

2021 Illinois Educator Shortage

Additional Analysis: Neighboring State Salary

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CONSULTING**

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KEY FINDINGS

Illinois had an average teacher salary of

\$59,251

with a median salary of

\$55,735.

Missouri average teacher salaries are

34% lower

than Illinois salaries, even after removing “extreme outlier” school districts.

School districts in Wisconsin who border Illinois ROEs 5, 34 and 44 had average teacher salaries

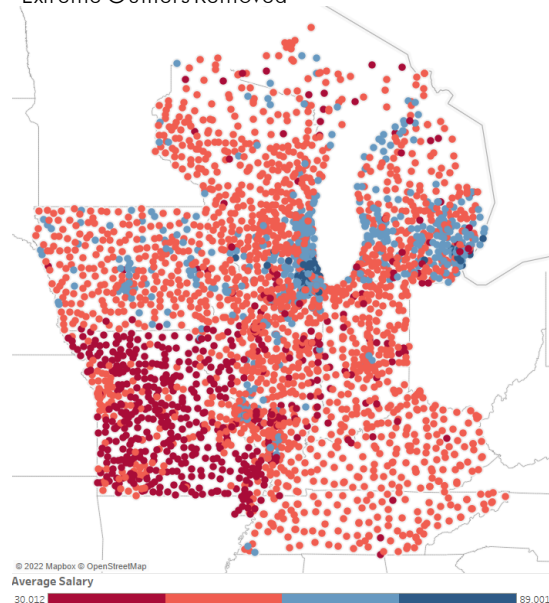
21% lower

than Illinois school districts in those regions.

After removing “extreme outlier” school districts, Illinois does not qualify being in the “top-ten” nationwide for average teacher salary.

Average Teacher Salaries by District

Extreme Outliers Removed



School districts in Iowa who border Illinois ROEs 26 and 33 had average teacher salaries

24% higher

than Illinois school districts in those regions.

EXECUTIVE SUMMARY

After compiling results from analyses done for the 2021 Illinois Association of Regional Superintendents of Schools (IARSS) Educator Shortage Survey, further questions arose regarding factors that impact recruitment and retention of both teachers and administrators, as shortages exist and persist across the state in key content areas and geographic areas¹. In particular, the topic of teacher salary came up most frequently, as it is an important component to both teacher recruitment and retention². Initial analyses showed average teacher salaries varied greatly statewide and that beginning teachers earned an average \$41,112 during the 2020-2021 school year³. These findings raised concerns about current and future teachers traveling to neighboring states to teach under a better compensation plan.

On average, Illinois is consistently ranked in the “top-10” nationwide for teacher salaries⁴. However, further analyses show that there are several “extreme outliers” which skew the average teacher salary in Illinois. For example, New Trier Township High School District 203 posts an average teacher salary of \$121,805, which, by comparison, is more than double the statewide average teacher salary of Illinois of \$59,251. These outliers are defined as school districts whose average teacher salary was above the “upper fence”, or below the “lower fence” in the original distribution of average teacher salaries⁵. Removing these outliers was done independently for all eight states. Excluding extreme outliers, results show that the average teacher salaries in Illinois are lower than those in Michigan, comparable to those in Iowa and Wisconsin, higher than those in Indiana, Kentucky, and Tennessee, and much higher than those in Missouri. Removing the outliers from all eight states in this study shows the average teacher salary in Illinois drops by over \$4,000 while the average salaries across the remaining seven states only change +/- \$2,000. It is important to note that these analyses did not account for differences in costs of living⁶ across each of the eight states.

To analyze cross-state salary differences more closely, we selected different groups of Illinois Regional Offices of Education, or ROEs. ROEs, in partnership with the Illinois State Board of Education (ISBE), are essential offices to support local school districts across multiple counties. Results show variations in mean average teacher salary across Illinois and comparison states. To illustrate, a comparison between Michigan’s bordering school districts to two Illinois ROEs (ROEs 5 and 34) show the highest percentage difference in mean of average teacher salary of 46%, with an average teacher salary of \$79,496 in Illinois and \$54,525 in Michigan. Like the state-to-state comparisons, ROE group comparisons in average teacher salaries were not adjusted for the differences in costs of living in each state. The ROE set of analyses were also performed independently for all states, with Illinois being the constant state for comparison. The analysis for ROE comparisons were performed *with* outliers still included in the data, though the reader may select the same groups to compare after removing outliers within the interactive Tableau dashboard⁷ that was created for this entire analysis.

The findings of this analysis reinforce that Illinois public education encompasses a very diverse population. From rural to urban areas, large and small districts, districts that cover small geographic areas and large geographic areas, as well as serve very differing populations of students. Broad comparisons across the state are often misleading or diffuse complicated issues. Strategies to support public education across the state need to be targeted toward the various types of districts.

METHODOLOGY

States' information on individual school districts' average teacher salaries come from their annual salary schedules and report cards, which were publicly available from each states' board of education website. Specifically, the salaries used in this analysis come from the 2020-2021 school year salaries. Geographic information, like school district addresses and corresponding latitude and longitude coordinates were also obtained from the National Center for Education Statistics for each state and were used to plot maps for regional school districts⁸.

Hypothesis testing was performed to determine whether the average teacher salary between Illinois and one of its neighboring states are statistically significantly different from each other. The size of the differences was also performed to accompany the statistical significance test results. Both the calculations were performed with and without outliers—school districts whose average teacher salary fall above the upper fence or below the lower fence of their corresponding state's salary distribution—and independently for each overall state-to-state comparison.

To look deeper into the salary discrepancies across Illinois and neighboring states, hypothesis testing was continued to compare bordering Illinois school districts (by ROE) with neighboring states' school districts. This analysis was done to determine if the average teacher salaries within certain Illinois ROEs are significantly different from neighboring states' school districts within the same region. Both calculations were performed independently for each overall state-to-state comparison.

Descriptive and inferential statistics were performed in R, which were then coded and translated into a Tableau dashboard for user interactivity. Throughout this dashboard, "Significant!" or "Not Significant" refers to a Welch two-sample t-test. Cohen's D calculations for were used to determine the size of the difference between the two groups and are discussed as "Negligible", "Small", "Medium", "Large", or "Very Large".

When selecting the Illinois school districts from individual ROEs along with neighboring states' bordering school districts within the same region for comparison, the Tableau dashboard can draw out an area of interest in the state maps provided in the dashboard. Using this functionality, the user can isolate whichever school districts they want to look at. Selecting a specific ROE or selection of ROEs involved drawing a boundary around the school districts found within the same ROE(s)—typically 1-3 state counties deep into the Illinois state line—while including all the school districts of similar geographic restrictions within the neighboring state. For further exploration, visit the online Tableau dashboard.

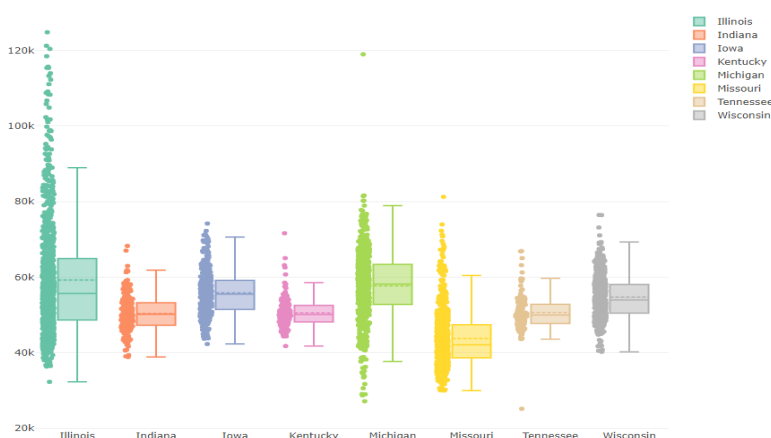
Note that not *all* school districts that are in each state are plotted on the maps or included in calculation. School districts with missing average teacher salaries were removed from the data set.

FINDINGS - STATE-TO-STATE COMPARISON

The overall average teacher salary in Illinois was \$59,251 for the 2020-2021 school year (SY2021). However, this average can be misleading as it included several school districts with relatively high average salaries. For example, New Trier Township High School District 203 reported an average teacher salary of \$124,834 for SY2021. To compare across states more accurately, extreme outliers were removed, independently, for each state. Extreme outliers were school districts whose average teacher salary fell above the “upper fence” or below the “lower fence”. When removing extreme outliers like New Trier TWD HSD 203, the average teacher salary in Illinois dropped \$4,606 to \$54,645. Tables A and B compare average teacher salaries across eight states—Illinois, Indiana, Iowa, Kentucky, Michigan, Missouri, Tennessee, and Wisconsin—with and without outliers. Removing the extreme outliers consisted of removing 45 districts from Illinois, 32 from Missouri, 18 from Michigan and 6 or less from the remaining states (See Table C).

