

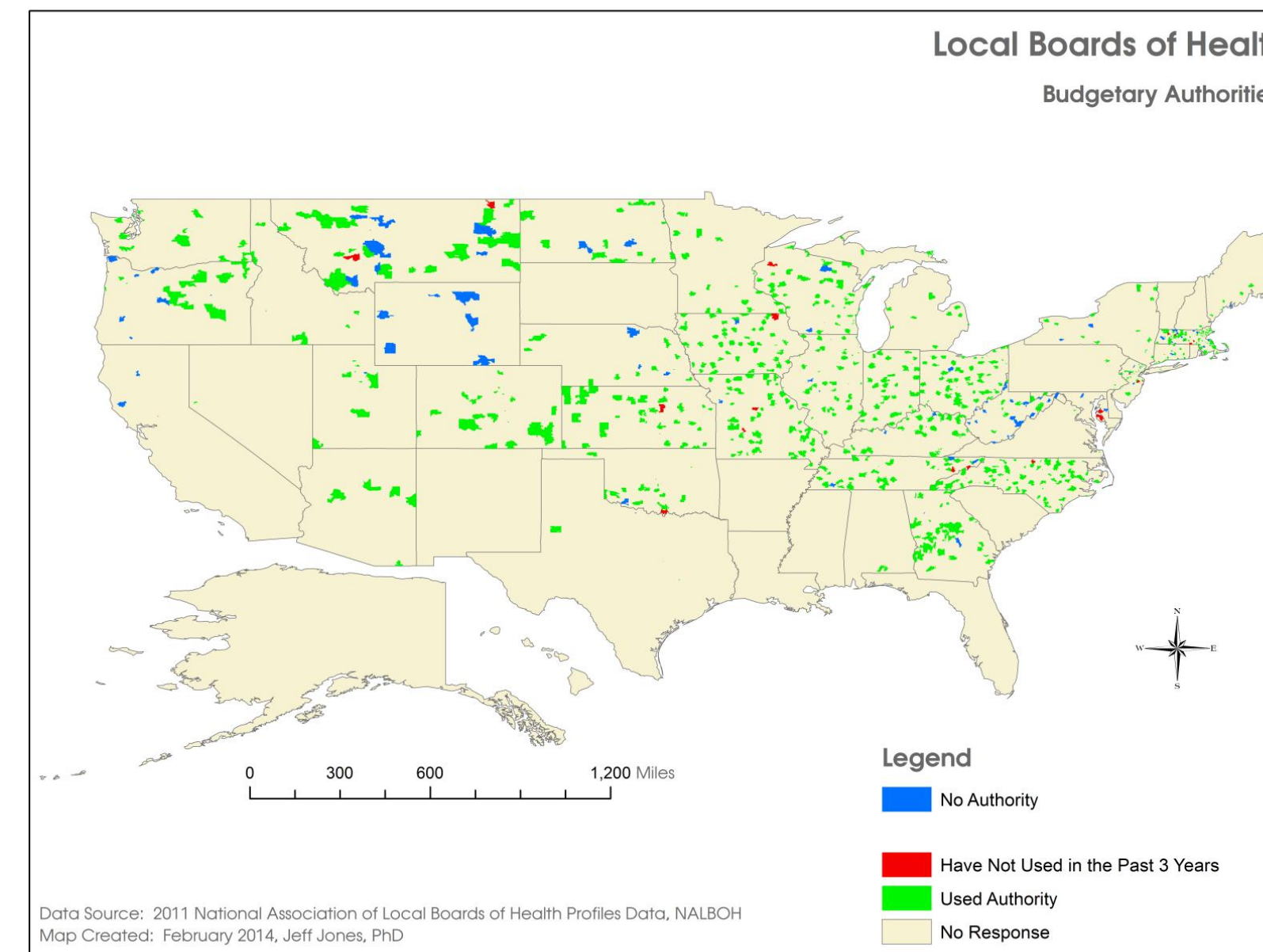
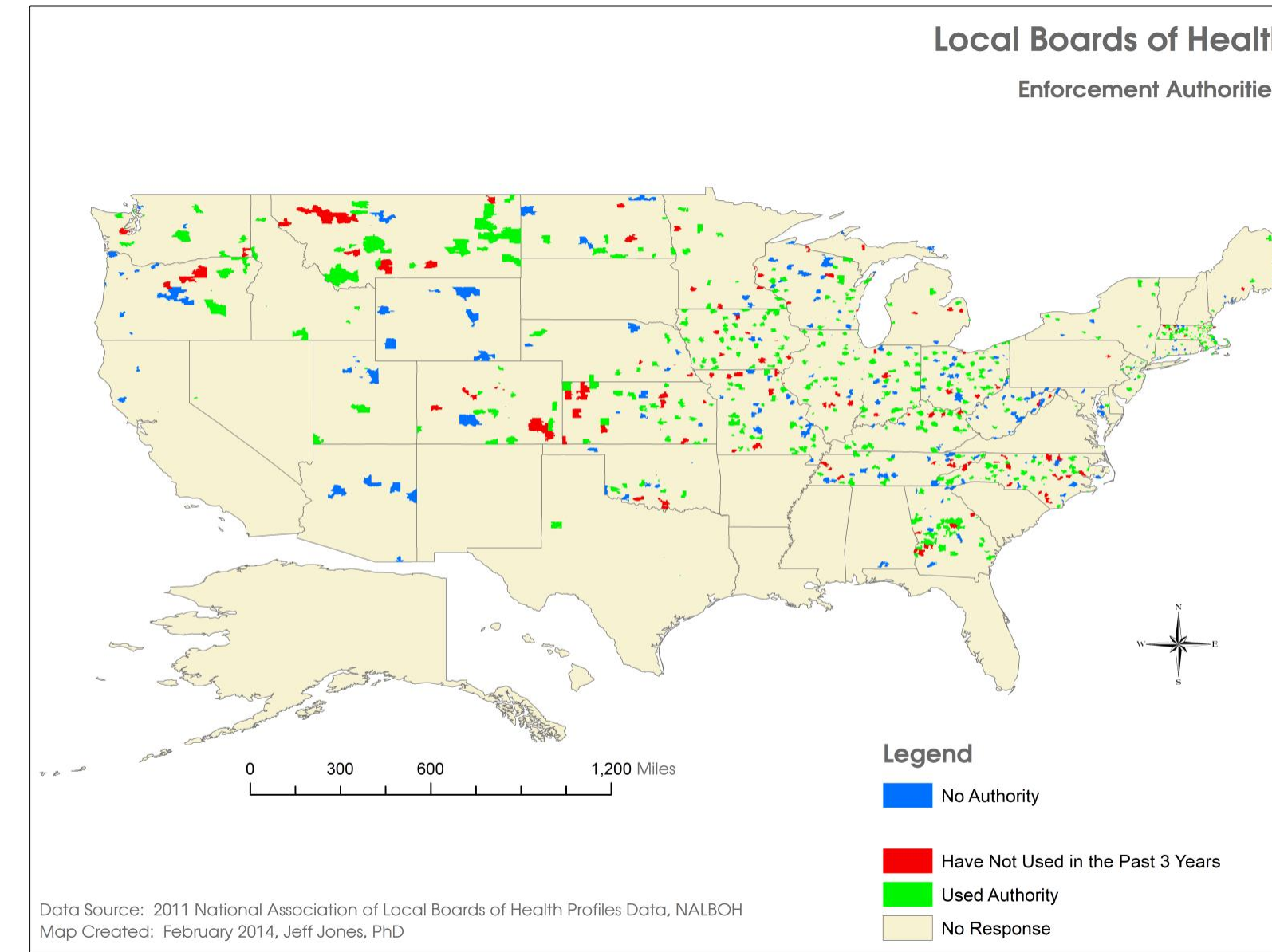
Background

While some studies of local health departments (LHDs) suggest that local boards of health (LBOH) make an important contribution to higher performance by LHDs, other studies find LBOHs have no significance on LHDs' performance or local community health. To assess LBOHs' significance, the studies use a binary dummy variable capturing if a LHD has or does not have a LBOH. However, analyses based on measures/variables capturing powers and authorities of LBOHs can provide better insights into significance and complexities of LBOHs' functions.

