

# California Department of Tax and Fee Administration

# ECONOMIC PERSPECTIVE

Discussion of Recent Economic Developments  
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## Alcohol Consumption and Revenues: A 50-State Comparison

### Introduction

U.S. Census Bureau data indicate that alcoholic beverages comprised \$18.7 billion in taxable sales in the state in 2012. Of this total, \$11.0 billion was sold by stores as packaged liquor, and \$7.7 billion was sold for immediate consumption in restaurants and bars.<sup>1</sup>

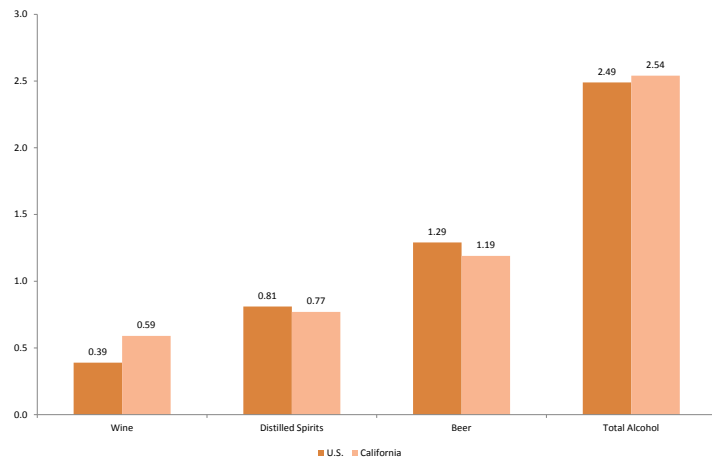
States vary greatly in how they regulate and tax alcohol. While social, psychological, and demographic factors affect alcohol consumption, taxation and regulations also influence it.

Unlike most products, making valid comparisons of states among alcohol types is challenging. This newsletter reviews and analyzes the results of one of the few studies that compares alcohol consumption for all states.<sup>2</sup> The author converted each category of beverage into "alcohol gallons," a volume of pure alcohol consumed by those aged 21 and over.

### U.S. and California Alcohol Consumption

Chart 1 compares annual U.S. and California alcohol consumption per capita. Californians drink 51 percent more wine per capita than the national average, 0.59 alcohol gallons compared to 0.39 for the nation as a whole. However, California residents consume five percent less distilled spirits (0.81 gallons compared to 0.77) and eight percent less beer (1.29 gallons compared to 1.19). Overall, California total alcohol consumption is close to the national average, 2.49 gallons per adult, compared to 2.54 gallons per adult for the nation as a whole, about two percent less than the national average.

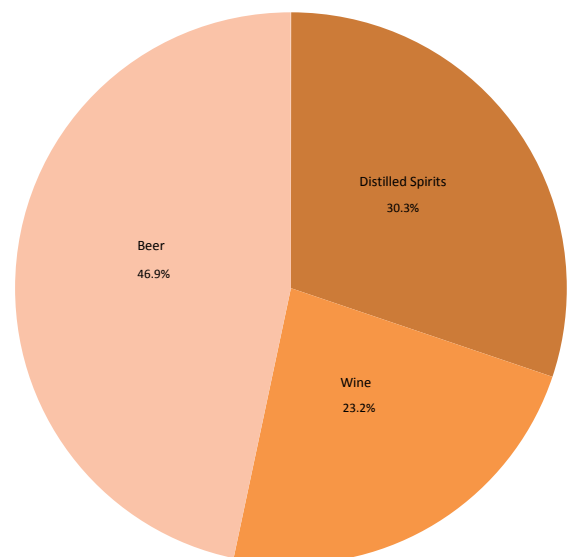
Chart 1  
U.S. AND CA PER CAPITA ALCOHOL CONSUMPTION  
(ALCOHOL GALLONS)



### California Alcohol Consumption

Chart 2 shows the composition of California alcohol consumption. Beer dominates adult beverages, accounting for 46.9 percent of the total. Beer is followed by distilled spirits (30.3 percent) and wine (23.2 percent).

