

State Alcohol Tax Rates



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Spirits tax rates compared to beer and wine tax rates

Spirits products are often taxed at higher rates per comparable unit of ethanol than wine (with a few exceptions such as Pennsylvania, Florida and Kentucky), and always higher per comparable unit of ethanol than beer. Table 5a presents the estimated tax rates per standard drink for spirits and wine in the control states along with actual and estimated tax rates for beer, wine and spirits for license states on a typical alcohol percentage by volume (%ABV) brand. Table 5b presents the same information in terms of tax rates per beverage gallon as states use this method to tax alcoholic beverages. Results in Table 5a and 5b show that tax rates per standard drink on spirits are lower in the control states and tax rates per standard drink on wine are higher in control states. For wine, the control state average masks considerable variation with some states having relatively high tax rates per standard drink and others having very low or negative rates. In general, spirits are taxed at higher average rates than beer and wine in control and license states.

We also contributed data on wholesale and retail margins or mark-ups from two sources. First, we calculated mark-up percentages taken from a report by the Beverage Information Group Distilled Spirits Price Mark-up: December, 2008 on pricing at the producer, wholesaler and retailer levels in Massachusetts. This report indicated average wholesale mark-ups of around 40% and retail mark-ups of around 25%, however, these were likely based on posted rather than realized prices and experts suggest posted prices will overstate the whole-

sale margins. This data also suggested that mark-up percentages vary by brand at the wholesale and retail levels with larger average mark-ups occurring on lower priced products. This is consistent with a fixed cost aspect to pricing policies. This variation in mark-ups across specific products differs from control state procedures where, in most cases, all products are treated in the same manner. The second source was the Economic Census, conducted by the U.S. government. This source provided data from the 2007 Economic Census for beer, wine and distilled alcoholic beverage merchants, indicating that gross margins as a percent of sales were 25.8%. This source also provided an estimated gross margin for retail beer, wine and liquor stores in 2011, using data from the Annual Retail Trade Survey and the 2007 *Economic Census*, indicating that the gross margin on sales was 28%. Taken together, the *Economic Census* data suggest that the overall mark-up on producer prices is 87.2%. This is substantially higher than our assumed mark-up, suggesting that the estimates presented in this report may be conservative.

We note that the estimated tax rates we present are highly dependent on these assumed mark-up percentages and that assumptions of lower margins and mark-ups would result in higher tax estimates while assumptions of higher margins and mark-ups would result in lower tax estimates. We also recognize that the presented tax estimates depend on the price of the product with differing relationships across price levels depending on the formulas for each state. This variation is illustrated in Tables 3a and 3b where tax estimates are presented for selected lower and higher FOB prices and, for a 750ml bottle of spirits.

Spirits and Wine Tax Rates for the Control States:

2014 estimates based on retail price impact relative to license state pricing

Control state tax estimates

This report presents estimates of tax rates for spirits products for the 17 control states and one control county, and for wine products in five control states and one control county. These tax estimates, presented in Tables 1 and 2, are conceptualized as the tax rate per beverage volume applied at the wholesale level. This method would have the equivalent effect on the retail price paid by a consumer as in a typical license state.

The estimate procedures presented here are based on the typical Freight on Board (FOB) prices used in the 2012 report, adjusted for change over time using the beverage specific Consumer Price Index (CPI). We then applied each control state's mark-up procedures to this adjusted price to determine the retail price for each state associated with that

FOB price. This retail price was then compared to an expected price as determined by applying typical wholesale margins and retail mark-up percentages. These margins and mark-up percentages were determined by NABCA through discussions with industry experts, taking into account the practices typically used.



Our assumed margins and mark-up rates are intended to represent typical wholesale margins of 21% and 25% retail mark-up on the wholesale price. Taken together, the assumed mark-up on FOB prices in this study is 58.125%.



METHODS FOR TABLE 1

Tax estimates for 1.75L 40%ABV spirit with FOB of \$12.73

Table 1 presents the estimated tax rate on a 1.75L bottle of spirits with an FOB of \$12.73 for year 2014. The columns in Table 1 show the details used to calculate an estimated tax rate for control states.

TABLE 1: Estimated spirits tax rates on a 1.75L bottle of spirits in 2014: Details of calculation.

STATES	Assumed adjusted-Av FOB Price	Calculated Retail Price	Expected Price (with mark-up) ^a	Tax per Bottle + Mark-up	Tax per Bottle	Tax per Gallon (40% abv)	Tax per Standard Drink (40% abv)
Alabama	\$12.73	\$26.12	\$20.13	\$5.99	\$3.79	\$8.20	\$0.096
Idaho	12.73	24.50	20.13	4.37	2.76	5.98	0.070
Maine ^b	12.70	21.99	20.08	1.91	1.21	2.61	0.031
Montgomery Co. (Maryland)	12.73	20.12	20.13	-0.01	-0.01	-0.02	0.000
Michigan	12.73	23.53	20.13	3.40	2.15	4.65	0.054
Montana	12.73	22.95	20.13	2.82	1.78	3.86	0.045
New Hampshire	12.73	18.99	20.13	-1.14	-0.72	-1.56	-0.018
North Carolina	12.73	24.51	20.13	4.38	2.77	5.99	0.070
Ohio	12.73	23.37	20.13	3.24	2.05	4.44	0.052
Oregon	12.73	27.90	20.13	7.77	4.91	10.63	0.125
Pennsylvania	12.73	21.59	20.13	1.46	0.92	2.00	0.023
Utah	12.73	23.95	20.13	3.82	2.42	5.23	0.061
Vermont	12.73	21.09	20.13	0.96	0.61	1.31	0.015
Virginia	12.73	25.45	20.13	5.32	3.36	7.28	0.085
Wholesale only							
Iowa	12.73	19.19	16.10	3.08	2.44	5.27	0.062
Mississippi	12.73	18.22	16.10	2.12	1.67	3.62	0.042
West Virginia ^c	12.73	16.68	16.10	0.57	1.12	2.43	0.028
Wyoming	12.73	16.78	16.10	0.68	0.54	1.16	0.014

^aMark-up used was 58.125%; 26.5% for wholesale only states. | ^bA formula was not available for Maine in 2014. We used a price closest to the assumed price on a 40% vodka beverage (Vikingfjord Vodka; \$12.70) | ^cWest Virginia tax estimate also includes a 5% retail tax. Estimated tax was calculated as other states, but an additional 5% tax (\$0.67) was added to the calculated tax bottle (\$0.45, not shown) to get the final estimated tax per bottle (\$1.12).

Table 1 presents the estimated tax rate on a 1.75L bottle of spirits with an FOB of \$12.73 for year 2014. The columns in Table 1 show the details used to calculate an estimated tax rate for control states.

We used the computed average FOB price from the 2012 report (using NABCA SAM ProDiver) and adjusted this price for inflation using the annual spirits (consumed at home versus away from home) Consumer Price Index (CPI), giving an FOB price of \$12.73 for 2014. We then calculated the estimated retail price using state mark-up/tax procedures based on the NABCA Survey Book: 2013/14 and through correspondence with each state's alcohol beverage control personnel. While state retail price equations vary, they generally include a freight cost, a mark-up and a set of additional taxes or charges. Each state's retail price calculation is detailed in the Appendix. Sales tax rates were not included in the retail price calculations. The results are shown in column 2 of Table 1.

The expected price was then calculated by adding a mark-up of 58.125% (the result of a 21% wholesale margin and a 25% retail mark-up) to the assumed FOB price (\$12.73), resulting in an expected retail price of \$20.13. For wholesale control states, only the typical wholesale margin was applied for an expected wholesale price of

\$16.10. The results are shown in column 3. The estimated tax rate per bottle was then calculated. The difference between the calculated price and expected price (defined using the typical %mark-up assumptions) results in the tax per bottle plus the %mark-up. (Column 4) As indicated, the tax per bottle + %markup rate has the assumed %mark-up included. To calculate the pre-mark-up tax estimate, we multiplied the tax rate + %mark-up results by (1 divided by %mark-up) for the tax estimate per bottle.

$$\text{Tax per bottle} = (\text{tax per bottle \& mark-up}) * (1 / \text{mark-up})$$

See results in Column 5.

