

SUPPLEMENTAL METHODS

ReadMe first strips all the words in the documents down to their stems. For example, “writing” and “written” would both become “writ.” It then creates a word stem profile, **S**, for each document, representing the “bag of words” contained in the document. The framing category described in each document (i.e., individual-level, environmental-level, neutral) is represented as **D**. The frequency distribution of $P(\mathbf{S})$ can then be expressed as follows:

$$P(\mathbf{S}) = P(\mathbf{S}|\mathbf{D}) * P(\mathbf{D})$$

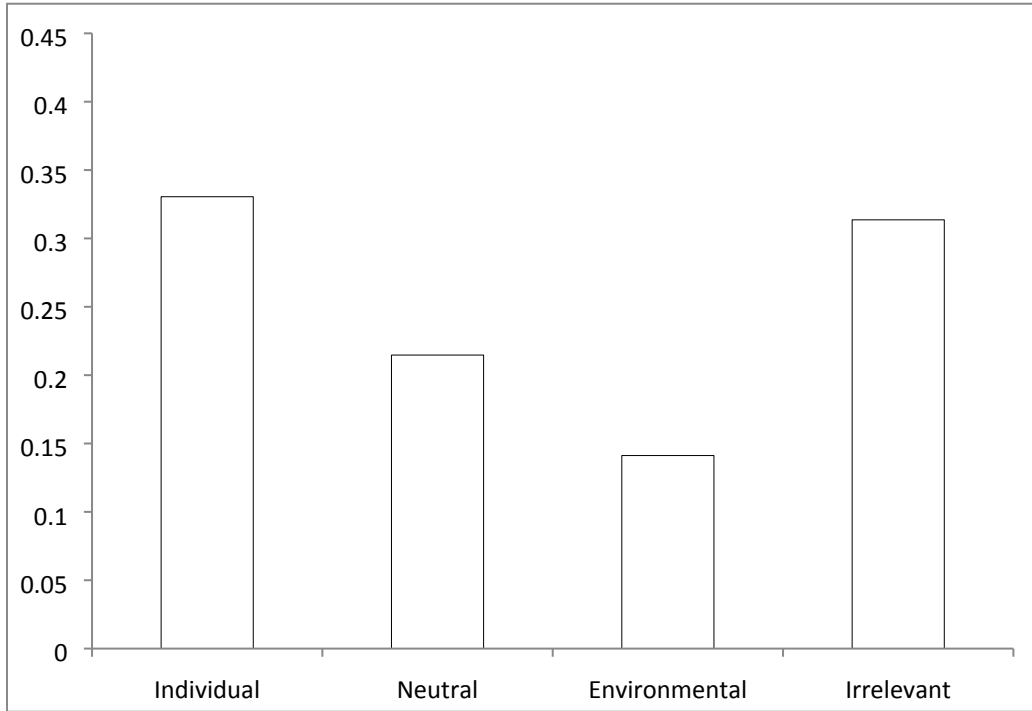
The ultimate goal of the program is to obtain $P(\mathbf{D})$, the distribution of articles into the predetermined categories in the larger body of documents. $P(\mathbf{S})$, the frequency distribution of the words in the documents, is calculated by the program from all of the documents. $P(\mathbf{S}|\mathbf{D})$ is obtained from the subset of hand-coded documents provided to the program by the researchers, known as the “training set.” This represents the proportion of the overall body of documents that fall into each of the predetermined categories. Importantly, this method does not require that the training set be representative of the larger data set, only that it be drawn from the same population of texts.

The developers of ReadMe demonstrate that the number of hand-coded articles need not exceed 500, which is sufficient to minimize root mean square error. For some applications, as few as 100 can be used. In this study, we hand-coded roughly 350 articles.

A more detailed description of this method is available in Hopkins and King (2010).

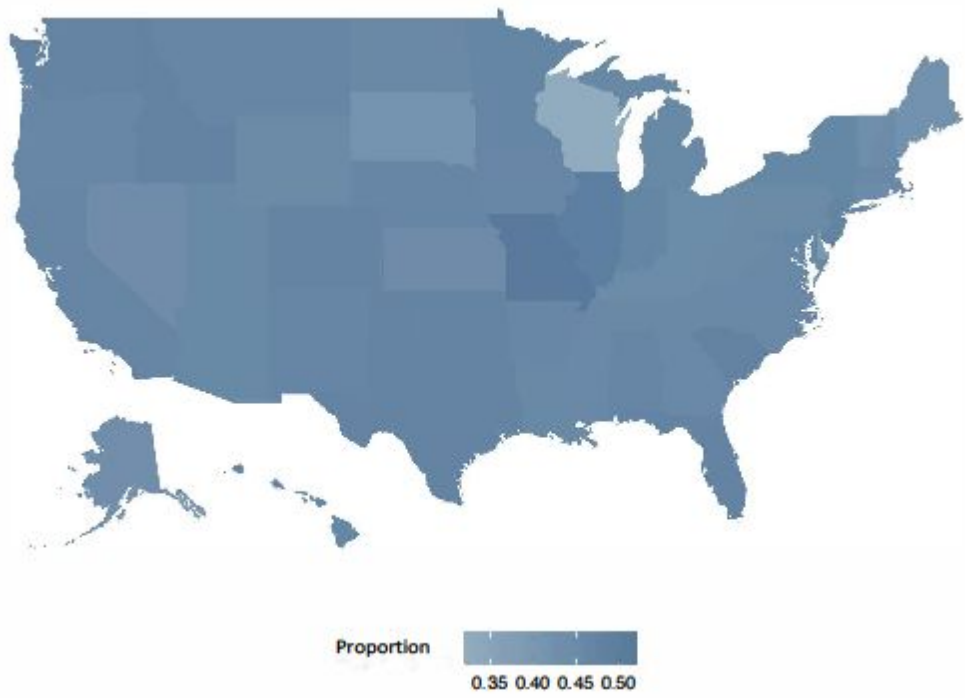
SUPPLEMENTAL FIGURES

Supplemental Figure S1. Overall proportion of hand-coded articles in media framing categories in training set (N = 354)

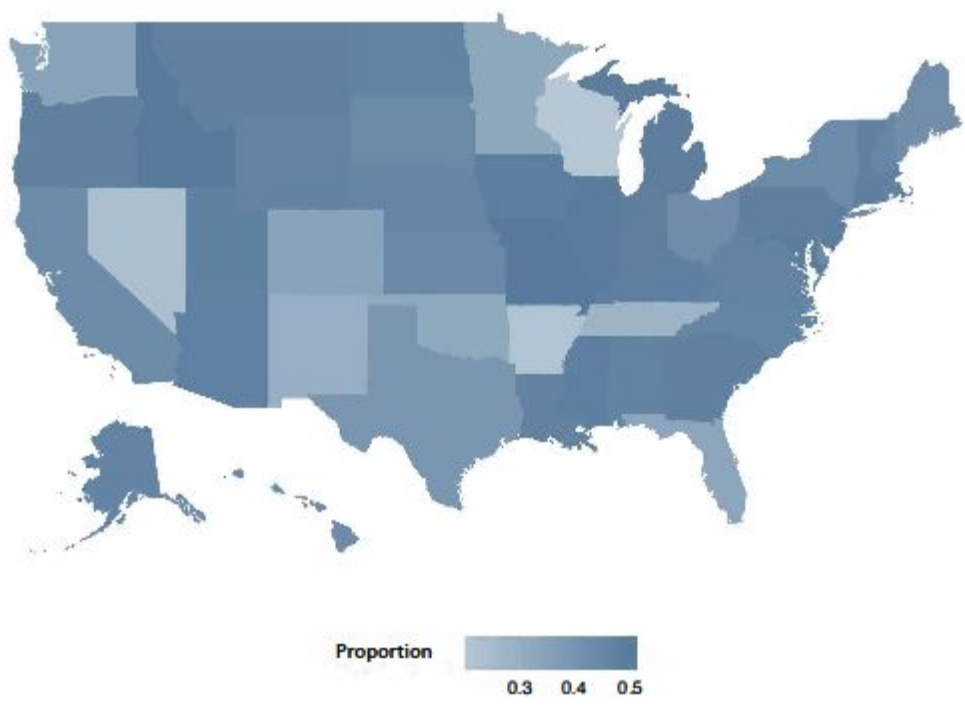


Supplemental Figure S2. Proportion of articles using an individual framework of obesity attribution, by state and year

