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TESTING THE GEOGRAPHICAL PROXIMITY
HYPOTHESIS: AN EMPIRICAL STUDY OF CITATIONS
TO NONBINDING PRECEDENTS BY INDIANA
APPELLATE COURTS

*Kevin Bennardo**

INTRODUCTION

It is difficult to gauge with certainty what makes one nonbinding judicial opinion “more persuasive” to a deciding court than another. Advice in this area comes mostly in the form of intuitive guesswork, anecdote, and hearsay. One oft-repeated factor bearing on persuasiveness is the geographical proximity between the court of decision and the court that generated the nonbinding precedent.¹ While instinctively attractive, this testable assertion has largely gone untested. Despite the lack of evidence, many resources list geographical proximity as a consideration when ranking the persuasiveness of nonbinding precedent.² With equally slim support, the

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1 The author colloquially refers to this proposition as the “buddy states” hypothesis.

2 See, e.g., DIANA R. DONAHOE, EXPERIENTIAL LEGAL WRITING: ANALYSIS, PROCESS AND DOCUMENTS 31 (2011) (“Also, state courts often look to neighboring states for guidance (the District of Columbia, for instance, might look to Maryland courts.”); CHRISTINA L. KUNZ ET AL., THE PROCESS OF LEGAL RESEARCH 163 (7th ed. 2008) (“In selecting from possible persuasive precedents, you should consider the following factors . . . how geographically close the sister jurisdiction is to yours.”); HELENE S. SHAPO ET AL., WRITING AND ANALYSIS IN THE LAW 22 (6th ed. 2013) (noting that some courts may favor “[d]ecisions from states that are geographically close and that have similar social or economic conditions

persuasive weight of geographical proximity has been decried elsewhere as a “popular myth.”³ This Article sets forth empirical research about the citation practices of Indiana appellate courts in order to test the proposition that geographical proximity bears on the persuasive value of nonbinding precedents.

This Article analyzes the citation patterns of the Indiana Supreme Court and the Indiana Court of Appeals from 2012 and 2013. The research underlying this Article involved a study of 1324 opinions from that time period. In those opinions, the Indiana appellate courts cited to out-of-state judicial decisions 738 times. This Article analyzes those citations to test the hypothesis that state courts are more likely to turn to decisions of geographically proximate state courts for guidance when homespun precedent is lacking. The evidence points to the conclusion that, while geographical proximity bears on persuasiveness, it does not cross regional divides. In other words, geographical proximity is important, but works only within groupings of states with shared regional identities. This answer provides a window into judicial decisionmaking that should guide advocates when selecting among a wealth of nonbinding authorities that could be cited.⁴ Moreover, it “convey[s] important information about the development of the law.”⁵

Part I summarizes existing research into citation patterns of state courts and explains why Indiana provides for a particularly good test sub-

that relate to the litigation”); NANCY L. SCHULTZ & LOUIS J. SIRICO, JR., *LEGAL WRITING AND OTHER LAWYERING SKILLS* 303 (6th ed. 2014) (“The law of some states will be more persuasive than that of other states. Generally those states that are geographically closer to your state will have case law that is similar to that of your jurisdiction.”).

3 MICHAEL D. MURRAY & CHRISTY H. DESANCTIS, *LEGAL WRITING AND ANALYSIS* 116 (2009) (dubbing the belief that “if your case is governed by North Carolina law, then cases from Virginia, West Virginia, Tennessee, Alabama, Georgia, and South Carolina should take on special weight because of geographical proximity” to be a “popular myth” unsupported by legal foundation).

4 James Leonard, *An Analysis of Citations to Authority in Ohio Appellate Decisions Published in 1990*, 86 *LAW LIBR. J.* 129, 129 (1994) (“Successful appellate advocacy depends in part on anticipating how an appellate panel will use legal authorities in resolving issues. . . . To the extent that we can identify patterns in the uses of authority in general and under specific conditions, we can make better informed guesses about how the appellate courts will respond to the different types of authority in various situations.”). It is important to remember, however, that judges’ citation practices are likely influenced by the authorities cited in the parties’ briefs. Thus, while judges’ citation practices should guide advocates in selecting precedents, the process is circular to some unknown degree because advocates’ selection of precedents no doubt has some impact on judges’ citation practices.

5 Ryan C. Black & James F. Spriggs II, *The Citation and Depreciation of U.S. Supreme Court Precedent*, 10 *J. EMPIRICAL LEGAL STUD.* 325, 326 (2013); see also John Henry Merryman, *The Authority of Authority: What the California Supreme Court Cited in 1950*, 6 *STAN. L. REV.* 613, 615 (1954) (stating that a court’s decision of which authority to apply “has a profound effect on the way the law grows and the shape legal doctrines take”).

ject. Part II sets forth the methodology underlying this study. Part III sets forth the data, including a number of graphical depictions of citation patterns. More detailed datasets may be found in appendices at the end of the Article. Lastly, Part IV synthesizes the data into a final analysis and conclusion.

I. CITATION PATTERN STUDIES

A. Existing Research

Prior research into citation patterns of state judges has yielded some noteworthy results. The most robust study to date surveyed citation patterns through a sample of 5900 opinions from sixteen state supreme courts over the period of 1870 to 1970 (referred to hereinafter as the “State Supreme Court Study”).⁶ That study found that state supreme courts were actually more likely to cite to out-of-state precedent than in-state precedent at the end of the nineteenth century.⁷ That trend changed dramatically during the twentieth century as state supreme courts became much more likely to invoke in-state precedent than out-of-state precedent.⁸ This trend is sensible, as the pool of in-state precedent has grown and modern caseloads have shifted away from common law issues to matters of state statutory interpretation.⁹

The State Supreme Court Study found that courts’ references to out-of-state cases was not indiscriminate: “there are favorites, ‘stars’ of the citation world, and some wallflowers too—courts that other courts rarely cite.”¹⁰ In the late nineteenth century, the study found three “stars”: New York, Massachusetts, and California.¹¹ In the latest period studied, 1945–1970, California moved into first place as the most cited state; the courts of New York, New Jersey, Illinois, and Texas were also cited with “special frequency.”¹² One reason for the variation is simply the disparity in the

6 Lawrence M. Friedman et al., *State Supreme Courts: A Century of Style and Citation*, 33 STAN. L. REV. 773, 774 (1981).

7 *See id.* at 797.

8 *See id.* However, three of the surveyed states—Nevada, Idaho, and Oregon—continued to cite more out-of-state cases than in-state cases even during the period of 1940–1970. *See id.* at 803.

9 *Id.* at 797–98; *see also* Eric A. Posner & Cass R. Sunstein, *The Law of Other States*, 59 STAN. L. REV. 131, 174 (2006) (“As states built up their own jurisprudences, there is a reduced need to rely on sister states for relevant information.”).

10 Friedman et al., *supra* note 6, at 801.

11 *Id.* at 804. In the study, New York accounted for twenty-six percent of all out-of-state citations in the period of 1870–1880. *Id.*

12 *Id.* at 805.

number of opinions generated by various states' court systems.¹³ It has been well-observed that more populous states generally generate more opinions than less populous states; therefore, more populous states are more likely to be cited based on sheer volume of citable opinions alone.¹⁴ The stock of citable precedent has been referred to elsewhere as a jurisdiction's "legal capital."¹⁵ However, the State Supreme Court Study concluded that variation in opinion volume did not explain everything: "[s]ome sort of 'prestige' factor, independent of population, must be involved" in the varying citation rates among states.¹⁶ Over the century surveyed, however, the "star" system faded and individual state courts had less nationwide influence.¹⁷

Using the same dataset, Peter Harris identified the influence of the West regional reporter system on citation patterns.¹⁸ Devised in the late nineteenth century, the West reporter system divides state court opinions into seven "regions" and publishes bound volumes of state court decisions by region.¹⁹ Harris observed that "[t]he appellate courts and their bars may be especially likely to own and consult the regional reporter that includes their own state's court's opinions. If so, the communication of precedent will tend to be greater within these seven arbitrary [West regional reporter] regions than between them."²⁰ According to Harris, at least before 1970, state courts exhibited a preference for citing to opinions from other courts

13 *Id.* (noting that larger states produce more state supreme court opinions and are more likely to have an intermediate appellate court that produces citable opinions).

14 *See, e.g.,* Gregory A. Caldeira, *On the Reputation of State Supreme Courts*, 5 POL. BEHAV. 83, 84 (1983) ("[S]tate supreme courts, on balance, refer more often to precedents from counterparts having written the most common law . . ."); *see also* sources cited *infra* note 31.

15 William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 262–75 (1976).

16 Friedman et al., *supra* note 6, at 806 (noting, however, that "[p]opulation and reputation are probably related"); *see also* Posner & Sunstein, *supra* note 9, at 174 (describing that under the "good state hypothesis" some states seek to "copy the institutions of the more successful states").

17 Friedman et al., *supra* note 6, at 806–07.

18 *Id.* at 807.