Figure 1: Average Teacher Salary Distribution by State.

Extreme Outliers Included



It is important to note that removing outliers from a data set creates a new independent distribution of average salaries for each state. These new distributions have their own interquartile ranges (IQR), which ultimately creates new outliers within each state’s average teacher salary distribution. However, the number of new outliers in each state range from only 0-5 which have been *included* in the analysis for extreme outliers removed.

Figure 2: Average Teacher Salary Distribution by State

Extreme Outliers Removed



All neighboring states’ (Indiana, Iowa, Kentucky, Michigan, Missouri, Tennessee, and Wisconsin) average teacher salaries, when including *all* school districts, are significantly different than Illinois. After removing extreme outliers, it becomes apparent that the average teacher salaries in Illinois are lower than those in Michigan, comparable to those in Iowa and Wisconsin, all the while continuing to be higher in Indiana, Kentucky, Tennessee, and especially Missouri.

Table A: State-to-State Average Teacher Salary Comparison, Outliers Included.

	IL	IN	IA	KY	MI	MO	TN	WI
Average	\$59,251	\$50,432	\$55,859	\$50,571	\$57,726	\$43,802	\$50,662	\$54,734
Median	\$55,735	\$50,162	\$55,534	\$50,128	\$58,169	\$42,099	\$49,984	\$53,981
Minimum	\$32,315	\$38,892	\$42,337	\$41,793	\$27,180	\$30,012	\$25,193	\$40,259
Maximum	\$121,834	\$68,298	\$74,206	\$71,634	\$118,993	\$81,275	\$66,926	\$76,475

Table B: State-to-State Average Teacher Salary Comparison, Outliers Removed.

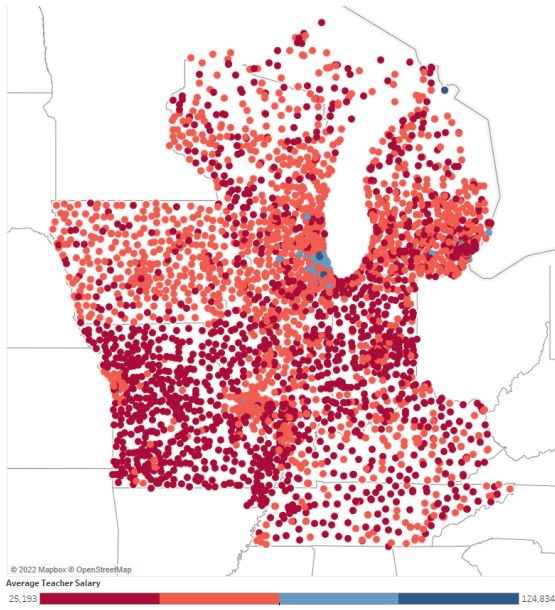
	IL	IN	IA	KY	MI	MO	TN	WI
Average	\$56,856	\$50,219	\$55,705	\$50,137	\$58,061	\$42,497	\$50,291	\$54,511
Median	\$54,916	\$50,022	\$55,454	\$49,969	\$58,287	\$41,754	\$49,959	\$53,910
Minimum	\$32,315	\$38,892	\$42,337	\$41,793	\$37,689	\$30,012	\$43,624	\$40,259
Maximum	\$89,001	\$61,874	\$71,107	\$58,555	\$78,962	\$59,337	\$59,690	\$69,145

Table C: Counts Table (Before/After Outliers Removal)

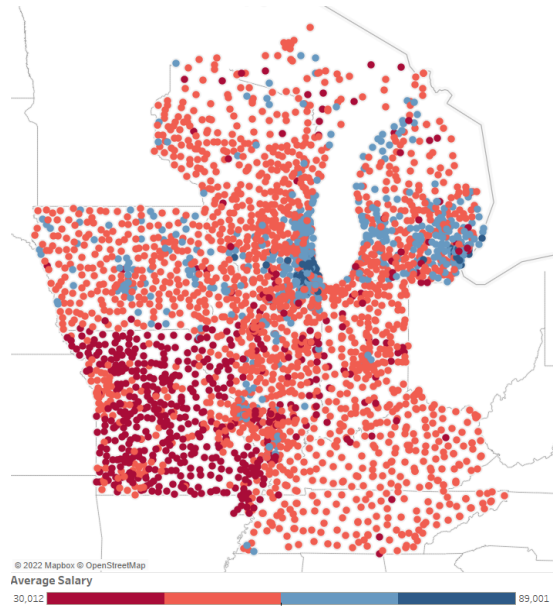
State	#Districts	#Above Upper Fence	#Below Lower Fence	#Missing Salary Info	#Districts "Outliers Removed"
Illinois	858	45	0	0	813
Indiana	426	3	0	202	221
Iowa	336	3	0	9	324
Kentucky	185	5	0	18	162
Michigan	898	5	13	354	526
Missouri	565	32	0	2	531
Tennessee	147	5	1	21	120
Wisconsin	463	5	0	42	416

Figure 3: Average Teacher Salary – State-to-State Comparison Maps.

Extreme Outliers Included



Extreme Outliers Removed

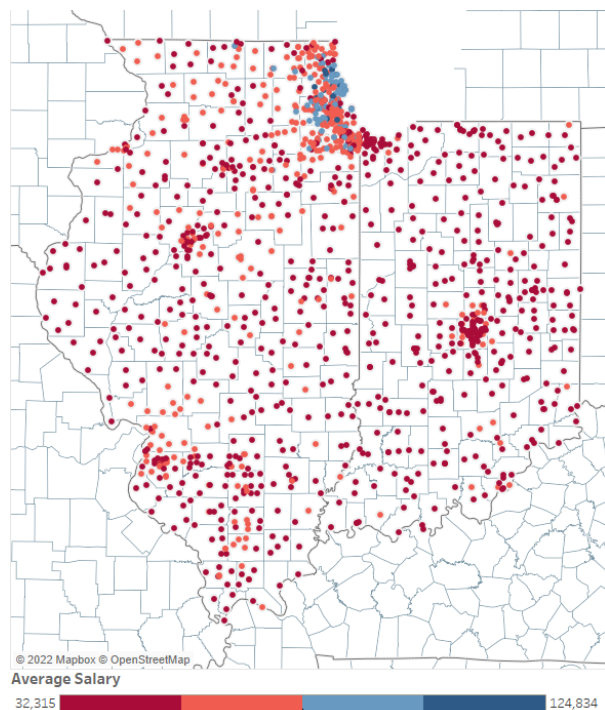


FINDINGS – ILLINOIS VS. INDIANA

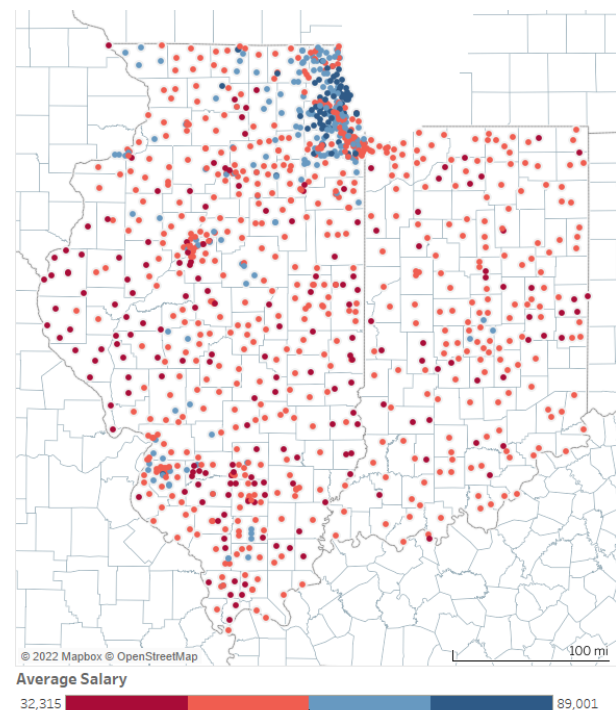
When looking at *all* school districts (extreme outliers included), the average teacher salary of Indiana was significantly lower than in Illinois by 17%. After removing the extreme outlier school districts, the average teacher salary of Indiana was still significantly lower than Illinois by 13%. Initially, Illinois ranked above Indiana for average teacher salaries. It is apparent that this finding continues after the extreme outlier school districts were removed from the analysis. However, comparing statewide averages differs from comparisons along the border.

Figure 4: Average Teacher Salary – Illinois vs. Indiana Comparison Maps.