Chart 2  
COMPOSITION OF CA PER CAPITA ALCOHOL CONSUMPTION  
(ALCOHOL GALLONS)



<sup>1</sup> U.S. Census Bureau, 2012 *Economic Census*, "Product Lines" reports for California, retail and food and accommodations industries. A two-step process is needed to access "Product Lines" data. (1) Go to Census Bureau website: <https://www.census.gov/>. (2) In the search box enter: "2012 Economic Census Retail Product Lines." Then click on the link provided.

<sup>2</sup> *Public Revenues From Alcohol Beverages, 2013*, The Distilled Spirits Council of the United States, Inc., 2015. (To view the study, enter the title, *Public Revenues From Alcohol Beverages*, into a search engine.)

## Wine Consumption by State

Table 1 ranks states by per capita wine consumption. Since income is statistically related to some types of alcohol consumption, the table also shows the percentage of each state's median household income of the U.S. average. The orange line in the table separates the top ten states from the others. Per capita consumption of wine ranges from a low of 0.10 gallons for West Virginia to a high of 1.00 gallons for the District of Columbia. California ranks seventh at 0.59 gallons.

## Wine Consumption and Income

Eight of the top ten states in Table 1 have higher than average household incomes. California Department of Tax and Fee Administration staff analysis indicates that household income explains about 33 percent of state differences from national per capita wine consumption. As state average median household income increases, wine consumption increases.

Table 1  
PER ADULT CONSUMPTION OF WINE IN 2013

	Rank	Gallons of Pure Alcohol per Adult	Percentage of 2015 U.S. Median Household Income
Dist. of Columbia	1	1.00	124%
New Hampshire	2	0.79	134%
Vermont	3	0.70	105%
Massachusetts	4	0.68	120%
Nevada	5	0.61	92%
New Jersey	6	0.61	121%
California	7	0.59	113%
Connecticut	8	0.59	129%
Rhode Island	9	0.57	99%
Delaware	10	0.55	102%
Washington	11	0.54	119%
Hawaii	12	0.53	114%
Oregon	13	0.50	108%
Florida	14	0.49	86%
New York	15	0.49	103%
Alaska	16	0.47	133%
Virginia	17	0.44	109%
Illinois	18	0.42	107%
Arizona	19	0.41	92%
Maine	20	0.41	90%
<b>TOTAL U.S.</b>		<b>0.39</b>	<b>100%</b>
Wisconsin	21	0.38	98%
Maryland	22	0.37	130%
Colorado	23	0.36	118%
Idaho	24	0.35	91%
Minnesota	25	0.35	122%
Montana	26	0.35	91%
Michigan	27	0.31	96%
Missouri	28	0.30	105%
Ohio	29	0.30	94%
New Mexico	30	0.29	80%
North Carolina	31	0.28	90%
Indiana	32	0.26	92%
Alabama	33	0.25	79%
Georgia	34	0.25	90%
South Carolina	35	0.25	82%
Louisiana	36	0.24	81%
Pennsylvania	37	0.23	107%
Nebraska	38	0.22	107%
Tennessee	39	0.22	84%
Texas	40	0.22	100%
Wyoming	41	0.22	108%
North Dakota	42	0.21	102%
South Dakota	43	0.21	97%
Iowa	44	0.20	108%
Oklahoma	45	0.19	83%
Arkansas	46	0.18	76%
Kentucky	47	0.16	75%
Utah	48	0.15	117%
Kansas	49	0.14	97%
Mississippi	50	0.12	71%
West Virginia	51	0.10	76%

Source: *Public Revenues From Alcohol Beverages*, 2013  
The Distilled Spirits Council of the United States, Inc. 2015

## Distilled Spirits Consumption by State

Table 2 lists states in per capita distilled spirits consumption. Per capita consumption of distilled spirits varies from a low of 0.46 gallons for West Virginia to a high of 2.01 gallons for New Hampshire. California is positioned 33<sup>rd</sup>, at 0.77 gallons.

## Distilled Spirits Consumption and Income

Eight of the top ten states in Table 2 have higher than average household incomes. Household income explains about 17 percent of state differences from national per capita distilled spirits consumption. As the state average median household income grows, distilled spirits consumption expands.

## Beer Consumption by State

Table 3 positions states in per capita beer consumption. Per capita consumption of beer extends from a low of 0.91 gallons for Utah to a high of 2.03 gallons for North Dakota. California ranks 39, at 1.19 gallons.