19 Peter Harris, *Ecology and Culture in the Communication of Precedent Among State Supreme Courts, 1870–1970*, 19 LAW & SOC'Y REV. 449, 452 (1985). For a contemporaneous (if promotional) account of the genesis of the West reporter system, see W. PUBL'G CO., LAW BOOKS BY THE MILLION: AN ACCOUNT OF THE LARGEST LAW-BOOK HOUSE IN THE WORLD,—THE HOME ESTABLISHMENT OF THE NATIONAL REPORTER SYSTEM AND THE AMERICAN DIGEST SYSTEM (1901), *reprinted in* 14 GREEN BAG 2D 311 (2011). For more modern treatment, see Ross E. Davies, *How West Law Was Made: The Company, Its Products, and Its Promotions*, 6 CHARLESTON L. REV. 231 (2012).

20 Harris, *supra* note 19, at 452–53; *see also* Caldeira, *supra* note 14, at 84 (noting the preference to cite cases from other states in the same geographical area based on "the easy access, in West's regional reporting system, to precedents").

whose opinions were reported in the same West regional reporter as the state of decision.²¹ Harris also found a significant correlation in the cultural regionalism of state courts in the form of a preference to cite to courts of neighboring states and a preference to cite to opinions of states from which many of their people had migrated.²² That cultural regionalism, however, overlapped with Harris's findings regarding the influence of West's regional reporter system.²³

Looking at cross-citations among all state supreme courts²⁴ in 1975, Gregory Caldeira used citations to create a reputational ranking of state supreme courts.²⁵ Caldeira calculated the number of citations each supreme court should garner if each out-of-state citation was made on a purely random basis.²⁶ Using this method, Caldeira found "a rather substantial skewing in the distribution of prestige among state courts of last resort," as only twenty-one of the fifty-one courts drew more than the expected number of references from other state supreme courts.²⁷ As a general matter, Caldeira found "that supreme courts in industrialized, populous, and progressive states do quite a lot better than in more agricultural, sparsely populated, and conservative ones."²⁸ Specifically, the supreme courts ranking highest in the reputational study were from California, New York, New Jersey, Pennsylvania, and Massachusetts.²⁹ The lowest ranking supreme courts hailed from the District of Columbia, Wyoming, South Dakota, Hawaii, and Vermont.³⁰

Other studies have focused on the citation practices of a single court, usually the highest court of a particular state. Looking at the raw number of out-of-state citations, these studies have fairly consistently identified a preference to cite to decisions of courts from populous states.³¹ One study

21 Harris, *supra* note 19, at 465–66 (finding no statistically significant correlation from 1870–1900, but a much stronger correlation in the period of 1940–1970).

22 *Id.* at 466–67.

23 *Id.* at 458 ("Other things being equal, one would expect more intermigration between proximate states; and the West's system of regional reporters is organized so that the decisions of proximate states are likely to be collected in the same reporter.").

24 For ease of reference, when this Article refers to states' "supreme courts" as a class, it includes courts of last resort that are not named "supreme courts," such as the New York Court of Appeals and the Maryland Court of Appeals.

25 *See* Caldeira, *supra* note 14, at 89.

26 *See id.* at 88.

27 *Id.* at 90. Caldeira's study included the supreme courts of the fifty states and the District of Columbia. *Id.* at 89.

28 *Id.* at 90.

29 *Id.* at 89.

30 *Id.*

31 *See* A. Michael Beard, *Citations to Authority by the Arkansas Appellate Courts, 1950–2000*, 25 U. ARK. LITTLE ROCK L. REV. 301, 317 (2003) (leaders in out-of-state citations were New York, California, Texas, Missouri, and Illinois); Joseph A. Custer, *Citation*

of the citation patterns of the Montana Supreme Court concluded that electronic legal research platforms like Westlaw had erased the historical preference to cite to other jurisdictions in the same West regional reporter.³² Aside from noting that some states generate more opinions than others,³³ commentators have hypothesized that some courts are preferred “based on the mere associative recollection of such names as Cardozo or Holmes,” the belief that the “social context” of litigation in the other state is similar to the home state, the belief that some state courts simply do “consistently superior work than is true in other states,”³⁴ or some measure of deference to the courts of geographical neighbors.³⁵ In some of these studies, previous researchers have attempted to control for the differences in the number of published opinions among state courts in a rough fashion: by measuring the number of running feet of decisions in bound volumes generated by each state supreme court from its inception.³⁶

Practices of the Kansas Supreme Court and Kansas Court of Appeals, 7 KAN. J.L. & PUB. POL'Y, no. 3, 1998, at 121–22 (leaders in out-of-state citations were California and New York); Richard A. Mann, *The North Carolina Supreme Court 1977: A Statistical Analysis*, 15 WAKE FOREST L. REV. 39, 45 (1979) (leaders in out-of-state citations were California, Illinois, New York, and New Jersey); John Henry Merryman, *Toward a Theory of Citations: An Empirical Study of the Citation Practice of the California Supreme Court in 1950, 1960, and 1970*, 50 S. CAL. L. REV. 381, 401 (1977) (leaders in out-of-state citations were New York, Massachusetts, Illinois, and Texas); Fritz Snyder, *The Citation Practices of the Montana Supreme Court*, 57 MONT. L. REV. 453, 463 (1996) (leaders in out-of-state citations were California and Michigan); see also James N.G. Cauthen, *Horizontal Federalism in the New Judicial Federalism: A Preliminary Look at Citations*, 66 ALB. L. REV. 783, 793 (2003) (noting that in a multistate study of constitutional decisions, the most cited jurisdictions were Pennsylvania, California, and New York). *But see* William H. Manz, *The Citation Practices of the New York Court of Appeals: A Millennium Update*, 49 BUFF. L. REV. 1273, 1279 (2001) (finding no preference to cite to other large-population states in the years of 1999 and 2000).

32 Snyder, *supra* note 31, at 463 (opining that the use of Westlaw by judges' law clerks “probably accounts for the fact that the out-of-state cases are spread throughout the United States and not concentrated in the states collected within the *Pacific Reporter 2d Series*”). An article based on a later study of Kansas opinions claimed that the West regional reporter factor “can be dispelled,” but used dubious data to support the proposition. See Custer, *supra* note 31, at 121 (comparing the raw number of citations to state courts not in the same regional reporter in 1965 to 1995 without controlling for other factors such as total number of citations or opinions).

33 Merryman, *supra* note 31, at 403 (dubbing it the “‘case-in-point’ factor” because “the probability that one will find a case in point in the decisions of the courts of a given state should be a function of the number of its published decisions”).

34 *Id.*

35 Custer, *supra* note 31, at 122; Snyder, *supra* note 31, at 463.

36 See, e.g., Caldeira, *supra* note 14, at 95; Merryman, *supra* note 31, at 403–04.

B. *Why Indiana?*

Indiana is a particularly interesting state to study. Its own supreme court ranks squarely in the middle of the pack in terms of reputation.³⁷ Neither its population nor its population density is extraordinary.³⁸ It is undoubtedly a Midwestern state in terms of public perception.³⁹ The U.S. Census Bureau counts Indiana as one of twelve states in the Midwest region.⁴⁰ Three of Indiana's immediate neighbors—Illinois, Michigan, and Ohio—are also in the Midwest region, but one—Kentucky—is not.⁴¹ The Census Bureau's Midwest region is further subdivided into two divisions.⁴² The “East North Central” division comprises Indiana, Illinois, Michigan,

37 Reputation-wise, Caldeira's study placed the Indiana Supreme Court twenty-fifth nationally. Caldeira, *supra* note 14, at 89.

38 Indiana ranks sixteenth in both population and population density. Although the data is taken from the U.S. Census (2014 estimates for population and 2013 estimates for population density), the most visually accessible way to view this information in list format is on Wikipedia. See *List of U.S. States and Territories by Population*, WIKIPEDIA, http://en.wikipedia.org/wiki/List_of_U.S._states_and_territories_by_population (last visited Mar. 30, 2015); *List of U.S. States by Population Density*, WIKIPEDIA, http://en.wikipedia.org/wiki/List_of_U.S._states_by_population_density (last visited Mar. 30, 2015); see also *Population for States and Puerto Rico: July 1, 2012*, U.S. CENSUS BUREAU, https://www.census.gov/popest/data/maps/2012/pop_size2012.pdf (last visited Mar. 30, 2015) (population map by state using 2012 estimates); *Population Density for States and Puerto Rico: July 1, 2012*, U.S. CENSUS BUREAU, https://www.census.gov/popest/data/maps/2012/pop_density2012.pdf (last visited Mar. 30, 2015) (population density map by state using 2012 estimates).

39 Respondents to one (unscientific) online poll ranked Indiana as the “most [m]idwestern” state with 28.06% of the vote. Wisconsin was second with 21.58% of the vote. See *View Poll Results: What is the Most Midwestern State?*, SKYSCRAPERCITY, <http://www.skyscrapercity.com/showthread.php?t=415522> (last visited Mar. 30, 2015). The *New York Times* files news briefs from Indiana in the “Midwest” section of its “National Briefing” section. See, e.g., *Indiana: Deal Reached in Suit over Concert Deaths*, N.Y. TIMES, Dec. 20, 2014, at A12.

40 Census regions are groupings of states that subdivide the United States into four regions—Northeast, Midwest, South, and West. *Geographic Terms and Concepts—Census Divisions and Census Regions*, U.S. CENSUS BUREAU, https://www.census.gov/geo/reference/gtc/gtc_census_divreg.html (last visited Mar. 30, 2015) [hereinafter *Geographic Terms and Concepts*].

