

The Economic Costs of Alcohol Abuse in Alaska

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Prepared for:
Alaska Mental Health
Trust Authority

March 2017

Purpose

- *The Economic Costs of Alcohol Abuse in Alaska, 2016 Update*. Fourth edition (2001, 2005, 2012)
- Alcohol abuse has many adverse health and social consequences:
 - Increased health care costs – injuries and chronic health conditions
 - Property damage – fire and motor vehicle collisions
 - Increased crime and criminal justice system costs
 - Lost or reduced worker productivity – absenteeism, diminished output while at work, and reduced earnings potential
 - Increased public assistance and social services – social welfare support
 - Increased public sector costs – alcohol-attributable expenditures
- Costs can be tangible (healthcare, criminal justice system, etc.) and intangible (diminished quality of life, pain & suffering, etc.)



Why Understanding the Economic Costs Matters

- Assessment of the extent of the problem
- Valuable insights into factors that may influence alcohol abuse and its adverse effects
- Inform planning and implementation of prevention strategies
- Assessment of the cost of prevention strategies relative to the cost of alcohol-attributable harms
- Builds awareness of the public/private sector costs



Methodology

- Alcohol Consumption
 - *National Survey of Drug Use and Health (NSDUH)*, *National Institute of Alcohol Abuse and Alcoholism (NIAAA)*
- Productivity Losses
 - Mortality Causes and Potential Years of Life Lost (PYLL) – Health Analytics and Vital Reports and Alcohol-Attributable Fractions (AAF)
 - Incarceration – DOC data and Alcohol attributable rates (Lewin Group's 2010 report, *Economic Cost of Excessive Alcohol Consumption in the United States*, 2006)
 - Diminished Productive Causes – Lewin report adjusted for Alaska's demographics (DOLWD, ACS, NSDUH)
 - Hospitalization and Treatment Causes – Alaska Hospital Facilities Data Reporting Program (HFRP), DOLWD, and AAF
- Vehicle Traffic Collisions
 - 9 categories (medical, emergency services, market productivity, household productivity, insurance administration, workplace and legal costs, congestion costs, & property damage)



Methodology (continued)

- Criminal Justice and Protective Services
 - Offenses and Arrests – DPS, FBI, and Lewin Group's alcohol attributable rates
 - Criminal Justice System – NIH report, *The Cost of Crime to Society: New Crime-Specific Estimates for Policy and Program Evaluation*, and Lewin Group's report
 - Criminal Victimization – Bureau of Justice Statistics, DOLWD/ACS, and Lewin Group's alcohol attributable rates
 - Protective Systems – *National Survey of Children and Adolescent Well-Being*, National Data Archive on Child Abuse and Neglect, OSC, National Institute on Drug Abuse (NIDA)
- Health Care
 - Inpatient, ED, and Outpatient Costs – HFDR, NIDA, and Lewin Group's AAF
 - Treatment for Alcohol Abuse – DBH and Medicaid
 - Skilled Nursing and Long Term Care – NIDA and DSDS
 - FAS/FASD – BVS and Health Analytics, Vital Reports, and Canadian study, *The Burden of Prenatal Exposure to Alcohol: Revised Measurement of Costs*
 - Prevention Services – DBH

