

US State Tax Rate Estimates

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**As required by the Alcohol Policy 19 Conference,
I/we have signed a disclosure statement and note the
following conflict(s) of interest:**

07-12/2021 Contracts and travel support from the
National Alcohol Beverage Association

1-10/2020 Expert witness for State of Indiana and
Indiana Wine and Spirits Wholesalers Assoc.

06/2020-02/2021 Expert witness for State of Illinois
and Illinois Wine and Spirits Wholesalers Assoc .



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Alcohol Beverage Revenues & Taxes 2020 Report

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National Alcohol Beverage Control Association (NABCA)

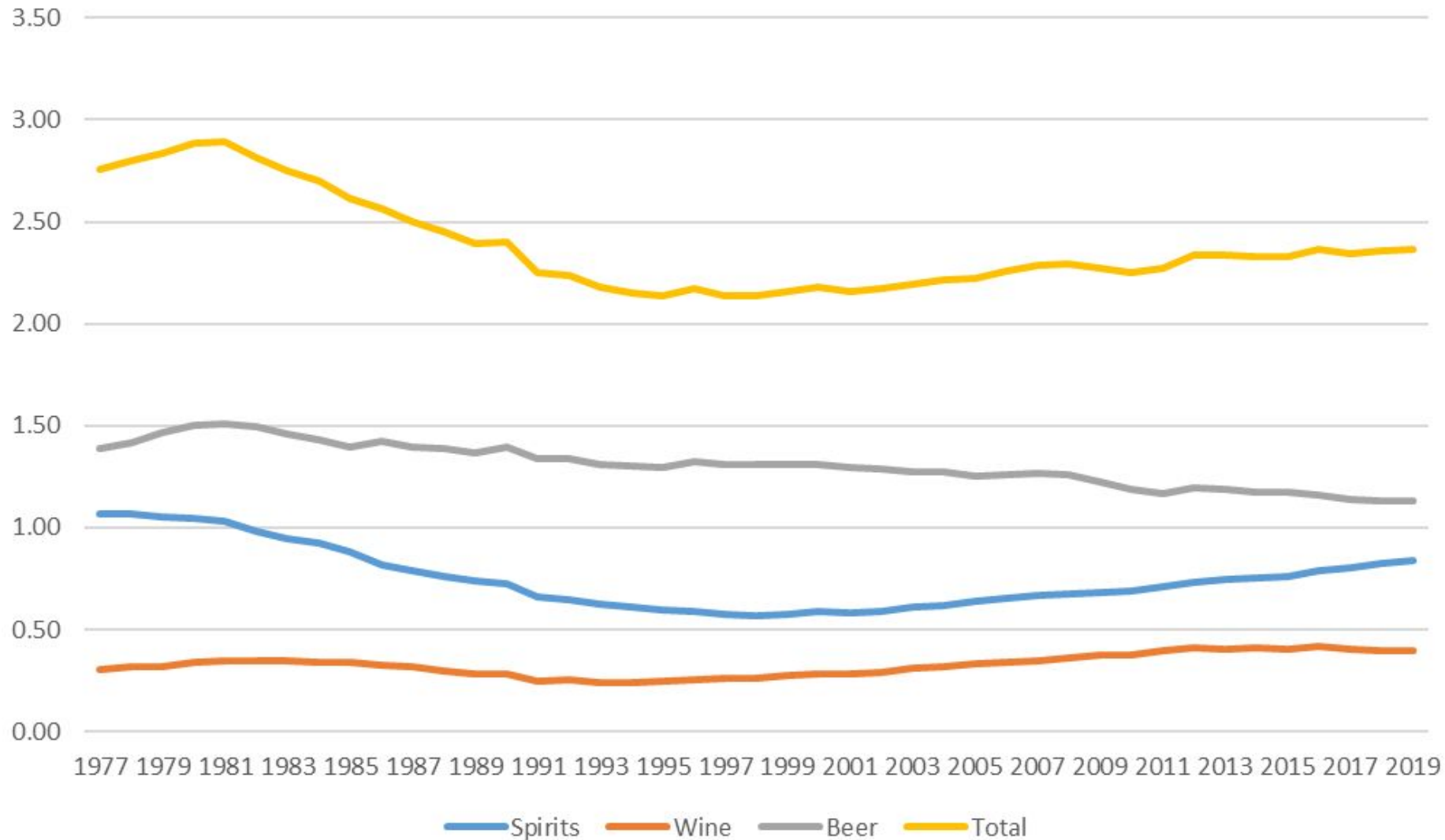
and the

U.S. National Institute on Alcohol Abuse and Alcoholism (NIAAA) at the
National Institutes of Health (NIH):

P50 AA005595 Epidemiology of Alcohol Problems: Alcohol-related Disparities

US Alcohol Sales 1977 to 2019

US Per Capita Ethanol Gallons



In 2016 there were **506 drinks** sold for each person aged 15 and older

US Mortality from Alcohol-related Causes has been Increasing since 1999 and rose substantially in 2020

- Deaths with alcohol as a main or secondary cause doubled from 36,000 in 1999 to 72,000 in 2017, a 51% age-adjusted increase.
- From 2019 to 2020 the alcohol-related death rate increased by 25%.
- The largest changes were among those aged 25-44.