Extreme Outliers Included

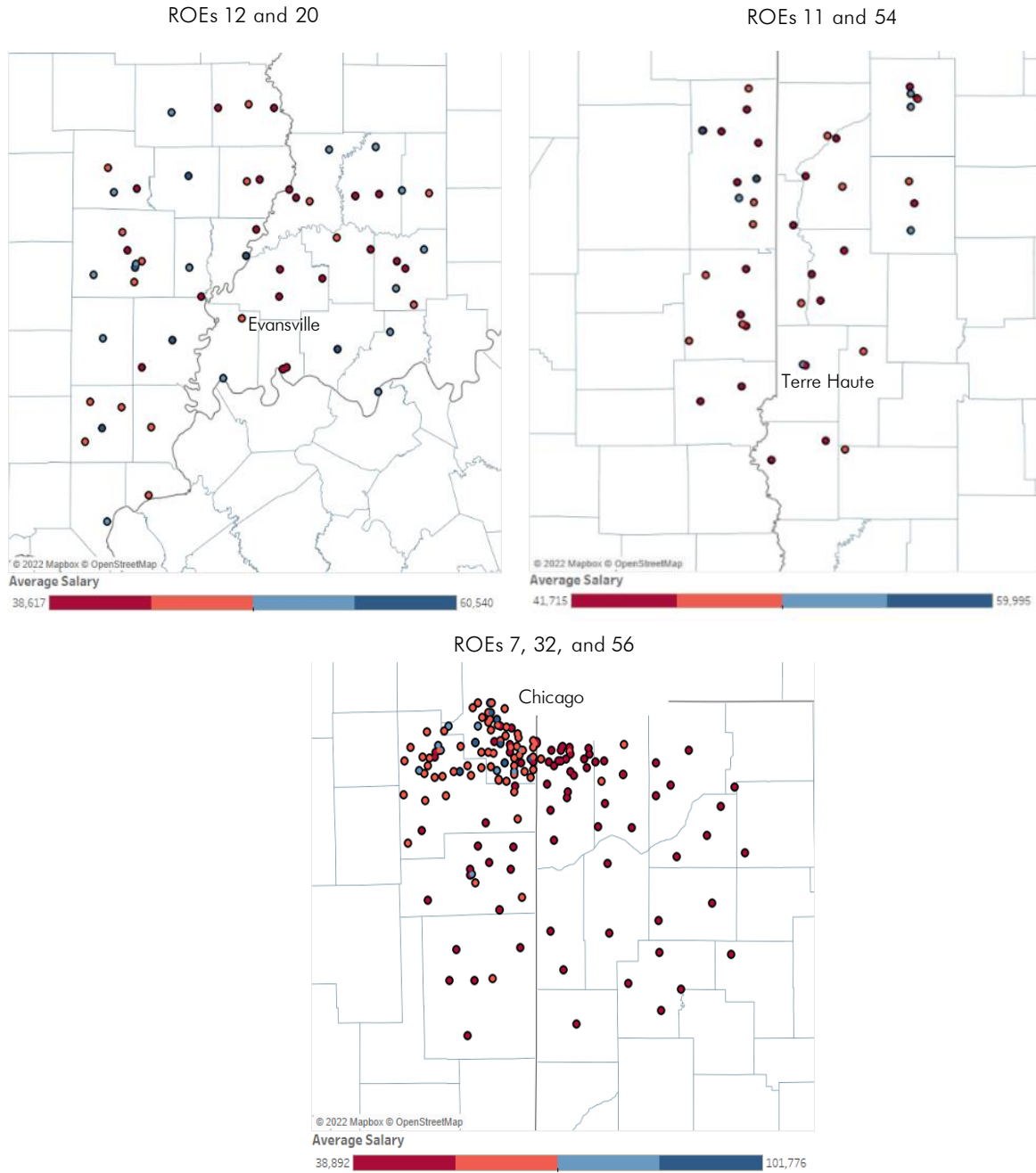


Extreme Outliers Removed



Looking along the border between Illinois and Indiana tells a different story. Three groups of ROEs were compared with bordering districts in Indiana of similar geographic area: (from the south to north) ROEs 12 and 20, ROEs 11 and 54, and ROEs 7, 32, and 56. School districts in Indiana, which border ROE 12 and 20 (southern border) showed little to no difference between average teacher salaries. In the middle of the border, ROEs 11 and 54 also had little to no difference when compared with school districts in Indiana. School districts in Indiana which border ROE 7, 31 and 56 were significantly lower than Illinois school districts. On average, teacher salaries were 24% lower in Indiana than Illinois in these regions (around ROE 7, 32, and 56) when including extreme outliers. These findings indicate that school districts along the border between Illinois and Indiana are, generally, not dissimilar in teacher compensation. The differences in average teacher salaries were only apparent closer to Chicago.

Figure 5: Average Teacher Salary – Illinois vs. Indiana ROE Comparison Maps.

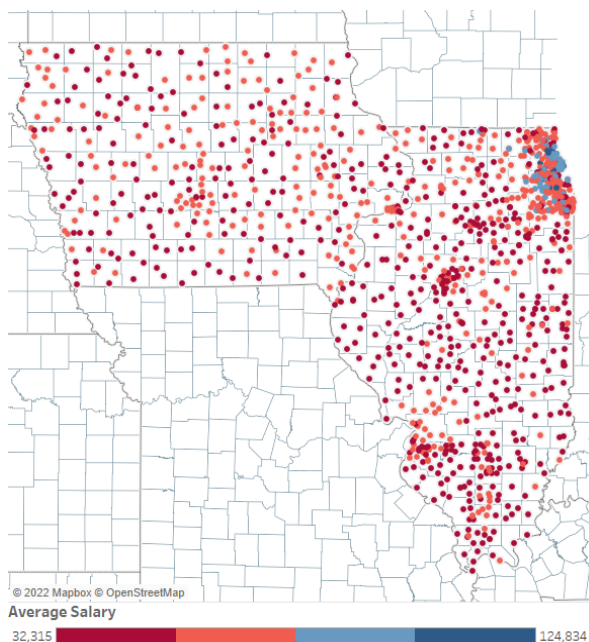


FINDINGS – ILLINOIS VS. IOWA

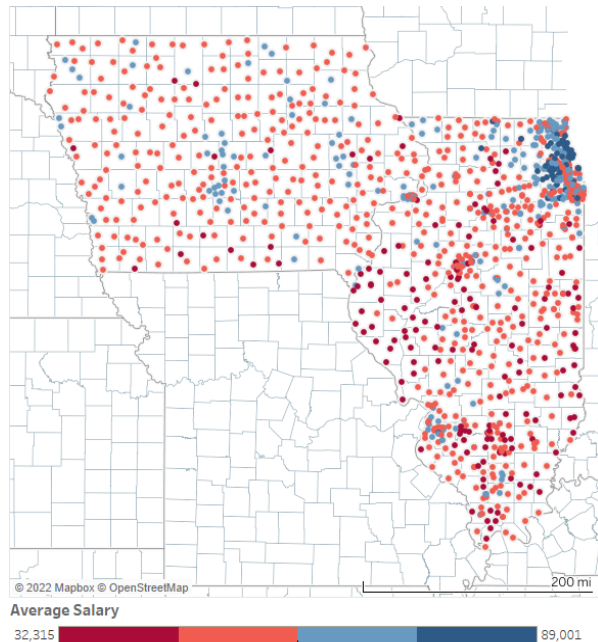
When looking at *a//*the school districts (extreme outliers included), average teacher salaries in Iowa were significantly lower than in Illinois by 6%. However, after removing the extreme outlier school districts, the average teacher salary of Iowa, although still significantly lower, is comparable to the average teacher salary in Illinois. The difference in average teacher salary after removing extreme outliers is only 2% lower in Iowa than Illinois. The maps in Figure 6, show the average teacher salary distribution across both Illinois and Iowa to be similar, excluding Northeast portion of Illinois. The average teacher salary discrepancies vary greatly for both states after removing the extreme outlier school districts. However, Illinois has a higher variance in the distribution of average teacher salary, whereas Iowa shows more consistency across the state.

Figure 6: Average Teacher Salary – Illinois vs. Iowa Comparison Maps.