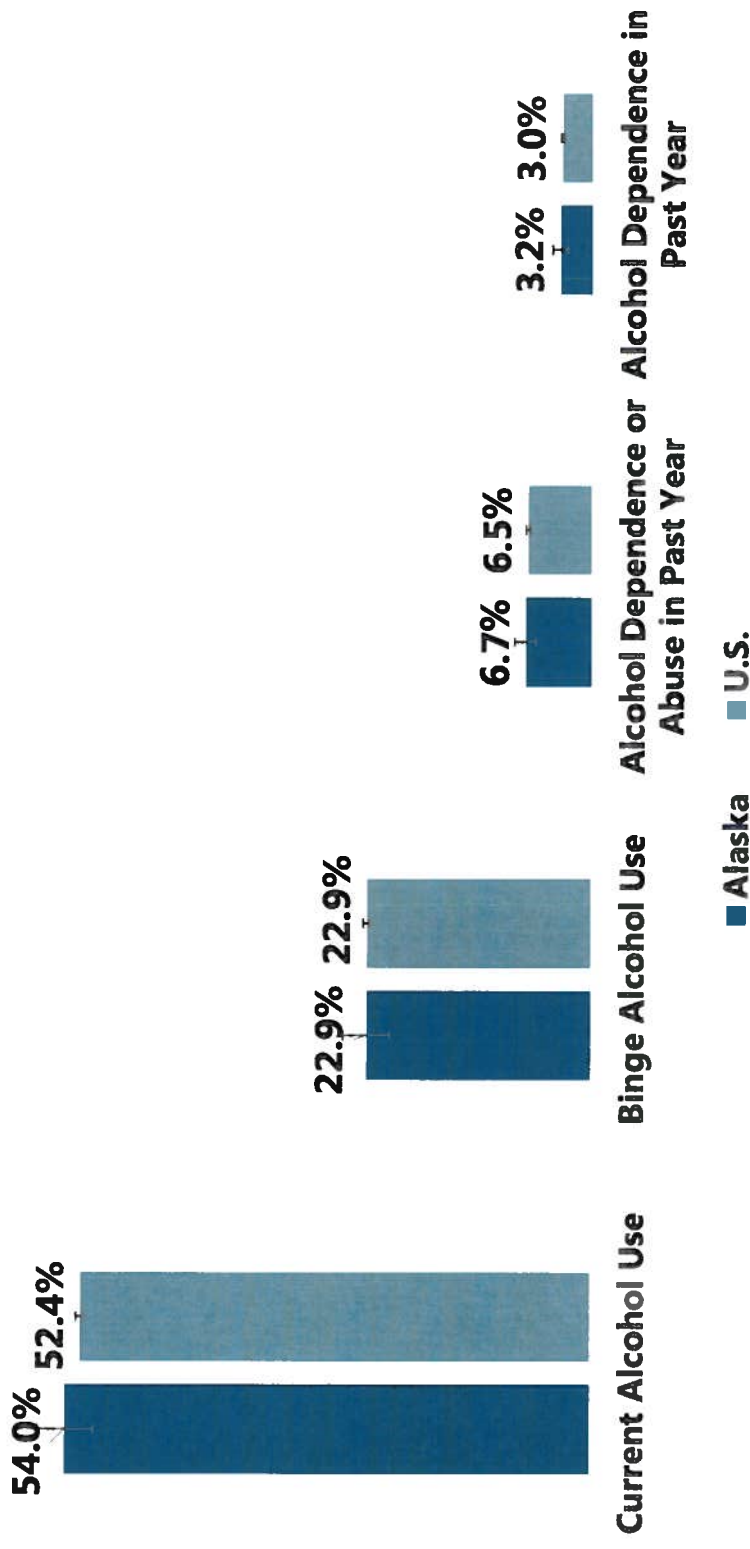


Methodology (continued)

- Public Assistance and Social Services
 - Federal Government Costs – NIDA and OASDI, SSI, TANF, and SNAP
 - State Government Costs – NIDA and DPA
- Underage Drinking
 - PIRE 2010 study on Underage Drinking in Alaska adjusted to 2016\$
- Jobs/Income in Alaska’s Alcoholic Beverage Manufacturing and Sales
 - DOLWD
- Alcoholic Beverage Tax
 - DOR
- Implications for Alcohol Abuse Impacts on State GF Budget
 - Prevention Grants (DHB), Justice System (Court System)



Alcohol Consumption Patterns (2013-2014)



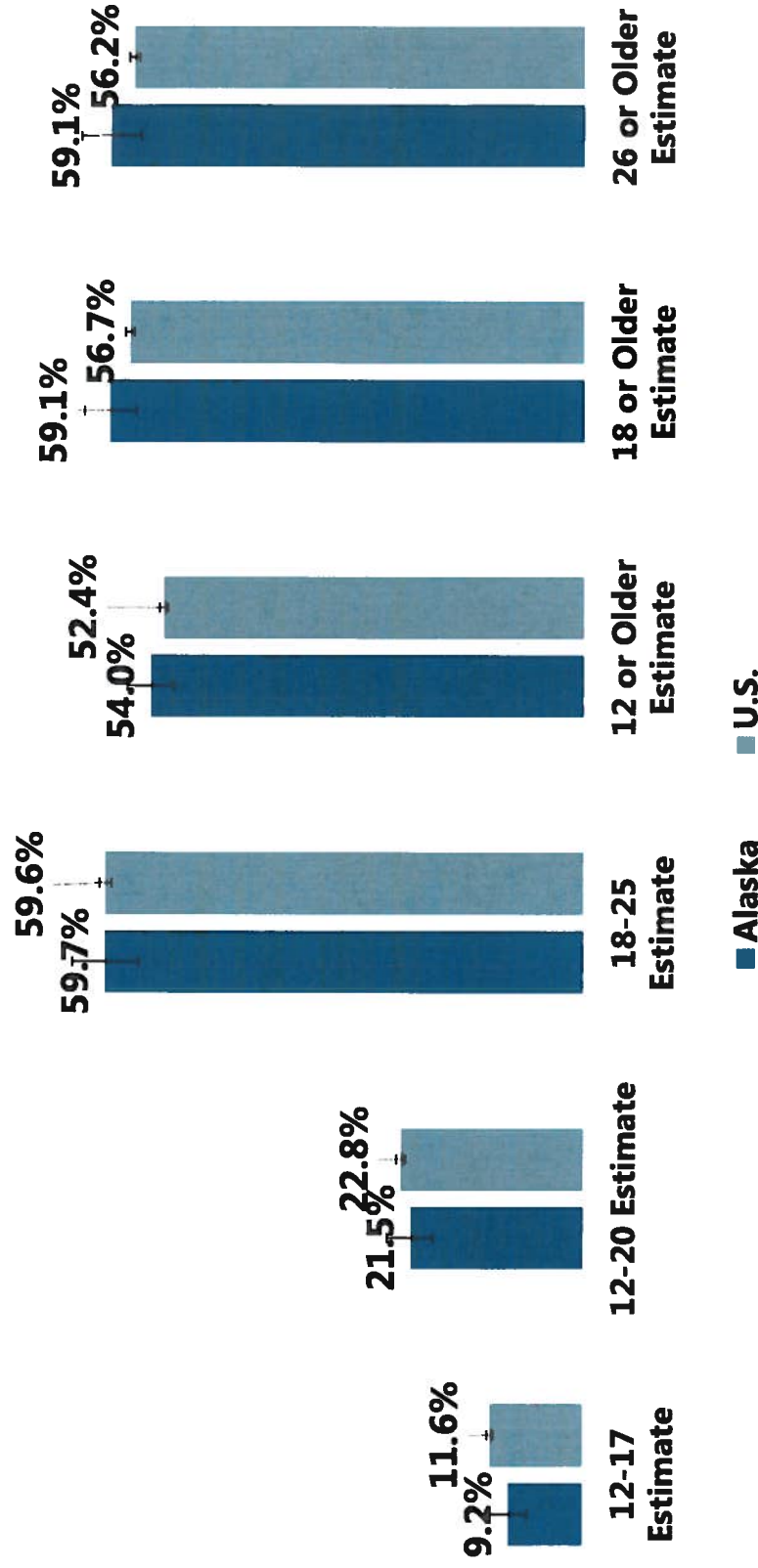
Source: National Survey of Drug Use and Health, SAMHSA