41 *Census Regions and Divisions of the United States*, U.S. CENSUS BUREAU, http://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf (last visited Mar. 30, 2015) [hereinafter *Census Regions and Divisions*]. Kentucky is in the South region. *Id.*; see also *Kentucky: Train Kills 2-Year-Old Wandering with Dog*, N.Y. TIMES, Jan. 20, 2015, at A11 (filed in the “South” region of the “National Briefing” section).

42 Each Census region is subdivided into two or more divisions for a total of nine divisions nationwide. *Geographic Terms and Concepts*, *supra* note 40.

Ohio, and Wisconsin.⁴³ The other seven Midwestern states form the “West North Central” division.⁴⁴

In West’s regional reporter system, opinions of Indiana courts are reported in the North Eastern Reporter along with the decisions of state courts in Illinois, Ohio, New York, and Massachusetts.⁴⁵ The North Eastern Reporter is somewhat unique because it contains the opinions of non-contiguous states.⁴⁶ Opinions of Indiana’s other immediate neighbors—Michigan and Kentucky—are published in the North Western and South Western Reporters, respectively.⁴⁷

II. METHODOLOGY

In this study, the author sought to capture a meaningful dataset of citations by Indiana appellate courts to out-of-state judicial opinions. It was not important to capture every single out-of-state citation during the relevant timeframe, but rather to capture a significantly large and randomized sample. The time period this study covers is calendar years 2012 and 2013. At the time the research was compiled in late 2014, these two years were the most recent complete years of judicial opinions and the opinions from those years had already been published in the North Eastern Reporter.

The author used Lexis Advance to manually count citations in the databases for Indiana Court of Appeals opinions and Indiana Supreme Court opinions.⁴⁸ First, in each database, the date range was limited to the relevant two-year span. For the Indiana Court of Appeals, the results were further limited to “reported” opinions because it was thought that reported opinions would be more likely to contain citations to out-of-state precedents than unreported opinions. Within those limits, the search returned a set of 1134 court of appeals opinions.⁴⁹

43 *Census Divisions and Regions*, *supra* note 41.

44 *Id.* (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota).

45 *Regional Reporters Map*, WESTLAW, https://lawschool.westlaw.com/userguides/nationalreporter/west_map_reg_v6/reg_reporters_map.html (last visited Mar. 30, 2015). For New York, the North Eastern Reporter only contains decisions of the highest state court; opinions of lower New York state courts appear in state-specific reporters. *United States Legal Research for L.L.M. Students*, UNIV. OF CHI. LIBRARY, <http://guides.lib.uchicago.edu/content.php?pid=97392&sid=743112> (last visited Mar. 30, 2015).

46 The Atlantic Reporter also comprises noncontiguous states, but those states are arguably of a more similar character. *Regional Reporters Map*, *supra* note 45.

47 *Id.*

48 The databases are designated “IN Appeals Court Cases from 1891” and “IN Supreme Court Cases from 1817,” respectively.

49 The Indiana Court of Appeals opinion set was split between 552 opinions from 2012 and 582 opinions from 2013.

The limitation for only reported opinions was not imposed on the Indiana Supreme Court opinion database. Instead, two filters were put in place to exclude decisions without published opinions and attorney disciplinary matters.⁵⁰ The former group was excluded because these decisions literally lack an opinion, and therefore do not contain any citations. The latter group was excluded because, after sampling and trial and error, the author determined that attorney disciplinary matters rarely cite to out-of-state precedents and therefore review of attorney disciplinary opinions would be a time-consuming endeavor yielding very little relevant information. Within those limits, a total of 190 Indiana Supreme Court opinions were included in the study.⁵¹

Thus, a total of 1324 opinions were analyzed in this study. For each opinion, the author accessed the Table of Authorities through the Shepard's function on Lexis Advance. The author then logged various information about the citations contained in each of the 1324 opinions, including the number of times each Indiana opinion cited to a court of another jurisdiction. For purposes of this study, each reference to a discrete out-of-state opinion in each Indiana opinion was counted as one citation.⁵²

Of the 1324 Indiana opinions, 687 cited to only Indiana state court opinions.⁵³ An additional fourteen opinions did not cite to any judicial opinions⁵⁴ and another eighty decisions of the court of appeals lacked an accompanying opinion.⁵⁵ In all, the author identified 738 citations to the other forty-nine states.⁵⁶ Citations to federal opinions were not counted

50 In combination, the two filters were: "(NOT("decision without published opinion")) and (NOT(NAME("in the matter of" or "failure to satisfy costs")))". With some overlap, those filters excluded 1893 opinions of the Indiana Supreme Court.

51 The Indiana Supreme Court opinion set was split between 109 opinions from 2012 and eighty-one opinions from 2013.

52 For example, imagine two precedents from the Ohio Supreme Court: the *Jones* case and the *Smith* case. Further imagine that opinion #1 of the Indiana Supreme Court cited to the *Jones* case once and the *Smith* case five times. Opinion #2 of the Indiana Supreme Court cited to the *Jones* case three times and did not cite to the *Smith* case. The citation tally for this study would be two Indiana citations to the *Jones* case and one citation to the *Smith* case.

53 In one opinion, the Indiana Court of Appeals managed to cite to fifty-five Indiana judicial opinions without a single citation to an out-of-state precedent. *See Wagler v. W. Boggs Sewer Dist., Inc.*, 980 N.E.2d 363 (Ind. Ct. App. 2012).

54 *See, e.g., Zavodnik v. Rinaldi*, 997 N.E.2d 1044 (Ind. 2013) (per curiam); *Ponce v. State*, 988 N.E.2d 805 (Ind. Ct. App. 2013) (ordering publication of decision); *In re Pilot Project for Expedited Transcripts*, 977 N.E.2d 1010 (Ind. Ct. App. 2012).

55 *See, e.g., Mahler v. State*, 985 N.E.2d 79 (Ind. Ct. App. 2013) (affirming without opinion).

56 The District of Columbia Court of Appeals was cited four times, but neither the District of Columbia nor the U.S. territories were not included in this study. Citations to out-of-state authorities were counted toward the total regardless of whether the citation appeared in a majority, concurring, or dissenting opinion and regardless of the type of citation

toward out-of-state citations and were not used in any of the following analyses.⁵⁷

III. THE DATA

A. Raw Citation Counts

The most straightforward way to report the data is to simply divide the 738 out-of-state citations by state and look for patterns. Using that method, the mean citation rate for the other forty-nine states is 15.06 citations per state over the two-year period. The states to garner the most raw citations were California (43), New York (38), Illinois (35), Florida (32), Michigan (29), Texas (27), and Ohio (26). Notably, three of those states border Indiana. The states which received the fewest raw citations were Wyoming (1), South Dakota (3), West Virginia (4), and Hawaii, Nevada, New Hampshire, North Dakota, and Utah (6 apiece). Figure 1, below, graphically depicts the raw citation data.⁵⁸

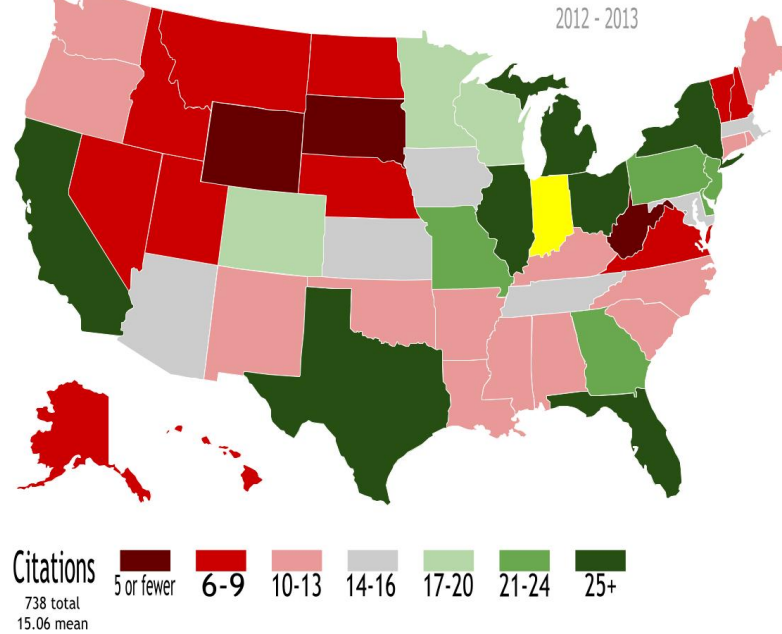
within Lexis Advance's classification system (e.g., "following," "citing," and "criticizing"). A study of only "following" citations in majority opinions would provide a clearer picture of what precedents are most persuasive to deciding courts. Less than one-quarter of the out-of-state citations by the Indiana Supreme Court were "following" citations; it would therefore require a much larger sample set of Indiana opinions to capture a significantly large quantity of "following" citations to out-of-state authority. To further compound things, Lexis Advance logs some cited sources in multiple categories (for example, a single source may be cited as both "distinguishing" and "criticizing") and some in no category at all.

⁵⁷ The federal opinions cited by the Indiana courts were overwhelmingly from the U.S. Supreme Court (1093 citations) and the U.S. Court of Appeals for the Seventh Circuit (213 citations).

