollars and decreases in volume.

The DC SET increase drastically reduced volume, with only a slight increase in excise dollars.

	Change Month	Change Amount	Volume % Change vs YAGO				SET Dollar % Change vs YAGO			
			Q1-2018	Q2-2018	Q3-2018	Q4-2018	Q1-2018	Q2-2018	Q3-2018	Q4-2018
2017 SET Increases	4 states	\$0.86	-23.0%	1.9%	-5.3%	-5.7%	61.9%	5.5%	-2.4%	-5.0%
CA	Apr-17	\$2.00	-25.5%	5.7%	-2.9%	-5.0%	99.7%	5.7%	-2.9%	-5.0%
DE	Sep-17	\$0.50	-15.6%	-13.3%	-20.3%	-6.4%	10.8%	13.9%	-6.3%	-6.4%
RI	Sep-17	\$0.50	-9.1%	-7.7%	-8.0%	-6.5%	3.0%	4.6%	-0.6%	-6.5%
CT	Dec-17	\$0.45	-10.4%	-8.2%	-9.9%	-10.4%	0.0%	2.4%	0.5%	-4.1%
2018 SET Increases	3 states	\$1.17	-5.5%	-0.7%	-10.5%	-10.7%	-6.1%	-0.6%	64.3%	66.1%
KY	Jul-18	\$0.50	-4.1%	-1.3%	-7.8%	-8.4%	-4.1%	-1.3%	69.0%	68.0%
OK	Jul-18	\$1.00	7.7%	0.7%	-15.6%	-13.4%	-7.7%	0.7%	66.4%	70.8%
DC	Oct-18	\$2.00	-10.3%	-6.0%	-1.3%	-43.5%	-10.3%	-6.0%	-1.3%	1.7%
No SET Increase	44 states	-	-5.4%	-3.4%	-4.7%	-4.8%	-5.1%	-3.5%	-4.7%	-5.0%

SET Impact on Cigarettes in DC

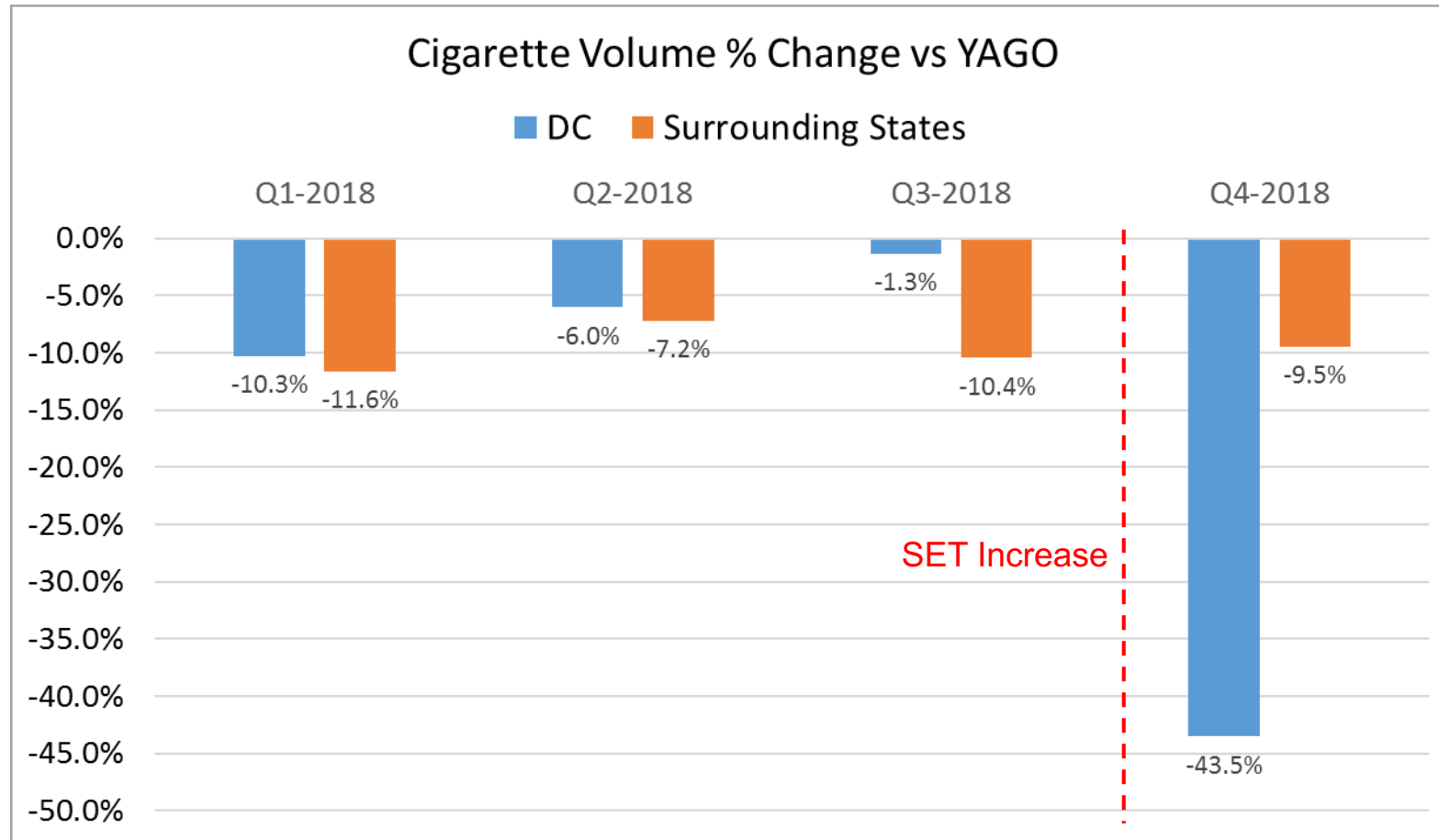
In October 2018, DC increased the SET on cigarettes from \$2.50 to \$4.50 per pack (80% increase).