Outliers Included

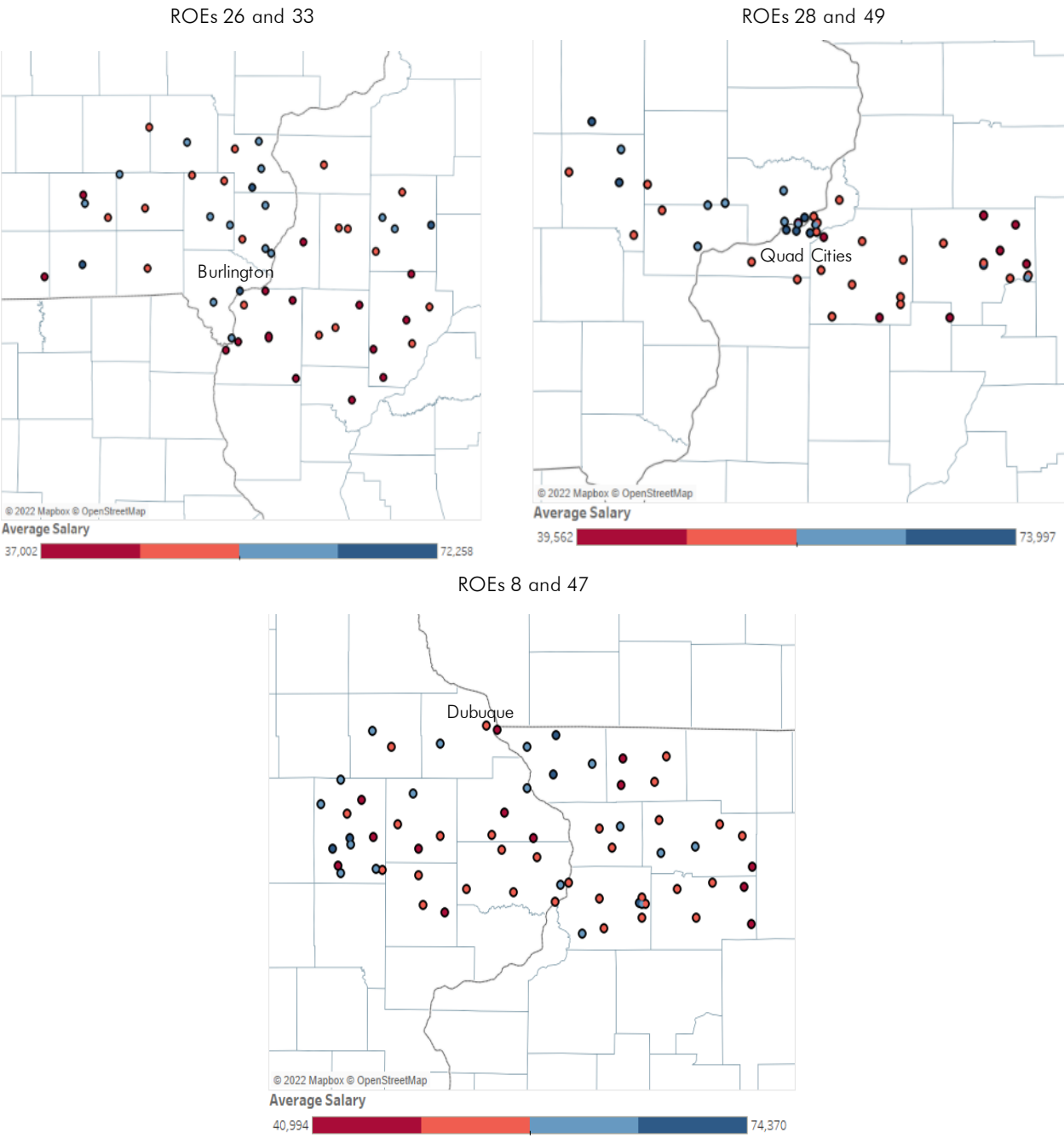


Outliers Removed



For the Illinois-Iowa ROE comparison, three groups of ROEs were compared with their respective Iowa school districts of similar geographic area: (from south to north) ROEs 26 and 33, ROEs 28 and 49, and ROEs 8 and 47. Along the southern and middle parts of the border (ROEs 26 and 33, and ROEs 38 and 49) had significantly lower average teacher salaries in Illinois than in Iowa. Along the northern part of the border (ROEs 8 and 47), Illinois had higher average teacher salaries than in Iowa.

Figure 7: Average Teacher Salary – Illinois vs. Iowa ROE Comparison Maps.

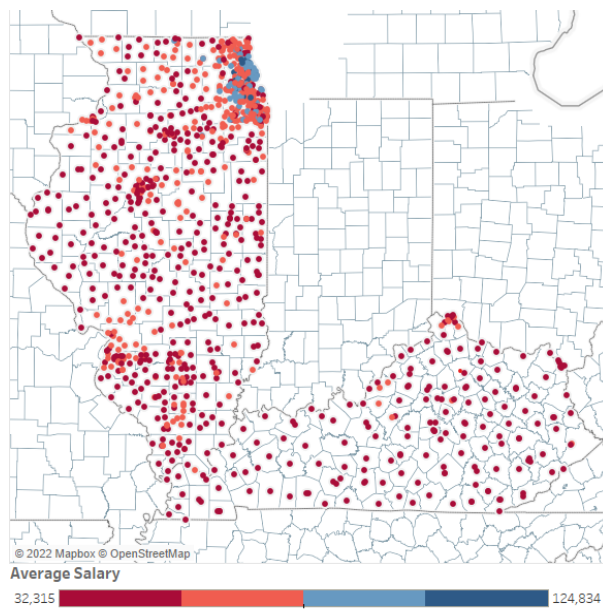


FINDINGS – ILLINOIS VS. KENTUCKY

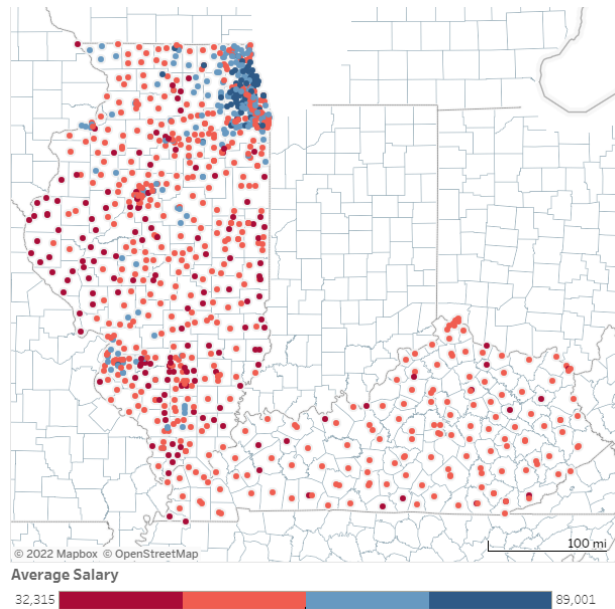
When looking at *all* school districts (outliers included), the average teacher salary in Kentucky was significantly lower than in Illinois by 17%. These results were consistent after removing the extreme outliers, showing a statewide average teacher salary 9% lower in Kentucky than in Illinois. The maps in Figure 7, show the stark difference in average teacher salary between Kentucky and Illinois, especially after removing the extreme outlier school districts. However, along the border of Kentucky and Illinois, there was little to no difference between Kentucky and Illinois.

Figure 8: Average Teacher Salary – Illinois vs. Kentucky Comparison Maps.

Extreme Outliers Included

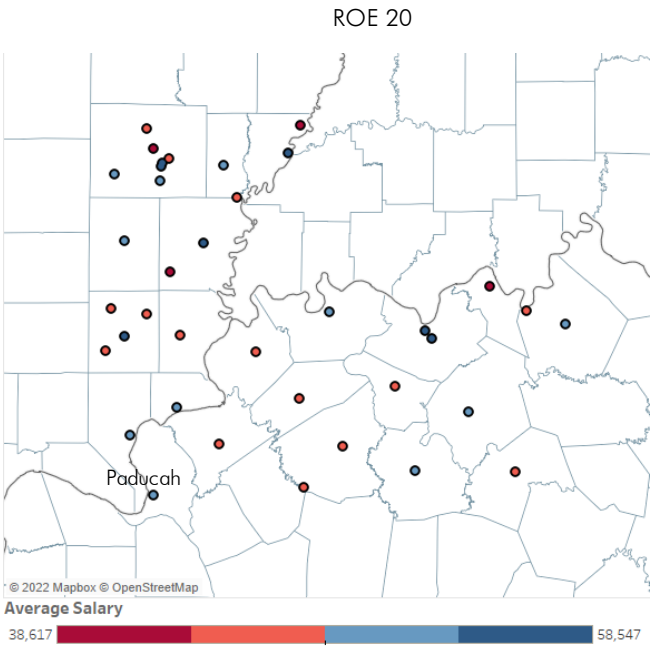
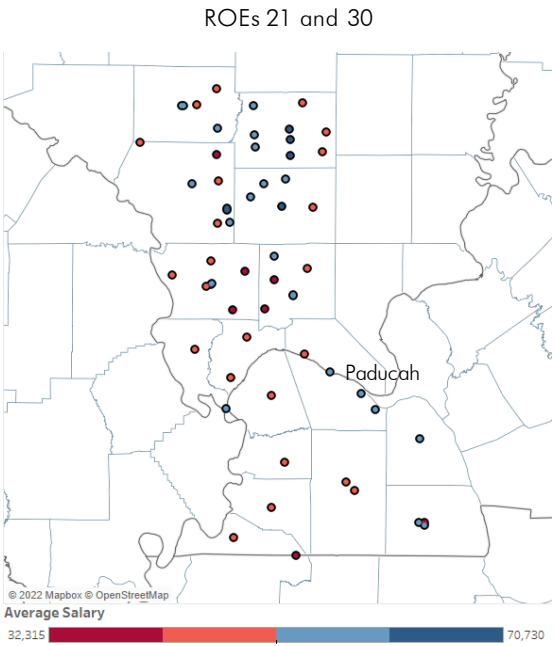


