

Legal Challenges to State  
Alcohol Control Policy:  
An Economist's Perspective

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# Alcohol Control Policy

## •Three-Tier System

- numerous legal challenges to three tier system over past 20+ years
  - Regulations/statutes repealed
  - Invalidated by court rulings
- Most challenges come under the Commerce Clause of the US Constitution or under federal Antitrust statutes (Sherman Act and/or Clayton Act)
  - Unfair constraints on interstate commerce
  - Anti-competitive
- 21<sup>st</sup> amendment defense has not been widely used
  - Recent Supreme Court decision (Granholm v. Heald) affirms several earlier decisions supporting the validity of the three-tier system

# Alcohol Control Policy

- Three-Tier System: *Granholm v. Heald*

**“The Twenty-first Amendment grants the states virtually complete control over whether to permit importation or sale of liquor and how to structure the liquor distribution system.”** *Midcal, supra*, at 110. A State which chooses to ban the sale and consumption of alcohol altogether could bar its importation; and, as our history shows, it would have to do so to make its laws effective. States may also assume direct control of liquor distribution through state-run outlets or funnel sales through the three-tier system. **We have previously recognized that the three-tier system itself is “unquestionably legitimate.”** *North Dakota v. United States*, 495 US, at 432.

*Granholm v. Heald* 03-116, Slip, pages 25-26

# Alcohol Control Policy

- Three-Tier System

- In *Granholm v. Heald*, the Court did find that the state policies at issue violated the Commerce Clause
  - Policies regulating Interstate sales (reciprocity)
- My interpretation:
  - States have wide latitude in determining the mix of policies that they use to control excessive alcohol consumption and to regulate the distribution of alcoholic beverages
  - Three-tier system is “unquestionably legitimate”
  - Policies need to be applied evenly
    - E.g. policies regulating distribution need to apply to all distributors in the same way
    - Reciprocal arrangements or those favoring in-state producers/distributors over those out of state (like those at issue in *Granholm*) do not apply evenly
    - Potentially an issue with many state alcohol-related policies (e.g. those favoring in-state producers as in Costco case)

# Costco v. Hoen, et al.

## Costco challenged multiple components of WA Three Tier System for beer and wine:

- “quantity discount” provisions
  - ensure that all retailers, regardless of size, location, and other characteristics, will face the same cost for beer and wine
  - ensure that all retailers can receive same non-price benefits (e.g. gifts, special services), rebates, etc.
- elimination of quantity discounts ban
  - benefits larger retailers given their size and volume since they would have greater buying power and ability to extract price discounts
  - would likely raise costs to smaller retailers
- Bottom line: quantity discount ban will result in higher retail beer and wine prices, on average, than would exist in the absence of the ban

# Costco v. Hoen, et al.

“minimum markup” provisions

- price to retailers requires minimum ten percent markup above wholesalers’ cost of acquisition
- adds to the ten percent minimum markup required of producers above their production costs
- will tend to rise with inflation (in contrast to excise tax)
  
- elimination of minimum markup provision
  - would almost certainly result in some wholesalers competing on the basis of price by selling to retailers at less than ten percent above acquisition costs
  - Profit margins in brewing industry suggest, for example, that producer markup is five percent or less on average in US
  
- Bottom line: minimum markup provisions will result in higher retail beer and wine prices, on average, than would exist in their absence

# Costco v. Hoen, et al.

- “post and hold” provisions
  - facilitate implementation and enforcement of the quantity discount ban and minimum markup provisions
  - “posting” allows relatively easy monitoring of wholesalers’ prices and their compliance with other policies
  - “holding” prevents price changes during hold period and ensures that all retailers pay same price for beer and wine purchased during this period
- elimination of post-and-hold provisions
  - would significantly raise the costs of enforcing other policies
  - would result in more frequent price changes and increase likelihood of different retailers paying different prices
- Bottom line: post-and-hold provisions will result in higher and more stable retail beer and wine prices, on average, than would exist in their absence

# Costco v. Hoen, et al.

- Other challenged components:

- requirements that retailers pay cash for beer and wine at the time of delivery

- “cash payment” provision

- Requirements that beer and wine be delivered directly from distributors to retailers’ licensed outlets or directly to the retailer at the distributors’ outlets at the same price

- “delivery” provisions

- Both raise costs to retailers and should result in higher prices for the beverages affected by the policies

- Policy allowing in-state producers to sell directly to retailers struck down before trial, given uneven treatment of in-state and out-of-state producers and Granholm decision



# TFWS v. Schaefer, et al.

- Maryland case brought by large retailer challenging state's quantity discount ban and post-and-hold system
  - Policies specific to wine and spirits (exclude beer)
  - In early 1990s, TFWS successfully convinced Delaware to remove similar policies on beer, wine and spirits
  - Case has been back and forth between district court and appeals court for several years

# Challenged Policies and Prices.

- Costco v. Hoen, et al.
  - Both parties agreed that the challenged policies led to an increase in retail prices for beer and wine
- TFWS v. Schaefer, et al.
  - Impact on price has been a contentious issue

# Costco v. Hoen, et al.

- Costco's complaint states:

- Costco "brings this action to promote competition in the sale of wine and beer in the State of Washington"
- "Costco seeks to create lower prices and greater choices for Washington consumers"
- Costco "seeks to" reform an inefficient and unlawful system that permits distributors to benefit at the expense of consumers and certain wineries and brewers"

- Costco describes "benefits" of eliminating these policies:

"Warehouse clubs and retailers would lower their costs and thus offer better prices and selection to consumers if permitted to negotiate discounts based on their efficient buying and distribution practices and good credit, to buy directly from all wineries and brewers where that makes economic sense, and to supply their stores through their own distribution systems."

# Costco v. Hoen, et al.

• Impact of challenged policies on prices – anecdotal evidence:

- 8/29/03 Costco letter cites 5/12/03 *Newsweek* article on Costco, comparing prices in California to Washington:

“For example, Moet Dom Perignon champagne, of which Costco sells more than any retailer in the country ...recently cost consumers over \$5 more per bottle in Washington than in California”

- Comparison of prices on Costco web-site
  - WA vs. CA, ID, IL, NM, OR, and WV (states where wine can be purchased on-line from Costco); 5/30/05
  - Very few products available for comparison
  - 12 bottle case of Columbia Crest Grand Estate Merlot 2001
    - WA: \$104.99    Others: \$84.99
  - Dom Perignon Brut Champagne 1996
    - WA: \$108.99    Others: \$10.00
  - Differences exceed those implied by state excise taxes

# Costco v. Hoen, et al.

- Impact of challenged policies on prices – Costco’s expert (Keith Leffler)

- Compares beer, wine and champagne prices Costco pays distributors in CA and WA

- net of state excise taxes and bottle deposit fees
- 2003-2005 internal data from Costco
- 21 beer prices, 4 champagne prices, and 26 wine prices (excluding CA wines)

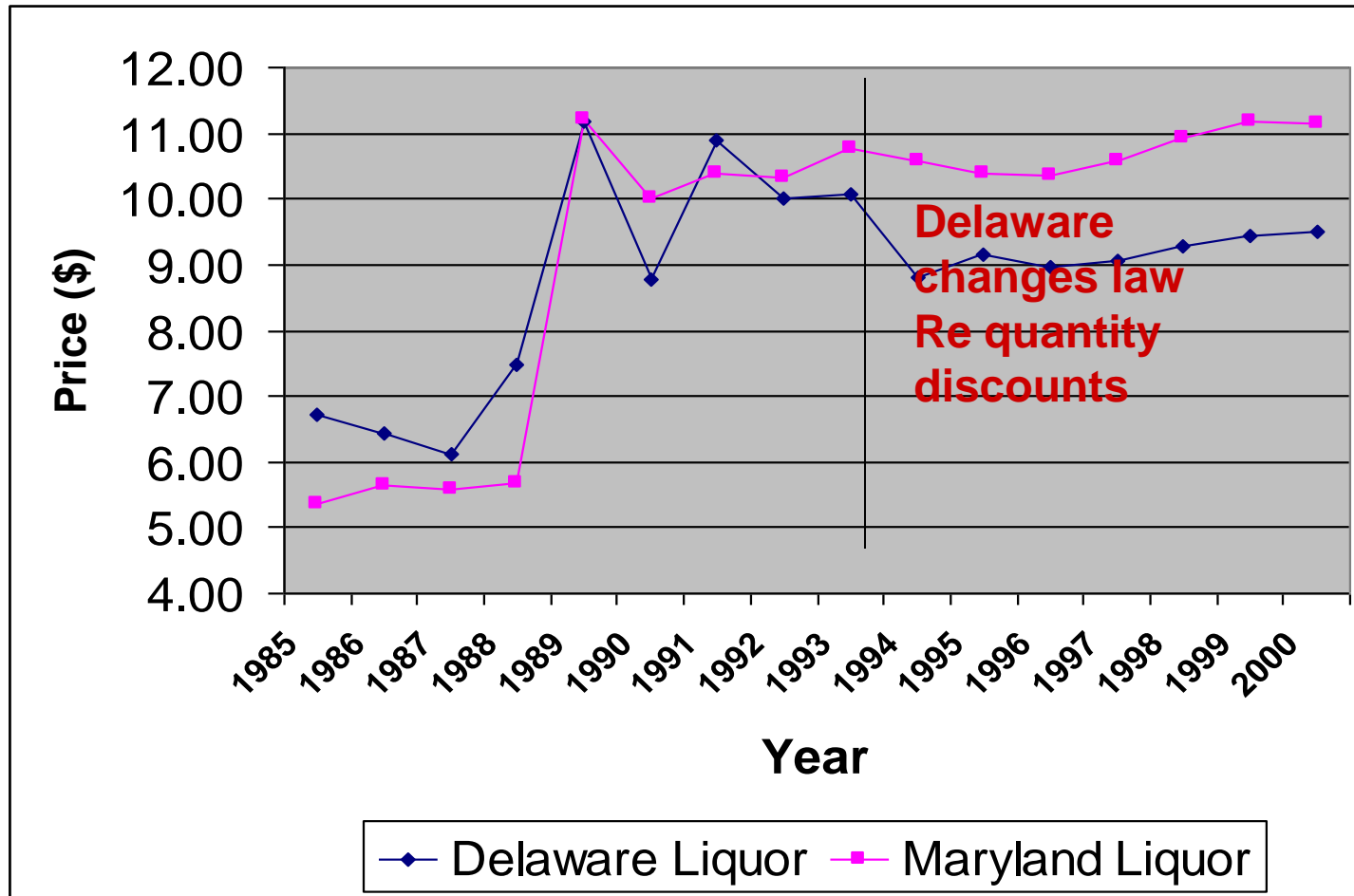
- For beer: “on average, the price paid by Costco for purchases in Washington was 4.8 percent above that paid in California”