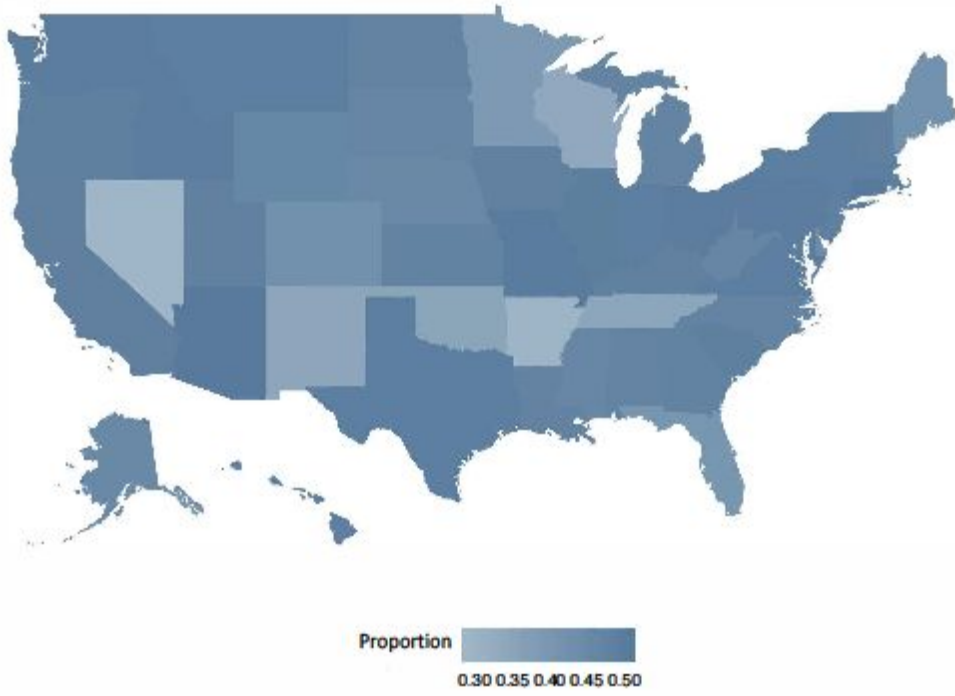
2006



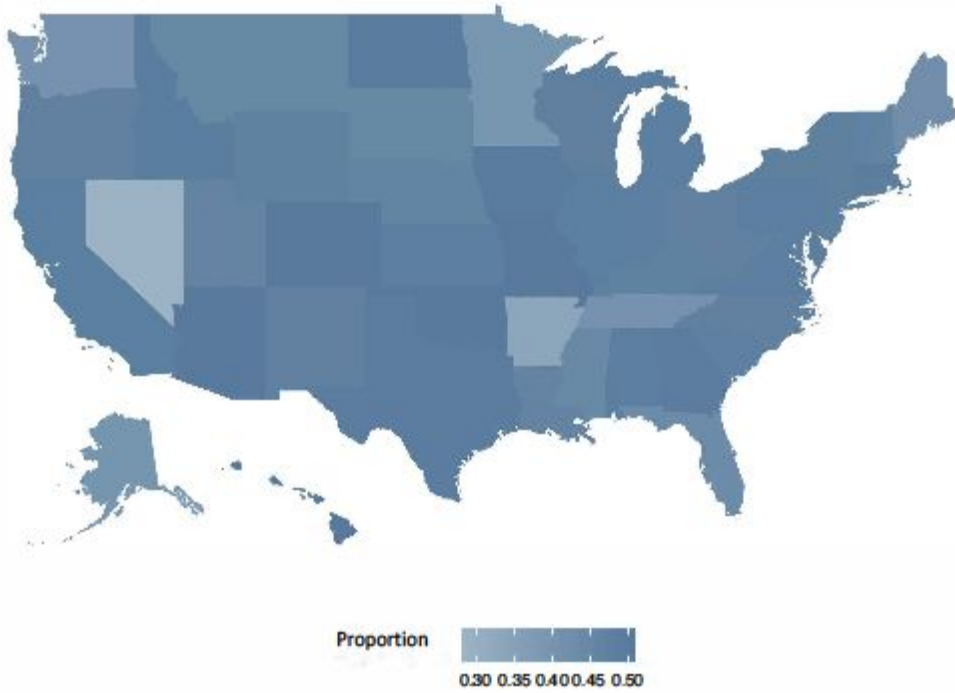
2007



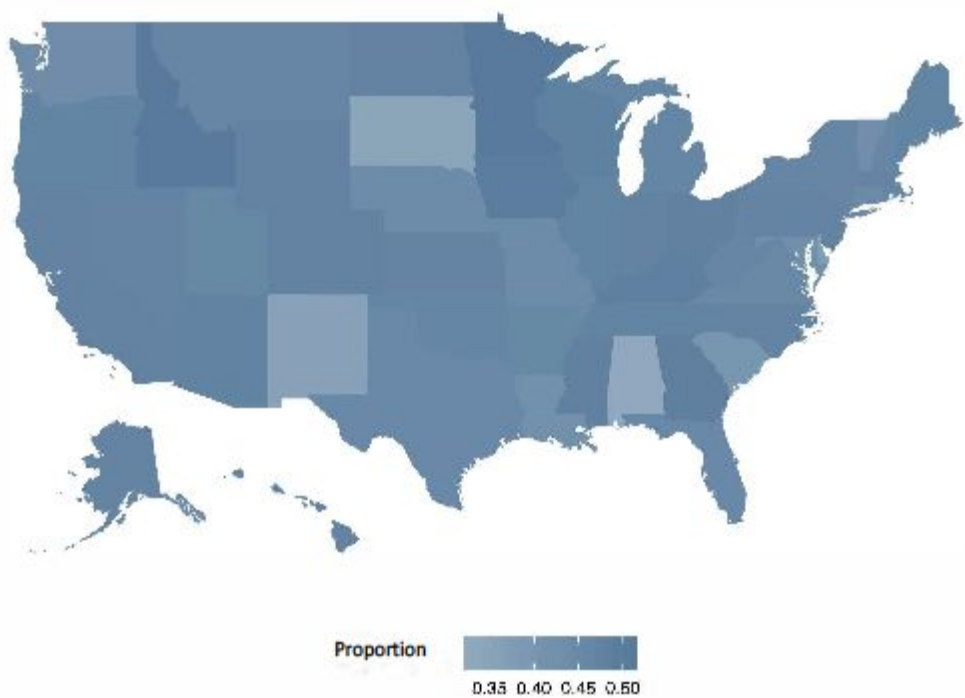
2008



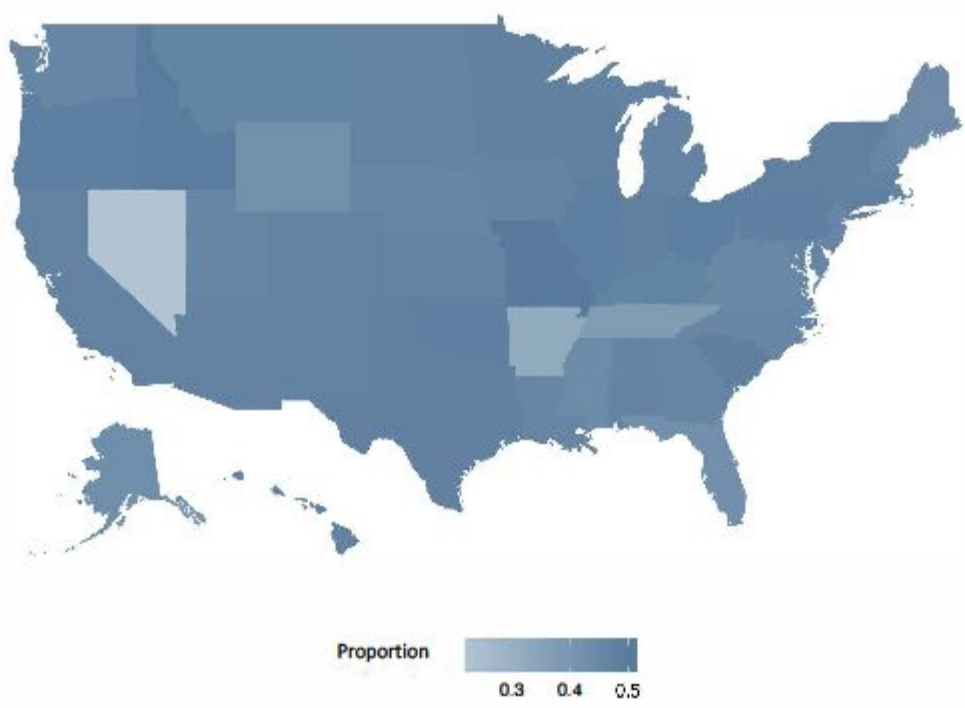
2009



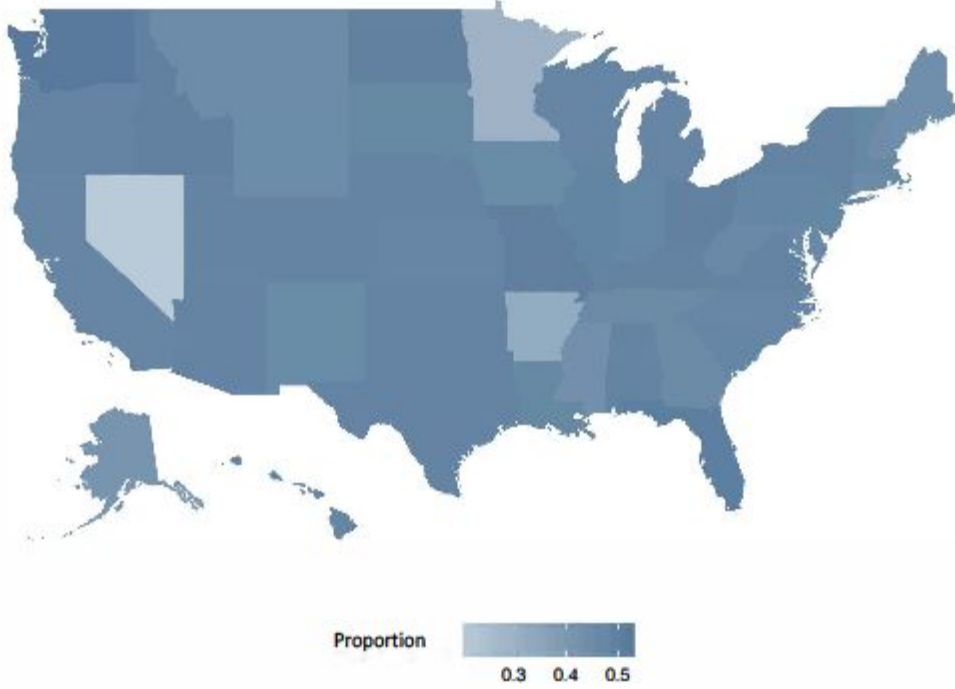