The last two columns (6 and 7) show two alternative ways of looking at tax rates on spirits. Rates were expressed as tax per beverage gallon on a 40%ABV product by multiplying by 2.16 (the number of 1.75L bottles in a gallon). This rate was then translated into a tax rate per standard drink by dividing the gallon rate by 85.33 (the number of 0.6 ounce standard drinks in a gallon of 40%ABV spirits).

METHODS FOR TABLE 2

Using the method described above for spirits, wine tax estimates were calculated on a 750ml bottle of wine with an FOB price of \$7.03 (after adjusting using the annual CPI for wine at home versus away from home for the year 2014).

The expected price (using the 58.125% mark-up), tax per bottle + % markup and tax per bottle, were calculated similarly to spirits. The tax per beverage gallon on a 12% ABV was calculated by multiplying by 5.05, the number of 750ml bottles in a gallon. This was then translated into tax rates per standard drink by dividing by 25.6 (number of standard drinks in a gallon of 12% ABV wine).

TABLE 2: Estimated wine tax rates on a 750ml bottle of 12% ABV wine with an FOB price of \$7.03 in 2014: Details of calculation.

STATES	Assumed adjusted-Av FOB Price	Calculated Retail Price	Expected Price (with mark-up) ^a	Tax per Bottle + Mark-up	Tax per Bottle	Tax per Gallon (12% abv)	Tax per Standard Drink (12% abv)
Montgomery County (Maryland)	\$7.03	\$11.33	\$11.12	\$0.21	\$0.13	\$0.67	\$0.026
New Hampshire	7.03	11.49	11.12	0.37	0.24	1.19	0.047
Pennsylvania	7.03	12.39	11.12	1.27	0.81	4.07	0.159
Utah	7.03	13.22	11.12	2.10	1.33	6.70	0.262
Mississippi (wholesale)	7.03	9.45	8.89	0.56	0.44	2.22	0.087
Wyoming (wholesale)	7.03	9.01	8.89	0.12	0.09	0.47	0.019

METHODS FOR TABLES 3a, 3b, 3c and 3d

Tax estimates for low, moderate and high priced brands of 1.75L spirits and for a 750ml. bottle.

Using the same procedures described above, we calculated the estimated tax rates for a lower priced brand with an adjusted FOB of \$7.64 and for a higher priced brand with an adjusted FOB of \$21.39. Estimates for a 750ml bottle with the adjusted FOB of \$7.64 were also calculated. To illustrate the difference in tax rate estimates by price, each estimate is presented with the estimate for the FOB of \$12.73 (detailed calculation shown above) for tax per stan-

dard drink in Table 3a and tax per beverage gallon in Table 3b. License states tax rates also differ by price level because some states have ad valorem (as % of price) taxes on alcoholic beverages. These were converted into taxes per beverage gallon applied at the wholesale tier for each FOB price level.

The last column in tables 3a and 3b present an average of the 1.75L moderate price FOB (\$12.73) and the 750ml FOB (\$7.64) bottles of spirits.

TABLE 3a Estimated tax per standard drink for low, moderate and high priced brands of 1.75L, moderate priced brand of 750ml spirits in 2014 and average of 1.75L & 750ml.

STATES	1.75L Spirits			750ml	1.75L/750ml Avg
	FOB \$7.64	FOB \$12.73	FOB \$21.39	FOB \$7.64	FOB \$10.19
Alabama	\$0.060	\$0.096	\$0.158	\$0.133	0.115
Idaho	0.052	0.070	0.084	0.090	0.080
Maine	0.037	0.031	0.008	0.075	0.053
Montgomery County (MD)	0.007	0.000	-0.012	-0.007	-0.004
Michigan	0.033	0.054	0.091	0.076	0.065
Montana	0.030	0.045	0.070	0.062	0.054
New Hampshire	-0.009	-0.018	-0.037	-0.022	-0.020
North Carolina	0.047	0.070	0.109	0.097	0.084
Ohio	0.044	0.052	0.066	0.061	0.057
Oregon	0.080	0.125	0.156	0.180	0.152
Pennsylvania	0.026	0.023	0.019	0.045	0.034
Utah	0.039	0.061	0.100	0.085	0.073
Vermont	0.010	0.015	0.025	0.023	0.019
Virginia	0.054	0.085	0.139	0.137	0.111
Wholesale only					
Iowa	0.038	0.062	0.103	0.088	0.075
Mississippi	0.041	0.042	0.044	0.046	0.044
West Virginia	0.020	0.028	0.042	0.038	0.033
Wyoming	0.023	0.014	-0.002	0.009	0.011
Control State Average	0.035	0.048	0.064	0.068	0.058
License State Average	0.055	0.059	0.064	0.066	0.063

Note: Comparisons with the license states are in later tables.

TABLE 3b Estimated tax per beverage gallon for low, moderate and high priced brands of 1.75L and for a moderate priced brand of 750ml spirits in 2014.

	1.75L Spirits			750ml Spirits	1.75L/750ml Avg
STATES	FOB \$7.64	FOB \$12.73	FOB \$21.39	FOB \$7.64	FOB \$10.19
Alabama	\$5.09	\$8.20	\$13.49	\$11.38	\$9.79
Idaho	4.47	5.98	7.15	7.72	6.85
Maine	3.17	2.61	-0.69	6.40	4.50
Montgomery County (MD)	0.56	-0.02	-1.00	-0.59	-0.31
Michigan	2.79	4.65	7.81	6.51	5.58
Montana	2.56	3.86	5.99	5.33	4.59
New Hampshire	-0.81	-1.56	-3.19	-1.89	-1.72
North Carolina	4.03	5.99	9.32	8.29	7.14
Ohio	3.71	4.44	5.67	5.22	4.83
Oregon	6.80	10.63	13.31	15.38	13.01
Pennsylvania	2.20	2.00	1.60	3.86	2.93
Utah	3.31	5.23	8.52	7.24	6.24
Vermont	0.83	1.31	2.12	1.94	1.63
Virginia	4.61	7.28	11.87	11.71	9.50
Wholesale only					
Iowa	3.22	5.27	8.75	7.52	6.40
Mississippi	3.53	3.62	3.77	3.94	3.78
West Virginia	1.73	2.43	3.61	3.23	2.83
Wyoming	1.94	1.16	-0.16	0.78	0.97
Control State Average	2.99	4.06	5.44	5.78	4.92
License State Average	4.71	5.01	5.50	5.64	5.33

Tables 3c and 3d show the history of taper standard drink and per beverage gallon respectively, for a simple average of FOB prices for a 1.75L bottle of spirits (\$12.73) and a 750ml bottle of spirits (\$7.64) across 2012 to 2013. The 2012 actual calculated price is also presented for comparison.

TABLE 3c Estimated tax per standard drink for the average of a 1.75L and 750ml spirits bottles for years 2012-2014 compared to the estimated beverage gallon for 2012.

STATES	Average of a 1.75L and 750m Spirits			1.75L
	2014	2013	2012	2012
Alabama	\$0.115	\$0.114	\$0.113	\$0.094
Idaho	0.080	0.083	0.087	0.076
Maine	0.053	0.058	0.058	0.036
Montgomery County (MD)	-0.004	-0.003	-0.003	0.000
Michigan	0.065	0.065	0.071	0.060
Montana	0.054	0.052	0.053	0.044
New Hampshire	-0.020	-0.017	-0.013	-0.012
North Carolina	0.084	0.081	0.080	0.067
Ohio	0.057	0.056	0.056	0.052
Oregon	0.152	0.152	0.150	0.122
Pennsylvania	0.034	0.035	0.035	0.024
Utah	0.073	0.073	0.072	0.060
Vermont	0.019	0.038	0.037	0.031
Virginia	0.111	0.110	0.109	0.084
Wholesale only				
Iowa	0.075	0.074	0.074	0.061
Mississippi	0.044	0.044	0.044	0.042
West Virginia	0.033	0.033	0.033	0.028
Wyoming	0.011	0.012	0.012	0.014

TABLE 3d Estimated tax per beverage gallon for the average of a 1.75L and 750ml spirits bottles for years 2012-2014 compared to the estimated beverage gallon for 2012.