Data on LBOH powers drawn from the 2011 National Association of Local Boards of Health (NALBOH) Profile reveal complexities regarding the presence and significance of LBOHs.

One on hand, a number of studies report having a LBOH does improve public health in a number of ways. Communities with a LBOH have a lower incidence of sexually transmitted diseases¹ and are better prepared for emergencies.² The strongest areas in which an active LBOH aids a LHD and community health outcomes appear to be public health advocacy and LHD performance. LHDs with a policy-making LBOH engage in more activities to improve local public health and are better at mobilizing community partners to solve public health problems.³ Researchers also pinpoint LBOHs as serving as effective public health advocates.^{4,5} Active LBOHs also appear to have the power to leverage local authorities to increase public health spending levels and to reduce risks of reductions to LHDs' budgets.⁷ On the other hand, other research finds no or marginal impact from a LHD having a LBOH.^{6,9}

- Rodriguez HP, Chen J, Owusu-Edusei K, Suh A, Bekemeier B. Local public health systems and the incidence of sexually transmitted diseases. *American journal of public health.* 2012;102(9):1773-1781.
- Savoia E, Rodday AM, Stoto MA. Public health emergency preparedness at the local level: results of a national survey. *Health services research.* 2009;44(5p2):1909-1924.
- Mays GP, Halverson PK, Baker EL, Stevens R, Vann JJ. Availability and perceived effectiveness of public health activities in the nation's most populous communities. *American Journal of Public Health.* 2004;94(6):1019-1026.
- Scutchfield FD, Knight EA, Kelly AV, Bhandari MW, Vasilescu IP. Local public health agency capacity and its relationship to public health system performance. *Journal of Public Health Management and Practice.* 2004;10(3):204-215.
- Pomeranz JL. The unique authority of state and local health departments to address obesity. *American journal of public health.* 2011;101(7):1192-1197.
- Dearlove JV, Glantz SA. Boards of health as venues for clean indoor air policy making. *American Journal of Public Health.* 2002;92(2):257-265.
- Mays GP, Smith SA. Geographic variation in public health spending: correlates and consequences. *Health services research.* 2009;44(5p2):1796-1817.
- Mays GP, McHugh MC, Shim K, et al. Institutional and economic determinants of public health system performance. *American Journal of Public Health.* 2006;96(3):523-531.
- Costich JF, Patton DJ. Local Legal Infrastructure and Population Health. *American journal of public health.* 2012;102(10):1936-1941.