Surrounding States: MD and VA

SET Impact on Cigarettes in DC

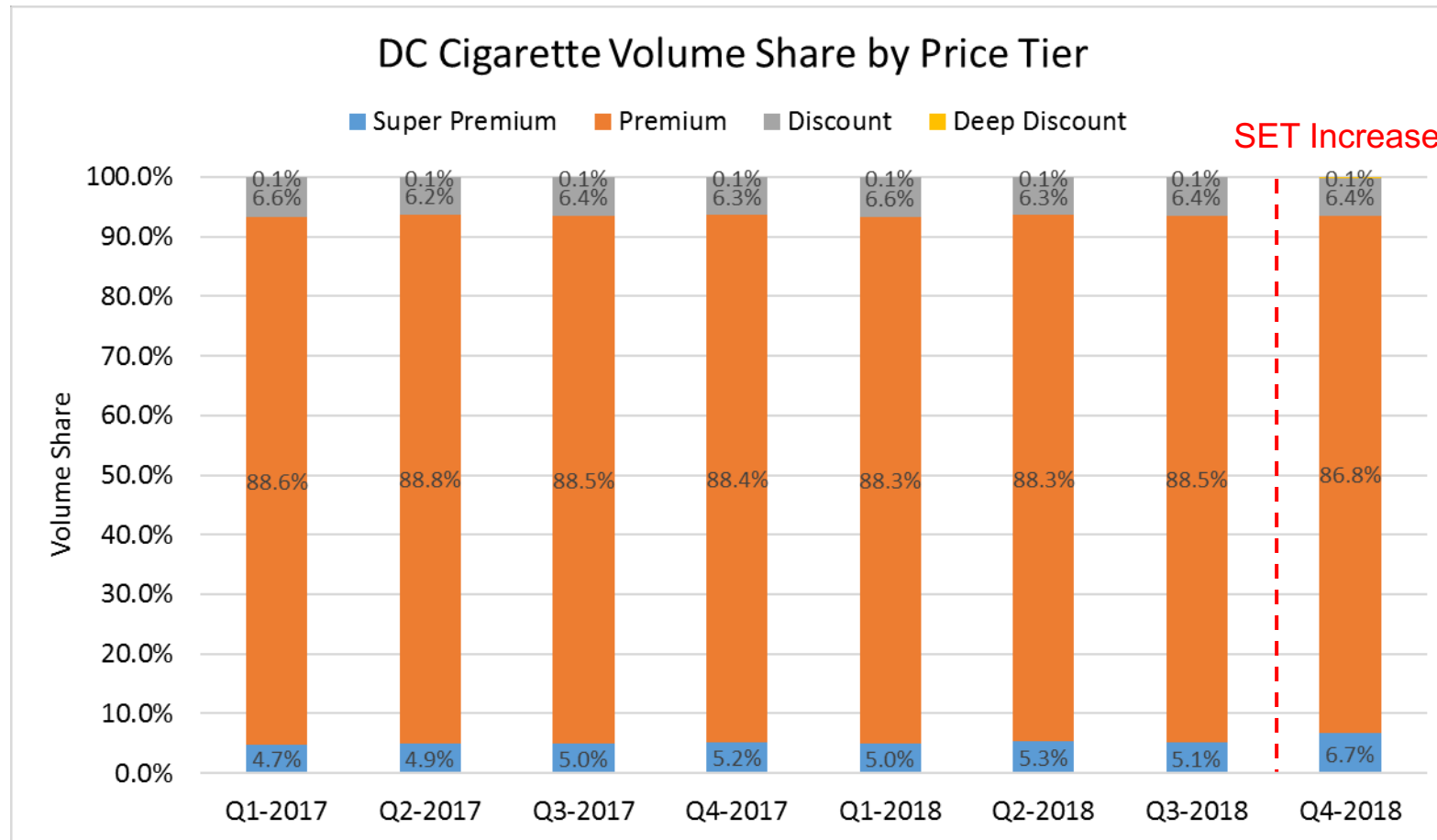
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Surrounding States: MD and VA

