Code Book: State Networks*

IPPSR

September 25, 2019

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Notes: BTS = Bureau of Transportation Statistics ACS = American Community Survey (U.S. Census) RLS = Religious Landscape Study (Pew)

1. *State1*

   Name of first state in dyad.

2. *State2*

   Name of second state in dyad.

3. *State1Abbr*

   State 1 Abbreviation

4. *State2Abbr*

   State 2 Abbreviation

5. *dyadid*

   Unique, directional identification of each state pair.

6. *Border*

   Binary variable. 0 if no border shared border between State 1 and State 2. 1 if State 1 and State 2 share a border. Collected from the list of borders from The State Border Data Set (Holmes, 1998).
   http://users.econ.umn.edu/~holmes/data/BORDLIST.html

7. *Distance*

   Haversine distance between State 1 and State 2 Capitals in kilometers. Calculated using the "geosphere" package ftp://cran.r-project.org/pub/R/web/packages/geosphere/geosphere.pdf.

8. *State1_Lat*

   Latitude of State 1 Capital. Latitudes and longitudes collected from http://www.xfront.com/us_states/.

9. *State1_Long*

   Longitude of State 1 Capital.

10. *State2_Lat*

    Latitude of State 2 Capital.

11. *State2_Long*

    Longitude of State 2 Capital.

12. *ACS_Migration*

    People migrating from State 2 to State 1 in one year, 2017. Population and *ACS_Migration* variables Collected from U.S. Census American Community Survey. https://www.census.gov/data/tables/time-series/demo/geographic-mobility/state-to-state-migration.html

13. *State1_Pop*

    Population of State 1 in 2017.

14. *State2_Pop*

    Population of State 2 in 2017.

15. *PopDif*

    Difference in State 1 and State 2 population. Negative values indicate State 2 population is higher.

16. *IncomingFlights*

    Flights from State 2 with destination in State 1. From Bureau of Transportation Statistics (BTS) Origin and Destination Survey, DB1B Coupon (10% sample of airline tickets from reporting carriers). 2019. For more information: https://www.transtats.bts.gov/Fields.asp.

17. *IRS_migration*

    Counts the number of exemptions on returns that were filed in State 2 the previous year and in State 1 the following year. Total from 1993-2010. *IRS_Migration* and *Income* from https://interactive.taxfoundation.org/migration/.

18. *Income*

    Total income moved on tax returns from State 2 to State 1, in thousands of dollars, from years 1993-2010. More information from FAQ:

    > *"AG" stands for "Adjusted Gross Income" - this is the income reported on the tax return that is the baseline for most tax calculations, and is usually the same as total income. The AGI figures are in thousands of dollars, so a figure of $1,200 between two states would mean that migrants...had a collective income of $1,200,000.*

19. *IRS_migration_2010*

    Total exemptions on returns that were filed in State 2 in 2009 and in State 1 in 2010.

20. *Income_2010*

    Total income moved on tax returns form State 2 to State 1, in thousands of dollars, from 2009 to 2010.

21. *Imports*

    Aggregated value of trade from State 2 to State 1 in one year. 2017 BTS Commodity Flow Survey. More info from BTS:

    > *"The CFS is a shipper survey of approximately 100,000 establishments from the industries of mining, manufacturing, wholesale trade, auxiliaries (i.e. warehouses and distribution centers), and select retail and service trade industries that ship commodities. Data requested by the CFS includes the type of commodities shipped, their origin and destination, their value and weight, and mode(s) of transport. The CFS provides a comprehensive multimodal picture of national freight flows and represents the only publicly available source of data for the highway mode."*

    For more information: `https://www.bts.gov/cfs`

22. *GSPDif*

    Difference between State 1 and State 2 GSP (in millions of current dollars). Negative values indicate State 2 has a higher GSP.