Table 2  
PER ADULT CONSUMPTION OF DISTILLED SPIRITS  
IN 2013

	Rank	Gallons of Pure Alcohol per Adult	Percentage of 2015 U.S. Median Household Income
New Hampshire	1	2.01	134%
Delaware	2	1.67	102%
Dist. of Columbia	3	1.63	124%
North Dakota	4	1.39	102%
Nevada	5	1.28	92%
Wisconsin	6	1.20	98%
Alaska	7	1.19	133%
Minnesota	8	1.18	122%
Wyoming	9	1.14	108%
Colorado	10	1.12	118%
South Dakota	11	1.03	97%
Rhode Island	12	0.98	99%
Florida	13	0.97	86%
Montana	14	0.95	91%
Louisiana	15	0.94	81%
Connecticut	16	0.93	129%
Maine	17	0.92	90%
New Jersey	18	0.92	121%
Maryland	19	0.91	130%
Massachusetts	20	0.91	120%
Missouri	21	0.90	105%
Nebraska	22	0.90	107%
Arizona	23	0.89	92%
Oregon	24	0.89	108%
Michigan	25	0.88	96%
New Mexico	26	0.86	80%
South Carolina	27	0.82	82%
Indiana	28	0.81	92%
<b>TOTAL U.S.</b>		<b>0.81</b>	<b>100%</b>
Iowa	29	0.80	108%
Idaho	30	0.79	91%
Illinois	31	0.79	107%
New York	32	0.78	103%
California	33	0.77	113%
Hawaii	34	0.77	114%
Kansas	35	0.77	97%
Washington	36	0.76	119%
Mississippi	37	0.75	71%
Oklahoma	38	0.74	83%
Arkansas	39	0.73	76%
Vermont	40	0.73	105%
Georgia	41	0.71	90%
Tennessee	42	0.71	84%
Kentucky	43	0.70	75%
Ohio	44	0.67	94%
Pennsylvania	45	0.67	107%
Texas	46	0.64	100%
Virginia	47	0.63	109%
Alabama	48	0.61	79%
North Carolina	49	0.61	90%
Utah	50	0.53	117%
West Virginia	51	0.46	76%

Source: *Public Revenues From Alcohol Beverages, 2013*  
The Distilled Spirits Council of the United States, Inc. 2015

Table 3  
PER ADULT CONSUMPTION OF BEER IN 2013

	Rank	Gallons of Pure Alcohol per Adult	Percentage of 2015 U.S. Median Household Income
North Dakota	1	2.03	102%
New Hampshire	2	1.99	134%
Montana	3	1.89	91%
South Dakota	4	1.77	97%
Vermont	5	1.67	105%
Wisconsin	6	1.66	98%
Maine	8	1.62	90%
Nevada	7	1.62	92%
Nebraska	9	1.59	107%
Mississippi	10	1.55	71%
Iowa	11	1.54	108%
Texas	12	1.54	100%
Louisiana	13	1.52	81%
Wyoming	14	1.52	108%
Delaware	15	1.50	102%
South Carolina	16	1.48	82%
New Mexico	17	1.44	80%
Hawaii	18	1.40	114%
Colorado	19	1.39	118%
Missouri	20	1.39	105%
Ohio	21	1.38	94%
Oregon	22	1.38	108%
West Virginia	23	1.38	76%
Alabama	24	1.37	79%
Alaska	25	1.35	133%
Arizona	26	1.35	92%
Minnesota	27	1.33	122%
Illinois	28	1.31	107%
Dist. of Columbia	29	1.30	124%
<b>TOTAL U.S.</b>		<b>1.29</b>	<b>100%</b>
Idaho	30	1.28	91%
Pennsylvania	31	1.28	107%
Florida	32	1.27	86%
Oklahoma	33	1.27	83%
Kansas	34	1.26	97%
Michigan	35	1.23	96%
North Carolina	36	1.23	90%
Arkansas	37	1.22	76%
Massachusetts	38	1.20	120%
California	39	1.19	113%
Virginia	40	1.19	109%
Indiana	41	1.18	92%
Rhode Island	42	1.18	99%
Tennessee	43	1.18	84%
Georgia	44	1.17	90%
Washington	45	1.13	119%
Kentucky	46	1.12	75%
New York	47	1.07	103%
Maryland	48	1.03	130%
Connecticut	49	1.00	129%
New Jersey	50	0.99	121%
Utah	51	0.91	117%

## Beer Consumption and Income

Only four of the top ten states have higher than average household incomes. Income explains just six percent of state differences from national per capita beer consumption. Unlike wine and distilled spirits consumption, as state average median household income rises, beer consumption falls.