2010



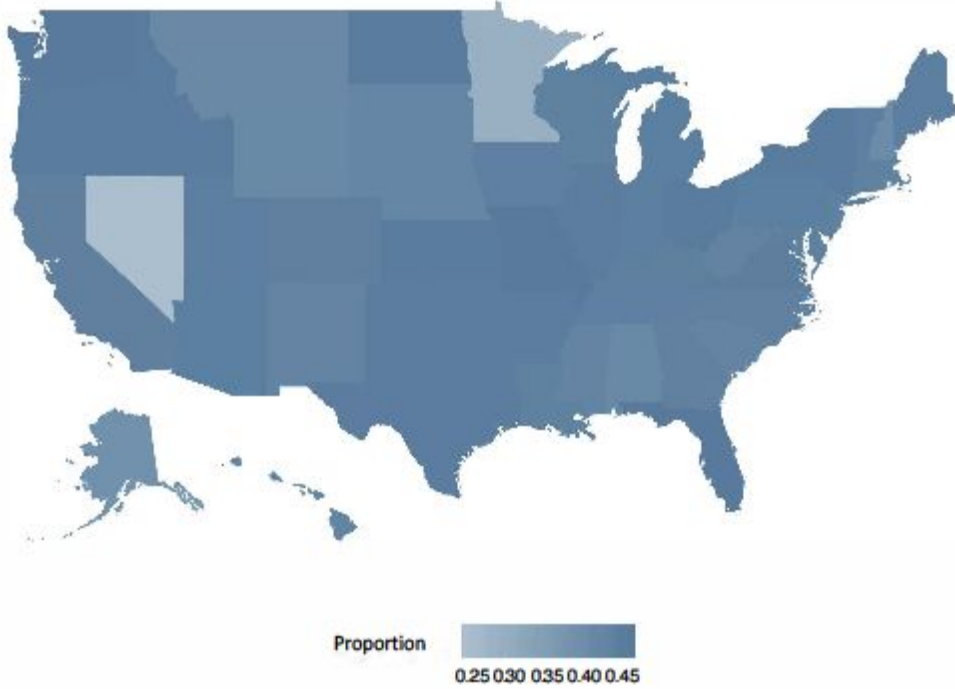
2011



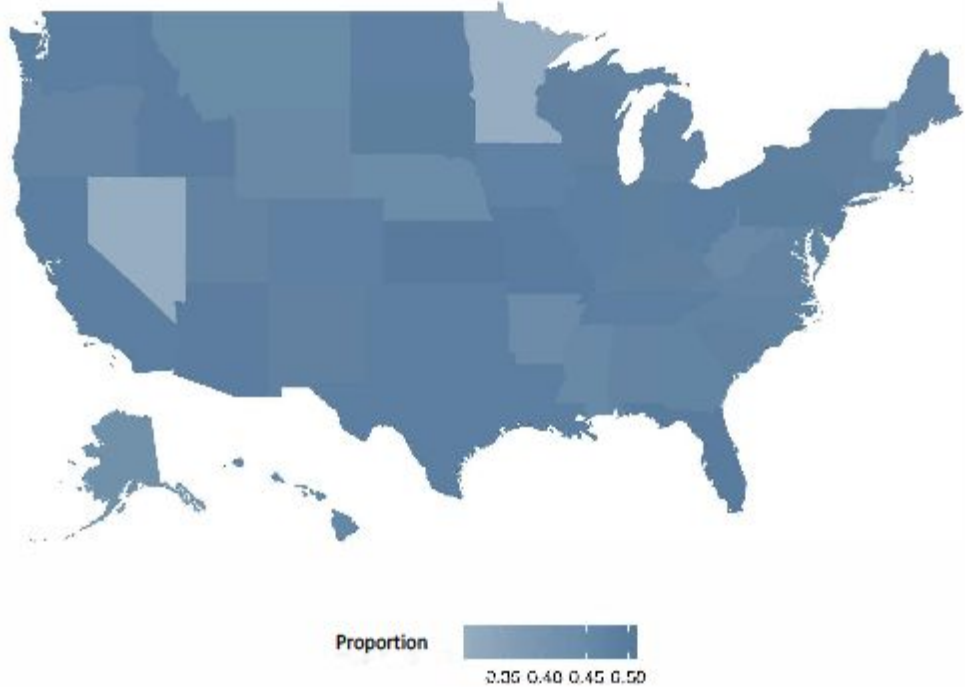
2012



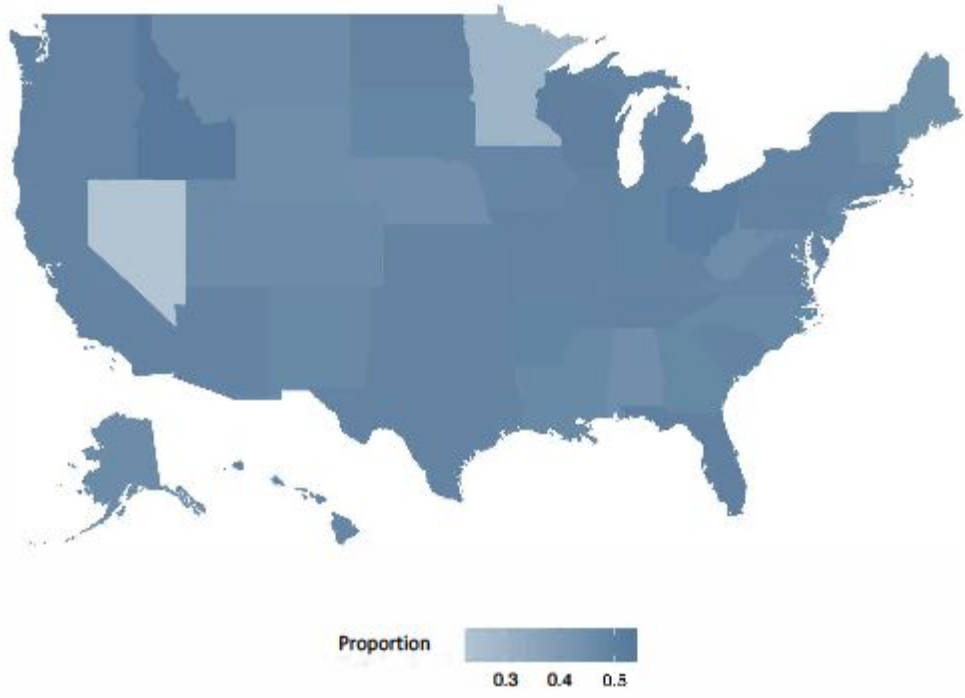
2013



2014



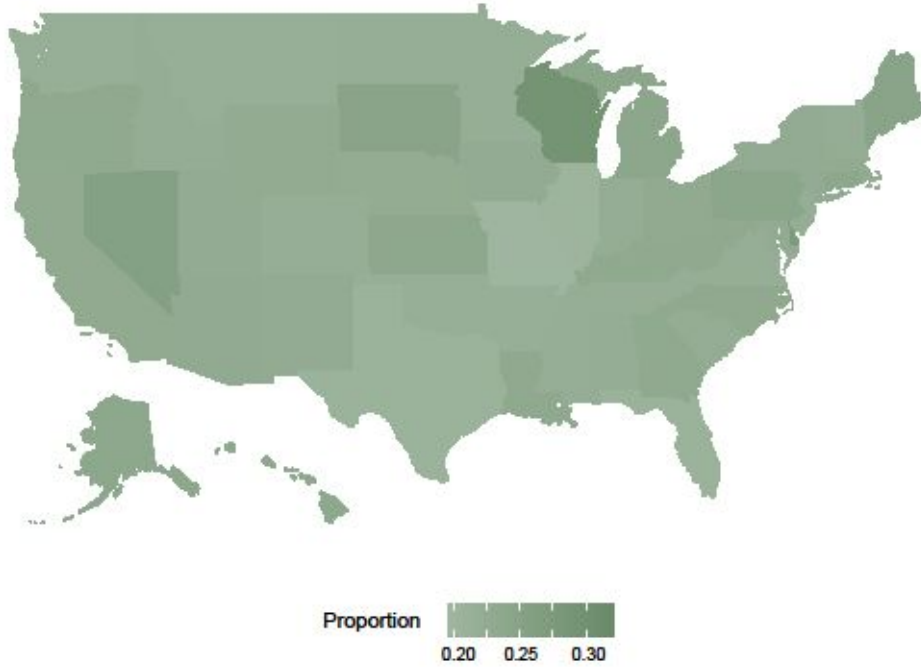
2015