⁵⁸ The raw citation data for each state may be found in Appendix A.

FIGURE 1

Citations by Indiana Supreme Court and Court of Appeals
to Out-of-State Judicial Opinions



A few observations are worthy of note. First, all of the states in Indiana's Census division—Illinois, Michigan, Ohio, and Wisconsin—are cited above the mean. Kentucky, which borders Indiana but is not in the same Census region or division, is cited below the mean. The rest of the Midwest region shows some geographical favoritism: the three most eastern states of the West North Central division (Minnesota, Iowa, and Missouri) are all cited above the mean while the four more distant states (the Dakotas, Nebraska, and Kansas) are all cited below or very near to the mean. Of the Census Bureau's West region, two states were cited above the mean, ten states below the mean, and one state near the mean. Of the states in the Census Bureau's South region, four states were cited above the mean, ten states below the mean, and two states near the mean. In the Northeast region, three states were cited above the mean, five states were cited below the mean, and one state near the mean. In that region, the three states geographically closest to Indiana—Pennsylvania, New York, and New Jersey—were the only three to garner significantly above-mean citations.⁵⁹

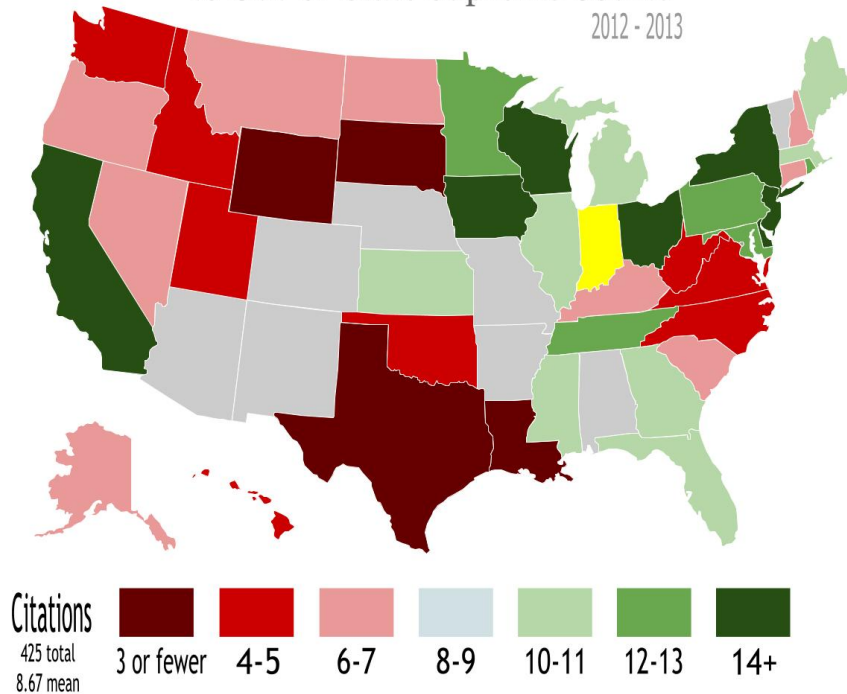
⁵⁹ Here are the raw citations for those three states: Pennsylvania (23), New York (38), and New Jersey (23).

The majority of out-of-state citations by Indiana courts were to other states' court of last resort (425 out of 738 citations). That preference was not evenly observed at the Indiana Supreme Court and Indiana Court of Appeals levels. For its part, 69% of the Indiana Supreme Court's out-of-state citations were to other states' court of last resort; only 31% were to other states' lower courts. The Indiana Court of Appeals spread its citations much more equally between other states' courts of last resort and lower courts. Indeed the citation split from the opinions of the Indiana Court of Appeals was 50% to other states' supreme courts and 50% to other states' lower courts.

Given the predominance of citations to other states' supreme courts, it is worthwhile to look at only those citations. Raw citations by both Indiana courts to other states' courts of last resort are depicted in Figure 2, below.⁶⁰

FIGURE 2

Citations by Indiana Supreme Court and Court of Appeals to Out-of-State Supreme Courts



Some similarities and differences are observable between Figures 1 and 2. A notable similarity is a continued preference to cite to the other states in Indiana's Census division, as well as other geographically proxi-

⁶⁰ The data underlying Figure 2 is reproduced in Appendix A.

mate Midwest states such as Iowa and Minnesota. The bordering state of Kentucky remains below-average on citations. A notable difference is Texas' dramatic shift from being cited well above the mean in Figure 1 to well below the mean in Figure 2.⁶¹

Grouping the states by West regional reporter, the North Eastern Reporter has the highest per-state average citation rate both for overall citations and for citations to state supreme court decisions.⁶² States in the South Eastern Reporter had the lowest per-state average citation rate under both calculations.

TABLE 1

West Regional Reporter	Average Citations per State (All Out-of-State Opinions) ⁶³	Average Citations per State (Only State Supreme Court Opinions)
North Eastern	28.8	13.5
South Western	17.2	7
Southern	17.0	7.5
Atlantic	14.6	10.9
North Western	14.6	10
Pacific	11.9	7.1
South Eastern	11.4	6.4

A moment's reflection reveals that raw citation rates are subject to significant interference.⁶⁴ Judicial systems in populous states have large dockets. As a general matter, they generate a greater wealth of precedents that could be cited. Returning to the raw citation data for all out-of-state

61 Indeed, the Texas Supreme Court was not cited a single time within the dataset. For purposes of Figure 2, the Texas Supreme Court was considered the sole relevant court of last resort even though the Texas Court of Criminal Appeals is the highest court of appeals in criminal cases.

62 The average citation rate per state is determined by taking the total number of citations to state courts in the West region and dividing it by the number of states in the region. Citations to Indiana courts were not included in this calculation; thus, the North Eastern Reporter region comprises Illinois, Ohio, New York, and Massachusetts for purposes of this analysis.

63 Note that this column includes citations to all state courts, even if the decisions were not reported in a West regional reporter (for example, citations to intermediate appellate courts in New York and California were factored into the average citation rate, even though decisions of those courts are reported in state-specific West reporters rather than the regional reporters).

64 See David Blumberg, *Influence of the Massachusetts Supreme Judicial Court on State High Court Decisionmaking 1982–1997: A Study in Horizontal Federalism*, 61 ALB. L. REV. 1583, 1589 (1998) (“Looking solely at raw citations can be deceiving.”).

opinions, it takes little probing to realize that the lists of the most and least heavily cited state courts bear striking similarities with a ranking of states by population. All of the seven most heavily cited states are also among the ten most populous states, and five are the five most populous.⁶⁵ And the least frequently cited states all rank quite low population-wise.⁶⁶ Indeed, only one state in the bottom half of states ranked by population had a raw citation count above the mean. That state, Delaware, presents a special circumstance because of its reputation as a leader in the field of corporate law.⁶⁷

In short, raw citation counts cannot be the end of the inquiry. Perhaps Indiana courts cite to other states in Indiana's Census division because those states are all relatively populous.⁶⁸ Perhaps Indiana courts cite more heavily to other states in the North Eastern Reporter because those states are all relatively populous.⁶⁹ Perhaps Kentucky is cited below the mean because its population is below the mean.⁷⁰ In order for the data to be more useful, population—or more accurately, the number of citable opinions generated by a state's court system—must be controlled for.

65 As of 2014, the top five states by population are California, Texas, Florida, New York, and Illinois. Ohio is seventh and Michigan is tenth. The only state in the top ten most populous states with a raw citation count below the mean was North Carolina. All state population data referenced in this Part is taken from the Census Bureau's July 1, 2014 estimates. *Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2014*, U.S. CENSUS BUREAU, <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk> (last visited Mar. 30, 2015) [hereinafter *State Annual Estimates*]. The data may be downloaded as a spreadsheet at <http://www.census.gov/popest/data/state/totals/2014/tables/NST-EST2014-01.xls> (last visited Mar. 30, 2015). See also Press Release, U.S. Census Bureau, Florida Passes New York to Become the Nation's Third Most Populous State (Dec. 23, 2014), <http://www.census.gov/newsroom/press-releases/2014/cb14-232.html> (accompanying press release listing the ten most populous states).

66 Wyoming is the least populous state; West Virginia is thirty-eighth; South Dakota is forty-sixth. *State Annual Estimates*, *supra* note 65.

67 See, e.g., Donald F. Parsons Jr. & Joseph R. Slight III, *The History of Delaware's Business Courts: Their Rise to Preeminence*, BUS. L. TODAY, Mar./Apr. 2008, at 21, 25 ("Delaware is the forum of choice for resolving complex business and commercial issues"); Omari Scott Simmons, *Branding the Small Wonder: Delaware's Dominance and the Market for Corporate Law*, 42 U. RICH. L. REV. 1129, 1139 (2008) (noting "Delaware's dominance in the corporate charter competition").

68 Here are the relevant population rankings: Illinois (fifth), Ohio (seventh), Michigan (tenth), and Wisconsin (twentieth). *State Annual Estimates*, *supra* note 65.