## Alcohol Revenues

As noted earlier, alcohol tax rates vary, leading to wide differences in tax collections among states for each type of product.

## Wine Revenues

Table 4 shows wine revenues by state per gallon of alcohol. They range from a low of \$7.18 per gallon for Oregon to a high of \$121.27 for Pennsylvania. California wine revenues are ranked 35th at \$26.34 per gallon, and are below the national average of \$33.06.

## Distilled Spirits Revenues

Table 5 displays distilled spirits revenues per gallon by state. They vary from a low of \$10.75 per gallon for Delaware to a high of \$146.12 for Washington. California distilled spirits revenues placed 35th at \$36.24 per gallon, and are below the national average of \$48.94.

## Beer Revenues

Table 6 presents beer revenues per gallon by state. They fluctuate from a low of \$2.38 per gallon for Oregon to a high of \$64.68 for the District of Columbia. California beer revenues are \$27.14 per gallon, ranked 22, and slightly above the national average of \$26.17.

## Summary

- Californians consume more wine, but less distilled spirits and beer than national averages of each.
- States vary greatly in consumption of different types of alcohol.
- Income explains some of the variation in consumption among states. As incomes increase, wine and distilled spirits consumption tend to rise, but beer consumption tends to fall. However, much of the variation in consumption of all types of alcohol remains unexplained by income.
- Alcohol tax revenues per gallon vary greatly by state for each type of alcohol.
- California tax revenues are below average for wine and distilled spirits, but slightly above average for beer.

Source: *Public Revenues From Alcohol Beverages, 2013*  
The Distilled Spirits Council of the United States, Inc. 2015

Table 4  
WINE REVENUE PER GALLON OF ALCOHOL IN 2013

	Rank	Dollars per Gallon of Alcohol
Pennsylvania	1	\$121.27
Mississippi	2	\$103.06
Utah	3	\$97.46
Kentucky	4	\$63.15
West Virginia	5	\$61.71
Idaho	6	\$52.75
Dist. of Columbia	7	\$48.64
Texas	8	\$48.29
North Carolina	9	\$47.99
South Dakota	10	\$47.50
New Hampshire	11	\$46.67
Georgia	12	\$41.79
Florida	13	\$38.92
Illinois	14	\$38.51
New Mexico	15	\$38.51
Tennessee	16	\$37.64
Maryland	17	\$36.97
North Dakota	18	\$36.80
Nebraska	19	\$36.61
Wyoming	20	\$34.03
Oklahoma	21	\$33.63
<b>TOTAL U.S.</b>		<b>\$33.06</b>
Alabama	22	\$31.94
New Jersey	23	\$31.91
Iowa	24	\$31.82
Nevada	25	\$31.09
Rhode Island	26	\$31.05
Washington	27	\$30.87
Minnesota	28	\$30.24
Alaska	29	\$30.10
Indiana	30	\$29.81
Virginia	31	\$29.39
Colorado	32	\$29.26
Connecticut	33	\$27.57
South Carolina	34	\$27.21
California	35	\$26.34
Arizona	36	\$25.81
Michigan	37	\$25.64
New York	38	\$25.58
Kansas	39	\$25.42
Vermont	40	\$25.30
Maine	41	\$25.26
Hawaii	42	\$25.16
Ohio	43	\$24.08
Missouri	44	\$22.78
Louisiana	45	\$22.73
Arkansas	46	\$20.18
Wisconsin	47	\$16.53
Montana	48	\$15.12
Massachusetts	49	\$11.60
Delaware	50	\$11.59
Oregon	51	\$7.18