Extreme Outliers Removed



For the Illinois-Kentucky ROE comparison, two groups of ROEs were compared with their respective Kentucky school districts of similar geographic area: (from south to north) ROEs 21 and 30, and ROE 20. For both Illinois ROE groups there was little to no difference in average teacher salary with their Kentucky counterparts of similar geographic area. ROEs 21 and 30 average teacher salaries were only \$2,197 higher in Illinois than in Kentucky, and ROE 20 was \$75 lower.

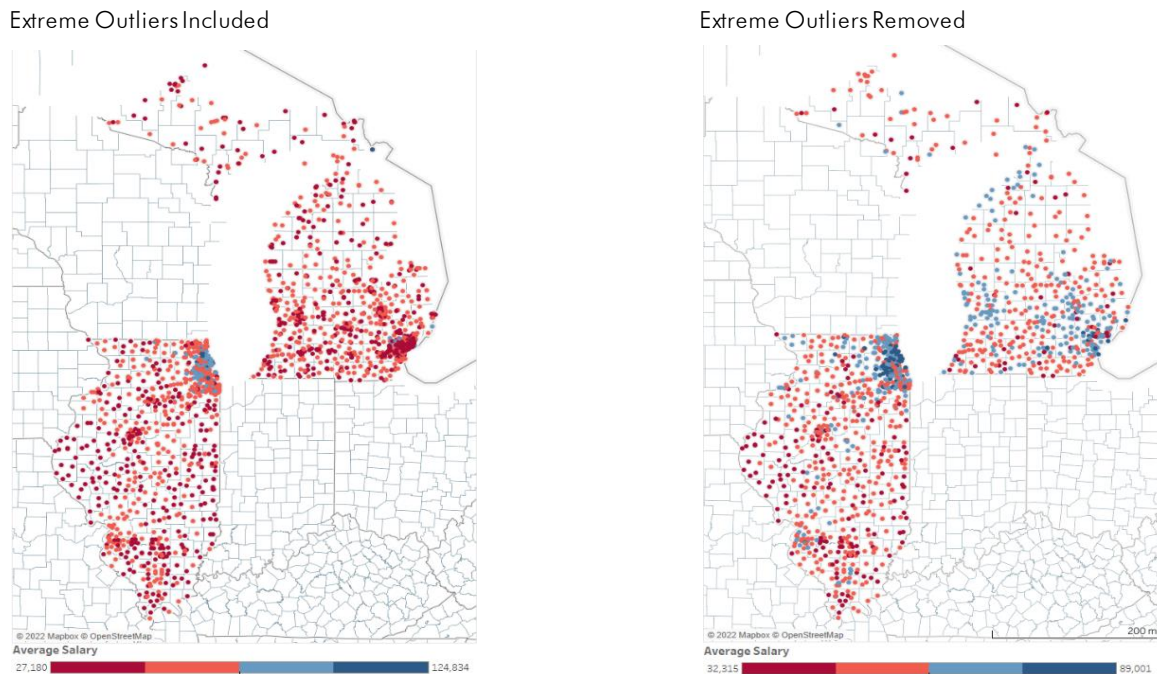
Figure 9: Average Teacher Salary – Illinois vs. Kentucky ROE Comparison Maps.



FINDINGS – ILLINOIS VS. MICHIGAN

When looking at *all* school districts (extreme outliers included), the average teacher salary in Michigan was significantly lower than in Illinois by 3%. However, after removing the extreme outliers, average teacher salaries in Michigan were significantly higher than those in Illinois by 2%. It is important to note that Michigan does not geographically border Illinois. However, even with Lake Michigan lying between the two states, the proximity could lead to teachers moving between the two states in search of a higher compensation.

Figure 10: Average Teacher Salary – Illinois vs. Michigan Comparison Maps.



The maps in Figure 9, show the average teacher salary across both Illinois and Michigan appears to be very similar. Although comparing all districts in Illinois to Michigan (with or without extreme outliers) showed significant differences, those differences were small in size. Including extreme outliers, average teacher salaries in Illinois were \$1,525 higher than in Michigan. Excluding extreme outliers, average teacher salaries in Illinois were \$1,205 lower than in Michigan.

However, the real difference between the states' average teacher salary does not show until looking along the "border" (as stated earlier, there is no true geographical border between Illinois and Michigan).

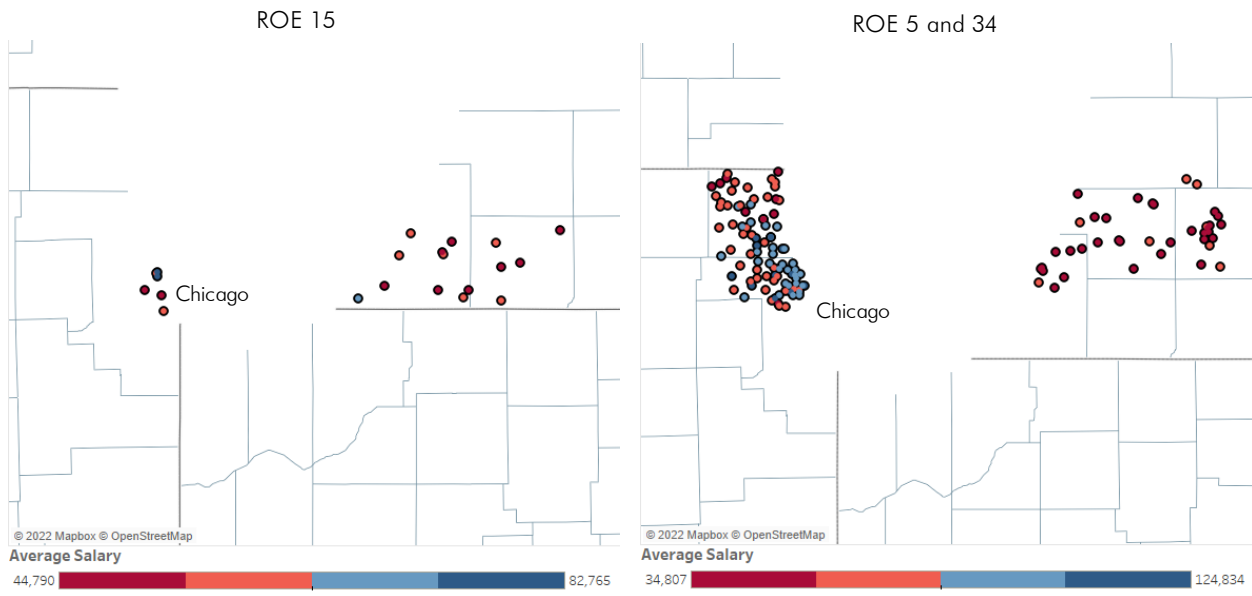
In the Illinois-Michigan ROE comparison, two groups of ROEs were analyzed traveling from the Southern to Northern borders: 1) ROE 15, and 2) ROEs 5 and 34 along with their respective Michigan school districts of similar geographical restrictions.

Results from hypothesis testing when comparing school districts in Michigan which border Group 1 Illinois school districts are inconclusive due to having less than 10 school districts in the Illinois group. Typically, sample sizes less than 10 do not have strong enough statistical power to perform hypothesis testing with great efficacy⁹. *Table 8a* in Appendix D shows that there is a large difference between the mean average

teacher salary of Illinois and Michigan in this comparison, although efficacy of this measure is low given the sample size of school districts in Illinois.

Results from hypothesis testing when comparing school districts in Michigan which border Group 2 Illinois school districts, however, do show *a very large significant difference* in average teacher salary. When comparing school districts which appear in *Figure 10*, the average teacher salaries in Michigan are 46% lower than those in Illinois.