Declining real tax rates may play an important role in these changes

- Tax rates are mainly specific amounts per beverage gallon and so decline as a % of price over time with inflation.
- Federal tax rates were last raised in 1991 and a small reduction occurred in 2018.
- Few states have increased nominal tax rates in the past 20 years.
- General sales taxes are not considered alcohol taxes because they apply to many products at the same rate, though they do effect the price paid for an alcoholic beverage relevant to affordability.



State tax rates

Most states have wholesale specific tax rates for each beverage type, sometimes with different rates by %ABV. In nearly all cases the tax is on the beverage volume.

Some states have *ad valorem* (% of price) taxes in addition and these may be at the wholesale or retail level.

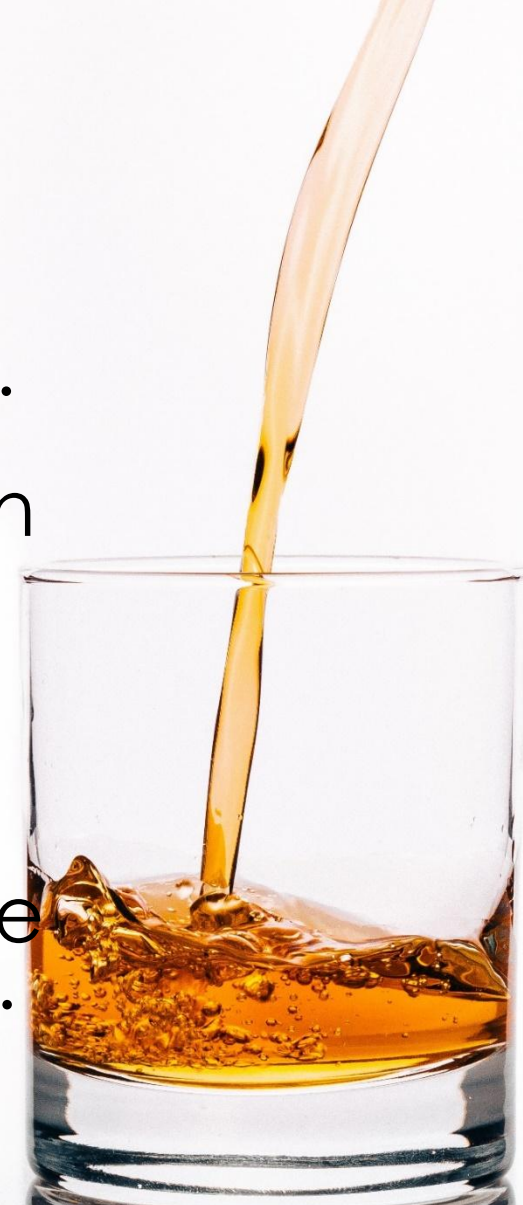
Control states have mark-up formula's that can include a variety of % mark-ups, fees, specific taxes and *ad valorem* taxes.

Comparability across states and beverage types

- Comparing these is difficult because % taxes or mark-ups vary by product price and products vary in %ABV, so that the same volume of alcohol varies in the number of standard drinks it contains.
- To compare across beverage types, tax rates should be presented in terms of pure ethanol or standard drinks.
- Taxes can be applied at production or import, wholesale and retail stages. Because industry practices include price-based mark-ups at each stage it is important to consider the stage at which a tax is applied.
- A wholesale tax may be marked up by the wholesaler and retailer, while a retail tax, added at the register like a general sales tax, will not be marked up.

Control state tax estimates

- Our estimation process is designed to generate an equivalent wholesale-stage specific tax rate for any tax or control state mark-up structure.
- Several assumptions are needed to facilitate this.
- These include a focus on a specific product, such as a 750ml bottle of 40%ABV spirits with a cost of \$10 per bottle to the wholesaler.
- We also assume an average margin of 21% by wholesalers and a 25% mark-up by retailers, resulting in a **58.125% total mark-up** from the price to the wholesalers from the producer or importer.