- “For champagne, the Washington price to Costco was 8.1 percent more than when the same items were purchased in California”

- “The average cost to Costco of purchasing the wines was 4.1% greater if purchased in Washington than if purchased in California”

# TFWS v. Schaefer, et al.

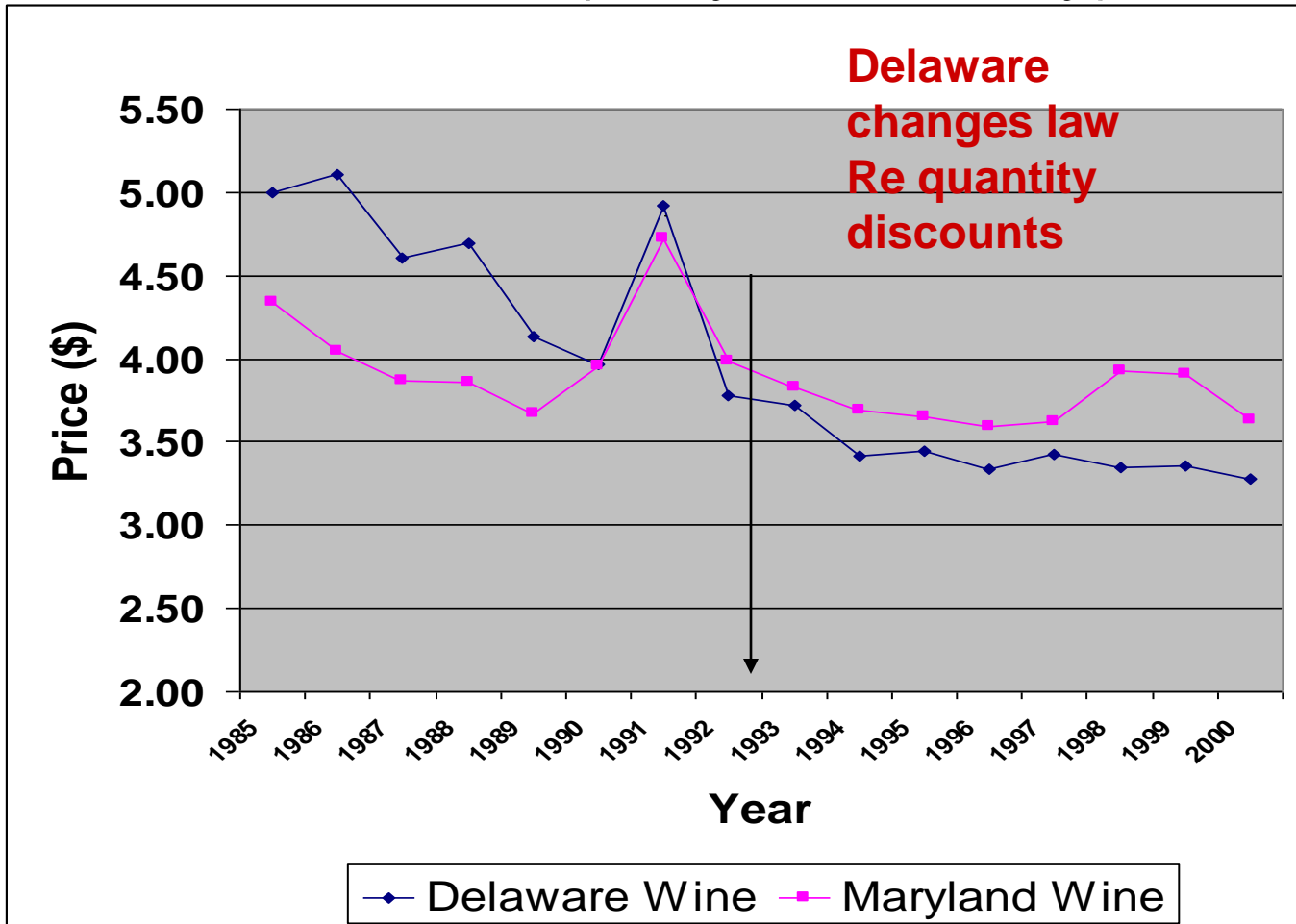
## Liquor Prices (Levy testimony)



Prices adjusted for inflation and standard of living

# TFWS v. Schaefer, et al.

## Wine Prices (Levy Testimony)



Prices adjusted for inflation and standard of living

# TFWS v. Schaefer, et al.

- TFWS wholesale price data from Maryland and Delaware stores
  - subset of products available in stores in both states in all months in 2003 (Exhibit 93)
    - 2,637 products (of more than 8,000 TFWS carries)
    - Account for excise tax differences in MD and DE
  - My analysis:
    - Month-by-month comparison allocating 1/12 of annual sales to each month
    - Cost in MD over \$250,000 higher than for same products in DE;
    - per case difference (\$2.64) more than 1/3 higher than MD excise tax applied per case
    - Likely understates retail price differences given evidence on overshifting of excise taxes
  - TFWS analysis:
    - Compares lowest price available at any point in year
    - Costs in MD almost \$17,000 higher than in DE
    - Per case difference less than 18 cents per case



# Alcohol Prices and Drinking

- Price elasticity – the percentage reduction in quantity demanded resulting from a one percent increase in price
- Estimates of price elasticity of demand for alcoholic beverages based on aggregate data (Leung and Phelps, 1993):
  - Beer: -0.3
  - Wine: -1.0
  - Distilled Spirits: -1.5

# Alcohol Prices and Drinking

- Price increases result in limited substitution within and across alcoholic beverage types, but net impact of price increases is reduction in total ethanol consumption
  - Nelson (1997): overall price elasticity for alcohol: -0.52
- Higher prices reduce drinking prevalence, frequency of consumption, number of drinks per drinking occasion, prevalence of binge drinking, and frequency of binge drinking
- Estimates from models that account for addictive nature of alcohol consumption suggest that long run impact of price even larger

# Alcohol Prices and Youth Drinking

- Grossman and colleagues (1987, 1988) find consistent evidence that higher beer prices lead to significant reductions in frequency and intensity of beer consumption by youth

*Frequent and fairly frequent young drinkers more responsive to price than infrequent drinkers*

*Heavy and fairly heavy young drinkers more responsive to price than young light drinkers*

- Laixuthai and Chaloupka (1993) find that youth responsiveness to price falls, but remains significant, after increase in minimum legal drinking ages
- Most other studies of prices and youth drinking conducted over the past decade reach a similar conclusions

*Higher prices reduce youth drinking while lower alcoholic beverage prices lead to increases in youth drinking*

# Alcohol Prices and Drunk Driving

- Many studies using data on motor vehicle accident fatality rates conclude that higher alcohol prices lead to significant reductions in drinking and driving
  - estimates suggest that a ten percent increase in price would:
    - reduce overall fatality rates by 5-10 percent
    - reduce youth fatality rates by 7-17 percent
- Estimates of impact on fatality rates consistent with estimates based on self-reported drinking/driving behavior from survey data:
  - Kenkel (1993) estimated that ten percent price increase would:
    - Reduce drinking and driving by 7.4 percent among males and 8.1 percent among females
    - Lead to larger reductions (12.6 and 21.1 percent) among young males and females

# Alcohol Prices and Alcohol-Related Health Consequences

- Studies have examined impact of alcohol prices on:
  - liver cirrhosis death rates
  - other diseases for which alcohol is a primary cause
  - diseases for which alcohol is a contributing factor
  - suicide deaths and suicidal ideation
  - other accidental deaths
  - non-fatal workplace accidents
  - sexually transmitted disease rates
- Generally consistent findings that increases in alcoholic beverage prices lead to significant reductions in the health consequences resulting from alcohol use and abuse

# Alcohol Prices and Violence and Other Crime

- Growing literature examining the impact of alcoholic beverage prices on violence and other crime, including:
  - homicide, rape, assault, and other violent crime rates
  - child abuse
  - spouse abuse
  - property crimes
  - delinquent behavior
- Again, generally consistent findings that increases in prices for alcoholic beverages lead to reductions in violence and other crime resulting from alcohol use and abuse

# Alcohol Prices and Educational Outcomes

- Several studies examine impact of alcoholic beverage prices on various measures of educational attainment and related outcomes:
  - Yamada and colleagues (1996) conclude that higher prices would raise the likelihood of high school graduation
  - Cook and Moore (1993) find that higher prices would increase the probability of attending and graduating from a four year college or university
  - Analyses of HCAS (Williams, et al. 2002; Powell et al. 2002) find that higher prices improve college student study habits, reduce frequency of missing classes and likelihood of falling behind in school, and lead to higher grade point averages

# Summary

- Increases in prices for alcoholic beverages lead to significant reductions in drinking behaviors
- Youth and young adult drinking is more responsive to price than is drinking among adults
- Increases in alcoholic beverage prices significantly reduce the consequences of alcohol use and abuse, including:
  - Drinking and driving related accidents and fatalities
  - Liver cirrhosis and other Health consequences
  - Violence and other crime
  - Negative educational outcomes
- ***Elimination of policies at issue would lower prices, increase drinking, and increase the consequences of alcohol use and abuse***