Alaskan Alcohol Consumption (2013-2014)

- **313,000** drank alcohol within past 30 days
- **39,000** experienced alcohol dependence or abuse in past year
- **19,000** experienced alcohol dependency in past year
- Nationally, Alaska ranked:
 - 31st for binge drinking
 - 26th for current alcohol use
 - 21st for alcohol dependence alone
 - 20th for alcohol dependence or abuse



Current Alcohol Use (age 12+), by Age Group



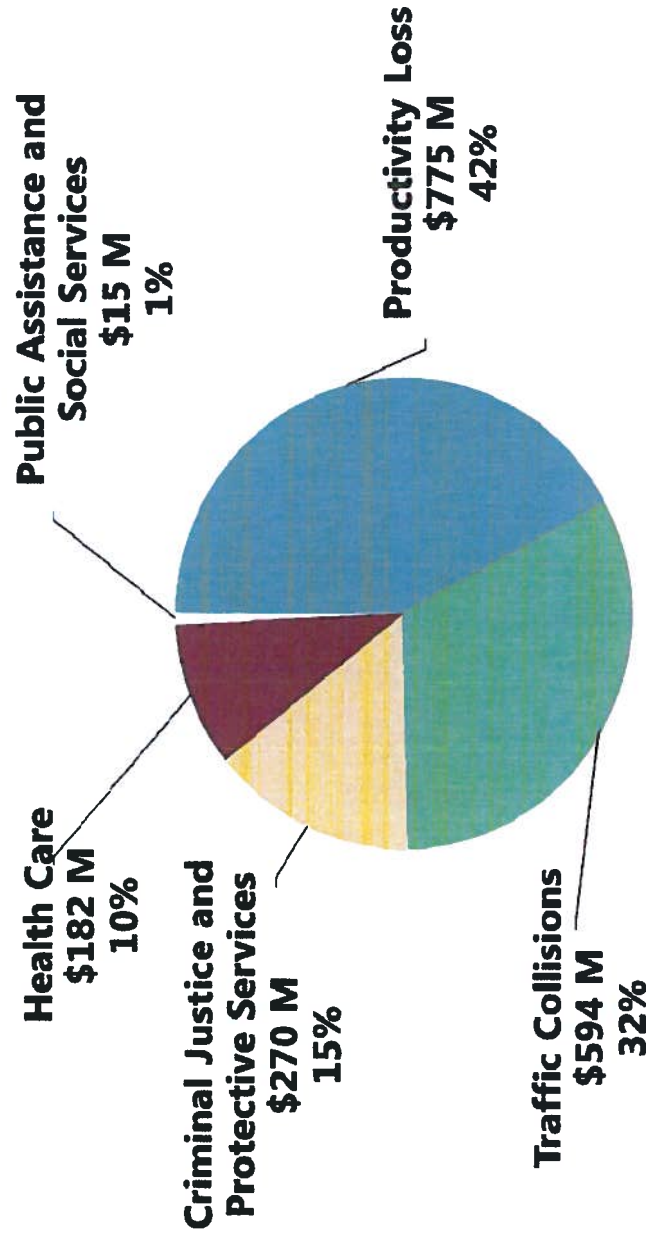
Source: National Survey of Drug Use and Health, SAMHSA