Control state tax estimation process

States	Assumed Avg FOB Price	Calculated	Expected Price (w/ Mark-up) ^a	tax per	tax per bottle	tax per	tax rates per std drink
		Retail Price - Avg 1.75L		bottle + markup		gallon (40% abv)	
Alabama	12.98	27.65	20.52	7.13	4.51	9.75	0.114
Idaho	12.98	25.40	20.52	4.88	3.08	6.67	0.078
Maine	12.98	23.99	20.52	3.47	2.19	4.74	0.056
Montgomery County (MD)	12.98	16.13	20.52	-4.39	-2.78	-6.01	-0.070
Michigan	12.98	23.99	20.52	3.46	2.19	4.74	0.056
Montana	12.98	23.40	20.52	2.88	1.82	3.93	0.046
New Hampshire	12.98	18.99	20.52	-1.53	-0.97	-2.10	-0.025
North Carolina	12.98	24.95	20.52	4.43	2.80	6.05	0.071
Ohio	12.98	23.79	20.52	3.27	2.07	4.47	0.052
Oregon	12.98	28.40	20.52	7.88	4.98	10.77	0.126
Pennsylvania	12.98	21.99	20.52	1.47	0.93	2.00	0.023
Utah	12.98	24.70	20.52	4.18	2.64	5.71	0.067
Vermont	12.98	22.50	20.52	1.98	1.25	2.71	0.032
Virginia	12.98	26.25	20.52	5.73	3.62	7.83	0.092
Wholesale Prices Only							
Iowa	12.98	19.56	16.42	3.14	2.48	5.37	0.063
Mississippi	12.98	18.54	16.42	2.12	1.68	3.62	0.042
West Virginia ^b	12.98	17.00	16.42	0.58	1.48	3.19	0.037
Wyoming	12.98	17.08	16.42	0.66	0.52	1.12	0.013

EXAMPLE OF SPIRITS MARK-UPS FROM APPENDIX

Pennsylvania

Delivered case cost	77.88
Price per bottle + 1% and rounded up	13.11
markup @30%	3.93
PLCB operational cost	1.55
<i>intermediate price</i>	<i>18.59</i>
state tax @ 18%	3.35
Bottle price	21.94
rounded to the final nine	21.99
sales and use tax @ 6%	
Bottle price	21.99

Ohio

Delivered case cost	77.88
Freight case cost	0.99
Operating cost factor @ 12.35%	9.74
Total cost of operation	88.61
Mark-up @30% margin=42.86%	37.98
Liquor gallonage tax @ \$3.38 per gallon	9.38
<i>intermediate price</i>	<i>135.96</i>
user charge @5%	6.80
retail BASE price	142.76
retail sales tax @5.75%	0.00
Case price before rounding	142.76
Bottle price	23.79
(minus sales tax of 5.75%)	

States with ad valorem taxes require a similar procedure.

Washington Department of Revenue Washington Liquor and Cannabis Board

	Tax Rate	Revenue
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Spirit Revenue		
Retailer & Wholesale Fees		\$172,453,017.00
Distilled Spirits Tax	20.50%	\$184,259,000.00
Distilled Spirits Liter Tax	\$3.7708/ltr	\$174,505,000.00
		<hr/>
		\$531,217,017.00
Wine Revenue [1]		
Under 14%	\$0.2292/ltr	--
Over 14%	\$0.4536/ltr	--
		<hr/>
		\$26,479,857.00
Beer Revenue		
Beer Tax	\$4.78 - \$23.58/bbl	\$30,076,121.00
Licensing Fees		\$15,476,379.00

1 Breakdown not available

We consider both 750ml and 1.75L products as well as 3 price levels. Each year we adjust the price levels by the CPI for at-home spirits.

• SHOW HOW THESE VARY, TABLE 6a

	1.75 L Spirits			750 ML Spirits	1.75L/750ml Avg
States	FOB \$7.79	FOB \$12.98	FOB \$21.81	FOB \$7.79	
Alabama	0.071	0.114	0.189	0.159	0.137
Idaho	0.057	0.078	0.101	0.104	0.091
Maine	0.067	0.056	0.032	0.063	0.059
Montgomery County (MD)	-0.037	-0.070	-0.127	-0.104	-0.087
Michigan	0.033	0.056	0.093	0.078	0.067
Montana	0.031	0.046	0.073	0.065	0.055
New Hampshire	-0.013	-0.025	-0.048	-0.031	-0.028
North Carolina	0.048	0.071	0.112	0.098	0.085
Ohio	0.044	0.052	0.067	0.062	0.057
Oregon	0.081	0.126	0.157	0.184	0.155
Pennsylvania	0.025	0.023	0.019	0.044	0.034
Utah	0.042	0.067	0.109	0.093	0.080
Vermont	0.020	0.032	0.052	0.046	0.039
Virginia	0.060	0.092	0.147	0.143	0.118
Wholesale Prices Only					
Iowa	0.038	0.063	0.105	0.090	0.076
Mississippi	0.041	0.042	0.044	0.046	0.044
West Virginia	0.010	0.037	0.057	0.050	0.044
Wyoming	0.022	0.013	-0.003	0.008	0.011
Control States Average	0.040	0.056	0.077	0.077	0.066
License States Average	0.058	0.061	0.067	0.065	0.063