69 Here are the relevant population rankings: New York (fourth), Illinois (fifth), Ohio (seventh), and Massachusetts (fourteenth). *Id.*

70 Kentucky ranks twenty-sixth in population. *Id.*

B. Controlling for Differing Outputs of Citable Opinions

As mentioned above, some previous researchers have approximated the quantity of published judicial decisions from each state by measuring the number of running feet of decisions in bound volumes generated by each state supreme court from its inception.⁷¹ This approach is inherently flawed, a fact not unnoticed by the method's inventor.⁷² It is both imprecise and fails to capture the most relevant information needed to control for differing caseloads. First, the approach is imprecise because of the many factors that influence the physical width of each state's printed reporters, including typesetting, paper stock, binding, and the height and depth of each volume. Second, the approach fails to capture the most relevant data because it seeks to approximate the entire corpus of each state supreme court's jurisprudence. It is well-documented that the value of precedents fades rather quickly.⁷³ Courts are much more likely to cite to recent opinions than to ancient ones. Thus, to control for caseload differences, the relevant measuring tool is the *recent* output of each state's court system rather than the state's historical reserve of past opinions.

In order to control for recent outputs of citable opinions, the author tallied the published opinions of each state court system from 2012 and 2013. The data was compiled using WestlawNext in late 2014. The author ran the following search in each individual court database in each state. First, the court was selected as a search limit (e.g., "Illinois Appellate Court"). Then, using the advanced search function, the date range was limited to January 1, 2012 to December 31, 2013.⁷⁴ This search returned the total number of opinions for the selected court during the two-year time span (e.g., 7457 opinions of the Illinois Appellate Court). The search was then limited to "reported" decisions (e.g., 1609 opinions of the Illinois Appellate Court). The author then sought to exclude memorandum decisions and decisions that were unpublished but nonetheless categorized as reported by WestlawNext. Thus, a filter was applied to exclude decisions containing the words "not reported in" or "(mem.)." For example, that filter excluded fourteen decisions of the Illinois Appellate Court that were not published in the North Eastern Reporter as well as two memorandum deci-

71 See, e.g., Caldeira, *supra* note 14, at 95; Merryman, *supra* note 31, at 403–04.

72 See Merryman, *supra* note 31, at 403–04 (noting that the method "requires too many unsupported assumptions to be treated seriously," but "is nevertheless fun").

73 See, e.g., Beaird, *supra* note 31, at 318 (finding that Arkansas appellate courts "predominantly cited cases less than twenty years old"); Black & Spriggs, *supra* note 5 (finding that the likelihood of citation depreciates eighty-one percent and eighty-five percent between the first and twentieth years of age); Landes & Posner, *supra* note 15, at 255 (finding that courts generally cite to Supreme Court and non-Supreme Court precedents that are less than twenty and ten years old, respectively).

74 The search language is "advanced: DA(aft 12-31-2011 & bef 01-01-2014)".

sions.⁷⁵ The author then manually confirmed the unpublished or memorandum status of each excluded opinion.⁷⁶ For example, in the Illinois Appellate Court, the filter returned two cases that the author did not exclude because they were neither unpublished nor memorandum decisions.⁷⁷ Thus, the total number of “citable opinions” generated by the Illinois Appellate Court from 2012 to 2013 was 1593.

For trial-level courts, opinions were included in the total tally of a state’s “citable opinions” if the trial-level opinion was both reported and electronically available on WestlawNext. This occurrence only took place in six states, and usually for a small number of opinions.⁷⁸ For the other forty-three states, the total number of citable opinions includes only published appellate decisions. Decisions published in state-specific reporters were included, as is the case with intermediate appellate decisions in New York and California.⁷⁹

State courts varied widely in publication practices. Some courts published all opinions while others were quite selective.⁸⁰ As a result of these and other factors, the number of citable opinions ranged from a low of 157 in Hawaii to a high of 11,607 in New York. The total number of citable opinions from the forty-nine states over the two year period was 49,709. The average output of each state was therefore roughly 1014 citable opinions over the two-year period. Based largely on publication practices, a

75 For those following along, the two memorandum decisions were *Knox v. Taylor*, 977 N.E.2d 315 (Ill. App. Ct. 2012), and *B. v. Ajradinoski (In re Estate of C.B.)*, 995 N.E.2d 594 (Ill. App. Ct. 2013).

76 For some courts, large numbers of reported memorandum decisions were excluded through painstaking effort: 5561 decisions of the Appellate Division of the New York Supreme Court, 5329 decisions of the Louisiana Supreme Court, and 4483 decisions of the Michigan Supreme Court.

77 The two decisions were *Patrick Engineering, Inc. v. Old Republic General Insurance Co.*, 973 N.E.2d 1036, 1043 (Ill. App. Ct. 2012) (returned in the search result because the body of the opinion cites to a memorandum decision), and *People ex rel. Madigan v. Kole*, 968 N.E.2d 1108, 1119 (Ill. App. Ct. 2012) (returned in the search result because the body of the opinion contains the words “not reported in”).

78 Reported trial-level decisions were included in Connecticut (11 opinions), Delaware (38 Court of Chancery and 16 Superior Court), New Jersey (32), New York (118), Ohio (3), and Pennsylvania (7).

79 The decisions of the Appellate Division of the New York Supreme Court are reported in West’s New York Supplement rather than the North Eastern Reporter. *United States Legal Research for L.L.M. Students*, *supra* note 45. The decisions of the California Court of Appeal are published in West’s California Reporter rather than the Pacific Reporter. *Id.*

80 The California Supreme Court published all of its 464 decisions (including 280 memorandum decisions) in the two-year time frame, while the same search in the Ohio Supreme Court database returned 51 reported decisions and 3708 unreported decisions.

state's output of citable opinions did not always closely correlate to its population.⁸¹

New York deserves special mention. As noted above, New York courts published 11,607 non-memorandum decisions between 2012 and 2013. That figure comprises over twenty-three percent of the total number of relevant opinions from all forty-nine states surveyed (49,709) and dwarfs the next closest state court by a factor of three.⁸² The number of citable opinions from New York's highest court (363) is above the mean but not especially notable.⁸³ The vast majority of citable New York opinions (11,126) are intermediate appellate decisions. Relatively few decisions of the Appellate Division are unreported.⁸⁴ Thus, the total count of citable opinions includes a disproportionately large number of decisions from New York's intermediate court of appeals. Given the extraordinarily high number of citable opinions, it is not difficult to imagine why New York courts garner so many raw citations.⁸⁵

The number of citable opinions generated by each state is graphically represented in Figure 3, below.⁸⁶

81 For example, Mississippi (thirty-first in population) had an above-average number of citable opinions (1419). Louisiana is twenty-fifth in population but third in number of citable opinions (2703). North Carolina and Michigan, ranking ninth and tenth in population, each had below-average citable opinion counts (971 and 421, respectively).

82 The state with the next highest number of citable opinions was Florida with 3860.

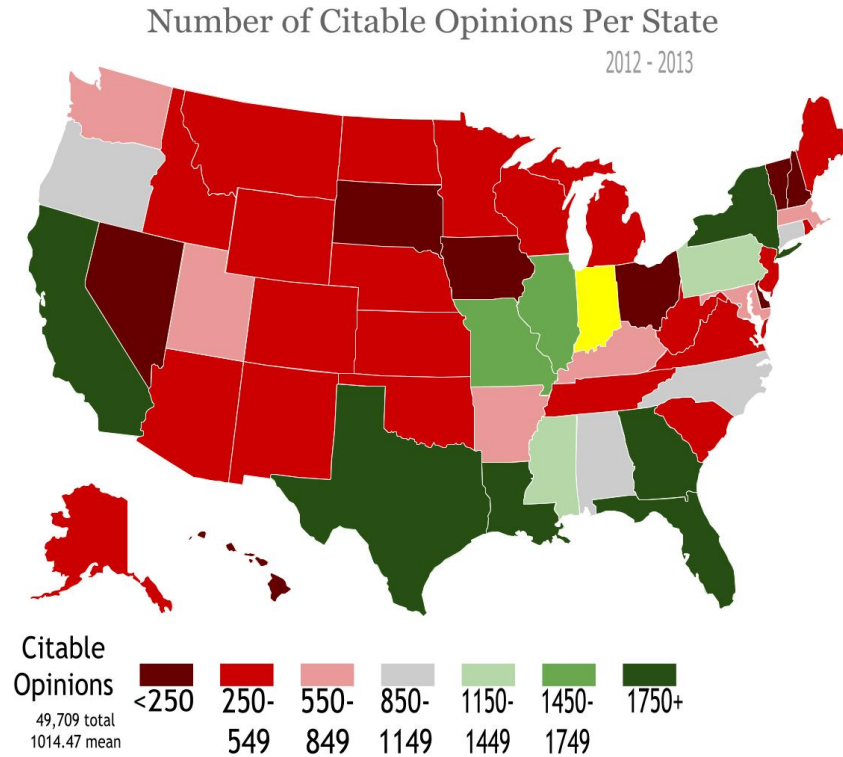
83 The mean number of relevant decisions from a state's highest court was a little under 225.

84 A WestlawNext search of the years 2012 and 2013 returned 16,691 reported decisions and 934 unreported decisions.

85 For a comparison to another state with a high volume caseload, a WestlawNext search of the intermediate appellate court of California for the relevant two-year span returned 1764 reported decisions and 18,032 unreported decisions.