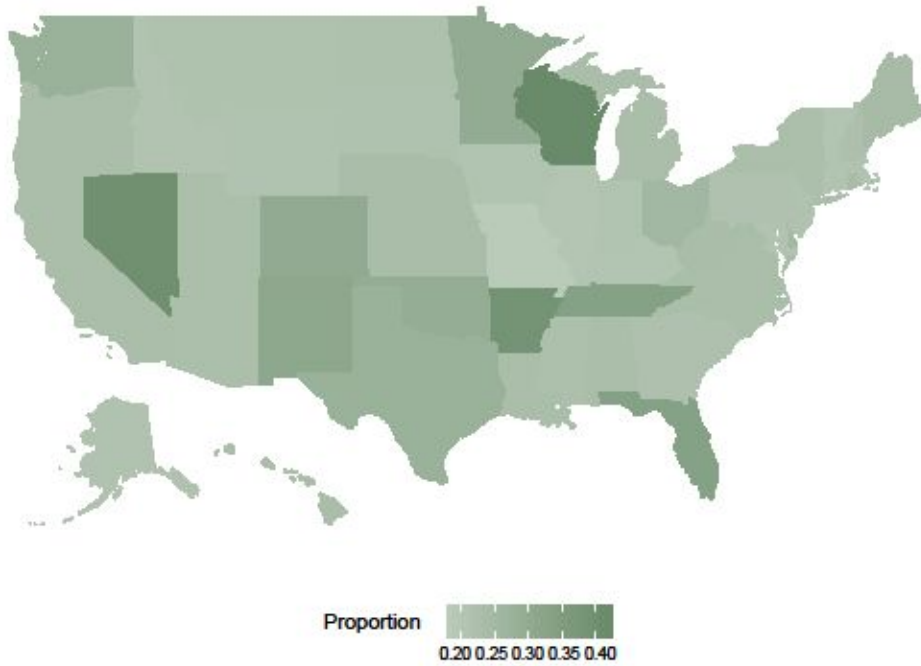
Note: N = 364,288 articles drawn from Access World News.

Supplemental Figure S3. Proportion of articles using an environmental framework of obesity attribution, by state and year