Figure 11: Average Teacher Salary – Illinois vs. Michigan ROE Comparison Maps.

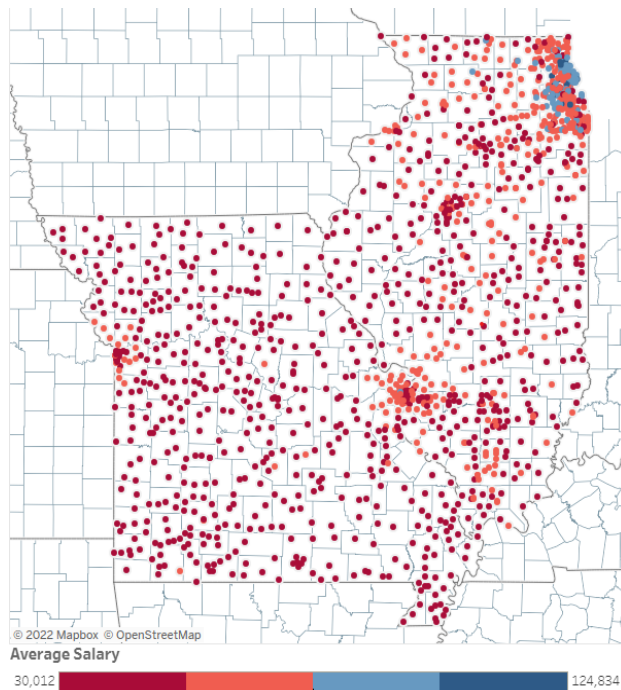


FINDINGS – ILLINOIS VS. MISSOURI

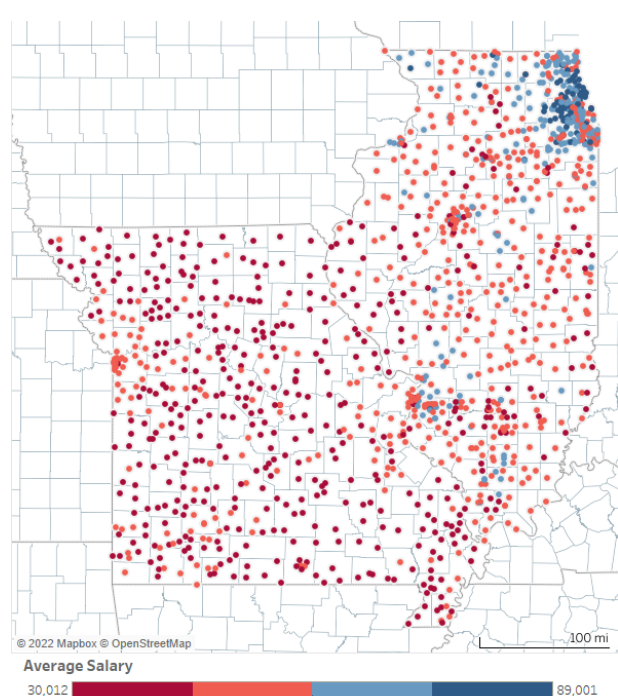
When looking at *all* school districts (outliers included), significance testing shows that the average teacher salary in Missouri is significantly lower than those in Illinois by 35%. After removing the outlier school districts from the dataset, statewide average teacher salaries in Missouri are still significantly lower than those in Illinois by 34%. Missouri, when compared individually against the other six neighboring states to Illinois, continues to show a significant difference in the average teacher salary.

Figure 12: Average Teacher Salary – Illinois vs. Missouri Comparison Maps.

Extreme Outliers Included



Extreme Outliers Removed

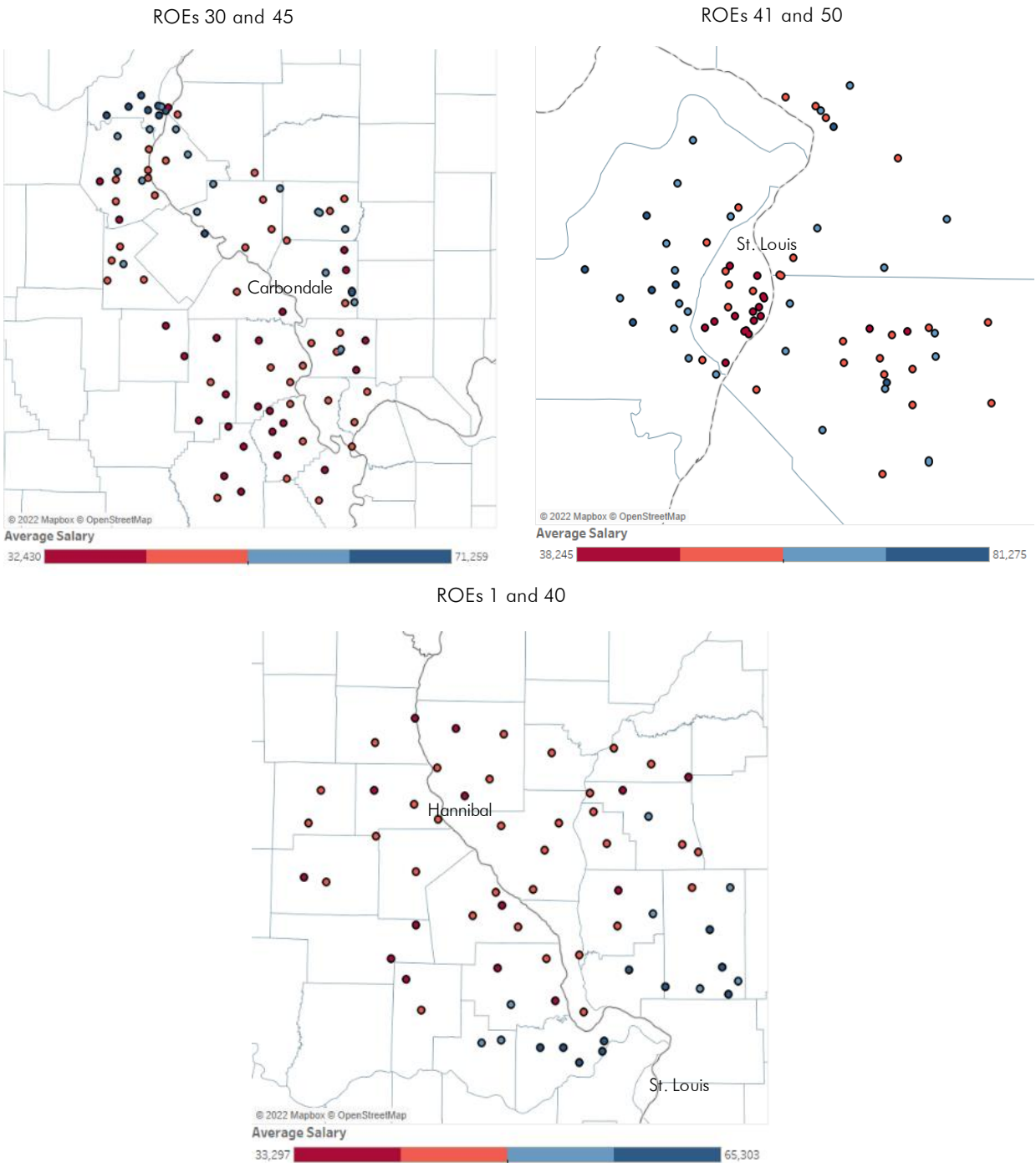


It is very apparent, after observing the maps in *Figure 11*, that average teacher salaries are vastly different in Missouri than those in Illinois (with and without outlier school districts). What is interesting, however, is that along the border between the two states, Missouri is similar to Illinois when looking at average teacher salaries.

In the Illinois-Missouri ROE comparison, three groups of ROEs were analyzed traveling from the Southern to Northern borders: 1) ROEs 30 and 45, 2) ROEs 41 and 50, and 3) ROEs 1 and 40 along with their respective Missouri school districts of similar geographical restrictions.

Results from hypothesis testing for *all three* Illinois ROE groups with their Missouri counterparts of similar geographical restrictions show *no statistically significant difference* in average teacher salary.

Figure 13: Average Teacher Salary – Illinois vs. Missouri ROE Comparison Maps.