86 The data underlying Figure 3 is reproduced in Appendix B.

FIGURE 3



The number of citable opinions from each state was then compared to the mean number of citable opinions (1014.47) to determine each state's appropriate multiplier. States that churned out above-mean numbers of citable opinions received a sub-one multiplier. States that produced below-mean numbers of citable opinions received an above-one multiplier. Hawaii's multiplier was 6.46,⁸⁷ New York's multiplier was 0.09,⁸⁸ and all other states fell in between these numbers.

Each state's number of raw citations by Indiana courts was then multiplied by the state's multiplier. The product is the "Adjusted Citation Count." This number represents the number of citations by Indiana appellate courts to out-of-state precedent controlled for the output of citable opinions in each state. The mean number of citations per state after the adjustment was 28.18.

This approach creates a more meaningful pathway to measure citation preferences. For example, in the raw citation count, New Mexico garnered

⁸⁷ The mean of 1014.47 citable opinions divided by Hawaii's 157 citable opinions, rounded to the nearest hundredth.

⁸⁸ 1014.47 divided by 11,607, rounded to the nearest hundredth.

twelve citations, below the mean of 15.06. But, when the appropriate multiplier (2.96) is applied, New Mexico’s Adjusted Citation Count is 35.49, above the mean of 28.18. Likewise, a state that creates a relatively large number of citable opinions may find its positions flipped from above-mean in raw citations to below-mean under the Adjusted Citation Count method.⁸⁹ Each state’s Adjusted Citation Count is graphically depicted below.⁹⁰

FIGURE 4

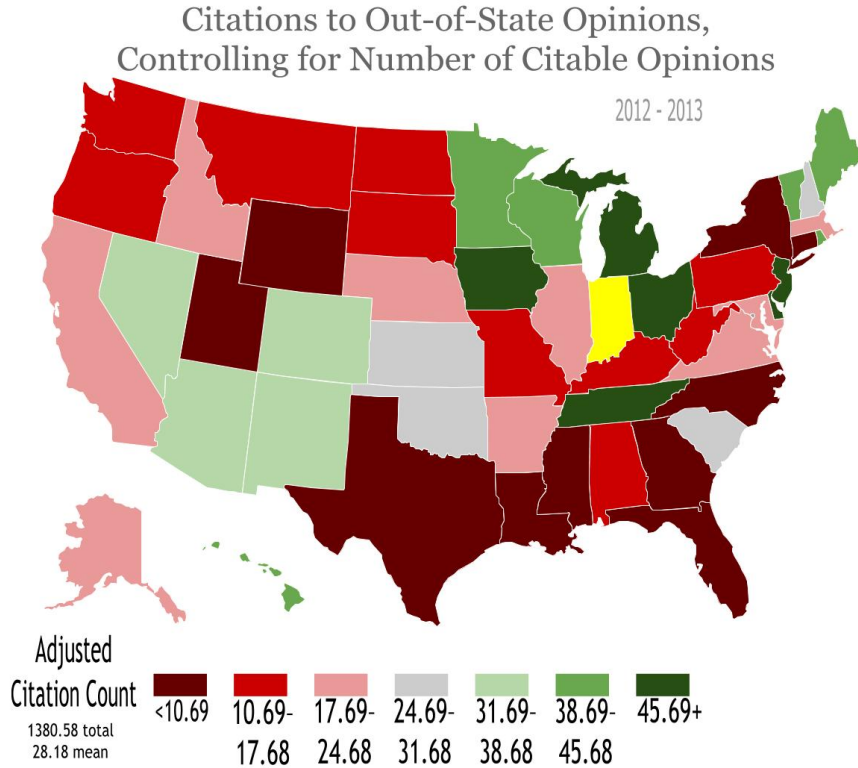


Figure 4 paints a very different picture than Figure 1. One notable observation that has not changed, however, is that Indiana’s Census division performs well in this test as well. Michigan, Ohio, and Wisconsin all have

89 See, for example, Missouri, which had 23 raw citations, but an Adjusted Citation Count of 15.51 after the appropriate multiplier (0.67) was applied. Some distortion may occur at the margins for states with either extremely high or low multipliers. Struggling against its miniscule multiplier of 0.09, New York ranks lowest in Adjusted Citation Count with 3.32. States with the most generous multipliers like Hawaii (6.46) often rank above the mean in Adjusted Citation Count (for example, Hawaii’s Adjusted Citation Count is 38.77). However, that is not always the case; South Dakota, the state with the third-most generous multiplier (5.37) has an Adjusted Citation Count (16.10) well below the mean.

90 The underlying data is reproduced in Appendix C.

Adjusted Citation Counts that are significantly above the mean (69.88, 117.75, and 40.66), while Illinois is respectable, although below mean, at 20.45. Two other states in the Midwest region, Minnesota and Iowa, garner Adjusted Citation Counts well above the mean (41.07 and 69.07, respectively). While the Dakotas, Missouri, and Nebraska all carry slightly below-mean Adjusted Citation Counts, Midwest states as a whole, and particularly those geographically closest to Indiana, performed extremely well in Adjusted Citation Counts. No comparable cluster of high-citation states can be found elsewhere in the country.⁹¹

Southern states as a region performed poorly when measured by Adjusted Citation Counts, especially states like Louisiana (4.13),⁹² Florida (8.41), Mississippi (8.58), and Georgia (8.83). This result is consistent with a previous suggestion that southern judiciaries lost respect from courts from other regions in the wake of segregationist rulings during the Civil Rights era.⁹³ Kentucky, a state that borders Indiana, continues to rank below the mean in Adjusted Citation Count (17.12).

The Adjusted Citation Count method could be criticized on the ground that extremely high or low multipliers are produced by the wide variations in published output of states' intermediate appellate courts.⁹⁴ New York, with a multiplier of 0.09, would need to be cited over 313 times to simply meet the mean. Hawaii, with a multiplier of 6.46, needs little more than four citations to meet the mean. In order to mediate the effect of extreme multipliers and account for the general preference of Indiana courts to cite to other states' courts of last resort, a multiplier based only upon other states' supreme court opinions provides another window at the data.

Thus, the author prepared a new multiplier (the "Supreme Court Multiplier") for each state using only the number of published non-memorandum decisions by its highest court (the "Citable Supreme Court Opinions").⁹⁵ This approach flattened out the range of multipliers aside from one significant outlier. Using this approach, only three states received

91 Nevada, Arizona, New Mexico, Colorado, and Kansas form an interesting stripe of slightly above-mean Adjusted Citation Counts.

92 Perceived differences between Indiana's common law system and the civil law system in Louisiana may contribute to its low Adjusted Citation Count.

93 See Caldeira, *supra* note 14, at 93 ("[I]t is probably true that the performance of southern state supreme courts in the 1950s and 1960s in the field of black civil rights did them little good in the eyes of colleagues around the nation.").

94 No state carried a sub-one multiplier and an above-mean Adjusted Citation Count, although two came fairly close: California (0.52 multiplier and 22.42 Adjusted Citation Count) and Illinois (0.58 multiplier and 20.45 Adjusted Citation Count). See also *supra* note 89 (describing the relationship between the number of citable opinions and Adjusted Citation Count).

95 This data is set forth in Appendix B. In the case of Texas, only the Texas Supreme Court was used in this analysis even though the Court of Criminal Appeals is the court of last resort for criminal cases.

multipliers above 3.00: Ohio (the outlier at 11.84), North Carolina (3.17), and Michigan (3.04). The smallest multipliers were Georgia (0.33), Montana (0.51), and Massachusetts (0.58). This Supreme Court Multiplier was then applied to the Indiana courts' citation of each state's highest court. The product is the state's "Adjusted Supreme Court Citation Count." The per-state mean of Adjusted Supreme Court Citations was 13.84. Figure 5 presents a graphical depiction of each state's Adjusted Supreme Court Citation Count.⁹⁶

FIGURE 5

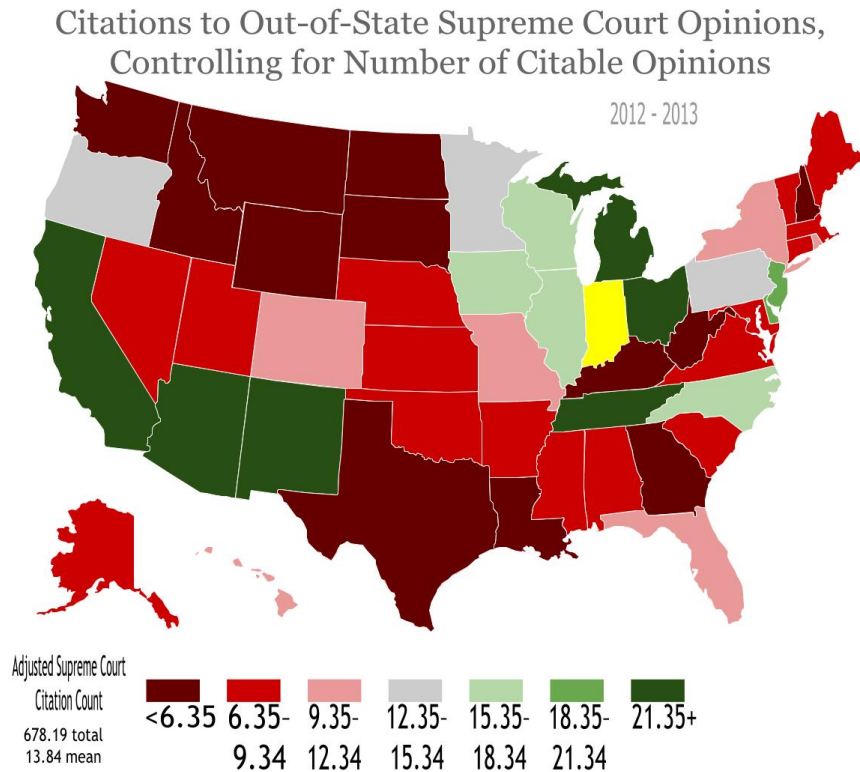


Figure 5 shows some significant shifts again when compared to Figure 4. California has swung from below mean to significantly above mean. New England states have plunged into the red. But an important point of consistency is the above-mean performance of the other states in Indiana's Census division (Illinois, Michigan, Ohio, and Wisconsin) and the respectable, albeit not spectacular, showing of the next closest states in the Midwest region (Minnesota, Iowa, and Missouri). Indiana's other neighbor,

96 The data underlying Figure 5 is contained in Appendix D.

Kentucky, again registers below the mean, and more squarely so in this analysis than the last.

