## Appendix A.

Dram Shop Liability, Responsible Beverage Service Training, and State Control of Alcohol law scoring descriptions and schemes.

Law coding mechanisms for each of the three laws in the current research as well as the additional 17 MLDA-21 laws can be found in prior research conducted by Fell et al., (2015). Below we outline the scoring mechanisms for the three laws of primary interest in the current research only.

Dram Shop Liability. The variables we used to score the strengths and weaknesses of statutory laws were the limitations on how a third party may sue. These limitations were separated into (1) those involving who may be sued, such as the type of retailer or servers over a certain age, and (2) requirements of additional facts or more rigorous evidentiary standards than those required under common law, such as proving the retailer knew the patron was underage or proving evidence "beyond a responsible doubt." Limitations are pertinent only when liability is available solely under statutory law as limitations do not pertain to common law. When both statutes and common law are available, a plaintiff may choose to pursue legal action under either.

Presumably, a plaintiff will choose the legal option that will grant the greatest relief. With a base score and a maximum score of 3 points allotted for having a dram shop liability law, our scores for the strengths and weaknesses of these laws can range from 0 (no law) to 1 or 2 (law with deductions for limitations) to 3 (common and/or statutory law with no limitations). To standardize scores, we divided the state score by the maximum possible score. See Table 4 for law scoring criteria and weights.

**Table 4.** Scoring mechanism for dram shop liability laws.

Condition	Weights
Law Type	+3.0 points for either common law or statutory law
Limitations on law	-1.0 point for any limitations on who may be sued
	-1.0 point for any limitations on elements or standards
	of proof

Responsible Beverage Service. Scores primarily range from 0 (no RBS law) to 12 (mandatory program requiring both managers and servers to be trained, covering both on- and off-premise outlets and both new and existing licensees) for most states. A few states have both a mandatory program and a voluntary program (booster sessions), so scores could be as high as 21 if a state has both a strong mandatory program and a voluntary or booster program, each of which include all four incentives. To standardize scores, we divided the state score by the maximum possible score. See Table 5 for RBS law scoring criteria, incentives, and weights.

**Table 5.** Scoring mechanism for responsible beverage service training laws.

Condition	Weights
Type of RBS program	+2.0 points for mandatory program
	+1.0 points for voluntary program
Personnel trained in	+1.0 point for licensee
mandatory program	+2.0 points for manager
	+3.0 points for server/seller
Incentives for voluntary	+1.0 point for liability defense
program offered by state	+1.0 point for mitigation of penalties for sales to minors
	+1.0 point for dram shop insurance discounts
	+1.0 point for protection of license
Type of establishment covered	+1.0 point for on-premises outlets
	+1.0 point for off-premises outlets
Type of licensee covered	+1.0 point for new licensees
	+1.0 point for existing licensees

**State Control of Alcohol.** Scores range from 0 (no part of retail distribution system is state-run) to 3 (state-run retail system for all three beverage types). As before, to standardize scores, we divided the state score by the maximum possible score of 3. See Table 6 for scoring criteria and weights of alcohol control system laws.

**Table 6.** Scoring mechanism for state control of alcohol laws.

Condition	Weights
Type of beverage that is	+1.0 point for beer
exclusively state run	+1.0 point for wine
	+1.0 point for spirits