Per Capita (age 14+) Consumption (2013)

- **1.6 M gallons of ethanol** consumed in Alaska (including consumption by residents and non-resident visitors)
- Alaska per capita consumption (**2.73 gallons**):
 - Beer – 1.06 gallons of ethanol
 - Wine – 0.52 gallons
 - Liquor – 1.16 gallons
- Average U.S. ethanol consumption – 2.34 gallons per capita (2013)
- Alaska consumption increased slightly in 2014, to 2.79 gallons per capita



Total Economic Costs of Alcohol Abuse – \$1.84 B



Source: McDowell Group calculations. Criminal justice and protective services estimate does not include intangible costs related to victimization, an estimated \$605 million in additional costs.

Criminal Justice and Protective Services – \$269.8 M

Cost Category	Alcohol-related Costs	% of Total
Criminal justice system	\$136.2 M	50%
Crime victim tangible costs	\$58.2 M	22
Child protective services	\$75.4 M	28
Total	\$269.8 M	100%
Crime victim intangible costs	\$604.9 M	
Total, incl. intangible costs	\$874.7 M	

Source: McDowell Group calculations.



Health Care – \$181.8 M

Cost Category	Alcohol-related Costs	% of Total
Medical inpatient	\$85.4 M	48%
Medical ED	\$32.7 M	18
Medical outpatient	\$22.6 M	12
Alcohol/Drug treatment	\$25.9 M	14
Prescription drug	\$10.7 M	6
Nursing Home/LTC	\$1.5 M	1
FASD	\$3.0 M	2
Total	\$181.8 M	100.0%

Source: McDowell Group calculations.

Public Assistance and Social Services – \$14.5 M

Cost Category	Alcohol-related Costs	% of Total
Federal social welfare	\$9.4 M	65%
State social welfare	\$5.1 M	35
Total	\$14.5 M	100.0%

Source: McDowell Group calculations.

Underage Drinking – \$350 M

- In 2013-2014:
 - Underage Drinkers: 9% of Alaskans age 12-17 and 22% of Alaskans age 12-20
 - Underage Binge Drinkers: 5% of Alaskans age 12-17 and 13% of Alaskans age 12-20
- In 2010, PIRE estimated costs from underage Alaskan drinkers at ~\$350 million (2016\$)
- Youth violence represent 48% of underage drinking costs, followed by youth traffic accidents (28%)





Traffic Collisions – \$594.3 million

Cost Category	Impairment-Caused Traffic Collision Costs
Medical	\$38.5 M
Emergency services	\$0.02 M
Market productivity	\$81.4 M
Household productivity	\$22.6 M
Insurance administration	\$9.3 M
Workplace costs	\$1.6 M
Legal costs	\$12.8 M
Congestion costs	\$1.3 M
Property damage	\$4.9 M
Direct Costs	\$172.5 M
Total, including quality-adjusted life years	\$990.5 M
Estimated portion attributed to alcohol (60%)	\$594.3 M

Source: McDowell Group calculations.