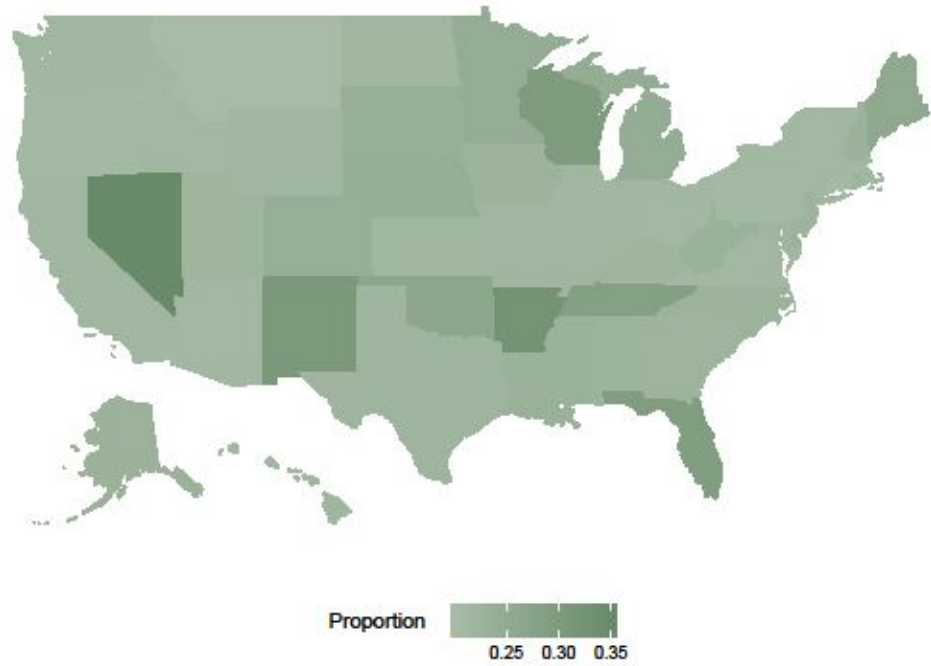
2006



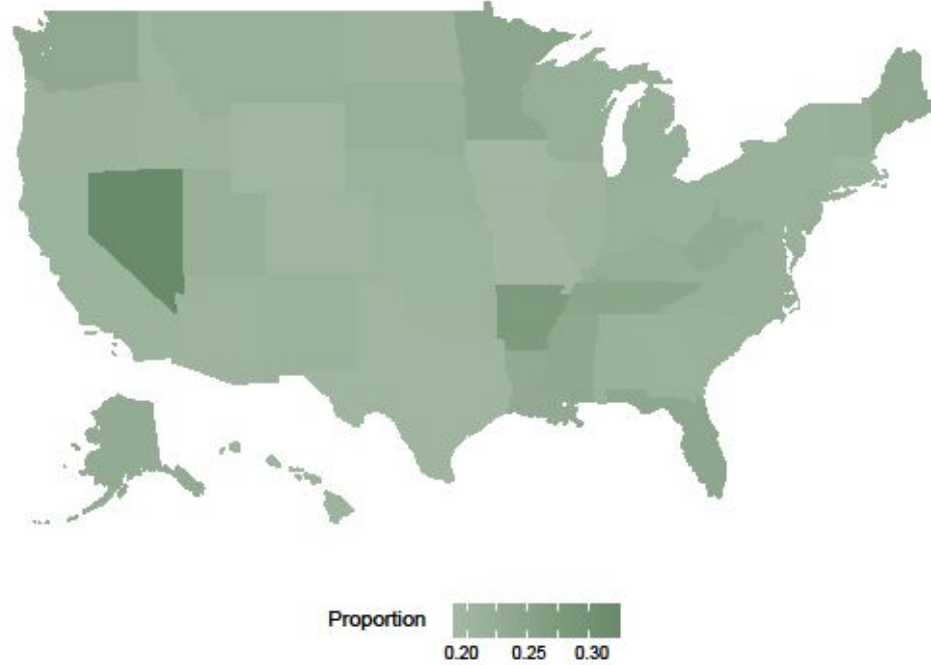
2007



2008

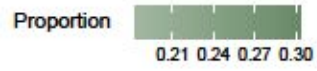
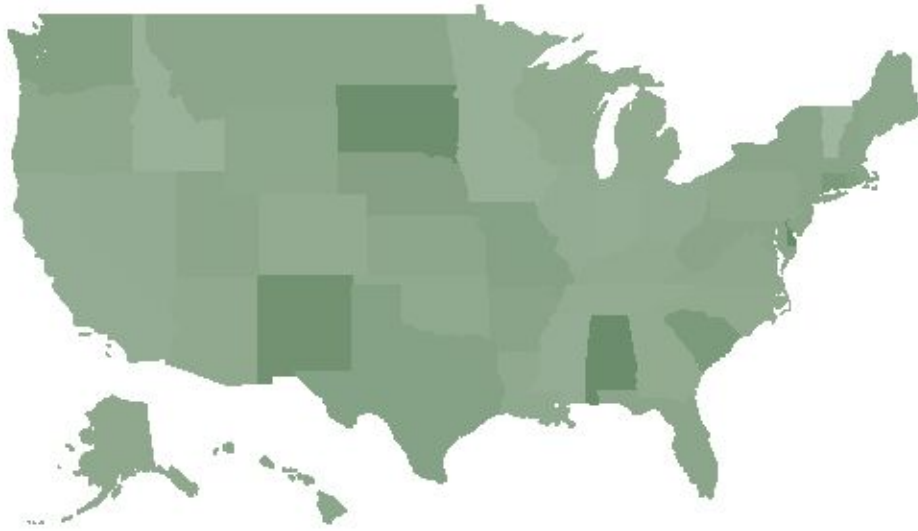


2009

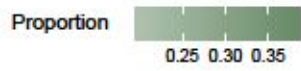
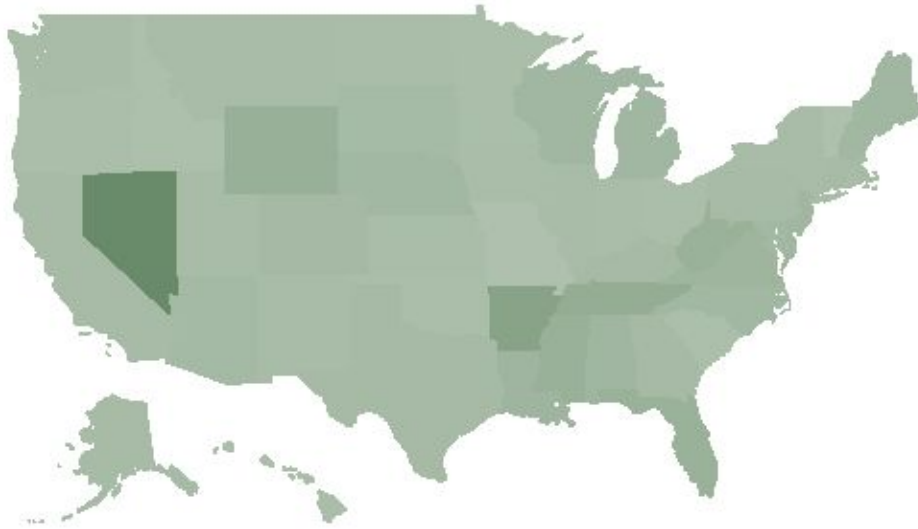