Grouping the states by West regional reporter, the North Eastern Reporter tops all reporters in per-state average Adjusted Citations and Adjusted Supreme Court Citations:

TABLE 2

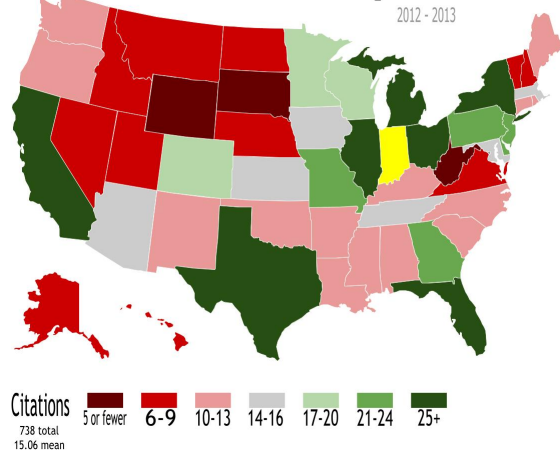
West Regional Reporter	Average Adjusted Citation Count per State	Average Adjusted Supreme Court Citations per State
North Eastern	41	55.5
North Western	39.1	12.8
Atlantic	36.2	11.7
Pacific	23.9	10.3
South Western	23.1	9.3
South Eastern	16.2	7.2
Southern	8.9	6.3

However, the North Eastern Reporter's dominance is propped up by Ohio. All three other North Eastern Reporter states had below-mean Adjusted Citation Counts and two (New York and Massachusetts) ranked squarely below the mean in Adjusted Supreme Court Citation Counts. Removing Ohio from the dataset would drop the per-state average to very pedestrian numbers (15.5 average Adjusted Citation Count and 10.9 average Adjusted Supreme Court Citation Count, respectively). Thus, after controlling for each state's output of citable opinions, inclusion in the same West regional reporter as Indiana did not, on its own, distinguish a state's rate of citation.

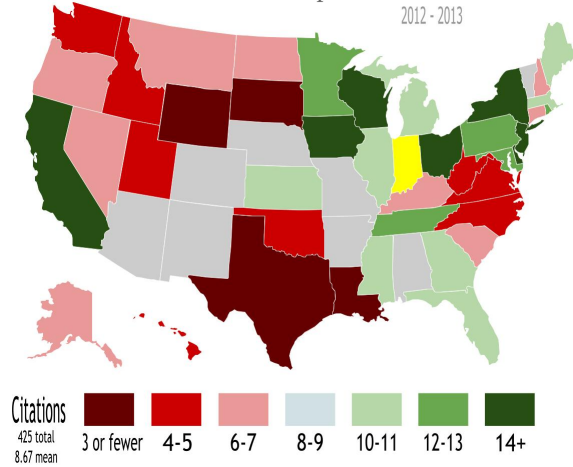
IV. FINAL ANALYSIS AND CONCLUSION

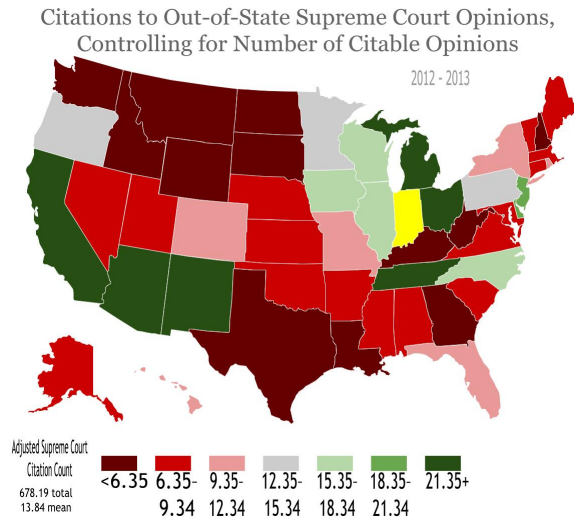
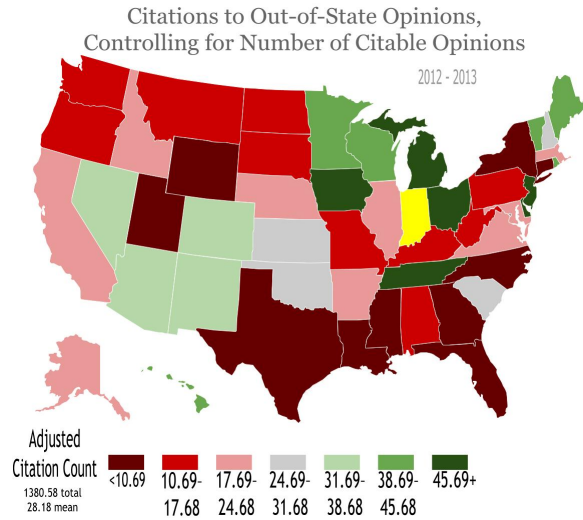
In the final analysis, none of the four approaches to measuring out-of-state citations tells the full story when viewed in isolation. In combination, however, the four analyses paint a telling picture:

Citations by Indiana Supreme Court and Court of Appeals to Out-of-State Judicial Opinions



Citations by Indiana Supreme Court and Court of Appeals to Out-of-State Supreme Courts





The only cluster of states that consistently garners above-mean citations are the Midwest states closest to Indiana, particularly those in Indiana’s Census division (Illinois, Ohio, Michigan, and Wisconsin). Indiana’s non-Midwest neighbor, Kentucky, is cited below average under all four analyses, along with the contiguous band of West Virginia and Virginia. Some other regions performed uniformly poorly: the Northwest (from the Dakotas to the Pacific Ocean) and the swath of Oklahoma, Arkansas, and

Louisiana.⁹⁷ Other performances have less geographic consistency: Connecticut and New Hampshire were always below mean, New Jersey and Delaware were always above mean, and the surrounding states were mixed.

Certainly, caution is warranted when it comes to overstating the significance of these results. This study simply reflects the citations patterns of one state's appellate courts—comprising a mere twenty judges⁹⁸—over a recent two-year period. The data is not broad enough to prove or disprove the geographical proximity hypothesis on a national level. However, it appears clear from this data that geographical proximity has a positive effect on rate of citation. A critical caveat, however, is that the positive effect of geographical proximity does not permeate across regions. Indiana is as proximate to Kentucky as it is to Michigan; it is closer to West Virginia than to Iowa or Minnesota.⁹⁹ Yet the more distant Midwest state is the clear winner when it comes to rate of citation under all four analyses. Indiana courts disproportionately cite to the decisions of the surrounding Midwest states of Ohio, Michigan, Illinois, Wisconsin, Iowa, and Minnesota.¹⁰⁰ It is not geographical proximity alone, but rather geographical proximity in conjunction with a sense of regional identity that translates into heightened persuasive value of nonbinding authorities. Thus, when using persuasive precedent, brief writers in Indiana, if not elsewhere, would be well-advised to prefer citing to courts in geographically proximate states *in the same region* as the court of decision.

97 The non-contiguous states (Alaska and Hawaii) generally performed poorly as well.

98 The Indiana Supreme Court has five justices and the Indiana Court of Appeals has fifteen judges. See *Today's Supreme Court*, COURTS.IN.GOV, <http://www.in.gov/judiciary/supreme/2367.htm> (last visited Mar. 4, 2015); *About the Court*, COURTS.IN.GOV, <http://www.in.gov/judiciary/appeals/2336.htm> (last visited Mar. 4, 2015).

99 As the crow flies, Lawrenceburg, Indiana, is 132 miles from Kenova, West Virginia. Whiting, Indiana, is 139 miles from Clinton, Iowa, and 244 miles from Caledonia, Minnesota.

100 It is notable (to the author at least), that these seven states contain all of the historic Big Ten universities measured from the Big Ten's founding in 1896 until the its 1990 expansion into Pennsylvania. *Big Ten History*, BIG TEN CONFERENCE, <http://www.bigten.org/trads/big10-trads.html> (last visited Mar. 4, 2015).