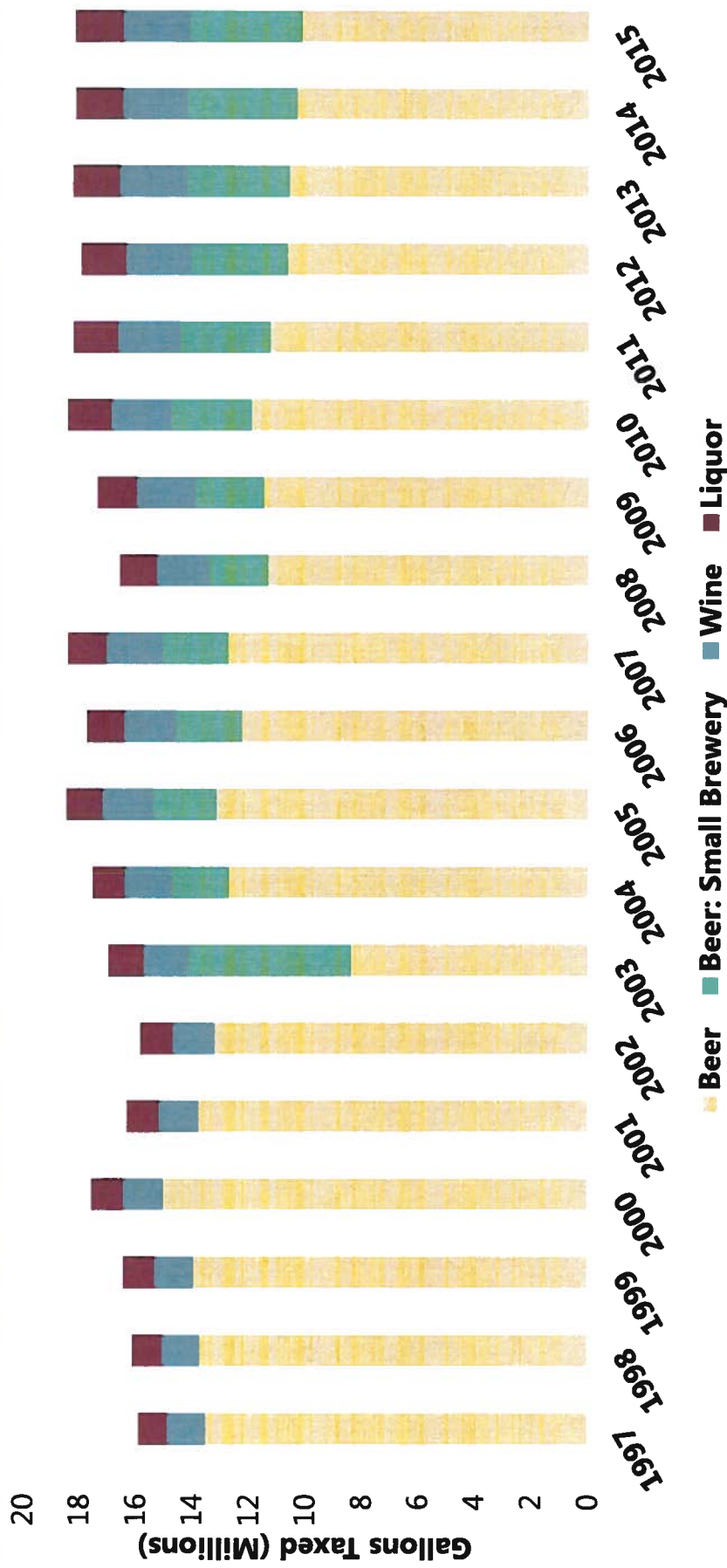


Productivity Losses – \$775.1 M

Productivity Category	Alcohol-related Costs	% of Total
Premature death (primary diagnosis)	\$581.5 M	75%
Incarceration	\$ 41.5 M	5
Diminished productivity	\$145.6 M	19
Substance abuse treatment	\$1.5 M	0.2
Medical conditions	\$5.0 M	1
Total	\$775.1 M	100%

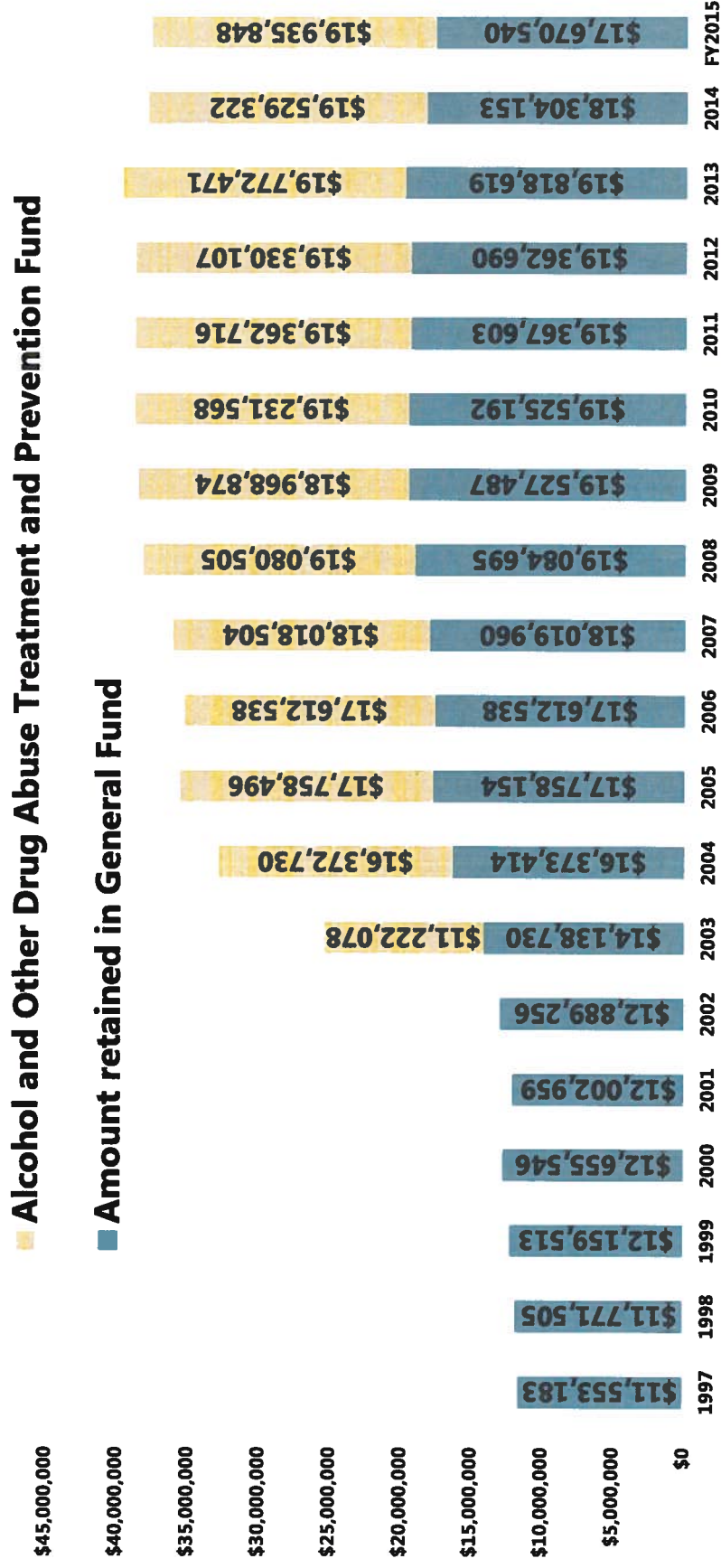
Due to rounding, some columns may not sum to total.