23. *S1GSP*

    State 1 Gross State Product (in millions of current dollars). 2016. From Correlates of State Policy Project and US Department of Commerce Bureau of Economic Analysis. âĂIJNAICS Per Capita GDP by state/SIC Per Capita GDP by state.âĂİ Accessed at: http://www.bea.gov/regional/downloadzip.cfm

24. *S2GSP*

    State 2 Gross State Product (in millions of current dollars). 2016. From Correlates of State Policy Project and US Department of Commerce Bureau of Economic Analysis. âĂIJNAICS Per Capita GDP by state/SIC Per Capita GDP by state.âĂİ Accessed at: http://www.bea.gov/regional/downloadzip.cfm

25. *DemDif*

    Difference in the average proportion of Democratic state legislators in State 1 and State 2. Negative values indicate State 2 has a higher proportion of Democratic legislators.

26. *S1AvgDem*

    Average proportion of Democrats in State senate and House in State 1.

27. *S2AvgDem*

    Average proportion of Democrats in State Senate and House in State 2.

28. *S1SenDemProp*

    Proportion of Democratic State Senators in State 1. 2016. From Correlates of State Policy and Ranney, Austin. 1976. “Parties in State Politics.” In Politics in

the American States, 3rd ed., edited by Herbert Jacob and Kenneth Vines. Boston, MA: Little, Brown Co.

29. *S1HSDemProp*

    Proportion of Democratic State House members in State 1. 2016. From Correlates of State Policy and Ranney, Austin. 1976. "Parties in State Politics." In Politics in the American States, 3rd ed., edited by Herbert Jacob and Kenneth Vines. Boston, MA: Little, Brown Co.

30. *S2SenDemProp*

    Proportion of Democratic State Senators in State 2. 2016. From Correlates of State Policy and Ranney, Austin. 1976. "Parties in State Politics." In Politics in the American States, 3rd ed., edited by Herbert Jacob and Kenneth Vines. Boston, MA: Little, Brown Co.

31. *S2HSDemProp*

    Proportion of Democratic State House members in State 2. 2016. From Correlates of State Policy and Ranney, Austin. 1976. "Parties in State Politics." In Politics in the American States, 3rd ed., edited by Herbert Jacob and Kenneth Vines. Boston, MA: Little, Brown Co.

32. *IdeologyDif* Difference between State 1 and State 2 ideology. Negative values indicate State 2 is more liberal than State 1.

33. *PIDDif* Difference between State 1 and State 2 party ID. Negative values indicate State 2 is more Democratic than State 1.

34. *S1Ideology*

    State 1 ideology. 2016. From Correlates of State Policy Project. "Yearly measure, giving the proportion of liberal identifiers minus the proportion of conservative identifiers in each state. A positive score indicates a more liberal state citizenry." From (Erikson, Wright and McIver, 1993).

35. *S1PID*

State 1 party ID. From Correlates of State Policy Project. "Yearly measure yearly measure, giving the proportion of Democratic identifiers minus the proportion of Republican identifiers in each state. A positive score indicates a more Democratic state citizenry." From (Erikson, Wright and McIver, 1993).

36. *S2Ideology*

    State 2 ideology. 2016. From Correlates of State Policy Project. "Yearly measure, giving the proportion of liberal identifiers minus the proportion of conservative identifiers in each state. A positive score indicates a more liberal state citizenry." From (Erikson, Wright and McIver, 1993).

37. *S2PID*

    State 2 party ID. From Correlates of State Policy Project. "Yearly measure yearly measure, giving the proportion of Democratic identifiers minus the proportion of Republican identifiers in each state. A positive score indicates a more Democratic state citizenry." From (Erikson, Wright and McIver, 1993).

38. *policy_diffusion_tie*

    Aggregated latent diffusion ties from State 2 to State 1, from 1960-2015. Total in the data counts the total years from the 55 year period where State 2 sent a directed policy diffusion tie to State 1. In other words, the total indicates the total years in the 55 year period where State 1 uses State 2 as a policy source.

    > *Estimates are generated using the NetworkInference R package developed by Linder and Desmarais (2016), which is an R implementation of the netinf algorithm of Gomez Rodriguez, Leskovec, and Krause (2010).* (Boehmke et al., 2019).

39. *policy_diffusion_2015*

    Latent diffusion ties from State 2 to State 1. Takes the value of 1 if State 2 sent a directed policy diffusion tie to State 1 in 2015, and takes the value of 0 if no policy diffusion tie was sent.