Methods

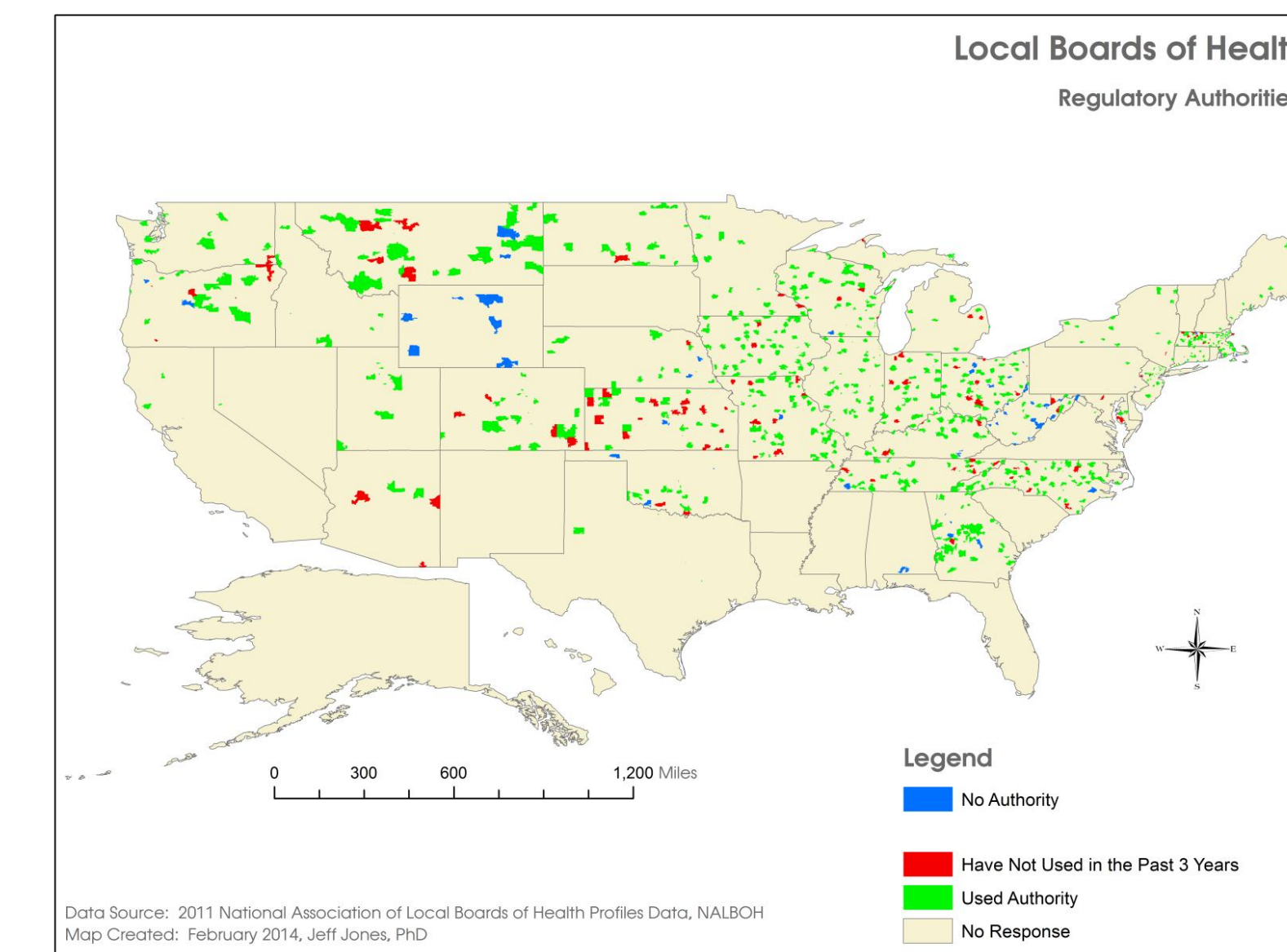
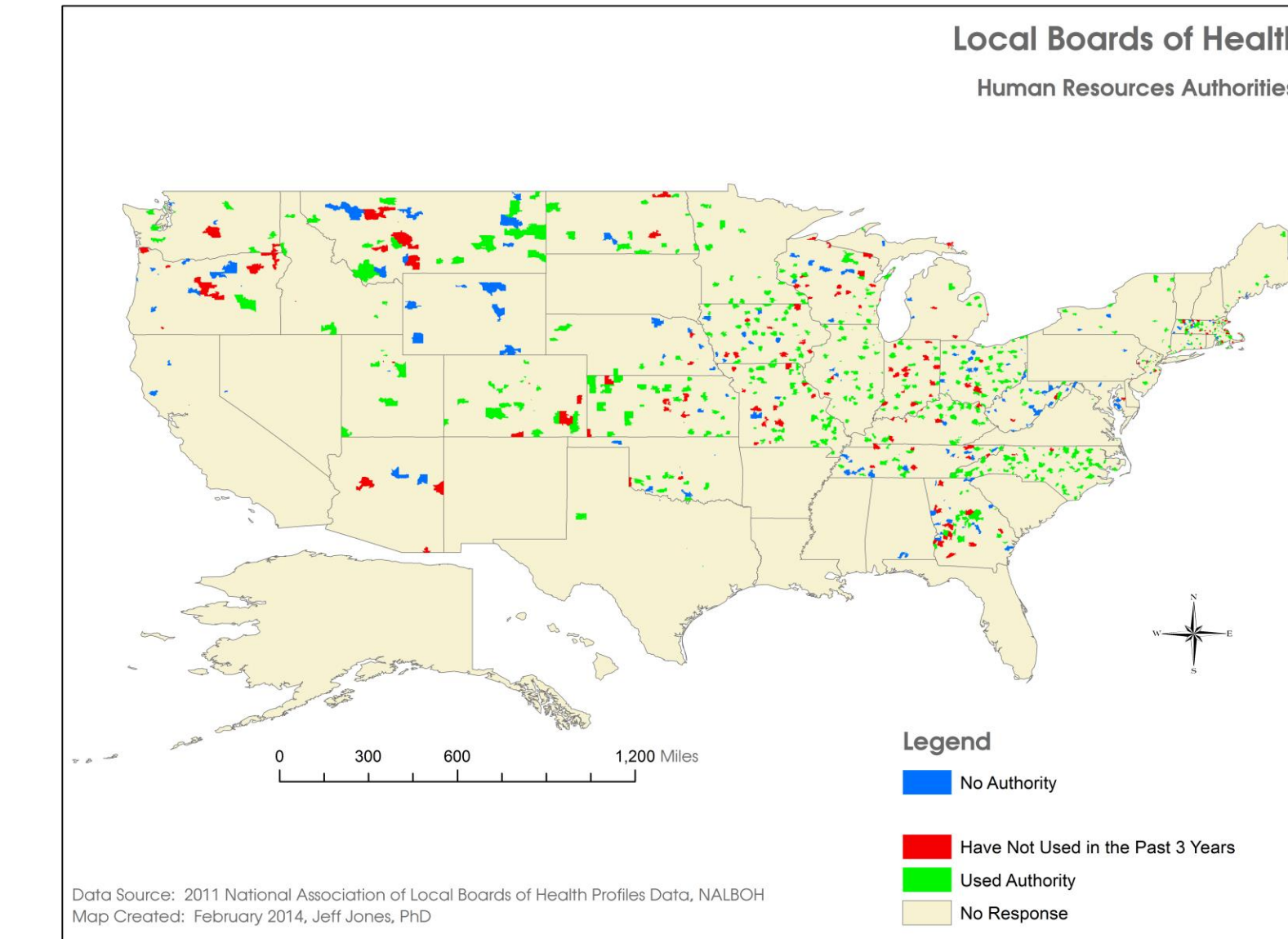
Using national profile sample data from the National Association of Local Boards of Health (NALBOH), we categorized LBOHs using 34 variables based on four domains of responsibilities and duties: enforcement powers, regulatory powers, human resource powers, and budgetary powers. Using SPSS 21, we examined whether LBOHs with particular powers differed from their peers without such authorities. We also used ArcGIS 10.1 to spatially analyze and map the data for regional and national patterns.