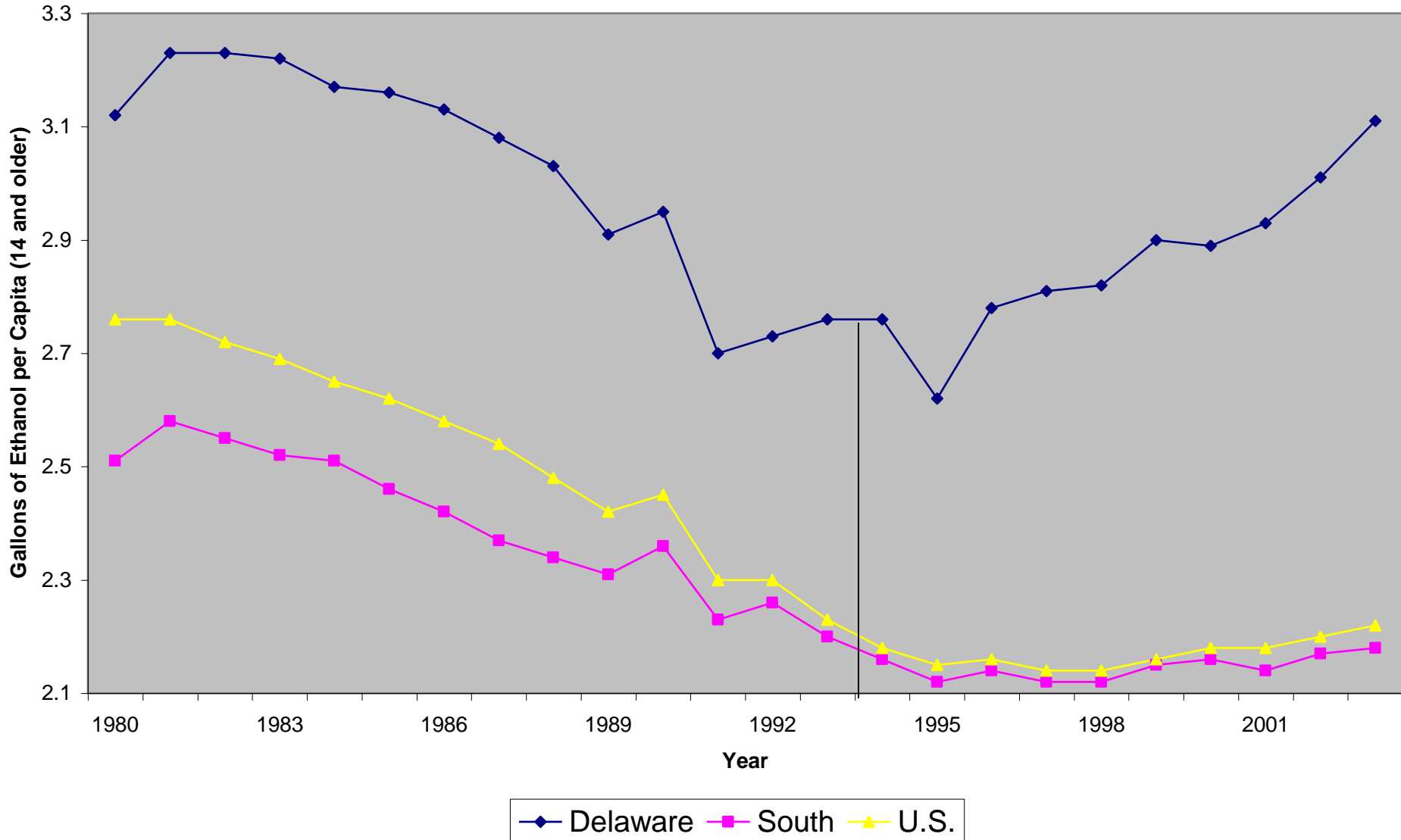
# Experiences in other states

- Lack of detailed data on key state policies creates challenges for the rigorous evaluation of the impact of policies on prices, alcohol consumption, and consequences of alcohol use and abuse
- Limited to examining the experiences in states where there were changes in similar policies
  - Focused on Nebraska and Delaware where policy changes were most similar: some discussion of California
- Very simple models that looked at impact of changes in policies on per capita measures of apparent ethanol consumption (total and beverage specific) accounting for underlying trends, changes in alcoholic beverage excise taxes, and national/regional factors affecting consumption

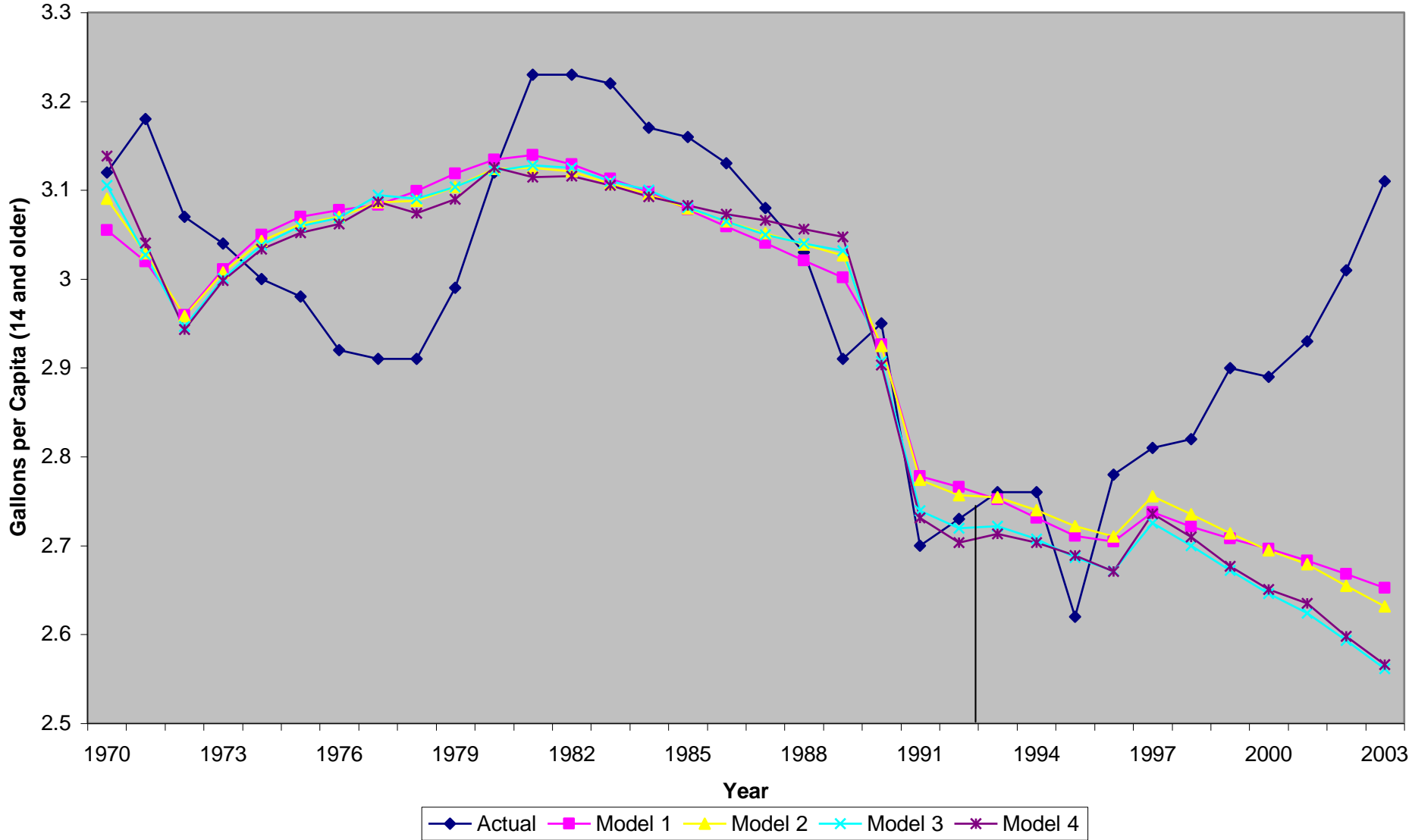
# Delaware

- Quantity discount prohibition for all alcoholic beverages eliminated by amendment to state rules effective June 1, 1992
- Tax changes 1985 to present:
  - 9/1/90: Beer taxes raised from \$2/barrel to \$4/barrel  
Wine taxes raised from \$.40/gal to \$.97/gal  
Spirits taxes, 50 proof or below raised from \$1.50/gal to \$3.64/gal; above 50 proof from \$2.25/gal to \$5.46/gal
  - 1/2/97: Spirits taxes, 50 proof or below lowered to \$2.50/gal; above 50 proof lowered to \$3.75/gal
- Apparent consumption data from National Institute on Alcohol Abuse and Alcoholism; based on sales data