STATES	Average of a 1.75L and 750ml Spirits			1.75L
	2014	2013	2012	2012
Alabama	\$9.79	\$9.72	\$9.62	\$8.06
Idaho	6.85	7.10	7.45	6.48
Maine	4.50	4.92	4.92	3.04
Montgomery County (MD)	-0.31	-0.29	-0.27	0.01
Michigan	5.58	5.53	6.10	5.08
Montana	4.59	4.47	4.49	3.74
New Hampshire	-1.72	-1.47	-1.12	-1.06
North Carolina	7.14	6.89	6.84	5.72
Ohio	4.83	4.81	4.79	4.40
Oregon	13.01	12.96	12.79	10.44
Pennsylvania	2.93	2.95	3.01	2.09
Utah	6.24	6.22	6.13	5.15
Vermont	1.63	3.22	3.19	2.61
Virginia	9.50	9.40	9.31	7.16
Wholesale only				
Iowa	6.40	6.35	6.28	5.18
Mississippi	3.78	3.78	3.78	3.62
West Virginia	2.83	2.82	2.79	2.38
Wyoming	0.97	0.99	1.01	1.20

METHODS FOR TABLES 4a and 4b

Tax estimates for low, moderate and high priced brands of 750ml wine

TABLE 4a Estimated tax per standard drink for low, moderate and high priced brands of 750ml wine in 2014.

STATES	\$4.02	\$7.03	\$15.07
Montgomery County (MD)	0.022	0.026	0.038
New Hampshire	0.079	0.047	-0.292
Pennsylvania	0.179	0.159	0.120
Utah	0.157	0.262	0.541
Mississippi (wholesale)	0.082	0.087	0.099
Wyoming (wholesale)	0.060	0.019	-0.093
Control State Average	0.096	0.100	0.069
License State Average	0.039	0.044	0.058

TABLE 4b Estimated tax per beverage gallon for low, moderate and high priced brands of a 750ml wine in 2014.

STATES	\$4.02	\$7.03	\$15.07
Montgomery County (MD)	0.55	0.67	0.97
New Hampshire	2.02	1.19	-7.47
Pennsylvania	4.58	4.07	3.07
Utah	4.02	6.70	13.85
Mississippi (wholesale)	2.10	2.22	2.54
Wyoming (wholesale)	1.54	0.47	-2.38
Control State Average	2.47	2.55	1.76
License State Average	1.13	1.00	1.48

Using the same procedures described above, estimated tax rates for a lower priced brand with an adjusted FOB price of \$4.02 and for a higher priced brand with an adjusted FOB price of \$15.07 were calculated. To illustrate the difference in tax rate estimates by price each of these estimates is presented along with the estimates for the adjusted FOB price of \$7.03 in terms of tax per standard drink in Table 4a and tax per beverage gallon in Table 4b. License states tax rates also differ by price level because some states have ad valorem (as % of price) taxes on alcoholic beverages. These were converted into taxes per beverage gallon applied at the wholesale tier for each FOB price level.

METHODS FOR TABLES 5a and 5b

Comparison of tax rates for a typical %ABV brand for beer, wine and spirits in control and license states

Tables 5a and 5b show tax rates on a typical brand (in terms of price and alcohol content) of spirits, wine and beer: for spirits, 1.75L and 750ml average at 40%ABV; for wine, \$7.64 FOB 750ml wine at 12%ABV; and for beer, \$5.25 retail price (\$3.32 FOB) per six pack at 5%ABV.

Table 5a shows the state-level tax rate per standard drink (0.6 ounces or 14 grams of ethanol) for spirits, wine and beer. Table 5b shows these same rates expressed as tax rates per beverage gallon applied at the wholesale level for each beverage type by state.

TABLE 5a - State-level spirits, wine and beer tax rates per standard drink of a brand at a typical %ABV and price.

CONTROL STATES	Spirits	Wine	Beer
Alabama	\$0.115	\$0.066	\$0.098
Idaho	0.080	0.018	0.014
Maine	0.053	0.023	0.033
Montgomery Co. (Maryland)	-0.004	0.026	-
Michigan	0.065	0.020	0.019
Montana	0.054	0.016	0.006
New Hampshire	-0.020	0.047	0.028
North Carolina	0.084	0.039	0.058
Ohio	0.057	0.013	0.017
Oregon	0.152	0.026	0.008
Pennsylvania	0.034	0.159	0.008
Utah	0.073	0.262	0.038
Vermont	0.019	0.021	0.025
Virginia	0.111	0.059	0.026
Wholesale only			
Iowa	0.075	0.068	0.018
Mississippi	0.044	0.087	0.040
West Virginia	0.033	0.039	0.017
Wyoming	0.011	0.019	0.002

TABLE 5a continued

LICENSE STATES	Spirits	Wine	Beer
Alaska	\$0.150	\$0.098	\$0.101
Arizona	0.035	0.033	0.015
Arkansas ^{abc}	0.042	0.072	0.028
California	0.039	0.008	0.019
Colorado	0.027	0.013	0.008
Connecticut	0.063	0.028	0.023
Delaware	0.044	0.038	0.015
District of Columbia ^{abc}	0.034	0.071	0.032
Florida	0.076	0.088	0.045
Georgia	0.044	0.059	0.095
Hawaii	0.070	0.054	0.087
Illinois	0.100	0.054	0.022
Indiana	0.031	0.018	0.011
Kansas ^{abc}	0.037	0.038	0.027
Kentucky ^{abc}	0.068	0.174	0.069
Louisiana	0.029	0.004	0.030
Maryland ^{abc}	0.030	0.058	0.025
Massachusetts	0.016	-1.70	-0.025
Minnesota ^{abc}	0.070	0.047	0.028
Missouri	0.023	0.016	0.006
Nebraska	0.044	0.037	0.029
Nevada	0.042	0.027	0.015
New Jersey	0.064	0.034	0.011
New Mexico	0.071	0.066	0.038
New York	0.075	0.012	0.013
North Dakota ^{abc}	0.038	0.048	0.026
Oklahoma	0.065	0.028	0.038
Rhode Island	0.044	0.055	0.010
South Carolina	0.035	0.042	0.072
South Dakota ^{ab}	0.055	0.065	0.025
Tennessee ^c	0.052	0.047	0.108
Texas	0.028	0.008	0.018
Washington ^a	0.409	0.034	0.071
Wisconsin	0.039	0.010	0.006
Control State Average	0.061	0.058	0.027
License State Average	0.061	0.042	0.034

Tax rates for license states were obtained from the Alcohol Policy Information System (APIS) website (<http://www.alcoholpolicy.niaaa.nih.gov>). These tax rates differ from those reported by the Tax Foundation due to differences in methodology (which may include ad valorem tax rates), or differences in reported rates from APIS.

For license states with ad valorem taxes at the wholesale or retail level, this tax was estimated for the prices of typical brands shown above based on the same assumed margins and mark-up as used in the control state tax estimates. They were also translated into tax amounts per beverage gallon applied at the wholesale level.

^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

TABLE 5b Tax Rates per Beverage Gallon (\$US) for Spirits, Wine and Beer 2014

CONTROL STATES	Spirits (40%)	Wine (12%)	Beer (5%)
Alabama	\$9.79	\$1.70	\$1.05
Idaho	6.85	0.45	0.15
Iowa	6.40	1.75	0.19
Maine	4.50	0.60	0.35
Michigan	5.58	0.51	0.20
Mississippi	3.78	2.22	0.43
Montgomery Co (Maryland)	-0.31	0.67	-
Montana	4.59	0.42	0.06
New Hampshire	-1.72	1.19	0.30
North Carolina	7.14	1.00	0.62
Ohio	4.83	0.32	0.18
Oregon	13.01	0.67	0.08
Pennsylvania	2.93	4.07	0.08
Utah	6.24	6.70	0.41
Vermont	1.63	0.55	0.27
Virginia	9.50	1.51	0.28
West Virginia	2.83	1.00	0.18
Wyoming	0.97	0.47	0.02