Table 5  
DISTILLED SPIRITS REVENUE PER GALLON OF ALCOHOL IN 2013

	Rank	Dollars per Gallon of Alcohol
Washington	1	\$146.12
Utah	2	\$120.45
Vermont	3	\$91.58
Virginia	4	\$90.22
North Carolina	5	\$89.74
Alabama	6	\$84.69
Ohio	7	\$78.26
Oregon	8	\$76.06
Idaho	9	\$75.07
Michigan	10	\$65.82
Dist. of Columbia	11	\$61.23
Iowa	12	\$61.17
Illinois	13	\$59.56
Pennsylvania	14	\$58.89
Mississippi	15	\$58.81
New Hampshire	16	\$58.28
Texas	17	\$54.19
Maine	18	\$52.11
Montana	19	\$51.95
<b>TOTAL U.S.</b>		<b>\$48.94</b>
New York	20	\$48.61
West Virginia	21	\$48.35
Kentucky	22	\$46.07
Minnesota	23	\$45.46
South Dakota	24	\$44.60
Oklahoma	25	\$43.21
New Jersey	26	\$42.60
Florida	27	\$42.44
Alaska	28	\$41.43
Tennessee	29	\$40.48
Connecticut	30	\$39.60
Rhode Island	31	\$39.35
Nevada	32	\$38.43
New Mexico	33	\$37.61
Wyoming	34	\$37.42
California	35	\$36.24
Georgia	36	\$36.23
South Carolina	37	\$35.69
Nebraska	38	\$34.12
Hawaii	39	\$33.14
Indiana	40	\$33.05
Wisconsin	41	\$32.12
North Dakota	42	\$31.93
Kansas	43	\$30.87
Maryland	44	\$30.15
Arkansas	45	\$27.43
Colorado	46	\$27.30
Arizona	47	\$27.15
Louisiana	48	\$25.50
Missouri	49	\$19.92
Massachusetts	50	\$19.13
Delaware	51	\$10.75

Source: *Public Revenues From Alcohol Beverages, 2013*  
The Distilled Spirits Council of the United States, Inc. 2015

Table 6  
BEER REVENUE PER GALLON OF ALCOHOL IN 2013

	Rank	Dollars per Gallon of Alcohol
Dist. of Columbia	1	\$64.68
Utah	2	\$52.48
Alabama	3	\$42.70
Georgia	4	\$38.93
Tennessee	5	\$38.23
Washington	6	\$37.45
Minnesota	7	\$37.43
Hawaii	8	\$37.13
South Dakota	9	\$35.13
Florida	10	\$31.11
Kentucky	11	\$30.81
Vermont	12	\$29.91
New Mexico	13	\$29.69
Illinois	14	\$29.60
Texas	15	\$29.54
Kansas	16	\$29.50
North Carolina	17	\$29.45
Maryland	18	\$28.59
Nevada	19	\$27.96
Rhode Island	20	\$27.95
South Carolina	21	\$27.55
California	22	\$27.14
Nebraska	23	\$26.82
Connecticut	24	\$26.79
Alaska	25	\$26.53
Mississippi	26	\$26.31
<b>TOTAL U.S.</b>		<b>\$26.17</b>
Ohio	27	\$25.94
New Jersey	28	\$25.25
Maine	29	\$25.15
New York	30	\$24.80
Louisiana	31	\$24.66
North Dakota	32	\$24.61
Indiana	33	\$24.26
Michigan	34	\$22.86
Virginia	35	\$21.82
New Hampshire	36	\$21.73
Arizona	37	\$21.15
Oklahoma	38	\$20.58
Colorado	39	\$19.48
West Virginia	40	\$19.14
Iowa	41	\$18.82
Missouri	42	\$17.39
Wisconsin	43	\$16.68
Arkansas	44	\$15.99
Idaho	45	\$15.73
Wyoming	46	\$13.97
Pennsylvania	47	\$12.02
Massachusetts	48	\$11.62
Delaware	49	\$4.16
Montana	50	\$3.55
Oregon	51	\$2.38

### Contact Us

Please contact us if you have questions or comments.

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<https://www.cdtfa.ca.gov/legal/legislative-research.htm>

### Online Resources

For more information about topics covered in this publication and previous issues, please visit any of the websites listed below.

U.S. Bureau of Labor Statistics

<http://www.bls.gov/>

U.S. Bureau of Economic Analysis

[www.bea.gov](http://www.bea.gov)

U.S. Census Bureau

[www.census.gov](http://www.census.gov)

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Source: *Public Revenues From Alcohol Beverages, 2013*  
The Distilled Spirits Council of the United States, Inc. 2015