APPENDIX A: RAW NUMBER OF CITATIONS
IN INDIANA APPELLATE OPINIONS, 2012–2013

State	Citations to All Judicial Opinions	Citations to Supreme Court Opinions Only
Alabama	13	8
Alaska	7	7
Arizona	16	8
Arkansas	10	8
California	43	18
Colorado	19	8
Connecticut	10	7
Delaware	23	16
Florida	32	10
Georgia	23	11
Hawaii	6	5
Idaho	8	5
Illinois	35	10
Indiana		
Iowa	16	15
Kansas	16	11
Kentucky	11	7
Louisiana	11	2
Maine	10	10
Maryland	15	12
Massachusetts	16	11
Michigan	29	10
Minnesota	20	13
Mississippi	12	10
Missouri	23	8
Montana	7	7
Nebraska	9	9
Nevada	6	6
New Hampshire	6	6
New Jersey	23	14
New Mexico	12	9
New York	38	17

APPENDIX A, CONTINUED

State	Citations to All Judicial Opinions	Citations to Supreme Court Opinions Only
North Carolina	10	5
North Dakota	6	6
Ohio	26	16
Oklahoma	10	5
Oregon	12	7
Pennsylvania	23	12
Rhode Island	12	12
South Carolina	12	7
South Dakota	3	3
Tennessee	15	12
Texas	27	0
Utah	6	5
Vermont	9	9
Virginia	8	5
Washington	10	4
West Virginia	4	4
Wisconsin	19	14
Wyoming	1	1
Totals	738	425
Per state mean	15.06	8.67

APPENDIX B: NUMBER OF CITABLE OPINIONS PRODUCED BY EACH STATE,
2012–2013

State	Court of Last Resort	Intermediate Court of Appeals	Other Court	Total Citable Opinions
Alabama	250	663	0	913
Alaska	236	70	0	306
Arizona	75	354	0	429
Arkansas	227	331	0	558
California	184	1762	0	1946
Colorado	146	390	0	536
Connecticut	216	870	11	1097
Delaware	175	0	54	229
Florida	232	3628	0	3860
Georgia	678	1965	0	2643
Hawaii	97	60	0	157
Idaho	278	137	0	415
Illinois	143	1593	0	1736
Indiana				
Iowa	202	33	0	235
Kansas	312	202	0	514
Kentucky	363	289	0	652
Louisiana	233	2470	0	2703
Maine	252	0	0	252
Maryland	304	323	0	627
Massachusetts	389	327	0	716
Michigan	74	347	0	421
Minnesota	235	259	0	494
Mississippi	351	1068	0	1419
Missouri	159	1345	0	1504
Montana	437	0	0	437
Nebraska	311	159	0	470
Nevada	171	0	0	171
New Hampshire	219	0	0	219
New Jersey	151	325	32	508
New Mexico	94	249	0	343
New York	363	11,126	118	11,607

APPENDIX B, CONTINUED

State	Court of Last Resort	Intermediate Court of Appeals	Other Court	Total Citable Opinions
North Carolina	71	900	0	971
North Dakota	352	0	0	352
Ohio	19	202	3	224
Oklahoma	142	254	0	396
Oregon	120	880	0	1000
Pennsylvania	198	1176	7	1381
Rhode Island	270	0	0	270
South Carolina	225	263	0	488
South Dakota	189	0	0	189
Tennessee	119	158	0	277
Texas	163	2651	0	2814
Utah	167	620	0	787
Vermont	222	0	0	222
Virginia	174	187	0	361
Washington	240	552	0	792
West Virginia	282	0	0	282
Wisconsin	199	275	0	474
Wyoming	312	0	0	312
Totals	11,021	38,463	225	49,709
Per state mean	224.92	784.96	4.59	1014.47

Note: The per-state mean includes the forty-nine states other than Indiana. Future researchers wishing to use a fifty-state mean need only incorporate the following Indiana data: 164 citable supreme court opinions and 1067 citable intermediate court of appeals opinions (1231 total).

APPENDIX C: CITATIONS TO OUT-OF-STATE OPINIONS,
CONTROLLING FOR NUMBER OF CITABLE OPINIONS

State	Raw Citations	Multiplier	Adjusted Citation Count
Alabama	13	1.11	14.44
Alaska	7	3.32	23.21
Arizona	16	2.36	37.84
Arkansas	10	1.82	18.18
California	43	0.52	22.42
Colorado	19	1.89	35.96
Connecticut	10	0.92	9.25
Delaware	23	4.43	101.89
Florida	32	0.26	8.41
Georgia	23	0.38	8.83
Hawaii	6	6.46	38.77
Idaho	8	2.44	19.56
Illinois	35	0.58	20.45
Indiana			
Iowa	16	4.32	69.07
Kansas	16	1.97	31.58
Kentucky	11	1.56	17.12
Louisiana	11	0.38	4.13
Maine	10	4.03	40.26
Maryland	15	1.62	24.27
Massachusetts	16	1.42	22.67
Michigan	29	2.41	69.88
Minnesota	20	2.05	41.07
Mississippi	12	0.71	8.58
Missouri	23	0.67	15.51
Montana	7	2.32	16.25
Nebraska	9	2.16	19.43
Nevada	6	5.93	35.60
New Hampshire	6	4.63	27.79
New Jersey	23	2.00	45.93
New Mexico	12	2.96	35.49
New York	38	0.09	3.32

APPENDIX C, CONTINUED

State	Raw Citations	Multiplier	Adjusted Citation Count
North Carolina	10	1.04	10.45
North Dakota	6	2.88	17.29
Ohio	26	4.53	117.75
Oklahoma	10	2.56	25.62
Oregon	12	1.01	12.17
Pennsylvania	23	0.73	16.90
Rhode Island	12	3.76	45.09
South Carolina	12	2.08	24.95
South Dakota	3	5.37	16.10
Tennessee	15	3.66	54.94
Texas	27	0.36	9.73
Utah	6	1.29	7.73
Vermont	9	4.57	41.13
Virginia	8	2.81	22.48
Washington	10	1.28	12.81
West Virginia	4	3.60	14.39
Wisconsin	19	2.14	40.66
Wyoming	1	3.25	3.25
Totals:	738		1380.58
Mean:	15.06		28.18

Note: Rounding the multiplier to two decimal places may create a perceived discrepancy between the product of the first two columns above and the Adjusted Citation Count. For example, North Carolina has ten raw citations and a multiplier of 1.04. The product of those two figures is 10.4. However, the Adjusted Citation Count is 10.45. The perceived discrepancy is the result of rounding North Carolina's true multiplier (something closer to 1.04476828) to two decimal places.

APPENDIX D: CITATIONS TO OUT-OF-STATE SUPREME COURT OPINIONS,
CONTROLLING FOR NUMBER OF CITABLE OPINIONS

State	Raw Supreme Court Citations	Supreme Court Multiplier	Adjusted Supreme Court Citation Count
Alabama	8	0.90	7.20
Alaska	7	0.95	6.67
Arizona	8	3.00	23.99
Arkansas	8	0.99	7.93
California	18	1.22	22.00
Colorado	8	1.54	12.32
Connecticut	7	1.04	7.29
Delaware	16	1.29	20.56
Florida	10	0.97	9.69
Georgia	11	0.33	3.65
Hawaii	5	2.32	11.59
Idaho	5	0.81	4.05
Illinois	10	1.57	15.73
Indiana			
Iowa	15	1.11	16.70
Kansas	11	0.72	7.93
Kentucky	7	0.62	4.34
Louisiana	2	0.97	1.93
Maine	10	0.89	8.93
Maryland	12	0.74	8.88
Massachusetts	11	0.58	6.36
Michigan	10	3.04	30.39
Minnesota	13	0.96	12.44
Mississippi	10	0.64	6.41
Missouri	8	1.41	11.32
Montana	7	0.51	3.60
Nebraska	9	0.72	6.51
Nevada	6	1.32	7.89
New Hampshire	6	1.03	6.16
New Jersey	14	1.49	20.85
New Mexico	9	2.39	21.53
New York	17	0.62	10.53

APPENDIX D, CONTINUED

State	Raw Supreme Court Citations	Supreme Court Multiplier	Adjusted Supreme Court Citation Count
North Carolina	5	3.17	15.84
North Dakota	6	0.64	3.83
Ohio	16	11.84	189.41
Oklahoma	5	1.58	7.92
Oregon	7	1.87	13.12
Pennsylvania	12	1.14	13.63
Rhode Island	12	0.83	10.00
South Carolina	7	1.00	7.00
South Dakota	3	1.19	3.57
Tennessee	12	1.89	22.68
Texas	0	1.38	0.00
Utah	5	1.35	6.73
Vermont	9	1.01	9.12
Virginia	5	1.29	6.46
Washington	4	0.94	3.75
West Virginia	4	0.80	3.19
Wisconsin	14	1.13	15.82
Wyoming	1	0.72	0.72
Totals:	425		678.19
Mean:	8.67		13.84

Note: Rounding the multiplier to two decimal places may create a perceived discrepancy between the product of the first two columns above and the Adjusted Supreme Court Citation Count. For example, Vermont has nine raw citations and a multiplier of 1.01. The product of those two figures is 9.09. However, the Adjusted Supreme Court Citation Count is 9.12. The perceived discrepancy is the result of rounding Vermont's true multiplier (something closer to 1.013153153) to two decimal places.