TABLE 5b continued

LICENSE STATES	Spirits (40%)	Wine (12%)	Beer (5%)
Alaska	\$12.80	\$2.50	\$1.07
Arizona	3.00	0.84	0.16
Arkansas ^{abc}	3.57	1.84	0.30
California	3.30	0.20	0.20
Colorado	2.28	0.32	0.08
Connecticut	5.40	0.72	0.24
Delaware	3.75	0.97	0.16
District of Columbia ^{abc}	2.92	1.82	0.34
Florida	6.50	2.25	0.48
Georgia	3.78	1.52	1.01
Hawaii	5.98	1.38	0.93
Illinois	8.55	1.39	0.23
Indiana	2.68	0.47	0.12
Kansas ^{abc}	3.13	0.96	0.29
Kentucky ^{abc}	5.77	4.46	0.74
Louisiana	2.50	0.11	0.32
Maryland ^{abc}	2.54	1.48	0.27
Massachusetts	1.34	-1.70	-0.27
Minnesota ^{abc}	5.98	1.20	0.30
Missouri	2.00	0.42	0.06
Nebraska	3.75	0.95	0.31
Nevada	3.60	0.70	0.16
New Jersey	5.50	0.88	0.12
New Mexico	6.06	1.70	0.41
New York	6.44	0.30	0.14
North Dakota ^{abc}	3.21	1.22	0.28
Oklahoma	5.56	0.72	0.40
Rhode Island	3.75	1.40	0.11
South Carolina	2.96	1.08	0.77
South Dakota ^{ab}	4.67	1.66	0.27
Tennessee ^c	4.40	1.21	1.15
Texas	2.40	0.20	0.19
Washington ^a	34.93	0.87	0.76
Wisconsin	3.36	0.25	0.06
Control State Average	5.23	1.48	0.29
License State Average	5.25	1.07	0.36

^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

SALES TAX ADJUSTED AD VALOREM RATE

Like most purchases of goods and services, alcohol is subject to general sales tax in most states. However four states (Alaska, Delaware, Montana, New Hampshire, and Oregon) do not have any sales tax on retail purchases (including alcohol).

While the majority of states tax alcohol similarly to general point of sale purchases, few exempt alcohol from the retail sales tax. In lieu of this sales tax, they impose a “special” tax or ad valorem tax (mentioned above) which is usually a percentage of the retail price. To get the true value of the tax paid in these states, we calculated a sales tax adjusted retail ad valorem rate by subtracting the sales tax from the ad valorem rate.

Massachusetts is the only state that does not impose the general retail sales tax on alcohol, nor does it have an ad valorem tax. The adjusted retail ad valorem tax is therefore negative.

TABLE 6 State General Sales Tax, General Sales Tax per Standard Drink and the Estimated Alcohol Tax per Standard Drink.

CONTROL STATES	Spirits			Wine		Beer	
	General Sales Tax	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink
Alabama	4%	\$0.026	\$0.115	\$0.090	\$0.066	\$0.054	\$0.098
Idaho	6	0.039	0.080	0.134	0.018	0.081	0.014
Iowa	6	0.039	0.075	0.134	0.068	0.081	0.018
Maine	5.5	0.036	0.053	0.123	0.023	0.074	0.033
Michigan	6	0.039	0.065	0.134	0.020	0.081	0.019
Mississippi	7	0.045	0.044	0.157	0.087	0.095	0.040
Montana	-	-	0.054	-	0.016	-	0.006
New Hampshire	-	-	-0.020	-	0.046	-	0.028
North Carolina	4.75	0.031	0.084	0.106	0.039	0.064	0.058
Ohio	5.75	0.037	0.057	0.129	0.013	0.078	0.017
Oregon	-	-	0.152	-	0.026	-	0.008
Pennsylvania	6	0.039	0.034	0.134	0.159	0.081	0.008
Utah	5.95	0.039	0.073	0.133	0.262	0.081	0.038
Vermont	6	0.039	0.019	0.134	0.021	0.081	0.025
Virginia	5.3	0.034	0.111	0.119	0.059	0.072	0.026
West Virginia	6	0.039	0.033	0.134	0.039	0.081	0.017
Wyoming	4	0.026	0.011	0.090	0.018	0.054	0.002

The above table gives the general sales tax for each state, the sales tax per standard drink, and the estimated alcohol tax per standard drink. The estimated alcohol tax per standard drink is described above. To calculate the sales tax per standard drink, we used the following steps:

1) Calculated an average retail price per drink by adding the average assumed excise tax for all states on the FOB for each beverage, then adding

the mark-up rate to this total). For spirits, we used this formula on a 1.75L bottle and a 750ml bottle.

2) The average retail price was then divided by the number of standard drinks per container of that beverage. We took an average of the 1.75L and 750ml bottles for spirits.

3) Finally, we multiplied the results of step 2 with the % general sales tax to express this in terms of standard drinks.

TABLE 6 continued

LICENSE STATES	Spirits			Wine		Beer	
	General Sales Tax	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink	General Sales Tax per Standard Drink	Estimated Alcohol Tax per Standard Drink
Alaska	-%	\$-	\$0.150	\$ -	\$0.098	\$ -	\$0.101
Arizona	5.6	0.036	0.035	0.125	0.033	0.049	0.015
Arkansas	6.5	0.042	0.042	0.145	0.072	0.057	0.031
California	7.5	0.049	0.039	0.168	0.008	0.066	0.019
Colorado	2.9	0.019	0.027	0.065	0.013	0.025	0.008
Connecticut	6.35	0.041	0.063	0.142	0.028	0.056	0.023
Delaware	-	-	0.044	-	0.038	-	0.015
District Of Columbia	5.75	0.037	0.034	0.129	0.071	0.050	0.045
Florida	6	0.039	0.076	0.134	0.088	0.053	0.045
Georgia	4	0.026	0.044	0.090	0.059	0.035	0.095
Hawaii	4	0.026	0.070	0.090	0.054	0.035	0.087
Illinois	6.25	0.040	0.100	0.140	0.054	0.055	0.022
Indiana	7	0.045	0.031	0.157	0.018	0.061	0.011
Kansas	6.15	0.040	0.037	0.138	0.038	0.054	0.033
Kentucky	6	0.039	0.068	0.134	0.174	0.053	0.102
Louisiana	4	0.026	0.029	0.090	0.004	0.035	0.030
Maryland	6	0.039	0.030	0.134	0.058	0.053	0.034
Massachusetts	6.25	0.040	0.016	0.140	-0.066	0.055	-0.043
Minnesota	6.875	0.045	0.070	0.154	0.047	0.060	0.036
Missouri	4.225	0.027	0.023	0.095	0.016	0.037	0.006
Nebraska	5.5	0.036	0.044	0.123	0.037	0.048	0.029
Nevada	6.85	0.044	0.042	0.153	0.027	0.060	0.015
New Jersey	7	0.045	0.064	0.157	0.034	0.061	0.011
New Mexico	5.125	0.033	0.071	0.115	0.066	0.045	0.038
New York	4	0.026	0.075	0.090	0.012	0.035	0.013
North Dakota	5	0.032	0.038	0.112	0.048	0.044	0.032
Oklahoma	4.5	0.029	0.065	0.101	0.028	0.039	0.038
Rhode Island	7	0.045	0.044	0.157	0.055	0.061	0.010
South Carolina	6	0.039	0.035	0.134	0.042	0.053	0.072
South Dakota	4	0.026	0.055	0.090	0.065	0.035	0.025
Tennessee	7	0.045	0.052	0.157	0.047	0.061	0.159
Texas	6.25	0.040	0.028	0.140	0.008	0.055	0.018
Washington	6.5	0.042	0.409	0.145	0.034	0.057	0.071
Wisconsin	5	0.032	0.039	0.112	0.010	0.044	0.006

SEE APPENDIX A and B: Calculated Retail Prices for Each State Using State Formulas