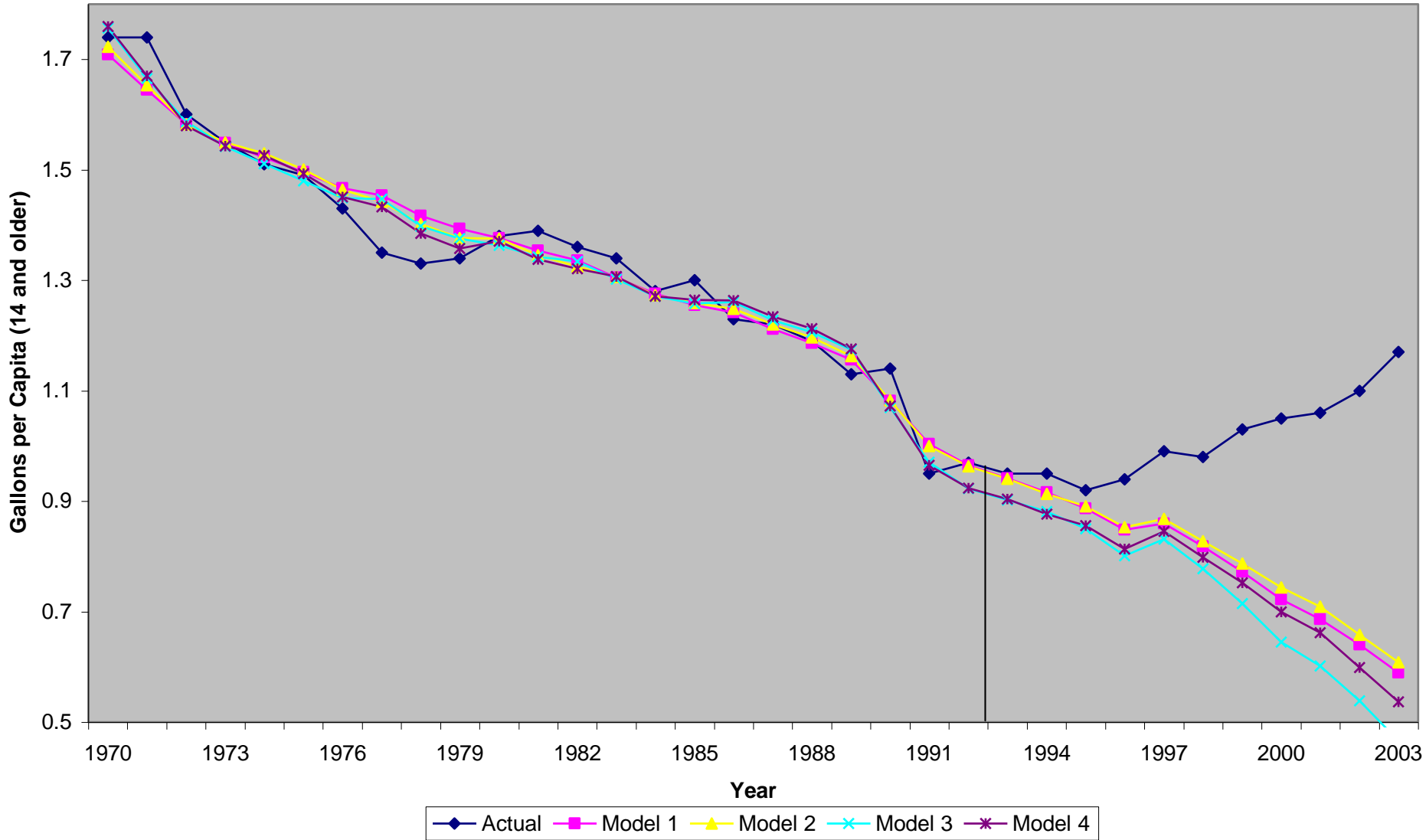
# Total Ethanol Consumption, per Capita (14 and older) Delaware, Southern Region, and United States, 1980-2003



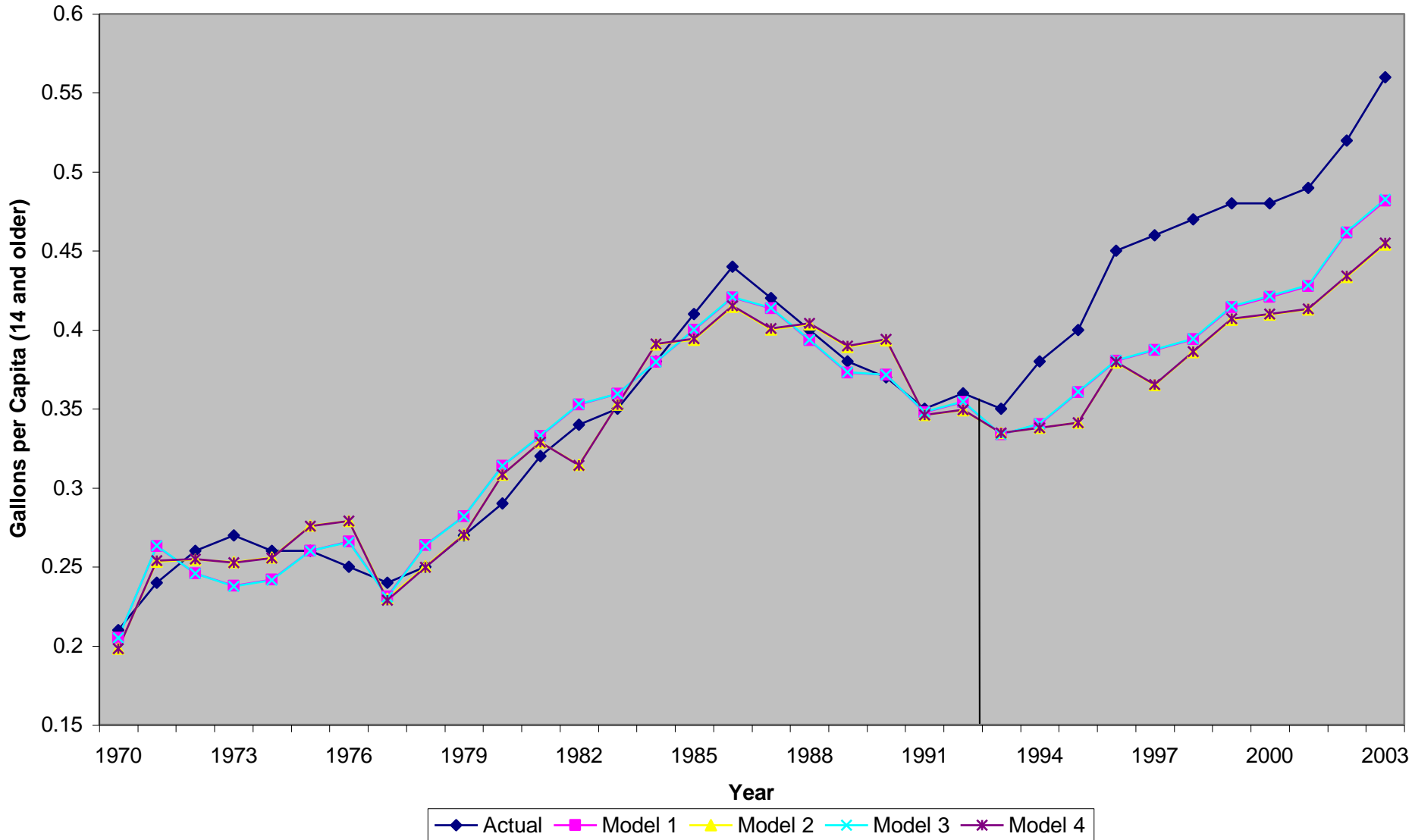
# Actual and Predicted Delaware Consumption Total Ethanol, 1970-2003



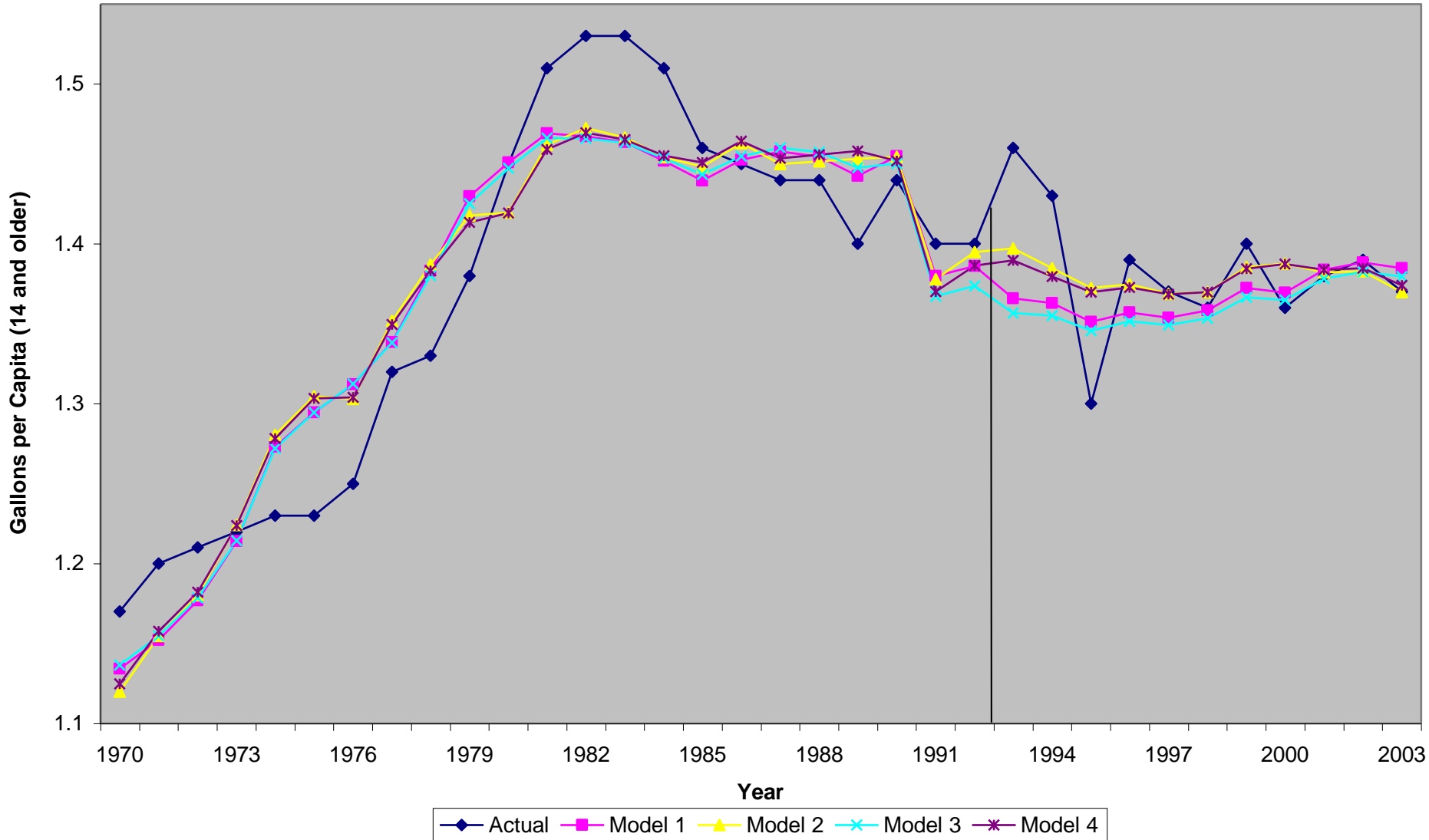
# Actual and Predicted Delaware Consumption Spirits, 1970-2003