SET Impact on Cigarettes in DC

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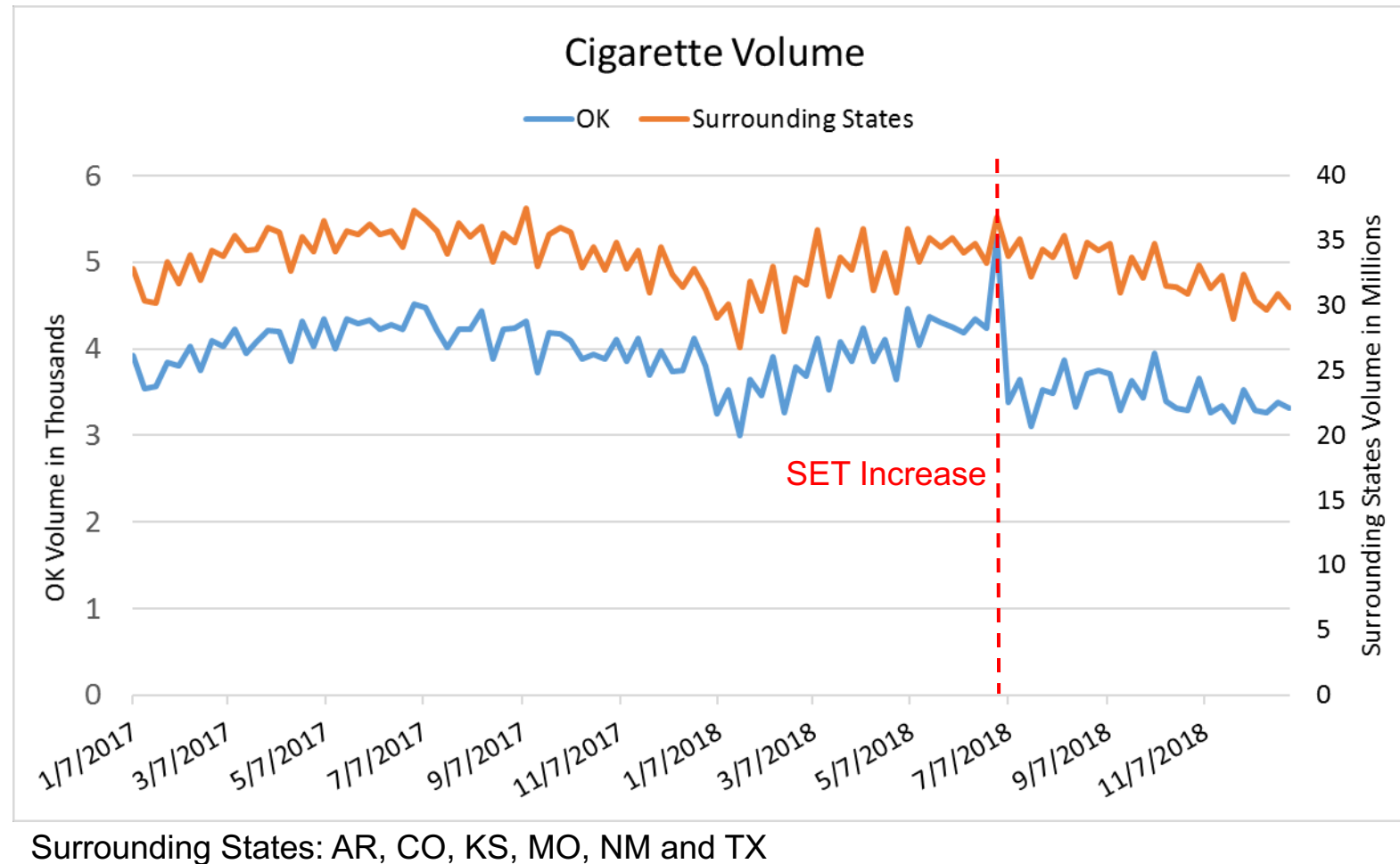
SET Impact on Cigarettes in DC