State Alcoholic Beverages Tax – Volume



Source: Alaska Department of Revenue

State Alcohol Beverage Tax Revenue (FY1997-2015)



Source: Alaska Department of Revenue

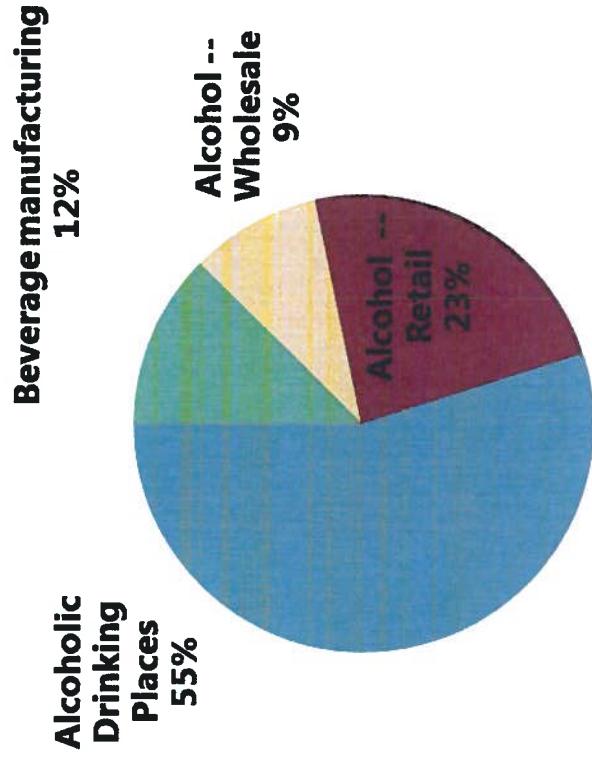


Local Government Alcohol Tax Sales, 2015

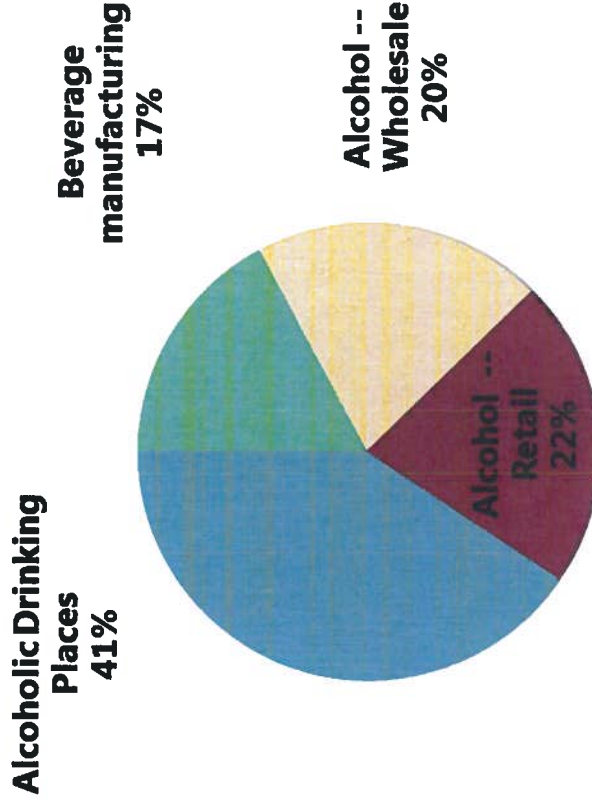
Alaska Communities	Sales Tax Rate (%)	Total Revenue
City of Fairbanks	5	\$2,239,679
Fairbanks North Star Borough	5	\$998,195
City and Borough of Juneau	3	\$760,910
Dillingham	10	\$297,325
North Pole	5	\$211,997
Kotzebue	6	\$183,967
Craig	6	\$121,554
Galena	3	\$46,629
Barrow	3	\$31,013
Whittier	3	\$6,450
Unalakleet	5	\$4,291
St. Mary's	3	\$2,059
Total		\$4,904,069

Source: Alaska Taxable 2015

Jobs and Wages – Alcoholic Beverage Sector, 2014



Total Jobs: 2,887



Total Wages: \$66.4M

Source: Alaska Department of Workforce and Labor Development.