# Actual and Predicted Delaware Consumption Wine, 1970-2003



# Actual and Predicted Delaware Consumption Beer, 1970-2003



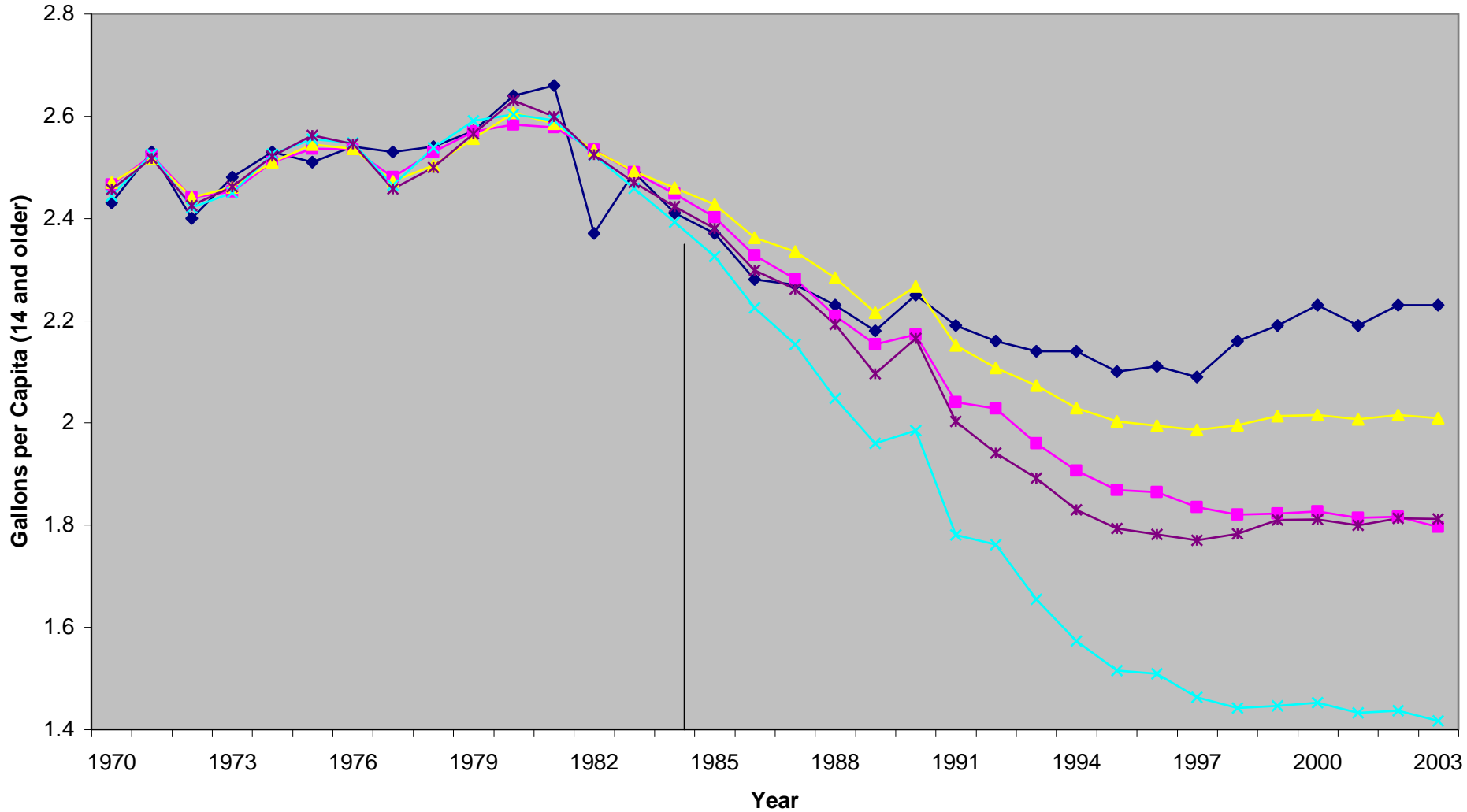
# Summary:

- Alcohol consumption in Delaware rose relative to alcohol consumption in the United States and the Southern region after the elimination of the state's price posting requirements and its ban on quantity discounts

*Elimination of price posting requirement and elimination of ban on quantity discounts contribute to increases in Delaware's alcohol consumption and its consumption relative to alcohol consumption in the United States and the Southern Region; **consumption in Delaware higher than it would have been had controls been maintained***



# Actual and Predicted Nebraska Consumption Total Ethanol, 1970-2003



—◆— Actual —■— Model 1 —▲— Model 2 —×— Model 3 —\*— Model 4

# Alcohol Control Efforts in Washington

- Washington has taken a comprehensive approach to addressing the health, economic, and social consequences of excessive drinking

- **Three tier system**

- **Quantity discount ban**

- **Post-and-hold requirement**

- **Price markup requirements**

- **Uniform delivered pricing**

- **Ban on central warehousing**

- **Ban on “tied house”**

- **Ban on credit from distributor to retailer**

- **Ban on retailer to retailer sales**

- **State monopoly**

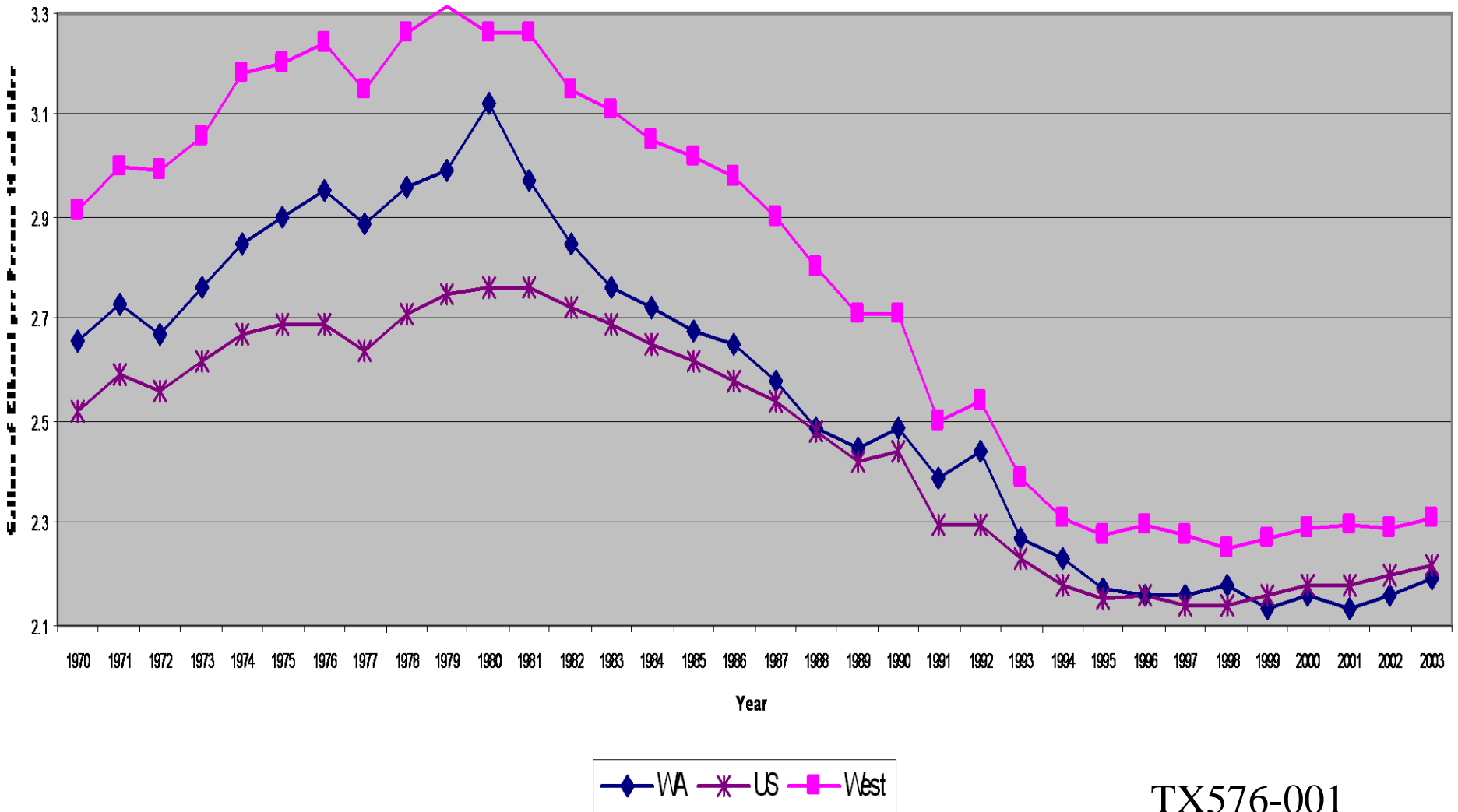
- **Relatively high excise taxes**

- **Strong drunk driving policies**

- **Comprehensive policies targeting underage drinking**

- **Policies/programs targeting high risk populations and/or problem areas (Alcohol Impact Areas)**