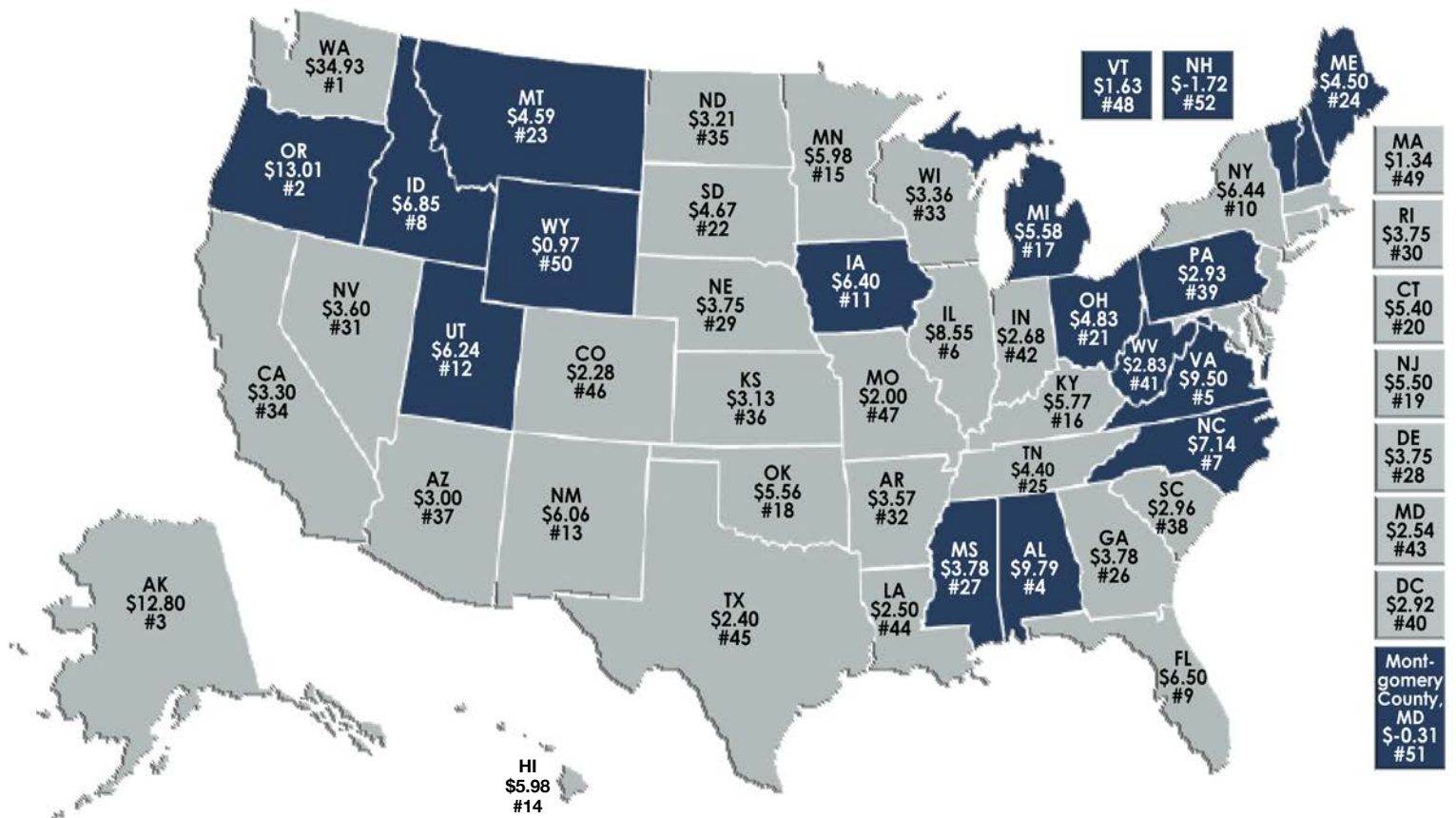
References: Kerr, W.C.; Greenfield, T.K; and Tujaque, J. Estimates of the mean alcohol concentration of the spirits, wine, and beer sold in the United States and per capita consumption: 1950 to 2002. *Alcoholism: Clinical and Experimental Research* 30(9): 1583-1591, 2006.

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State Spirits Excise Tax Rates (Dollars Per Gallon) 2014