In October 2018, DC increased the SET on cigarettes from \$2.50 to \$4.50 per pack (80% increase).

Q4'18 vs. YAGO	Volume % Change		Share Change	
	DC	MD, VA	DC	MD, VA
Price Tier				
Super Premium	-28.1%	-2.2%	1.4%	0.1%
Premium	-44.5%	-10.8%	-1.5%	-1.2%
Discount	-42.8%	-7.9%	0.1%	0.3%
Deep Discount	-17.0%	8.6%	0.0%	0.8%
Total	-43.5%	-9.5%	-	-
Trade Class				
Convenience Gas	-43.6%	-6.7%	-0.1%	2.2%
Dollar Store	-44.6%	7.3%	0.0%	0.3%
Drug	-27.9%	-17.3%	1.4%	-0.2%
Tobacco Outlets	-8.2%	-2.9%	0.1%	0.7%
All Other Outlets	-45.6%	-27.6%	-1.3%	-3.0%
Total	-43.5%	-9.5%	-	-
Tobacco Category				
Cigarettes	-43.5%	-9.5%	-1.1%	-3.4%
Cigars	-44.3%	6.8%	-1.7%	2.1%
OTP	-17.8%	-1.9%	1.1%	0.3%
Vapor	204.6%	166.2%	1.7%	1.0%
Total	-42.2%	-5.1%	-	-