40. *LibDif*

    Total absolute value of differences in social and economic liberalism between State 1 and State 2. Lower values indicate more similarity between State 1 and State 2.

41. *ELibDif*

    Difference between State 1 and State 2 economic liberalism. Negative values indicate State 2 has a higher score.

42. *SLibDif*

    Difference between State 1 and State 2 social liberalism. Negative values indicate State 2 has a higher score.

43. *S1EconomicLiberalism*

    State 1 economic liberalism score. 2000. From Correlates of State Policy Project and (Rigby and Wright, 2013).

44. *S1SocialLiberalism*

    State 1 social liberalism score. 2000. Correlates of State Policy Project and (Rigby and Wright, 2013).

45. *S2EconomicLiberalism*

    State 2 economic liberalism score. 2000. From Correlates of State Policy Project and (Rigby and Wright, 2013).

46. *S2SocialLiberalism*

    State 2 social liberalism score. 2000. From Correlates of State Policy Project and (Rigby and Wright, 2013).

47. *MassSocLibDif*

    Difference between State 1 and State 2 mass social liberalism. Negative values indicate State 2 has a higher score. State-level mass liberalism and policy liberalism scores come from (Caughey and Warshaw, 2018).

48. *MassEconLibDif*

    Difference between State 1 and State 2 mass economic liberalism. Negative values indicate State 2 has a higher score. State-level mass liberalism and policy liberalism scores come from (Caughey and Warshaw, 2018).

49. *PolSocLibDif*

    Difference between State 1 and State 2 policy social liberalism. Negative values indicate State 2 has a higher score. State-level mass liberalism and policy liberalism scores come from (Caughey and Warshaw, 2018).

50. *PolEconLibDif*

    Difference between State 1 and State 2 policy economic liberalism. Negative values indicate State 2 has a higher score. State-level mass liberalism and policy liberalism scores come from (Caughey and Warshaw, 2018).

51. *State1PolSocLib*

    State 1 social policy liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal social policies.

52. *State1PolEconLib*

    State 1 economic policy liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal economic policies.

53. *State1MassSocLib*

    State 1 mass social liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal social attitudes from the public in that state.

54. *State1MassEconLib*

    State 1 mass economic liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal economic attitudes from the public in that state.

55. *State2PolSocLib*

State 2 social policy liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal social policies.

56. *State2PolEconLib*

    State 2 economic policy liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal economic policies.

57. *State2MassSocLib*

    State 2 mass social liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal social attitudes from the public in that state.

58. *State2MassEconLib*

    State 1 mass economic liberalism score from (Caughey and Warshaw, 2018). Higher values indicate more liberal economic attitudes from the public in that state.

59. *RaceDif*

    Total absolute value of differences in each racial group. Lower values indicate more similarity between State 1 and State 2.

60. *LatinxDif*

    Difference between State 1 and State 2 proportions of Latinx population. Negative values indicate State 2 has a larger proportion of Latinx citizens.

61. *WhiteDif*

    Difference between State 1 and State 2 proportions of white population. Negative values indicate State 2 has a larger proportion of white citizens.

62. *BlackDif*

    Difference between State 1 and State 2 proportions of Black population. Negative values indicate State 2 has a larger proportion of Black citizens.

63. *AsianDif*

    Difference between State 1 and State 2 proportions of Asian population. Negative values indicate State 2 has a larger proportion of Asian citizens.

64. *NativeDif*

    Difference between State 1 and State 2 proportions of Latinx population. Negative values indicate State 2 has a larger proportion of Native citizens.

65. *S1Latinx*

    Proportion of State 1 population that is Latinx. Race and religious demographics all from 2017 U.S. Census American Community Survey.

66. *S1White*

    Proportion of State 1 population that is non-Hispanic white. 2017 ACS.

67. *S1Black*

    Proportion of State 1 population that is Black. 2017 ACS.

68. *S1Asian*

    Proportion of State 1 population that is Asian. 2017 ACS.

69. *S1Native*

    Proportion of State 1 population that is Native. 2017 ACS.

70. *S2Latinx*

    Proportion of State 2 population that is Latinx. 2017 ACS.