SOURCE: Alcohol Research Group - <http://www.arg.org/>

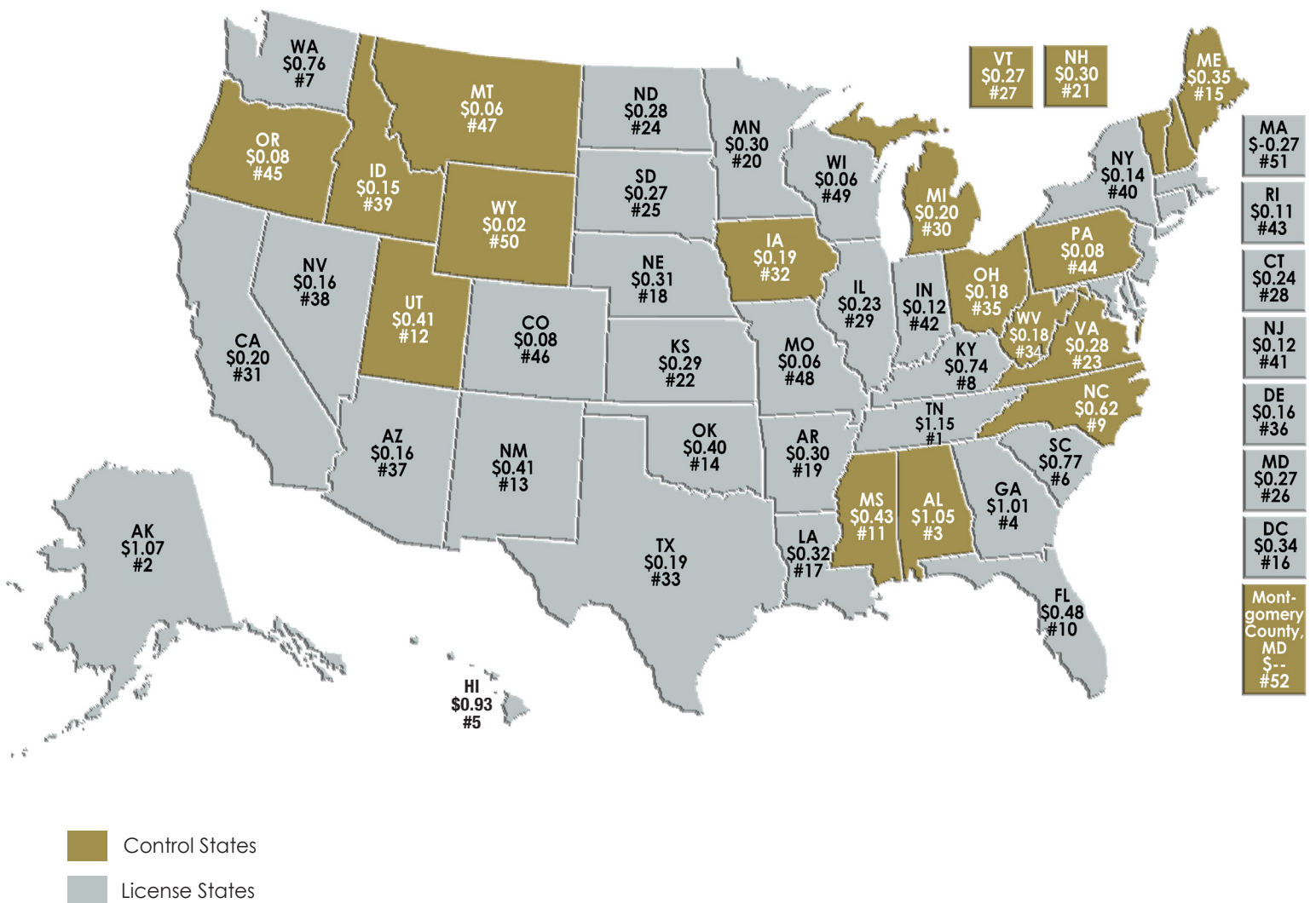


Control States
 License States

MAP 1

State Beer Excise Tax Rates (Dollars Per Gallon) 2014

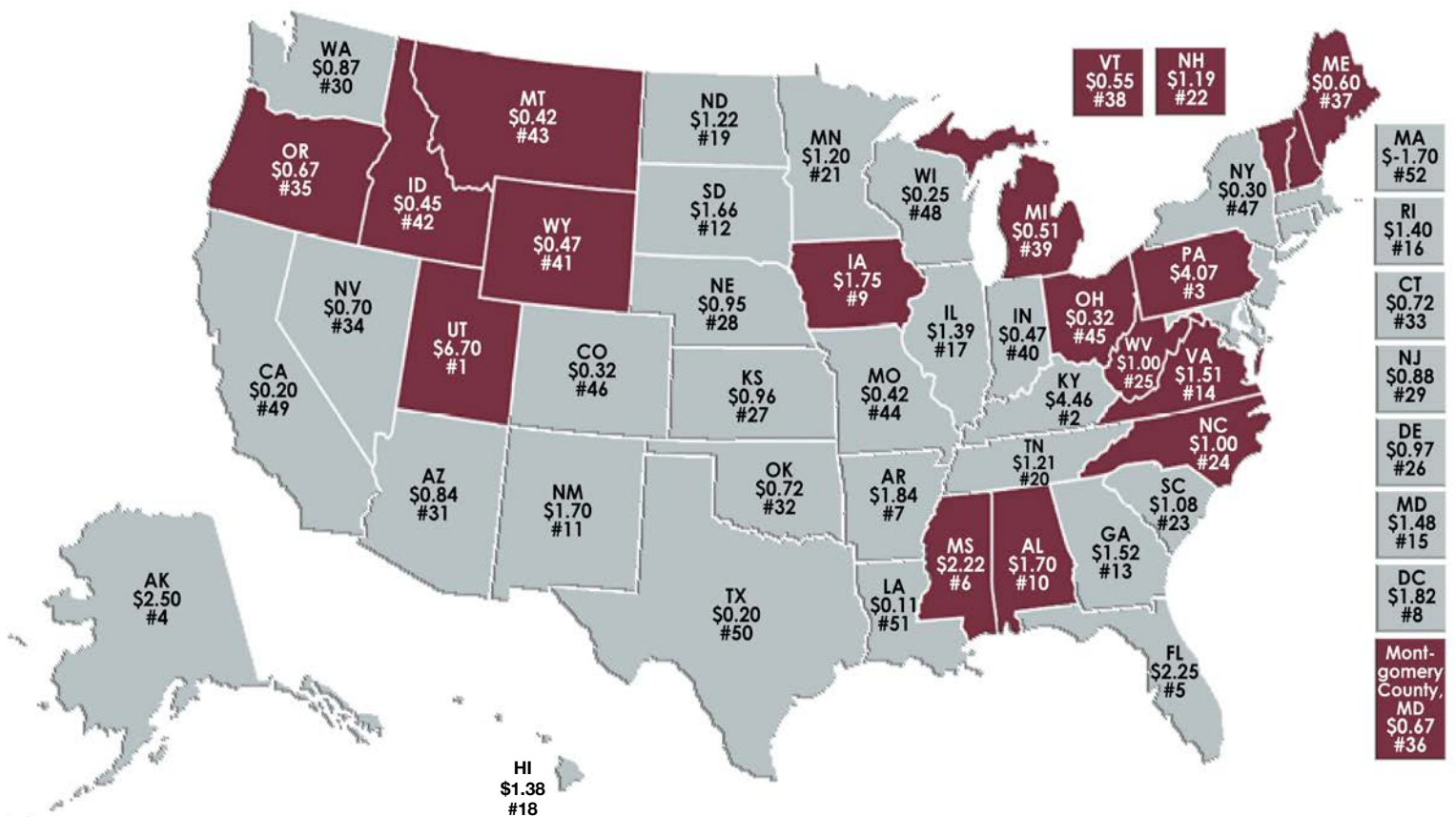
SOURCE: Alcohol Research Group - <http://www.arg.org/>



MAP 2

State Wine Excise Tax Rates (Dollars Per Gallon) 2014

SOURCE: Alcohol Research Group - <http://www.arg.org/>



Control States
License States

MAP 3

Appendix A

Details for Calculations used in the main tables

Calculated Retail Prices for Each State Using Sate Formulas

The following tables present calculations of the estimated retail price of a 1.75L product using an average FOB price of \$12.73 for spirits, and the retail price of a 750ml product using an average FOB price of \$7.03 for wine. The table gives the general calculation and may include minor notes/details that are not reflected here. The tax estimate is based on the calculated retail price (in bold) per bottle.

The calculation used mark-up/tax procedures based on the NABCA Survey Book (2013/2014) and through correspondence with state alcohol beverage control personnel. Maine did not have

a state formula in the Survey Book, therefore, we used actual prices from the NABCA SAM Provider database in our tax estimates.



SPIRITS

STATES	Formula	FOB \$12.73
Alabama	Delivered case cost (FOB)	76.38
	Freight to stores	0.90
	Mark-up @ 30%	23.18
	intermediate price	100.46
	Liquor tax @ 56%	56.26
	Case price	156.72
	Bottle price	26.12

STATES	Formula	FOB \$12.73
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Idaho

Delivered case cost (FOB)	76.38
Multiply \$8.27 times Value Markup (1.87)	15.46
Multiply \$4.16 times Popular Markup (1.78)	7.40
Multiply \$0.07 times Premium Markup (1.68)	0.12
Multiply \$0.00 times Super Premium Markup (1.54)	0.00
Total Cost after combining all Markups:	22.99
Handling charge for a 1750 ml bottle is: \$1.00	23.99
Single Bottle Charge does not apply to this product.	23.99
Special Handling Charge does not apply to this product.	23.99
Mandated 2% Drug Court Surcharge (\$0.48)	24.47
Rounded to 2 decimal places:	0.48
Round price up to nearest nickel.	24.50
Calculated Retail Price:	24.50
Bottle price	24.50

Iowa

Delivered case cost (FOB)	76.38
mark-up @ 50% wholesale	38.19
bottle deposit & surcharge (\$0.05 per bottle)	0.30
bottle reclamation fee (\$0.04 per bottle)	0.24
State wholesale price	115.11
24.5% average retailer mark-up	-
Sub total	115.11
sales tax @5%	-
unit price	115.11
retail case price calculation	115.11
Bottle price	19.19

Maine

Delivered case cost (FOB)	76.20
Shelf price	12.70
Bottle price	21.99
Single Bottle Charge does not apply to this product.	23.99
Special Handling Charge does not apply to this product.	23.99
Mandated 2% Drug Court Surcharge (\$0.48)	24.47
Rounded to 2 decimal places:	0.48
Round price up to nearest nickel.	24.50
Calculated Retail Price:	24.50
Bottle price	24.50

STATES	Formula	FOB \$12.73
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Montgomery County, MD

Delivered case cost (FOB)	76.38
State tax (1.50/gallon)	4.16
Wholesale mark-up (27%)	21.75
Rounding	-
wholesale case price	102.29
Wholesale bottle price	17.05
Retail markup @ 18%	18.41
Rounding	-
Retail case price	120.70
Bottle price	20.12

Michigan

Delivered case cost (FOB)	76.38
Amount per bottle	12.73
Base price (using mark-up @65%)	21.00
4% Convention and facilities tax (on base price)	0.84
4% School aid fund (on base price)	0.84
4% General fund (on base price)	0.84
Total liquor tax	2.52
License profit through discount	-
Minimum shelf price	23.53
Sales tax	-
Bottle price	23.91

STATES	Formula	FOB \$12.73
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Mississippi

Delivered case cost (FOB)	76.38
Freight	5.00
Markup 27.5%	21.00
Subtotal	102.38
Excise tax based on gallonage (\$2.50/gallon)	6.93
Subtotal 2	109.32
sales tax @7%	-
Case price	109.32
Bottle price	18.22

STATES	Formula	FOB \$12.73
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Montana

Delivered case cost (FOB)	76.38
Freight to stores	1.52
Markup 40%	31.16
26% tax	28.36
Liquor excise tax 16%	-
License tax 10%	-
Case price	137.42
Bottle price (before rounding)	22.90
Bottle price	22.95

New Hampshire

Delivered case cost (FOB)	76.38
Bailment	1.20
Bottle cost	12.93
Bottle mark-up (46.5%)	18.94
Bottle price (rounded using state formula)	18.99

STATES	Formula	FOB \$12.73
North Carolina	Delivered case cost (FOB)	76.38
	Bailment charges	1.50
	Subtotal case cost	77.88
	Local ABC board mark-up (39.5%)	30.76
	Subtotal case cost 2	108.64
	State excise tax (30%)	32.59
	Additional markup (on subtotal 2)	3.80
	Case cost (to 6 decimal place)	145.04
	Bailment surcharge	1.40
	Case cost	146.44
	Per bottle cost	24.41
	Bottle tax	0.05
	Additional bottle charge	0.05
	Bottle price	24.51
	Selling price to individual (+ 7% tax)	
Ohio	Delivered case cost (FOB)	76.38
	Freight case cost	0.99
	Operating cost factor @ 12.35%	9.56
	Total cost of operation	86.93
	Mark-up @30% margin=42.86%	37.26
	Liquor gallonage tax @ \$3.38 per gallon	9.38
	intermediate price	133.56
	user charge @5%	6.68
	retail BASE price	140.23
	retail sales tax @5%	0.00
	Case price before rounding	140.23
	Bottle price	23.37
	(minus sales tax of 5%)	

STATES	Formula	FOB \$12.73
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Oregon