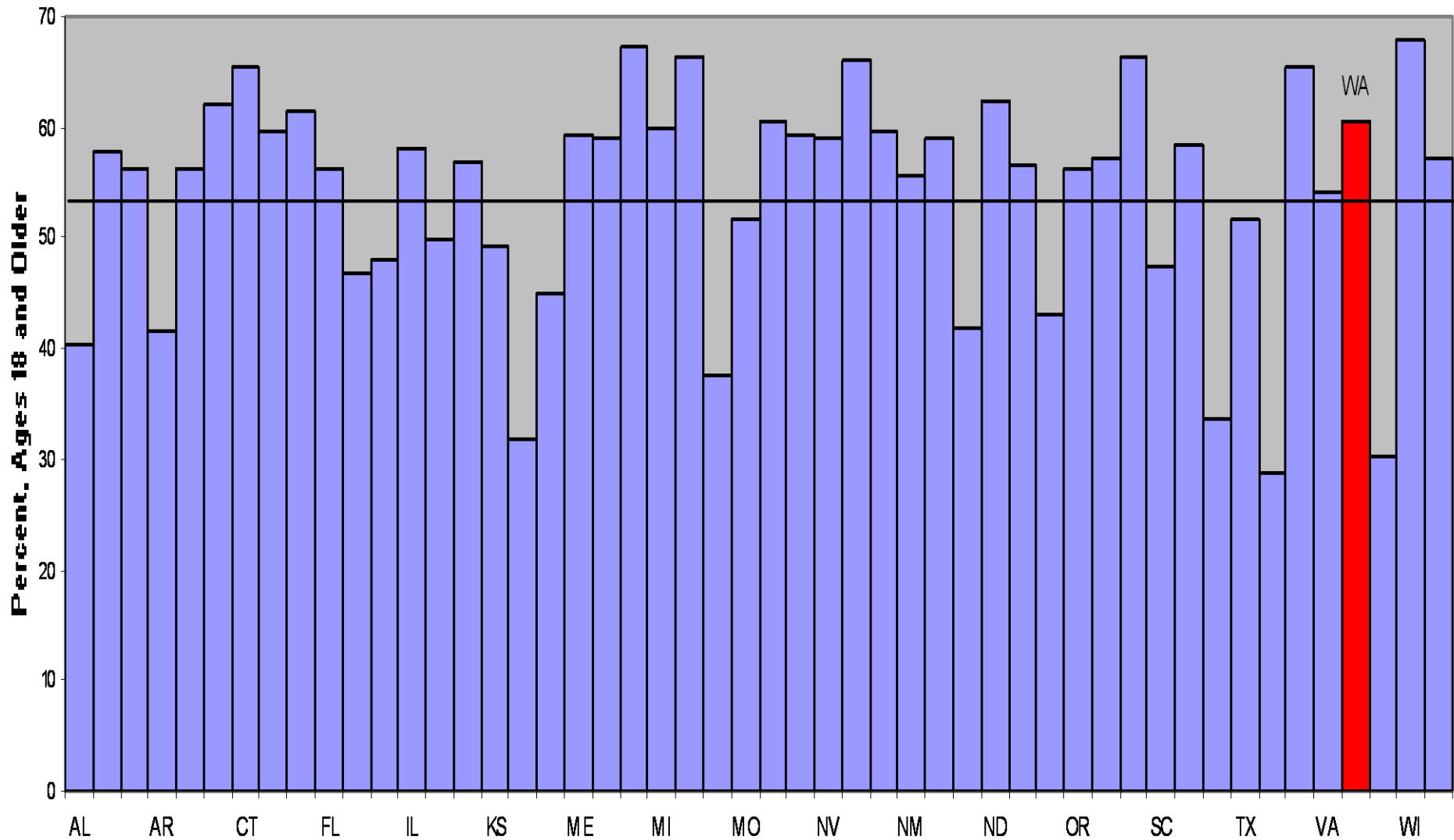
## Per Capita Alcohol Consumption, WA, West and US - 1970-2003



TX576-001

Source: <http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/consum03.htm>;  
In gallons of ethanol per capita, ages 14 and older

# Past Month Drinking Prevalence, by State, 2004

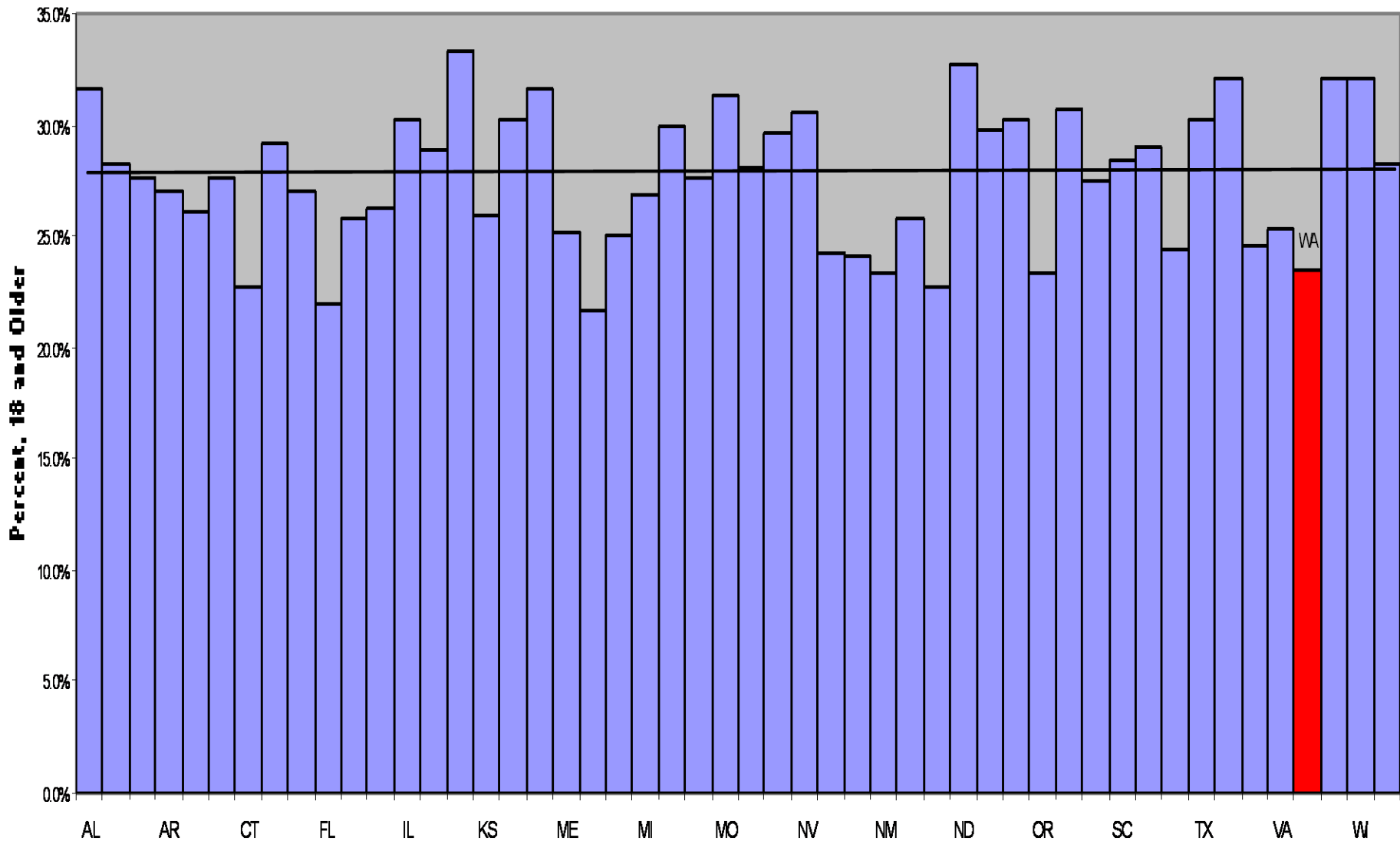


TX576-007

Source: <http://apps.nccd.cdc.gov/brfss/list.asp?cat=AC&yr=2004&qkey=4411&state=All>