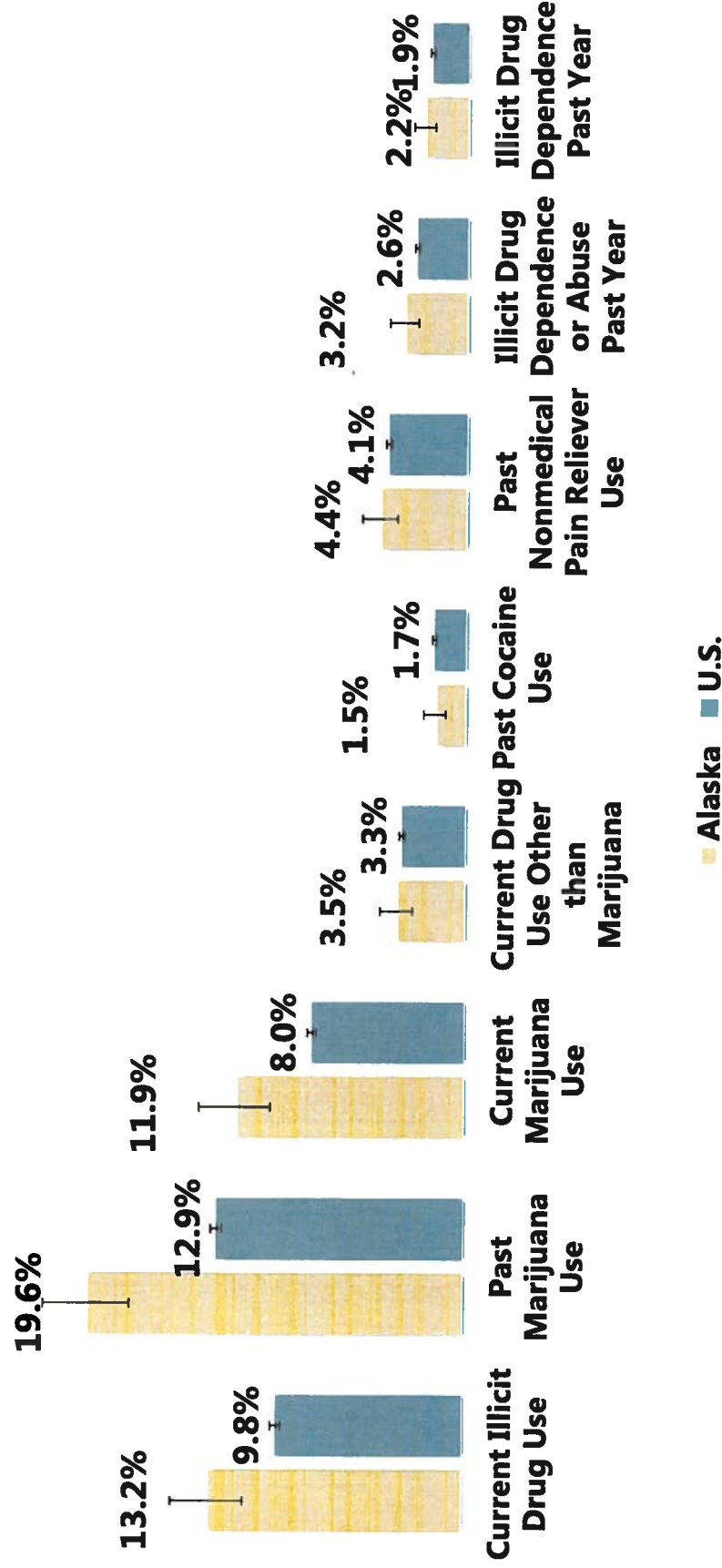
In Summary

- **\$1,840.0 M** – Total Economic Costs of Alcohol Abuse (2016)
- **\$66.4 M** – Total Alaska's Alcoholic Beverage Sector Payroll (2014)
- **\$37.6 M** – Total Alaska Alcohol Beverage Tax Revenue (FY2015)
- **\$4.9 M** – Local Government Alcohol Sales Tax Revenue (2015)