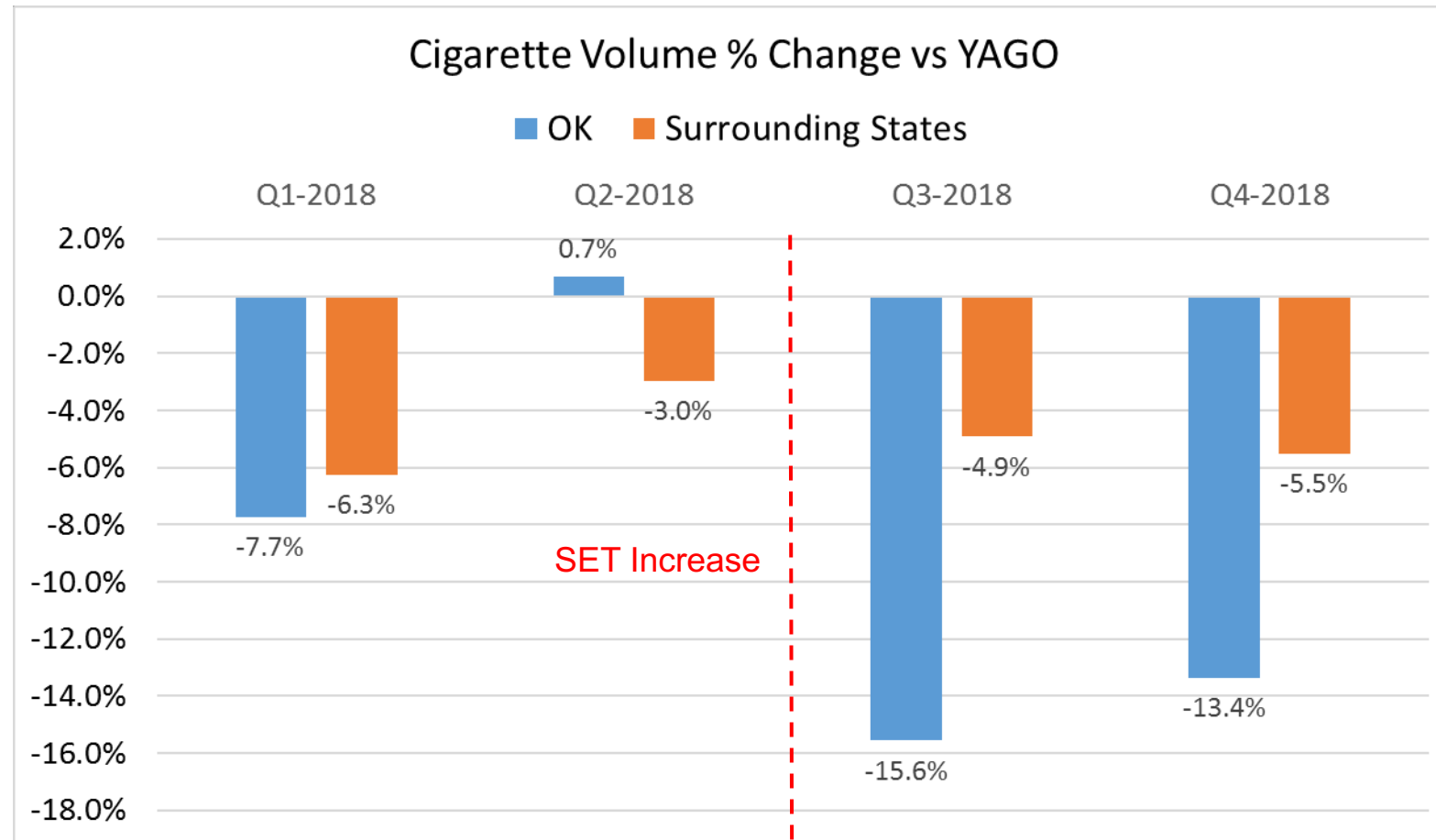
SET Impact on Cigarettes in OK

In July 2018, Oklahoma increased the SET on cigarettes from \$1.03 to \$2.03 per pack (97% increase).