Note: 2004 drinking prevalence data not available for Hawaii

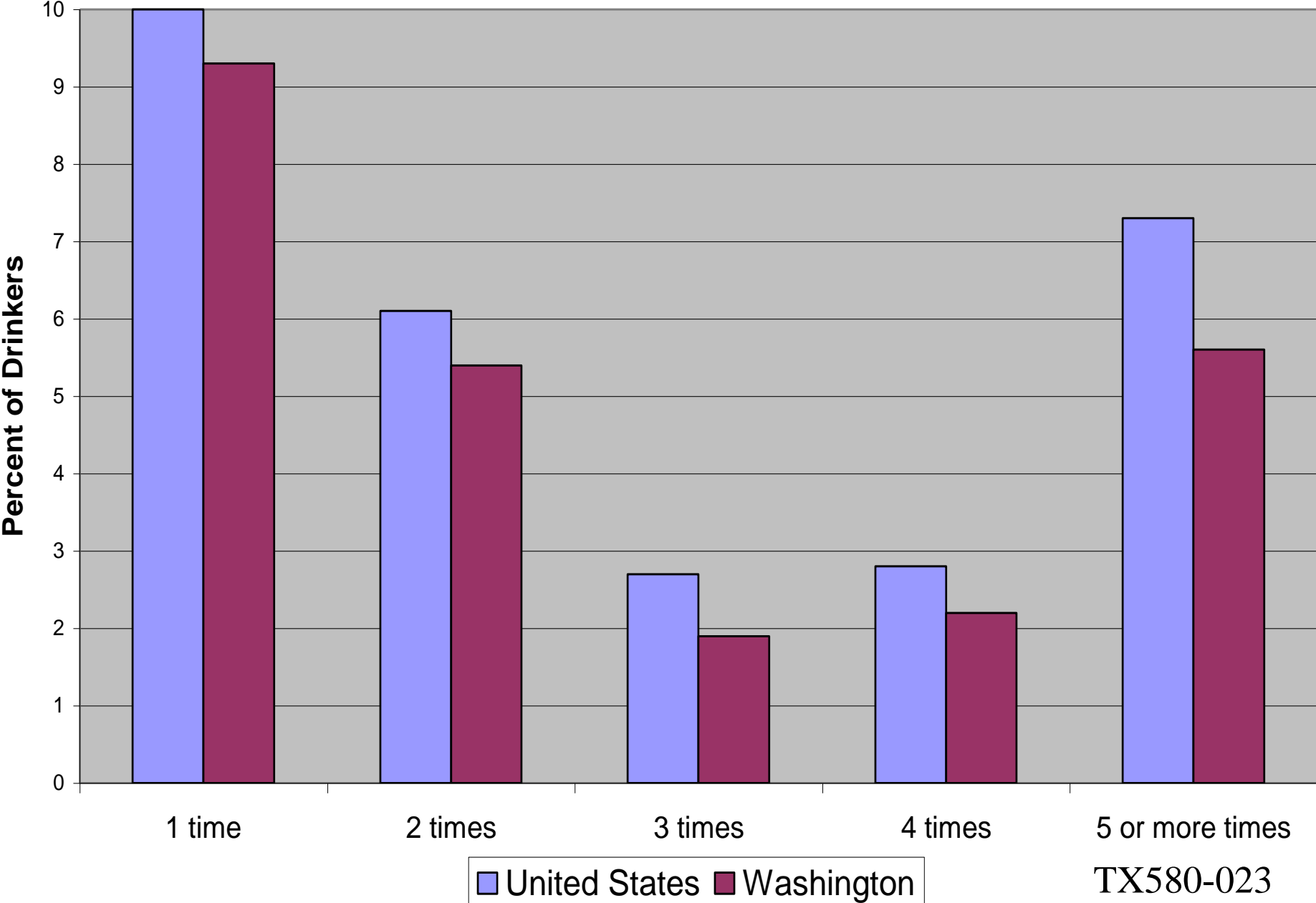
# Percent of Past Month Drinkers Reporting Binge Drinking, 18 and older, by State, 2004



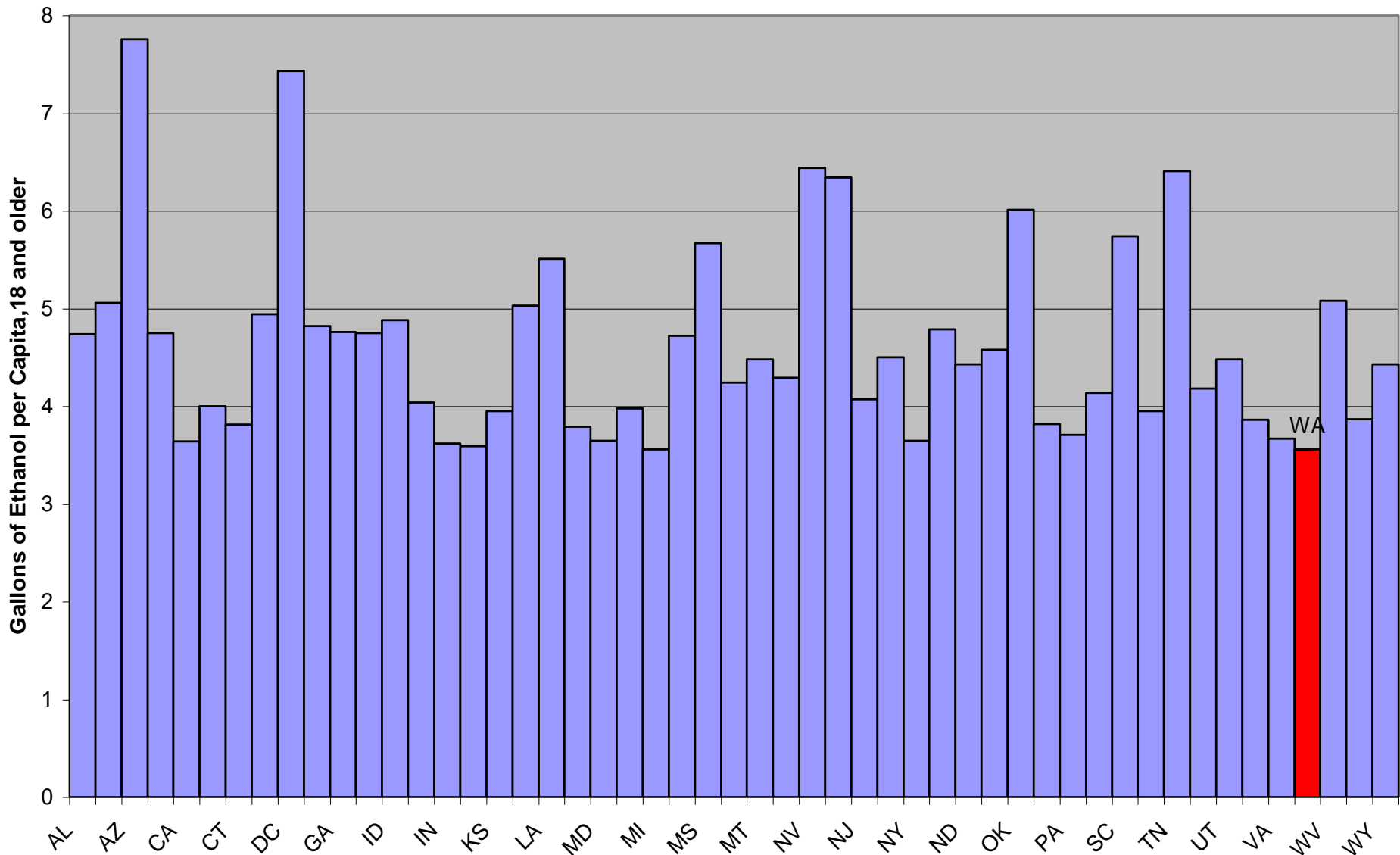
Source: <http://apps.nccd.cdc.gov/brfss/list.asp?cat=AC&yr=2004&qkey=7306&state=All>

Note: 2004 binge drinking prevalence data not available for Hawaii

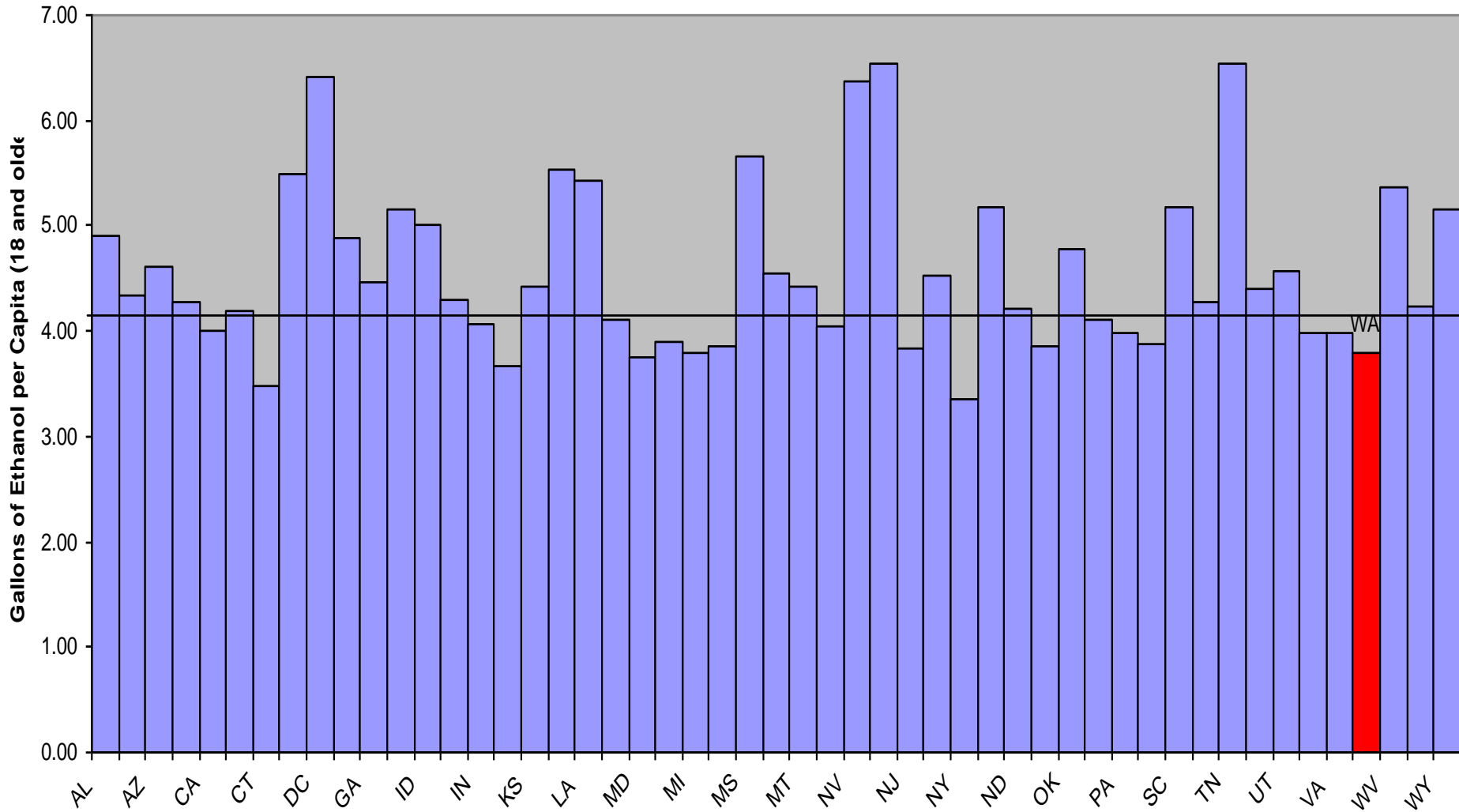
# Number of Binge Drinking Occasions per Month, 2002