	n	Done within past 3 years (%)	Not done within 3 years, but have authority (%)	No authority (%)
Recommend health department budget approval	343	74.6	3.8	6.4
Review public health regulations	339	72.9	20.6	1.8
Recommend health department priorities	343	72	15.7	3.2
Approve health department budget	343	70.8	1.7	17.5
Collaborate with health department to establish priorities	340	66.8	18.8	2.6
Recommend public health priorities	338	61.8	26.9	2.7
Establish health department priorities	341	60.7	18.8	9.1
Enforce public health regulations	341	58.9	19.6	12.6
Recommend community health priorities	339	58.1	30.4	2.4
Establish public health policies	340	56.2	25	8.8
Adopt public health regulations	340	56.2	23.8	13.2
Identify sources of funding	338	56.2	18.3	6.5
Collaborate with health department for strategic plan	342	54.7	31.9	2.6
Revise public health regulations	337	54.3	28.2	11
Propose public health regulations	335	54	32.8	6
Receive fees	339	53.4	4.4	16.8
Approve grant applications	339	53.1	13.3	12.7
Establish community health priorities	339	52.5	29.8	7.1
Conduct performance evaluations of health director/officer/CEO	342	47.4	19.6	15.2
Alignment of health department budget with strategic plan	338	47	24	7.7
Ensure a community health assessment is done	341	44.6	38.7	4.7
Participate in preparing requests for grants	341	43.1	26.4	6.2
Budget allowance for board training	343	42.9	28.3	10.2
Ensure community health improvement plan	339	41.9	40.7	5
Conduct a community health assessment	353	35.8	39	5.9
Receive fines and penalties	338	32.2	10.9	24.3
Hire/fire health director/officer/CEO	345	22.6	40.9	19.7
Establish board performance measures	343	21.6	59.5	2.9
Hire/fire health department staff	341	19.6	16.7	42.5
Recommend hire/fire health director/officer/CEO	340	19.4	41.2	9.1
Request a levy	337	19.3	22.6	25.2
Conduct a board of health self-assessment	343	16.9	64.4	2.6
Develop a board performance plan	341	12.3	66.6	2.6