SET Impact on Cigarettes in OK

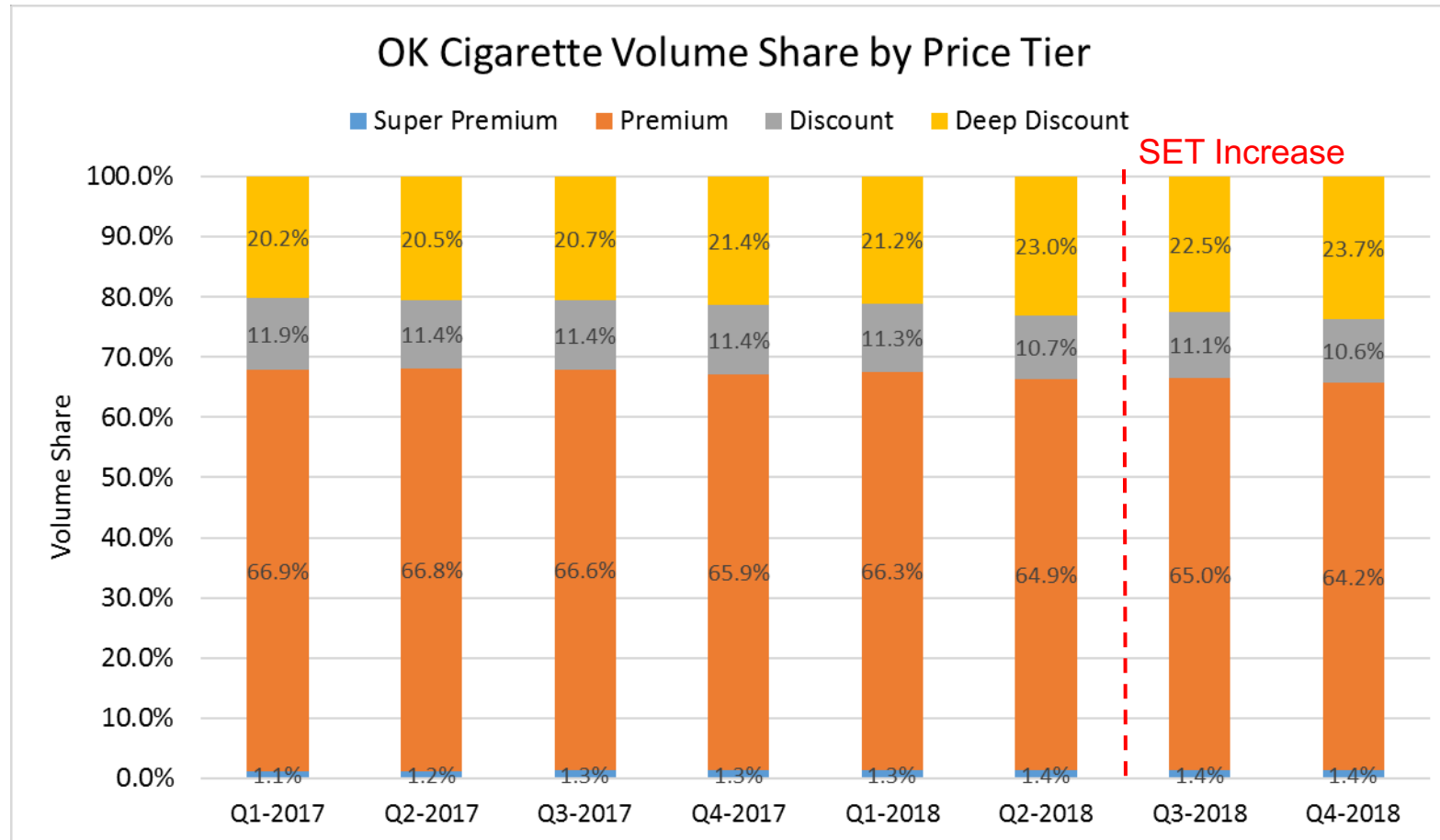
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Surrounding States: AR, CO, KS, MO, NM and TX

SET Impact on Cigarettes in OK

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SET Impact on Cigarettes in OK

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Q3-Q4'18 vs. YAGO	Volume % Change		Share Change	
	OK	CO, KS, TX, MO, AR, NM	OK	CO, KS, TX, MO, AR, NM
Price Tier				
Super Premium	-4.1%	0.7%	0.2%	0.1%
Premium	-16.6%	-4.5%	-1.7%	0.5%
Discount	-18.7%	-10.1%	-0.6%	-0.8%
Deep Discount	-6.1%	-3.8%	2.1%	0.2%
Total	-14.5%	-5.2%	-	-
Trade Class				
Convenience Gas	-14.7%	-5.3%	-0.2%	0.0%
Dollar Store	0.0%	8.1%	0.6%	0.4%
Drug	-23.2%	-15.5%	-0.1%	-0.3%
Tobacco Outlets	-18.0%	-3.9%	-0.9%	0.1%
All Other Outlets	-6.4%	-5.9%	0.6%	-0.1%
Total	-14.5%	-5.2%	-	-
Tobacco Category				
Cigarettes	-14.5%	-5.2%	-3.8%	-2.5%
Cigars	2.0%	7.4%	1.8%	1.8%
OTP	-1.4%	-2.1%	1.3%	0.0%
Vapor	124.1%	118.7%	0.7%	0.7%
Total	-9.6%	-1.7%	-	-



THANK YOU!