The Economic Costs of Drug Abuse in Alaska, 2016

Illicit Drug Use, 2013-2014



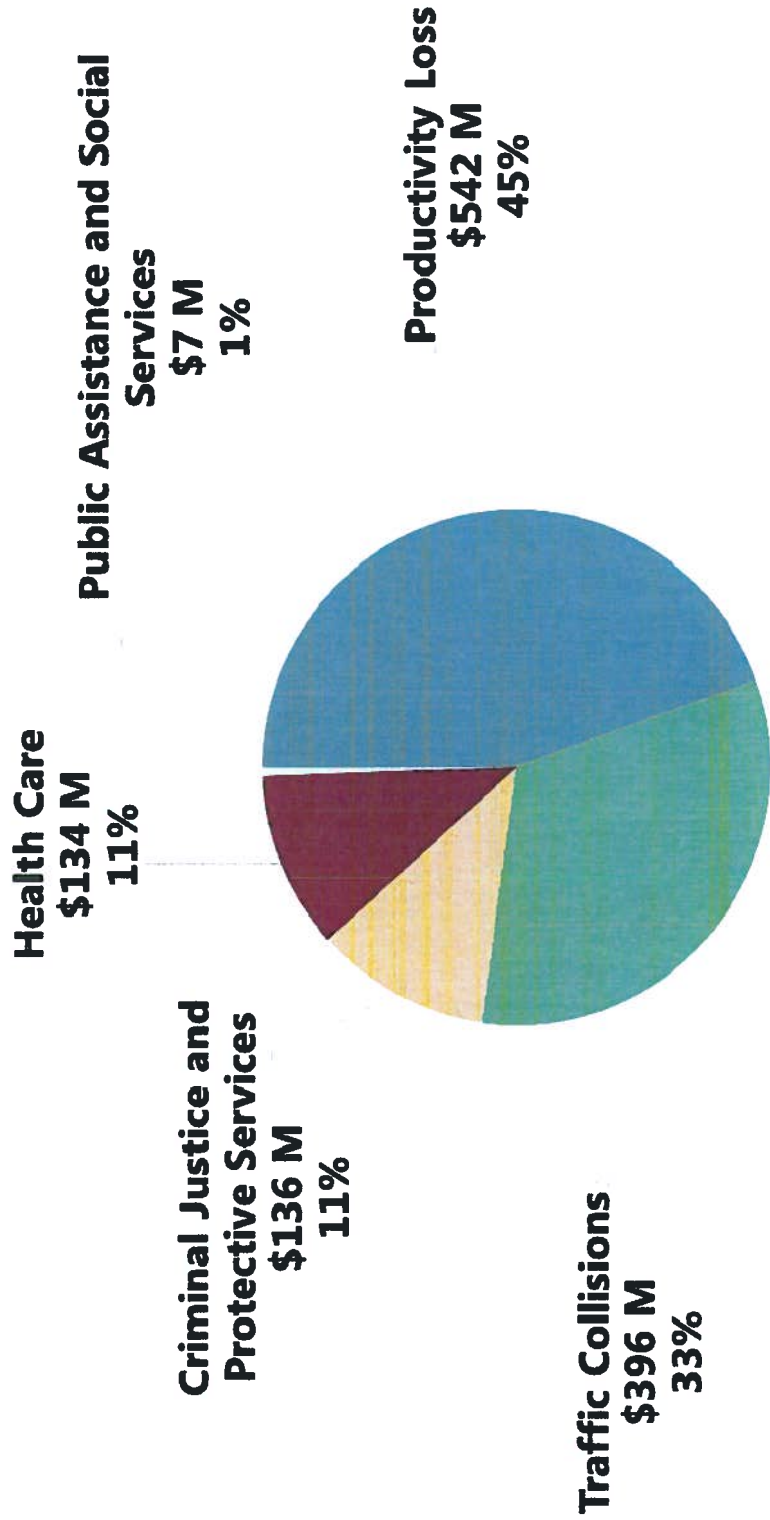
Source: National Survey of Drug Use and Health, SAMHSA



Illicit Drug Use, 2013-2014

- **77,000** Alaskans used illicit drugs within the past 30 days
 - 69,000 consumed marijuana
 - 20,000 used other illicit drugs
- **26,000** Alaskans used pain relievers for non-medical purposes in the past year
- **13,000** Alaskans are dependent on illicit drugs
- Marijuana consumption is the only drug in Alaska statistically different than U.S.
 - **12%** Alaskans used marijuana in past 30 days – 8% in U.S.
 - **20%** Alaskans used marijuana in past year – 13% in U.S.

Total Economic Costs of Drug Abuse – \$1.22 B



Source: McDowell Group calculations.



In Conclusion

- **\$1,840.0 M** – Total Economic Costs of Alcohol Abuse (2016)
- **\$1,220.0 M** – Total Economic Costs of Drug Abuse (2016)
- **\$3,100.0 M** – Total Combined Economic Costs of Alcohol and Drug Abuse in Alaska (2016)

Questions?