# Per Capita Ethanol Consumption per Drinker, by State, 1999



## Estimated Per Capita Ethanol Consumption per Past Month Drinker, by State, 2003

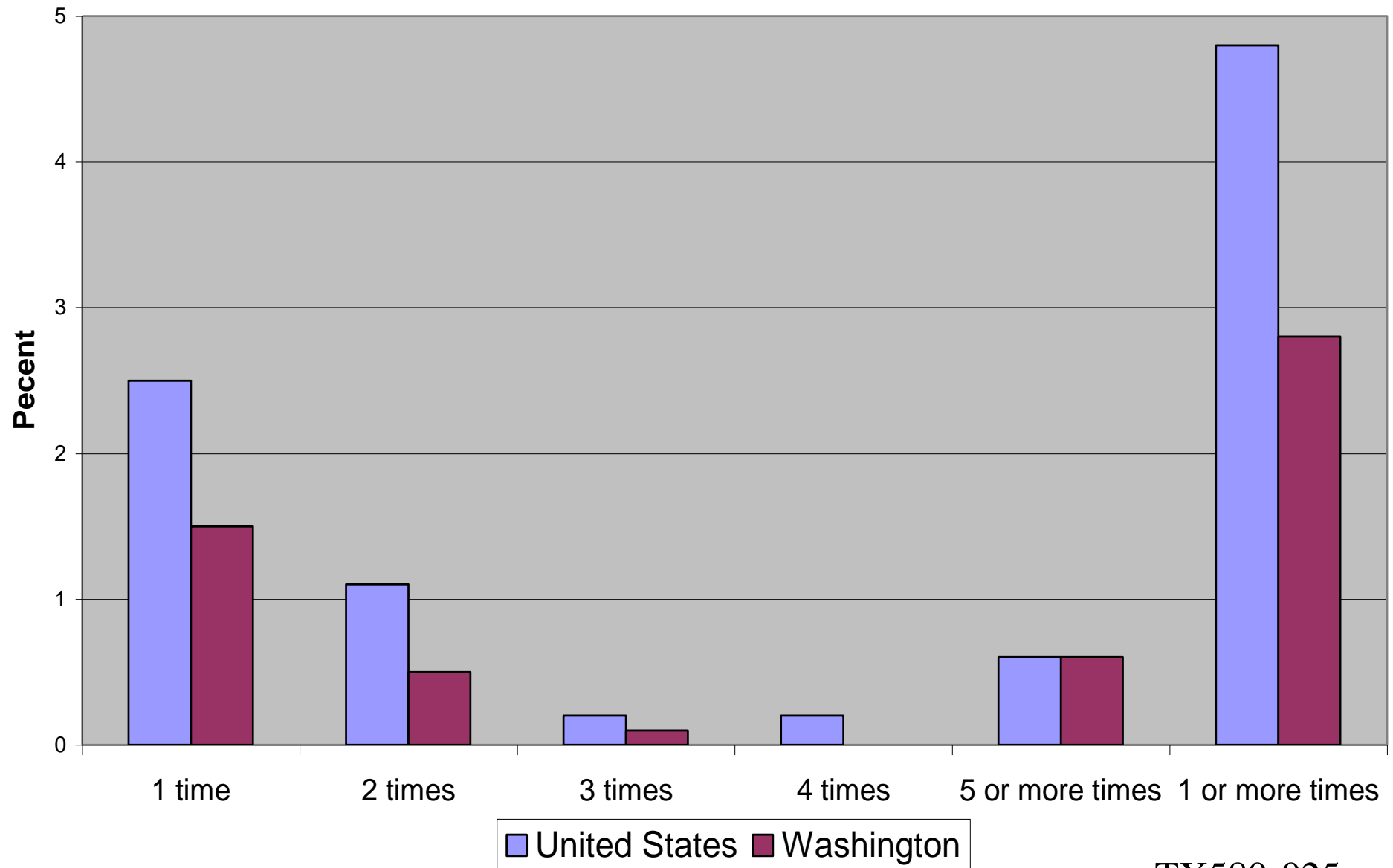


TX576-012

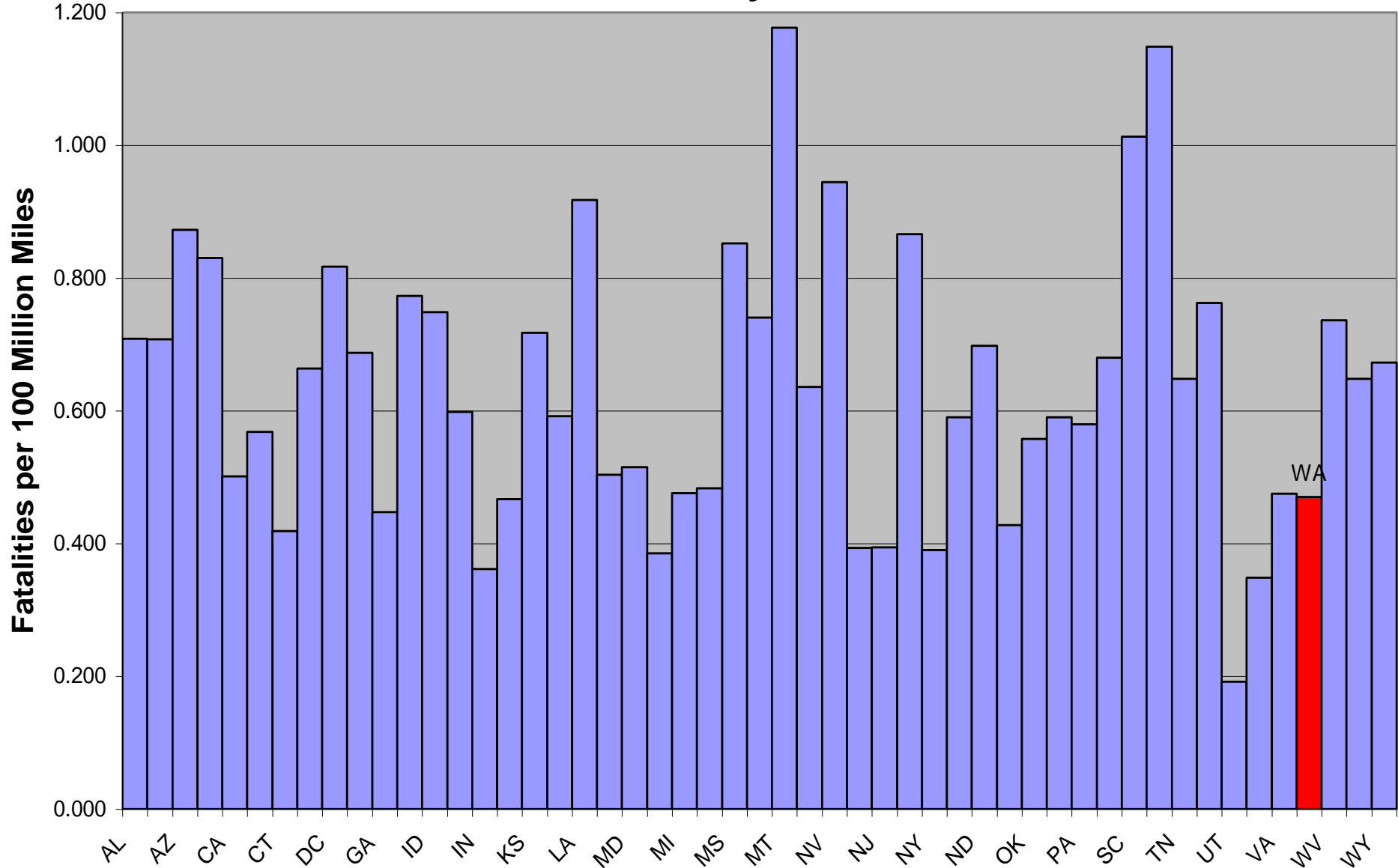
Sources: 2003 past month prevalence: <http://apps.nccd.cdc.gov/brfss/list.asp?cat=AC&yr=2003&qkey=4411&state=All>;  
 2003 ethanol consumption: <http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/AlcoholSales/consum02.htm>;  
 2003 population 18 and older: [http://www.census.gov/popest/states/files/SC-EST2004-AGESEX\\_RES.csv](http://www.census.gov/popest/states/files/SC-EST2004-AGESEX_RES.csv)



# Prevalence and Frequency of Drinking and Driving, 1999



# Alcohol-Related Traffic Fatalities per 100 Million Vehicle Miles Traveled, by State, 2003



# Alcohol Control Efforts in Washington

- Comprehensive approach has been effective in reducing excessive drinking
  - Overall per capita alcohol consumption generally falling over past 25 years
    - Below national and regional levels
  - Somewhat higher overall drinking prevalence but lower binge drinking prevalence
    - Indicates relatively greater frequency of moderate drinking rather than excessive drinking
  - Less drinking and driving
    - Relatively low alcohol-related traffic fatality rate
- ***Challenged policies regulating wholesale distribution are a key component of Washington's effective approach to alcohol control***

# Conclusions:

- State policies controlling the distribution of alcoholic beverages result in higher retail prices
  - Quantity discount bans, minimum markup policies and others
- Higher alcoholic beverage prices reduce drinking and its consequences
- Elimination of state policies leads to increases in drinking and its consequences