Discussion

Do LBOHs matter? LBOHs are the predominant governance structure for local health departments in general and in rural areas especially. The diversity of authorities and their uses found in this study suggest a need for a deeper analysis that takes into account more than whether a local health department has or does not have a LBOH. In Idaho for example, every LBOH reported being an active one in all four domains. In Wyoming, every reporting LBOH categorizes itself as having no authorities. These LBOHs are different in their powers to influence community health.

Future research from this project includes developing a deeper typology of LBOHs as well as investigating whether variations within a state reflect allowances granted under local control or errors in knowledge and perceptions of authority by the self-reporting LBOHs.



Results

Budgetary Authorities: LBOHs with budgetary authorities (91.3% of all LBOHs) are more likely to be elected ($p=.001$) and to have board chairs with longer tenures ($p=.007$). Most (97%) LBOHs with such powers have used them in the past 3 years and are thus considered *active* LBOHs in regards to budgetary authorities. Active LBOHs differ from other LBOHs with budgetary powers in that they are more likely to have members designated by statute to a non-elected position ($p=.000$).

Human Resources Authorities: Eighty-four percent (83.5%) of LBOHs report having human resources authorities, and these LBOHs do not differ from their peers in any significant way in terms of board composition or demographics. Most (73.6%) LBOHs with such powers have used them in the past 3 years. These *active* LBOHs are more likely to have provided training to their chairs ($p=.004$).

Regulatory Authorities: Ninety-six percent of LBOHs report having regulatory authorities, and these LBOHs are more likely to have a chair who has worked in public health ($p=.000$) and more likely to serve a city or multi-county jurisdiction ($p=.005$). Most (86.6%) LBOHs with such powers have used them in the past 3 years. These *active* LBOHs are more likely to have provided training to their chairs ($p=.002$), have more board members ($p=.036$), have more female board members ($p=.005$) and are more likely to be an appointed board ($p=.017$).

Enforcement Authorities: Seventy-seven percent (76.5%) of LBOHs report having enforcement authorities and are less likely to have female board members ($p=.030$), Native American members ($p=.005$) and fewer Native Hawaiian and Pacific Islander members ($p=.015$). Most (78.8%) LBOHs with such powers have used them in the past 3 years. These *active* LBOHs are more likely to serve a city or multi-county jurisdiction ($p=.000$).