71. *S2White*

    Proportion of population in State 2 that is non-Hispanic white. 2017 ACS.

72. *S2Black*

    Proportion of population in State 2 that is Black. 2017 ACS.

73. *S2Asian*

    Proportion of population in State 2 that is Asian. 2017 ACS.

74. *S2Native*

    Proportion of population in State 2 that is Native. 2017 ACS.

75. *ReligDif*

    Total absolute value of differences in each of the following religious groups: Evangelicals, Mainline Protestants, Black Protestants, Catholics, Mormons, Jews, Muslims, Buddhists, Hindus, and "Nones." Lower values indicate more similarity between State 1 and State 2.

76. *ChristianDif*

    Difference between State 1 and State 2 proportions of Christians. Includes Evangelicals, Mainline Protestants, Black Protestants, Catholics, and Mormons (also includes Orthodox Christians, Jehovah's Witnesses, and Other Christians not listed in dataset). Negative values indicate State 2 has a larger proportion of Christians.

77. *EvangelicalDif*

    Difference between State 1 and State 2 proportions of Evangelicals. Negative values indicate State 2 has a larger proportion of Evangelicals.

78. *MainlineDif*

    Difference between State 1 and State 2 proportions of mainline protestants. Negative values indicate State 2 has a larger proportion of Mainline Protestants.

79. *BPDif*

    Difference between State 1 and State 2 proportions of Black Protestants. Negative values indicate State 2 has a larger proportion of Black Protestants.

80. *CatholicDif*

    Difference between State 1 and State 2 proportions of Catholics. Negative values indicate State 2 has a larger proportion of Catholics.

81. *MormonDif*

    Difference between State 1 and State 2 proportions of Mormons. Negative values indicate State 2 has a larger proportion of Mormons.

82. *JewishDif*

Difference between State 1 and State 2 proportions of Jewish population. Negative values indicate State 2 has a larger proportion of Jewish citizens.

83. *MuslimDif*

Difference between State 1 and State 2 proportions of Muslims. Negative values indicate State 2 has a larger proportion of Muslims.

84. *BuddhistDif*

Difference between State 1 and State 2 proportions of Buddhists. Negative values indicate State 2 has a larger proportion of Buddhists.

85. *HinduDif*

Difference between State 1 and State 2 proportions of Hindus. Negative values indicate State 2 has a larger proportion of Hindus.

86. *NonesDif*

Difference between State 1 and State 2 proportions of religious "nones." Nones include unaffiliated (atheist or agnostic), those identify with "nothing in particular" and those who say they "don't know." Negative values indicate State 2 has a larger proportion of "nones."

87. *NPDif*

Difference between State 1 and State 2 proportions of those identifying as "nothing in particular." Negative values indicate State 2 has a larger proportion of those identified as "nothing in particular."

88. *ReligiosityDif*

Difference between State 1 and State 2 proportions of highly religious people from the *highlyreligious* variables. Negative values indicate State 2 has a larger proportion of highly religious people.

89. *S1Christian*

Proportion of State 1 identifying as Christian, all traditions and denominations. 2014 Pew Religious Landscape Study (RLS). More information:

https://www.pewforum.org/religious-landscape-study/

90. *S1Evangelical*

    Proportion of State 1 identifying as Evangelical. 2014 RLS.

91. *S1Mainline*

    Proportion of State 1 identifying as Mainline Protestant. 2014 RLS.

92. *S1BlackProt*

    Proportion of State 1 identifying as Black Protestant. 2014 RLS.

93. *S1Catholic*

    Proportion of State 1 identifying as Catholic. 2014 RLS.

94. *S1Mormon*

    Proportion of State 1 identifying as Mormon. 2014 RLS.

95. *S1Jewish*

    Proportion of State 1 identifying as Jewish. 2014 RLS.

96. *S1Muslim*

    Proportion of State 1 identifying as Muslim. 2014 RLS.

97. *S1Buddhist*

    Proportion of State 1 identifying as Buddhist. 2014 RLS.

98. *S1Hindu*

    Proportion of State 1 identifying as Hindu. 2014 RLS.