Online Supplement
Chiang et al., *Obesity* 2020

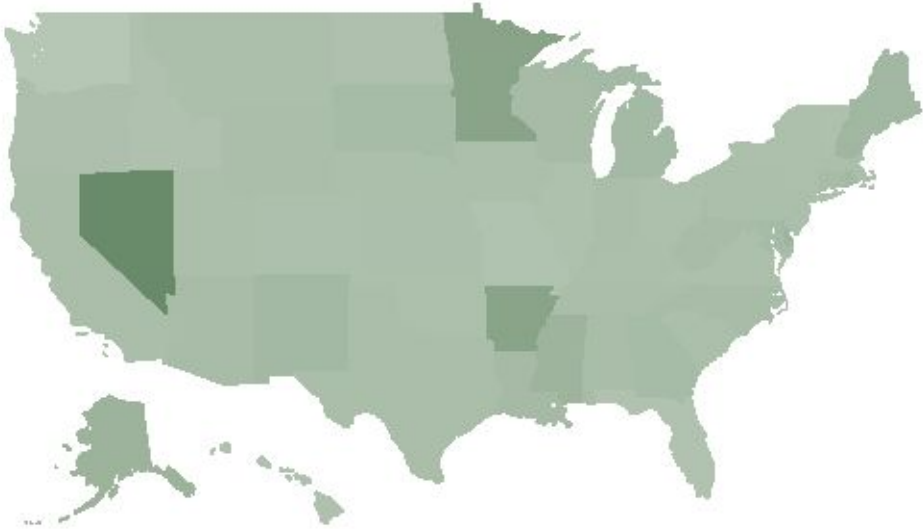
2010



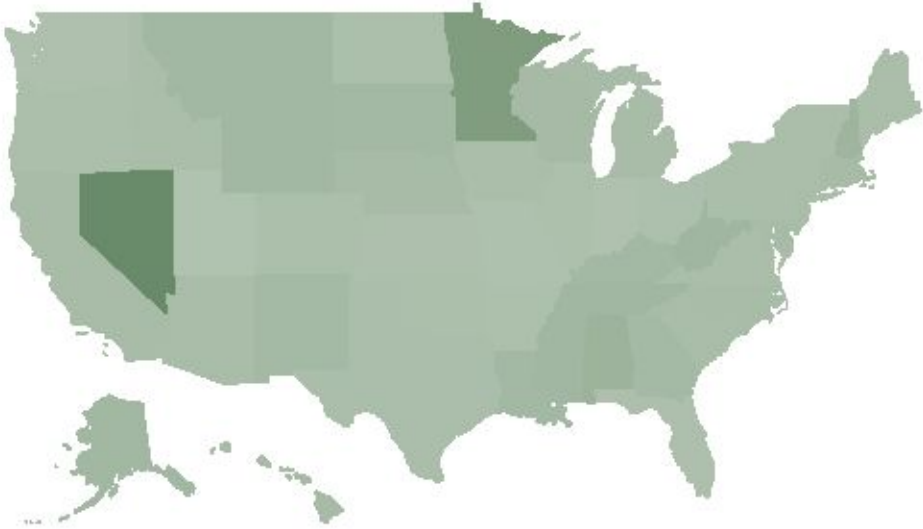
2011



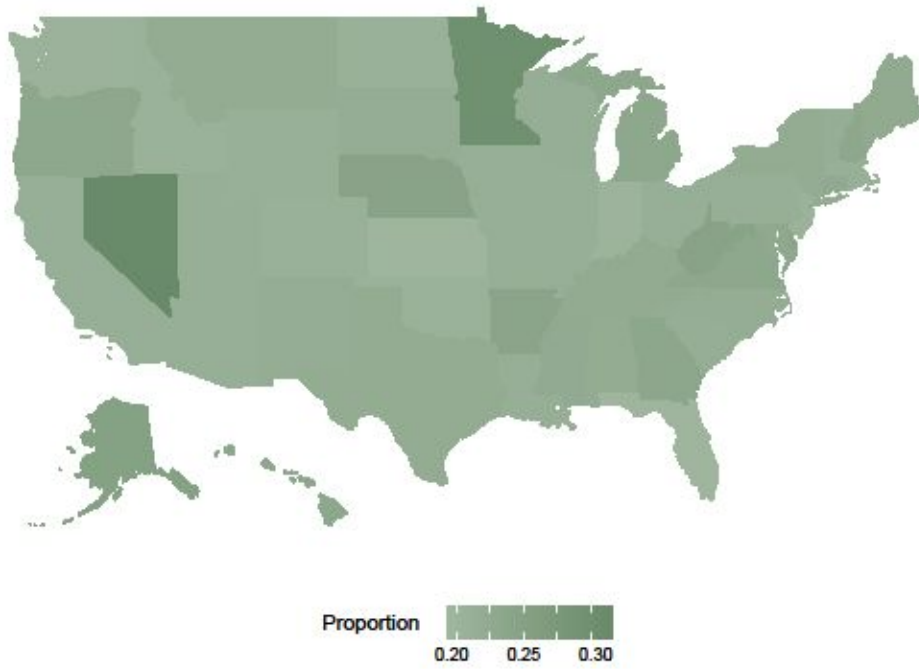
2012



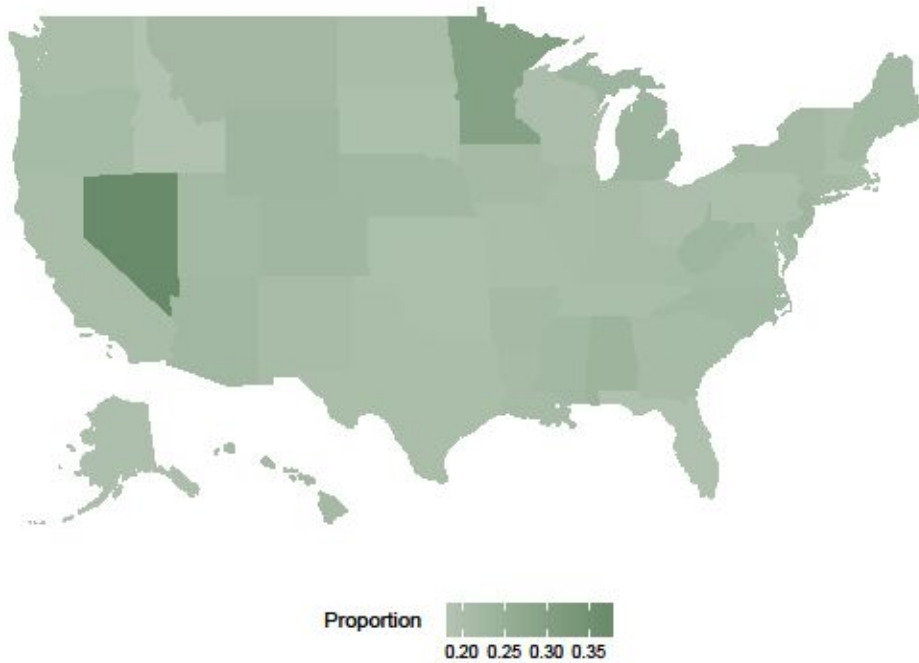
2013



2014



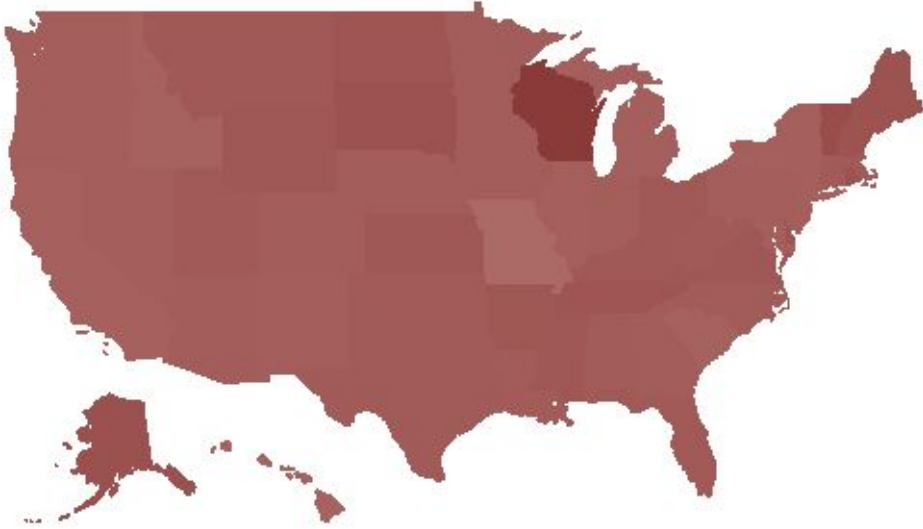
2015



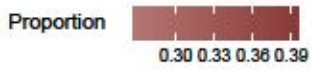
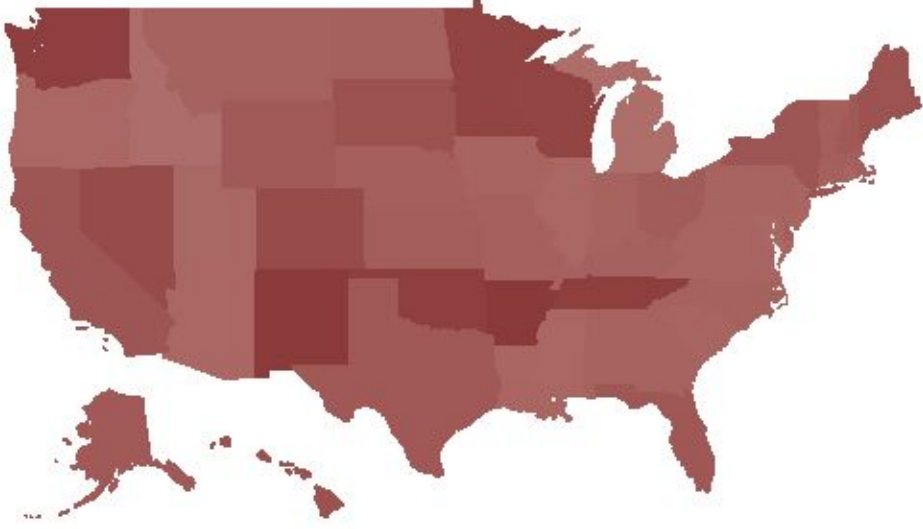
Note: N = 364,288 articles drawn from Access World News.