TAX RATES CAN VARY OVER TIME

States	Average 1.75 L and 750 ML Spirits				
	2020	2019	2018	2016	2014
Alabama	\$0.137	\$0.136	\$0.134	\$0.115	\$0.115
Idaho	0.091	0.083	0.088	0.088	0.080
Maine	0.059	0.062	0.068	0.076	0.053
Montgomery County (MD)	-0.087	-0.086	-0.085	-0.004	-0.004
Michigan	0.067	0.066	0.065	0.066	0.065
Montana	0.055	0.056	0.055	0.056	0.054
New Hampshire	-0.028	-0.025	-0.019	-0.022	-0.02
North Carolina	0.085	0.085	0.084	0.085	0.084
Ohio	0.057	0.057	0.057	0.057	0.057
Oregon	0.155	0.154	0.153	0.153	0.152
Pennsylvania	0.034	0.033	0.035	0.033	0.034
Utah	0.080	0.079	0.078	0.073	0.073
Vermont	0.039	0.038	0.038	0.038	0.019
Virginia	0.118	0.117	0.111	0.111	0.111
Wholesale Prices Only					
Iowa	0.076	0.076	0.075	0.075	0.075
Mississippi	0.044	0.044	0.044	0.044	0.044
West Virginia	0.044	0.044	0.043	0.043	0.033
Wyoming	0.011	0.011	0.011	0.011	0.011

2020 tax rate for a standard drink of each beverage type in control states

Control States	Spirits	Wine	Beer
Alabama	0.137	0.066	0.050
Idaho	0.091	0.018	0.014
Maine	0.059	0.023	0.033
Montgomery Co. (Maryland)	-0.087	0.026	-
Michigan	0.067	0.020	0.019
Montana	0.055	0.040	0.013
New Hampshire	-0.028	0.019	0.028
North Carolina	0.085	0.039	0.058
Ohio	0.057	0.013	0.017
Oregon	0.155	0.026	0.008
Pennsylvania	0.034	0.131	0.008
Utah	0.080	0.285	0.040
Vermont	0.039	0.021	0.025
Virginia	0.118	0.059	0.024
Wholesale only			
Iowa	0.076	0.068	0.018
Mississippi	0.044	0.070	0.040
West Virginia	0.044	0.039	0.017
Wyoming	0.011	0.017	0.002

2020 tax rate for a standard drink of each beverage type in license states

License States	Spirits	Wine	Beer				
Alaska	0.150	0.098	0.100				
Arizona	0.035	0.033	0.015				
Arkansas ^{abc}	0.042	0.073	0.032				
California	0.039	0.008	0.019	Nevada	0.042	0.027	0.015
Colorado	0.027	0.011	0.008	New Jersey	0.064	0.034	0.011
Connecticut	0.070	0.028	0.023	New Mexico	0.071	0.067	0.038
Delaware	0.053	0.064	0.024	New York	0.075	0.012	0.013
District of Columbia ^{abc}	0.035	0.072	0.049	North Dakota ^{abc}	0.038	0.048	0.034
Florida	0.076	0.088	0.045	Oklahoma	0.065	0.028	0.038
Georgia	0.044	0.059	0.030	Rhode Island	0.063	0.055	0.010
Hawaii	0.070	0.054	0.087	South Carolina	0.032	0.035	0.072
Illinois	0.100	0.054	0.022	South Dakota ^{ab}	0.055	0.065	0.025
Indiana	0.031	0.018	0.011	Tennessee	0.052	0.047	0.121
Kansas ^{abc}	0.036	0.033	0.031	Texas	0.028	0.008	0.018
Kentucky ^{abc}	0.068	0.170	0.108	Washington^a	0.388	0.034	0.024
Louisiana	0.036	0.030	0.030	Wisconsin	0.039	0.010	0.006
Maryland ^{abc}	0.030	0.059	0.037	Control State Average	0.066	0.056	0.024
Massachusetts	0.047	0.021	0.010	License State Average	0.063	0.045	0.035
Minnesota ^{abc}	0.070	0.047	0.038				
Missouri	0.023	0.016	0.006				
Nebraska	0.044	0.037	0.029				

^a States with ad valorem taxes at the wholesale or retail level for spirits

^b States with ad valorem taxes at the wholesale or retail level for wine

^c States with ad valorem taxes at the wholesale or retail level for beer

THANK YOU

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