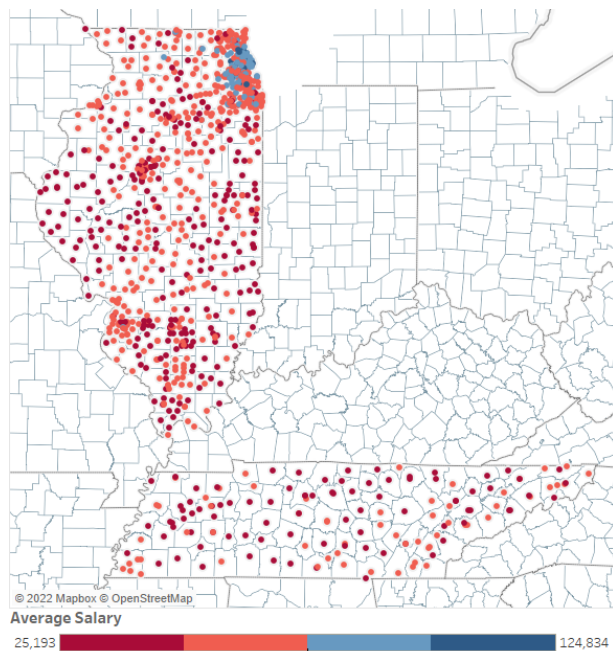


FINDINGS – ILLINOIS VS. TENNESSEE

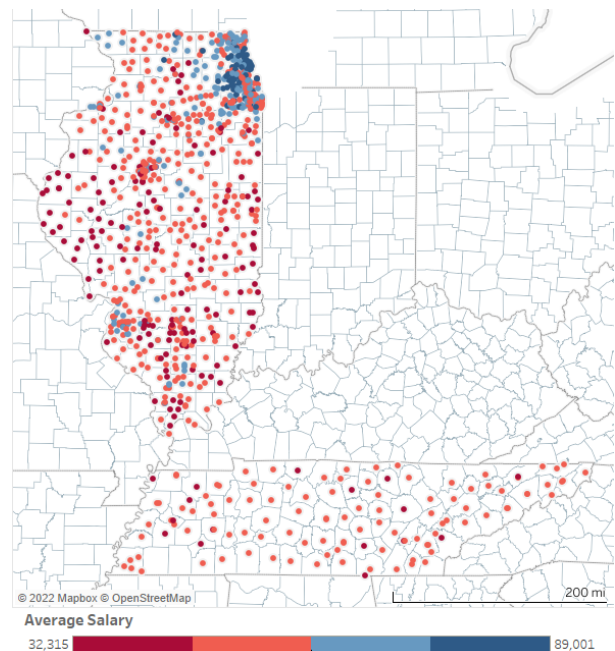
When looking at *all* school districts (outliers included), significance testing shows that the average teacher salary in Tennessee is significantly lower than those in Illinois by 17%. After removing the outlier school districts from the data set, statewide average teacher salaries in Tennessee are still significantly lower than those in Illinois by 13%. It is important to note that like Michigan, Tennessee does not geographically border Illinois, Kentucky lies between Illinois and Tennessee. However, Tennessee was included in this analysis because of its proximity to Illinois allowing teachers to potentially move back and forth between states for a better teacher compensation.

Figure 14: Average Teacher Salary – Illinois vs. Tennessee Comparison Maps.

Extreme Outliers Included



Extreme Outliers Removed



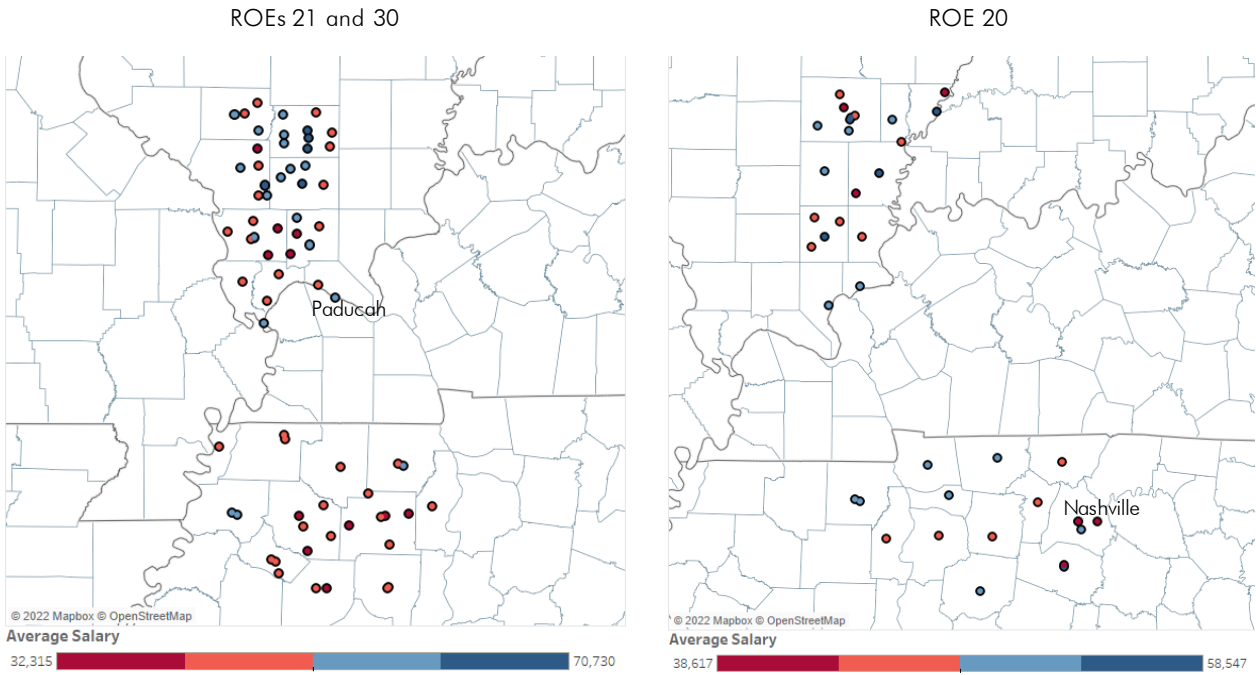
Like comparing both Missouri or Kentucky to Illinois, there appears to be a noticeable difference in average teacher salaries between Illinois and Tennessee. This is true when including and excluding outlier school districts.

In the Illinois-Tennessee ROE comparison, two groups of ROEs were analyzed: 1) ROEs 21 and 30, and 2) ROE 20 along with their respective Tennessee school districts of similar geographical restrictions.

Results from hypothesis testing for Tennessee school districts which border Group 1 Illinois school districts showed *a medium significant difference* between average teacher salary. When looking at the area selected in *Figure 14*, Group 1 school districts showed an average teacher salary in Tennessee being 8% lower than in Illinois.

Results from hypothesis testing for Tennessee school districts which border Group 2 Illinois school districts, however, showed *no significant difference* in average teacher salary.

Figure 15: Average Teacher Salary – Illinois vs. Tennessee ROE Comparison Maps.

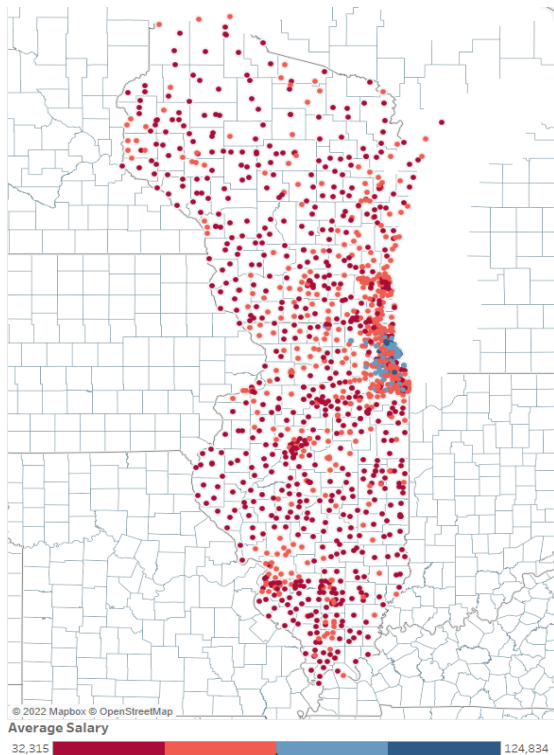


FINDINGS – ILLINOIS VS. WISCONSIN

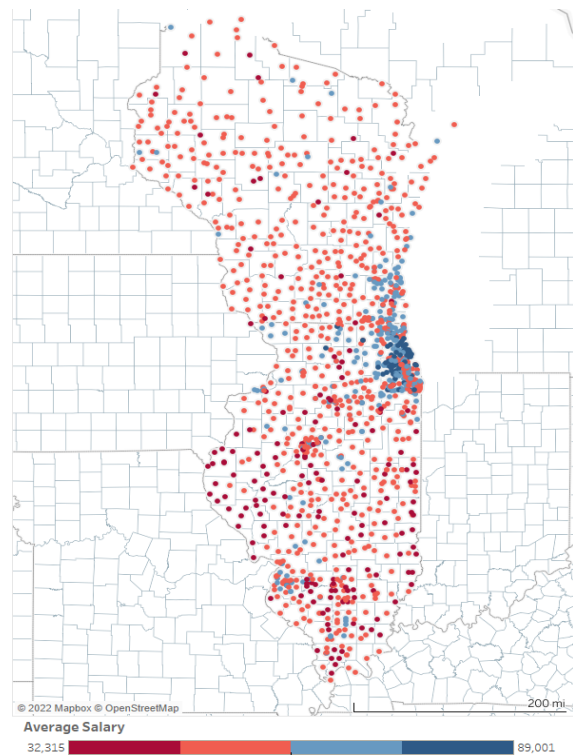
When looking at *all* school districts (outliers included), significance testing shows that the average teacher salary in Wisconsin is significantly lower than those in Illinois by 8%. After removing the outlier school districts from the data set, statewide average teacher salaries in Wisconsin are still significantly lower than those in Illinois by 4%.