Delivered case cost (FOB)	76.38
Case add on amount	0.00
Intermediate case price mark-up factor (x 2.131)	162.77
freight	1.40
case price	164.17
bottle price	27.36
rounded to nearest \$.05	27.40
per bottle surcharge	0.50
Bottle price	27.90

Pennsylvania

Delivered case cost (FOB)	76.38
Price per bottle + 1% and rounded up	12.86
markup @30%	3.86
PLCB operational cost	1.55
intermediate price	18.26
state tax @ 18%	3.29
Bottle price	21.55
rounded to the final nine	21.59
sales and use tax @ 6.21%	
Bottle price	21.59

Utah

Delivered case cost (FOB)	76.38
freight	0.90
intermediate cost	77.28
mark-up factor of 86%	66.46
overall case retail	143.74
Raw unit retail	23.96
Bottle price (Rounded to next even 5 cents)	23.95

STATES	Formula	FOB \$12.73
Vermont	Delivered Case cost (FOB)	76.38
	BTLS (.05/bottle)	0.30
	Mark-up (65%)	126.52
	Bottle price	21.09
Virginia	Delivered Case cost (FOB)	76.38
	Standard handling fee	1.00
	Times factor (mark-up) (64%)	126.90
	Divide by number of bottles	21.15
	Rounded to next highest \$.05 multiple	21.20
	Plus 20% state tax	4.24
	Shelf and licensee bottle price	25.44
	Bottle price (rounded to next highest \$.05 multiple)	25.45
West Virginia	Delivered case cost (FOB price)	76.38
	Mark-up @ 28%	21.39
	Per case delivery fee	2.30
	Delivered case cost to retailer	100.07
	Bottle price	16.68
Wyoming	Delivered case cost (FOB price)	76.38
	Inventory cost (subtotal)	79.58
	Mark-up @ 17.6% rounded to full penny	14.01
	Outgoing freight (per case)	4.50
	State excise tax	2.61
	Case price to retailer	100.70
	Bottle price	16.78

WINE

STATES	Formula	FOB \$7.03
Montgomery County (MD)	Delivered case cost (FOB)	84.36
	State tax (0.40/gallon)	0.95
	Wholesale mark-up (35%)	29.86
	Rounding	
	wholesale case price	115.17
	Wholesale bottle price	9.60
	Retail markup @ 18%	20.73
	Rounding	
	Retail case price	135.90
	Bottle price	11.33
Mississippi	Delivered case cost (FOB)	84.36
	Freight	5.00
	Markup 27.5%	23.20
	Subtotal	112.56
	Excise tax based on gallonage (0.35c/gallon)	0.83
	Subtotal 2	113.39
	sales tax @7%	
	Case price	113.39
	Bottle price	9.45
New Hampshire	Delivered case cost (FOB)	84.36
	Bailment	1.20
	Bottle cost	7.13
	Bottle mark-up (57%)	11.19
	Bottle price	11.49
Pennsylvania	Delivered case cost (FOB)	84.36
	Price per bottle + 1% and rounded up	7.10
	markup @30%	2.13
	PLCB operational cost	1.30
	intermediate price	10.53
	state tax @ 18%	1.90
	Bottle price	12.43
	rounded to the final nine	12.39
	sales and use tax @ 6.21%	
	Bottle price	12.39

STATES	Formula	FOB \$12.73
Utah	Delivered case cost (FOB)	84.36
	freight	0.90
	intermediate cost	85.26
	mark-up factor of 86%	73.32
	overall case retail	158.58
	Raw unit retail	13.22
	Bottle price	13.22
Wyoming	Delivered case cost (FOB price)	84.36
	Inventory cost (subtotal)	87.56
	Mark-up @ 17.6% rounded to full penny	15.41
	Outgoing freight (per case)	4.50
	State excise tax	0.67
	Case price to retailer	108.14
	Bottle price	9.01

Appendix B

Details for sales tax estimates used in Table 6

SALES TAX CALCULATIONS FOR **SPIRITS**

CONTROL STATES	Retail Tax	Sales tax %	Average Retail Price for 1.75L	Retail Price/Standard drink per 1.75L container (40)	General Sales Tax Per Standard Drink 1.75L	Average Retail Price for 750ml	Retail Price/Standard Drink Per 750ml Container (17)	General Sales Tax Per Standard Drink 750ml	General Sales Tax Per Standard Drink (Av Of 1.75L & 750ml)
Alabama		4	\$21.093	\$0.527	\$0.021	\$13.045	\$0.77	\$0.03	\$0.026
Idaho		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Iowa		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Maine		5.5	21.093	0.527	0.029	13.045	0.77	0.04	0.036
Michigan		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Mississippi		7	21.093	0.527	0.037	13.045	0.77	0.05	0.045
Montana		0	21.093	0.527	0.000	13.045	0.77	0.00	0.000
New Hampshire		0	21.093	0.527	0.000	13.045	0.77	0.00	0.000
North Carolina		4.75	21.093	0.527	0.025	13.045	0.77	0.04	0.031
Ohio		5.75	21.093	0.527	0.030	13.045	0.77	0.04	0.037
Oregon		0	21.093	0.527	0.000	13.045	0.77	0.00	0.000
Pennsylvania		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Utah		5.95	21.093	0.527	0.031	13.045	0.77	0.05	0.039
Vermont		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Virginia		5.3	21.093	0.527	0.028	13.045	0.77	0.04	0.034
West Virginia		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Wyoming		4	21.093	0.527	0.021	13.045	0.77	0.03	0.026

SALES TAX CALCULATIONS FOR SPIRITS

LICENSE STATES	Retail Tax	Sales tax %	Average Retail Price for 1.75L	Retail Price/ Standard drink per 1.75L container (40)	General Sales Tax Per Standard Drink 1.75L	Average Retail Price for 750ml	Retail Price/ Standard Drink Per 750ml Container (17)	General Sales Tax Per Standard Drink 750ml	General Sales Tax Per Standard Drink (Av Of 1.75L & 750ml)
Alaska		0	\$21.093	\$0.527	\$0.000	\$13.045	\$0.77	\$0.00	\$0.000
Arizona		5.6	21.093	0.527	0.030	13.045	0.77	0.04	0.036
Arkansas	3%	6.5	21.093	0.527	0.034	13.045	0.77	0.05	0.042
California		7.5	21.093	0.527	0.040	13.045	0.77	0.06	0.049
Colorado		2.9	21.093	0.527	0.015	13.045	0.77	0.02	0.019
Connecticut		6.35	21.093	0.527	0.033	13.045	0.77	0.05	0.041
Delaware		0	21.093	0.527	0.000	13.045	0.77	0.00	0.000
District Of Columbia	10%	5.75	21.093	0.527	0.030	13.045	0.77	0.04	0.037
Florida		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Georgia		4	21.093	0.527	0.021	13.045	0.77	0.03	0.026
Hawaii		4	21.093	0.527	0.021	13.045	0.77	0.03	0.026
Illinois		6.25	21.093	0.527	0.033	13.045	0.77	0.05	0.040
Indiana		7	21.093	0.527	0.037	13.045	0.77	0.05	0.045
Kansas	8%	6.15	21.093	0.527	0.032	13.045	0.77	0.05	0.040
Kentucky		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Louisiana		4	21.093	0.527	0.021	13.045	0.77	0.03	0.026
Maryland	9%	6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
Massachusetts		6.25	21.093	0.527	0.033	13.045	0.77	0.05	0.040
Minnesota	3%	6.875	21.093	0.527	0.036	13.045	0.77	0.05	0.045
Missouri		4.225	21.093	0.527	0.022	13.045	0.77	0.03	0.027
Nebraska		5.5	21.093	0.527	0.029	13.045	0.77	0.04	0.036
Nevada		6.85	21.093	0.527	0.036	13.045	0.77	0.05	0.044
New Jersey		7	21.093	0.527	0.037	13.045	0.77	0.05	0.045
New Mexico		5.125	21.093	0.527	0.027	13.045	0.77	0.04	0.033
New York		4	21.093	0.527	0.021	13.045	0.77	0.03	0.026
North Dakota	7%	5	21.093	0.527	0.026	13.045	0.77	0.04	0.032
Oklahoma		4.5	21.093	0.527	0.024	13.045	0.77	0.03	0.029
Rhode Island		7	21.093	0.527	0.037	13.045	0.77	0.05	0.045
South Carolina		6	21.093	0.527	0.032	13.045	0.77	0.05	0.039
South Dakota	2%	4	21.093	0.527	0.021	13.045	0.77	0.03	0.026
Tennessee		7	21.093	0.527	0.037	13.045	0.77	0.05	0.045
Texas		6.25	21.093	0.527	0.033	13.045	0.77	0.05	0.040
Washington	20.5%	6.5	21.093	0.527	0.034	13.045	0.77	0.05	0.042
Wisconsin		5	21.093	0.527	0.026	13.045	0.77	0.04	0.032