Supplemental Figure S4. Proportion of articles using both frameworks of obesity attribution, by state and year

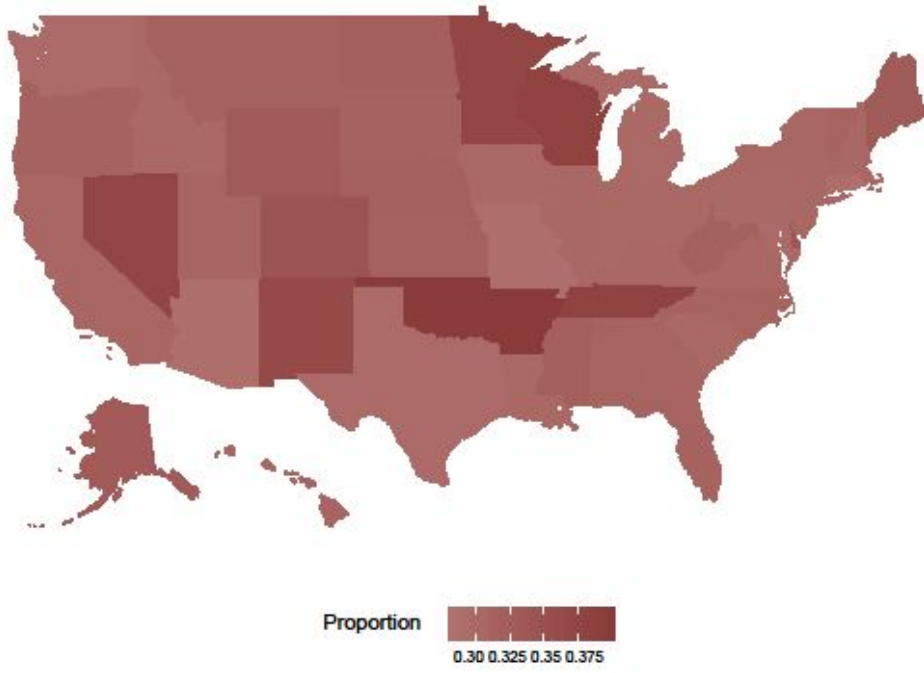
2006



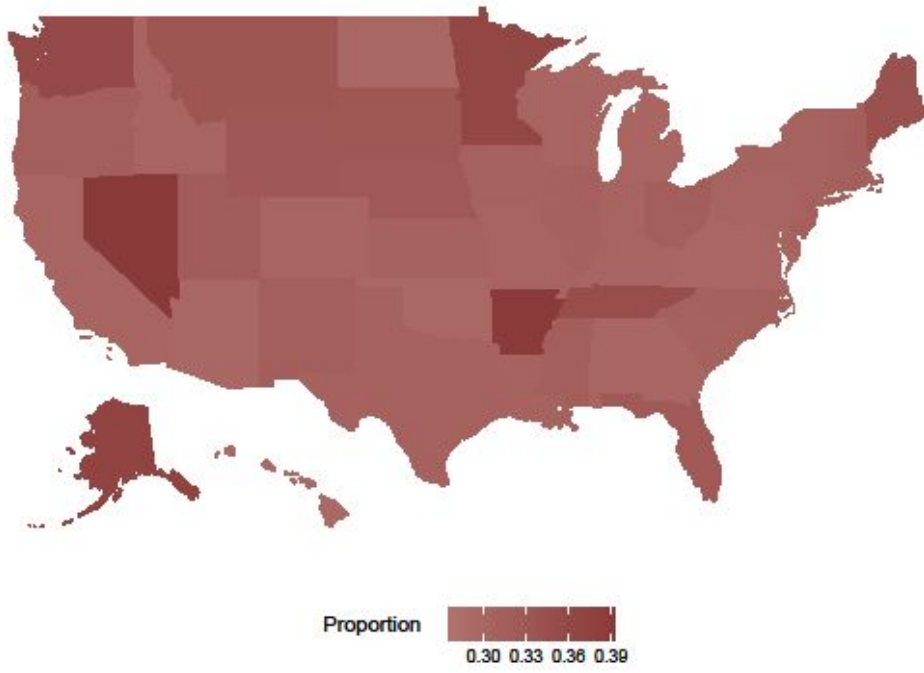
2007



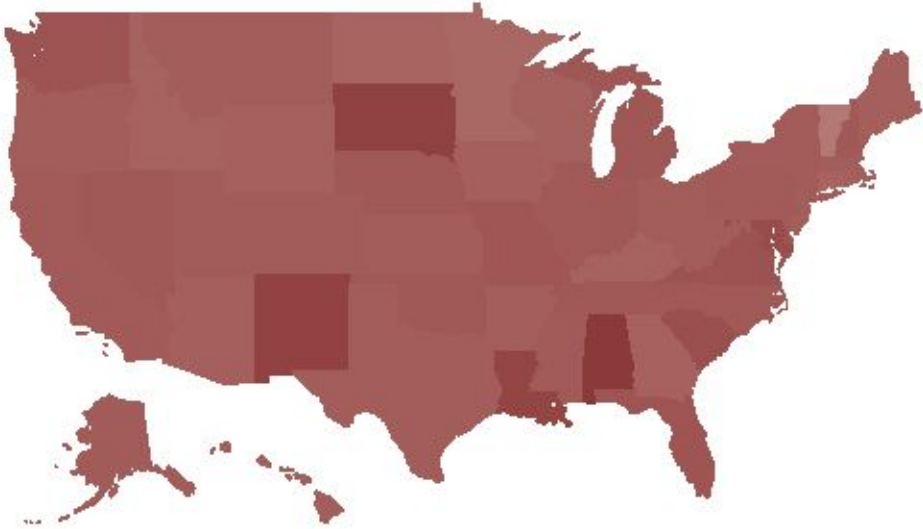
2008



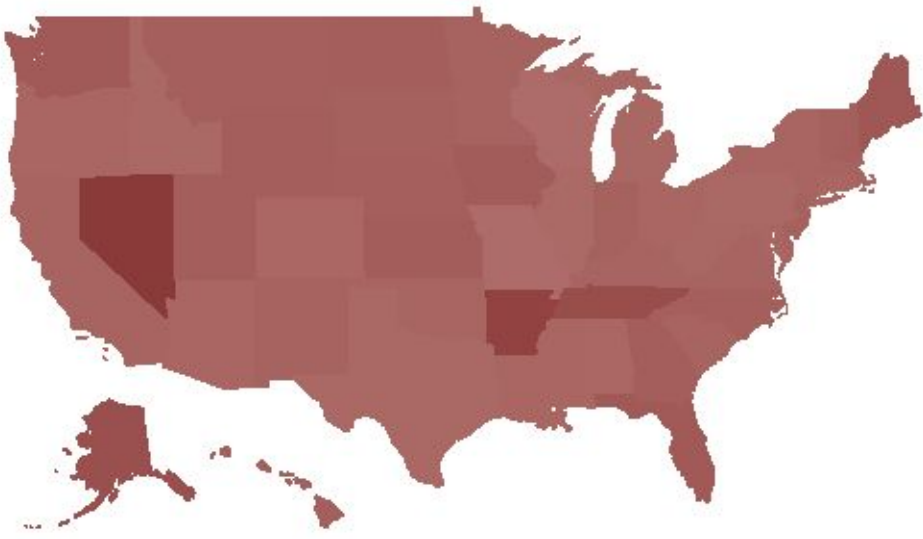
2009



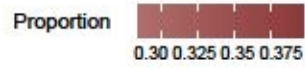