99. *S1Nones*

    Proportion of State 1 identifying as "Nones." Includes atheists, agnostics, and those who are "nothing in particular." 2014 RLS.

100. *S1NothingParticular*

    Proportion of State 1 identifying as "nothing in particular" in regards to religion. 2014 RLS.

101. *S1HighlyReligious*

Proportion of State 1 population identifying as "Highly Religious" on religious observance index. 2014 RLS. More information on index from Pew:

> "The index is created by combining four individual measures of religious observance - self-assessment of religionâĂŹs importance in oneâĂŹs life, religious attendance, frequency of prayer, and belief in God. Respondents are assigned a score of 1 on each of the four measures on which they exhibit a high level of religious observance, a score of 0 on each of the measures on which they exhibit a medium level of religious observance, and a score of -1 on each measure on which they exhibit a low level of religious observance."

102. *S2Christian*

Proportion of State 2 identifying as Christian, all traditions and denominations. 2014 RLS.

103. *S2Evangelical*

Proportion of State 2 identifying as Evangelical. 2014 RLS.

104. *S2Mainline*

Proportion of State 2 identifying as Mainline Protestant. 2014 RLS.

105. *S2BlackProt*

Proportion of State 2 identifying as Black Protestant. 2014 RLS.

106. *S2Catholic*

Proportion of State 2 identifying as Catholic. 2014 RLS.

107. *S2Mormon*

Proportion of State 2 identifying as Mormon. 2014 RLS.

108. *S2Jewish*

Proportion of State 2 identifying as Jewish. 2014 RLS.

109. *S2Muslim*

Proportion of State 2 identifying as Muslim. 2014 RLS.

110. *S2Buddhist*

Proportion of State 2 identifying as Buddhist. 2014 RLS.

111. *S2Hindu*

Proportion of State 2 identifying as Hindu. 2014 RLS.

112. *S2Nones*

Proportion of State 2 identifying as "Nones." Includes atheists, agnostics, and those who are "nothing in particular." 2014 RLS.

113. *S2NothingParticular*

Proportion of State 1 identifying as "nothing in particular" in regards to religion. 2014 RLS.

114. *S2HighlyReligious*

Proportion of State 2 population identifying as "Highly Religious" on religious observance index. 2014 RLS. More information on index from Pew:

> "The index is created by combining four individual measures of religious observance - self-assessment of religion's importance in one's life, religious attendance, frequency of prayer, and belief in God. Respondents are assigned a score of 1 on each of the four measures on which they exhibit a high level of religious observance, a score of 0 on each of the measures on which they exhibit a medium level of religious observance, and a score of -1 on each measure on which they exhibit a low level of religious observance."

References

Boehmke, Frederick, Mark Brockway, Bruce Desmarais, Jeffrey J. Harden, Scott LaCombe, Fridolin Linder and Hanna Wallach. 2019. "State Diffusion Networks - Latent Network Ties from SPID v1.0.". type: dataset.
URL: *https://dataverse.harvard.edu/citation?persistentId=doi:10.7910/DVN/1QJCDJ*

Caughey, Devin and Christopher Warshaw. 2018. "Policy Preferences and Policy Change: Dynamic Responsiveness in the American States, 1936âĂŞ2014." *American Political Science Review* 112(2):249–266.
URL: *https://www.cambridge.org/core/product/identifier/S0003055417000533/type/journal*$_a$*rticle*

Erikson, Robert S., Gerald C. Wright and John P. McIver. 1993. *Statehouse democracy: public opinion and policy in the American states*. Cambridge ; New York: Cambridge University Press.

Holmes, ThomasÂăJ. 1998. "The Effect of State Policies on the Location of Manufacturing: Evidence from State Borders." *Journal of Political Economy* 106(4):667–705.
URL: *https://www.journals.uchicago.edu/doi/10.1086/250026*

Rigby, Elizabeth and Gerald C. Wright. 2013. "Political Parties and Representation of the Poor in the American States: POLITICAL PARTIES AND REPRESENTATION OF THE POOR." *American Journal of Political Science* 57(3):552–565.
URL: *http://doi.wiley.com/10.1111/ajps.12007*