SALES TAX CALCULATIONS FOR WINE

CONTROL STATES	Retail Tax	Sales tax %	Average Retail Price	Retail Price/ Standard drink per 750ml container (5)	General Sales Tax Per Standard Drink
Alabama		4	\$11.19	\$2.238	\$0.090
Idaho		6	11.19	2.238	0.134
Iowa		6	11.19	2.238	0.134
Maine		5.5	11.19	2.238	0.123
Michigan		6	11.19	2.238	0.134
Mississippi		7	11.19	2.238	0.157
Montana		0	11.19	2.238	0.000
New Hampshire		0	11.19	2.238	0.000
North Carolina		4.75	11.19	2.238	0.106
Ohio		5.75	11.19	2.238	0.129
Oregon		0	11.19	2.238	0.000
Pennsylvania		6	11.19	2.238	0.134
Utah		5.95	11.19	2.238	0.133
Vermont		6	11.19	2.238	0.134
Virginia		5.3	11.19	2.238	0.119
West Virginia		6	11.19	2.238	0.134
Wyoming		4	11.19	2.238	0.090

SALES TAX CALCULATIONS FOR WINE

LICENSE STATES	Retail Tax	Sales tax %	Average Retail Price	Retail Price Standard drink per 750ml container (5)	General Sales Tax Per Standard Drink
Alaska		0	\$11.19	\$2.238	\$0.000
Arizona		5.6	11.19	2.238	0.125
Arkansas		6.5	11.19	2.238	0.145
California		7.5	11.19	2.238	0.168
Colorado		2.9	11.19	2.238	0.065
Connecticut		6.35	11.19	2.238	0.142
Delaware		0	11.19	2.238	0.000
District Of Columbia		5.75	11.19	2.238	0.129
Florida		6	11.19	2.238	0.134
Georgia		4	11.19	2.238	0.090
Hawaii		4	11.19	2.238	0.090
Illinois		6.25	11.19	2.238	0.140
Indiana		7	11.19	2.238	0.157
Kansas		6.15	11.19	2.238	0.138
Kentucky		6	11.19	2.238	0.134
Louisiana		4	11.19	2.238	0.090
Maryland		6	11.19	2.238	0.134
Massachusetts		6.25	11.19	2.238	0.140
Minnesota		6.875	11.19	2.238	0.154
Missouri		4.225	11.19	2.238	0.095
Nebraska		5.5	11.19	2.238	0.123
Nevada		6.85	11.19	2.238	0.153
New Jersey		7	11.19	2.238	0.157
New Mexico		5.125	11.19	2.238	0.115
New York		4	11.19	2.238	0.090
North Dakota		5	11.19	2.238	0.112
Oklahoma		4.5	11.19	2.238	0.101
Rhode Island		7	11.19	2.238	0.157
South Carolina		6	11.19	2.238	0.134
South Dakota		4	11.19	2.238	0.090
Tennessee		7	11.19	2.238	0.157
Texas		6.25	11.19	2.238	0.140
Washington		6.5	11.19	2.238	0.145
Wisconsin		5	11.19	2.238	0.112

SALES TAX CALCULATIONS FOR BEER

CONTROL STATES	Retail Tax	Sales tax %	Average Retail Price	Retail Price/ Standard drink per six-pack (6)	General Sales Tax Per Standard Drink
Alabama		4	\$5.25	\$0.88	\$0.035
Idaho		6	5.25	0.88	0.053
Iowa		6	5.25	0.88	0.053
Maine		5.5	5.25	0.88	0.048
Michigan		6	5.25	0.88	0.053
Mississippi		7	5.25	0.88	0.061
Montana		0	5.25	0.88	0.000
New Hampshire		0	5.25	0.88	0.000
North Carolina		4.75	5.25	0.88	0.042
Ohio		5.75	5.25	0.88	0.050
Oregon		0	5.25	0.88	0.000
Pennsylvania		6	5.25	0.88	0.053
Utah		5.95	5.25	0.88	0.052
Vermont		6	5.25	0.88	0.053
Virginia		5.3	5.25	0.88	0.046
West Virginia		6	5.25	0.88	0.053
Wyoming		4	5.25	0.88	0.035

SALES TAX CALCULATIONS FOR BEER

LICENSE STATES	Retail Tax	Sales tax %	Average Retail Price	Retail Price Standard drink per six-pack (6)	General Sales Tax Per Standard Drink
Alaska		0	\$5.25	\$0.88	\$0.000
Arizona		5.6	5.25	0.88	0.049
Arkansas	1	6.5	5.25	0.88	0.057
California		7.5	5.25	0.88	0.066
Colorado		2.9	5.25	0.88	0.025
Connecticut		6.35	5.25	0.88	0.056
Delaware		0	5.25	0.88	0.000
District Of Columbia	10	5.75	5.25	0.88	0.050
Florida		6	5.25	0.88	0.053
Georgia		4	5.25	0.88	0.035
Hawaii		4	5.25	0.88	0.035
Illinois		6.25	5.25	0.88	0.055
Indiana		7	5.25	0.88	0.061
Kansas	8	6.15	5.25	0.88	0.054
Kentucky		6	5.25	0.88	0.053
Louisiana		4	5.25	0.88	0.035
Maryland	9	6	5.25	0.88	0.053
Massachusetts		6.25	5.25	0.88	0.055
Minnesota	2.5	6.875	5.25	0.88	0.060
Missouri		4.225	11.19	0.88	0.037
Nebraska		5.5	5.25	0.88	0.048
Nevada		6.85	5.25	0.88	0.060
New Jersey		7	5.25	0.88	0.061
New Mexico		5.125	5.25	0.88	0.045
New York		4	5.25	0.88	0.035
North Dakota	7	5	5.25	0.88	0.044
Oklahoma		4.5	5.25	0.88	0.039
Rhode Island		7	5.25	0.88	0.061
South Carolina		6	5.25	0.88	0.053
South Dakota		4	5.25	0.88	0.035
Tennessee		7	5.25	0.88	0.061
Texas		6.25	5.25	0.88	0.055
Washington		6.5	5.25	0.88	0.057
Wisconsin		5	5.25	0.88	0.044

Summary: State Alcohol Tax Rates

PURPOSE:

The purpose of this study is not to advocate for higher or lower tax rates. The study is meant to provide policy makers with actual or implied state tax rates per gallon and by standard drink (0 .6 oz. of ethanol) for beer, wine and spirits.

METHODOLOGY:

Because of differing statutory and regulatory environments, it is difficult to compare alcohol tax rates. To ensure understandable and reliable data, the study used a methodology that was peer-reviewed by other researchers and industry representatives.

THE METHODOLOGY IS AS FOLLOWS:

2. Where excise taxes are not available, (i.e., control states for spirits), use implied markups and margins for wholesale retail and any excess in price as the implied tax.
3. Do not include sales tax if applied to all commodities.
4. Used ad-valorem (as % of price) taxes specific to alcohol or sales tax if higher for alcohol, than other products.
5. All tax estimates are presented as wholesale excise taxes, translating control state mark-ups and ad valorem taxes into a wholesale excise tax that would result in the same price to consumers given our assumptions regarding implied mark-ups, margins and ad-valorem taxes into a whole-sale excise tax that would result in the same price to consumers given our assumptions regarding implied mark-ups and margins.

SUMMARY:

In general, spirits are taxed at higher rates per gallon than either beer or wine in both control and license states. For control states, this disparity often grows as the price of the product increases. On average, control jurisdictions tax less expensive spirit products at a lower rate than license states, but as the price goes up, the control states will tax these products at a higher rate than do license states. This anomaly is due to the fact that most control states have

an ad-valorem mark-up structure as opposed to a fixed excise tax rate, which nearly all license states employ. Control states generate considerably more revenue per gallon as profits that are remanded to the state coffers. In license states, the profits accrue to retailers or distributors. In conclusion, it is important to look at each state individually as their tax rates vary based on a multitude of factors.



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