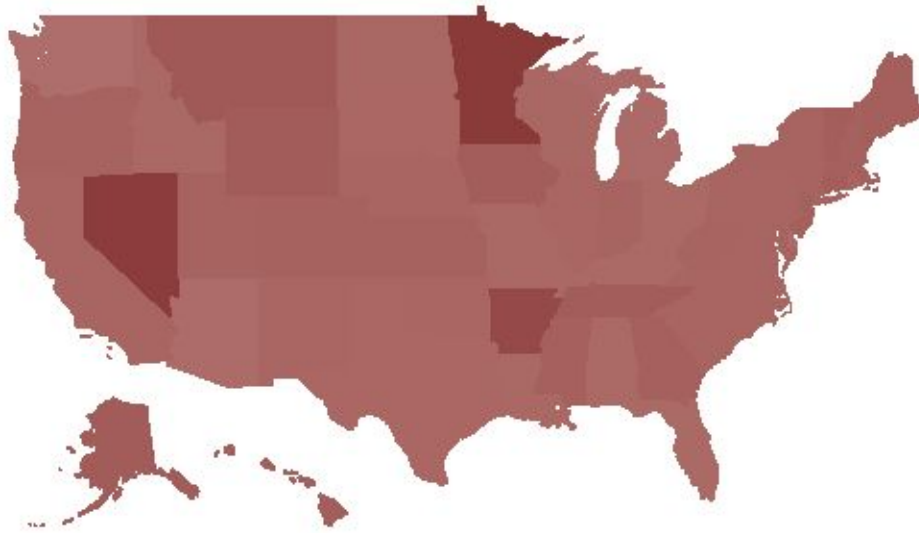
2010



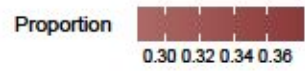
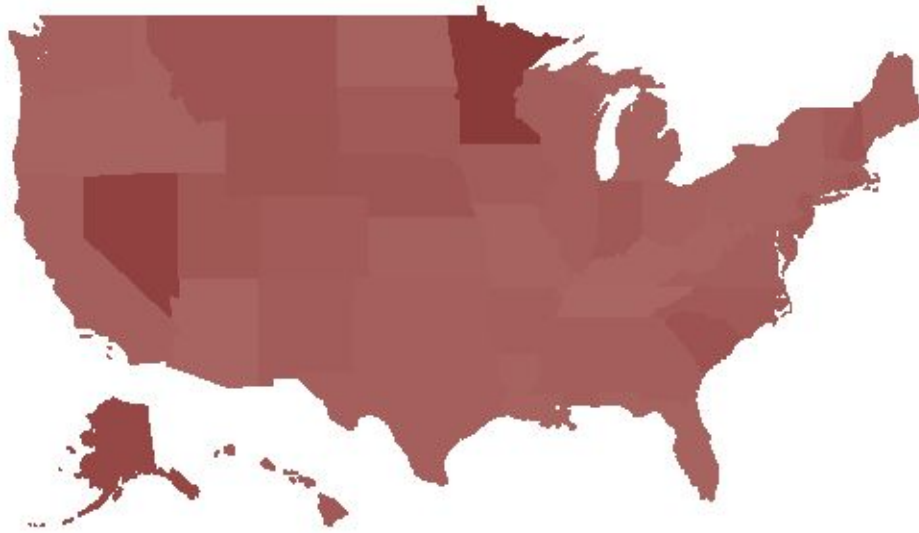
2011



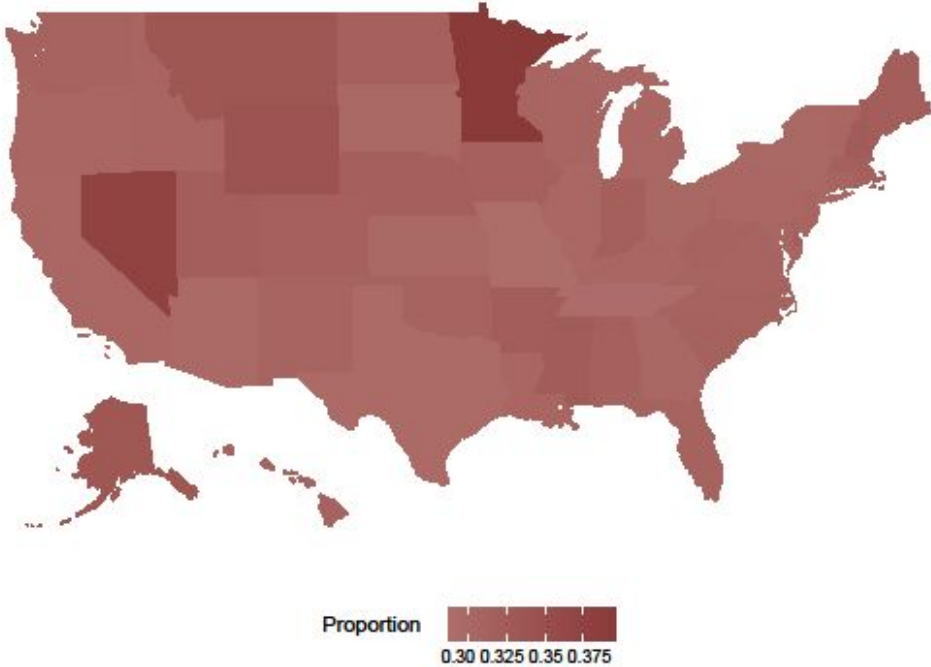
2012



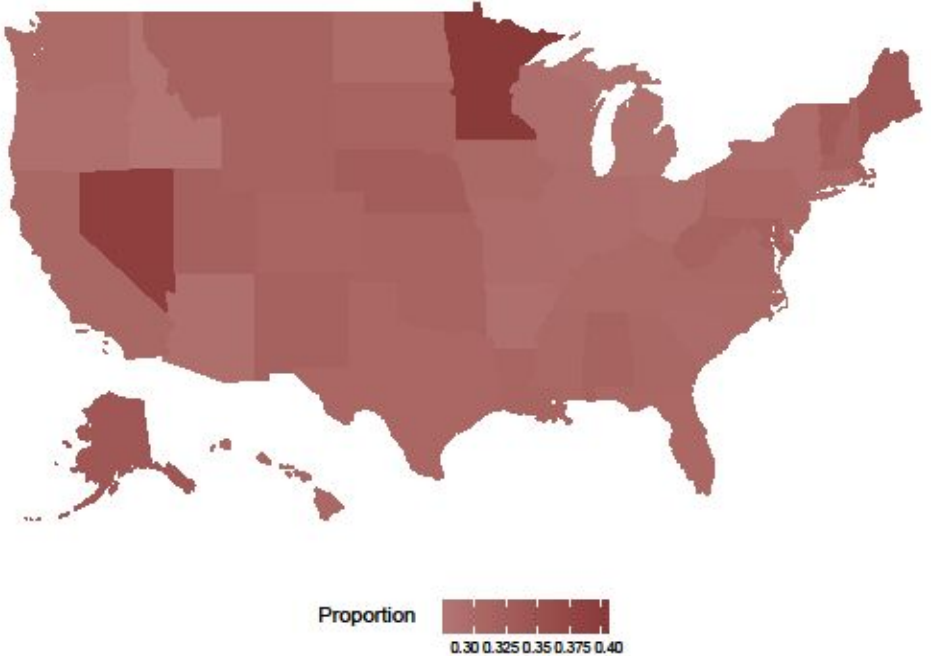
2013



2014



2015



Note: N = 364,288 articles drawn from Access World News.