USAboundaries: Historical and Contemporary Boundaries of the United States of America

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The USAboundaries package for R provides contemporary and historical boundaries of the United States of America (Mullen and Bratt 2017). (The package is available on GitHub and archived on Zenodo.) Historical data in the package includes state and county boundaries from 1629 to 2000 from the Newberry Library’s “Atlas of Historical County Boundaries” (Long 2010). Also included is historical city population data from Erik Steiner’s “United States Historical City Populations, 1790-2010” (Steiner 2016). Contemporary data in the package includes state, county, and Congressional district boundaries, as well as Zip Code Tabulation Area centroids. These data are all drawn from the U.S. Census Bureau (U.S. Census Bureau 2017).

These historical and contemporary boundaries are provided at different resolutions suitable for national and state-level mapping. A consistent interface provides a way to easily select historical boundaries for any specific date. The package includes helper functions and datasets, including tables of state names, abbreviations and FIPS codes for joining to attribute data, as well as functions and data to get State Plane Coordinate System projections as EPSG codes or PROJ.4 strings (Stem 1989). A first step in many spatial analyses is joining data of interest to spatial data, which the datasets in this package enable.

This package underlies the Mapping Early American Elections project created by a team at the Roy Rosenzweig Center for History and New Media (Mapping Early American Elections project team 2016–2019). That project maps Congressional elections and state legislative elections from 1787 to 1825. The USAboundaries package provides access to the frequently changing state and county boundaries during that time period.

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References