Figure 16: Average Teacher Salary – Illinois vs. Wisconsin Comparison Maps

Extreme Outliers Included



Extreme Outliers Removed



Like the Illinois and Michigan comparison, average teacher salary in Illinois and Wisconsin appear to be similar, with Wisconsin having less variation across the state compared to Illinois. The real difference between Illinois and Wisconsin's average teacher salary, however, shows itself once looking along their border.

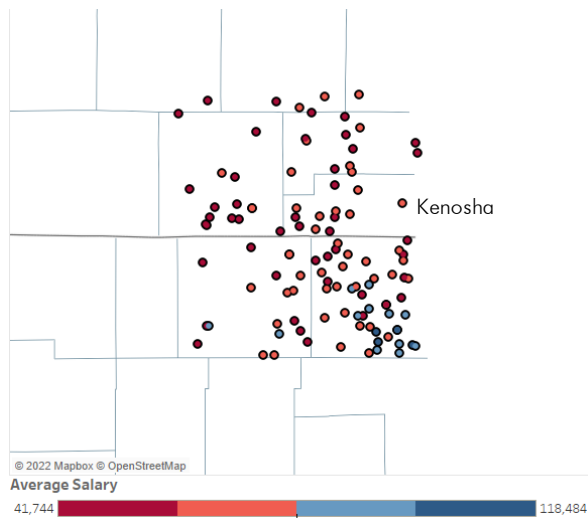
In the Illinois-Wisconsin ROE comparison, two groups of ROEs were analyzed: 1) ROEs 34 and 44, and 2) ROEs 4 and 8 along with their respective Wisconsin school districts of similar geographical restrictions.

Results from hypothesis testing for Wisconsin school districts which border Group 1 Illinois school districts showed a *large significant difference* in average teacher salary. When looking at the area selected in *Figure 16*, Group 1 school districts showed an average teacher salary in Wisconsin being 21% lower than in Illinois. This comparison shows a "Large" difference in group means¹⁰. Likewise, hypothesis testing for Wisconsin school districts which border Group 2 Illinois school districts again showed a *medium significant difference* in average teacher salary. Group 2 school districts showed an average teacher salary in Wisconsin being 8% lower than in Illinois. These results indicate that Illinois average teacher salaries are

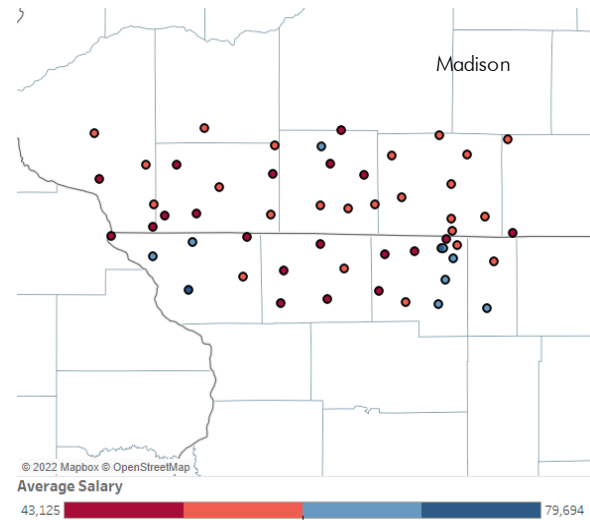
indeed greater than those in Wisconsin along the border, which could potentially lead licensed teachers to cross over from one state to the other in search of higher compensation.

Figure 17: Average Teacher Salary – Illinois vs. Wisconsin ROE Comparison Maps.

ROEs 34 and 44



ROEs 4 and 8



CONCLUSION

Salary is an important component to teacher recruitment and retention, and Illinois has consistently ranked in the “top-10” nationwide for average teacher salaries. However, further analyses show that there are several “extreme outliers” which skew the average teacher salary in Illinois due to high variation across districts. Further investigations comparing Illinois to its neighboring states—Indiana, Iowa, Kentucky, Michigan, Missouri, Tennessee, and Wisconsin—show that, after removing the outliers, average teacher salaries across Illinois are comparable to Iowa and Wisconsin, lower than in Michigan, and higher than in Indiana, Kentucky, Tennessee, and Missouri.

Looking along the border tells a different story. All along the borders in both Kentucky and Missouri there was little to no difference in average teacher salary compared to respective school districts in Illinois. There was little to no difference for most school districts along the border between Indiana and Illinois except in the northeast regions of Illinois where districts in ROEs 7, 32, and 56 had significantly higher average teacher salaries than their geographic counterparts in Indiana. Iowa bordering school districts show a significantly higher teacher salary to those in Illinois except around ROEs 8 and 47. Only Tennessee school districts who border Illinois ROEs 21 and 30 were significantly lower in average teacher salary than those in Illinois. Lastly all school districts which border Illinois in both Michigan and Wisconsin showed a statistically lower average teacher salary.

These results indicate that Illinois is, in general, not paying their teachers more than teachers from neighboring states. This is especially true when looking along each states’ respective borders. Additional analyses excluding outlier school districts with ROE group comparisons were not performed. However, one may infer similar results to occur with lower variation in average teacher salary within each state.

Furthermore, this analysis confirms that the average teacher salary offered by Illinois school districts vary greatly across the state. The average teacher salary ranges from \$32,315 to \$121,834 with 45 districts identified as “extreme outliers”. Broad comparisons of Illinois public education across the whole state can be misleading. Illinois policymakers need to look closely at information to understand the variations across the state and develop targeted strategies that support the unique subgroups of school districts, not necessarily blanket policies that impact all school districts.

ENDNOTES

- ¹ Beilstein and Withee (2021). *2021 Illinois Educator Shortage Survey*. Edwardsville, IL: Goshen Education Consulting. Retrieved from: <https://iarss.org/wp-content/uploads/2022/02/IARSS-2021-Educator-Shortage-220207-1.pdf>
- ² Patrick and Carver-Thomas (2022). *Teacher Salaries: A Key factor in Recruitment and Retention*. Learning Policy Institute. Retrieved from: <https://learningpolicyinstitute.org/blog/teacher-salaries-key-factor-recruitment-and-retention>
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APPENDIX A – ILLINOIS VS. INDIANA

Table 1: IL vs IN Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	0.82	Large
Indiana	224	\$50,432	\$4,775			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.001*	0.82	Large
Indiana (Outliers Removed)	221	\$50,219	\$4,432			

*Statistically significant

Table 2a: IL vs IN Average Teacher Salary Comparison ROEs 12 and 20

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	31	\$48,698	\$5,447	>0.05	0.4570	Small
Indiana	15	\$50,460	\$3,836			

Table 2b: IL vs IN Average Teacher Salary Comparison ROEs 11 and 54

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	34	\$47,994	\$5,357	>0.05	0.2850	Small
Indiana	16	\$47,104	\$4,212			

Table 2c: IL vs IN Average Teacher Salary Comparison ROEs 7, 32, and 56

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	105	\$62,625	\$12,944	<0.001*	1.437	Very Large
Indiana	35	\$49,470	\$4,386			

*Statistically significant

APPENDIX B – ILLINOIS VS. IOWA

Table 3: IL vs IA Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	0.3150	Small
Iowa	327	\$55,680	\$6,004			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.05*	0.14	Negligible
Iowa (Outliers Removed)	324	\$55,705	\$5,809			

*Statistically significant

Table 4a: IL vs IA Average Teacher Salary Comparison ROEs 26 and 33

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	27	\$46,958	\$6,298	<0.001*	2.111	Very Large
Iowa	24	\$56,362	\$6,681			

*Statistically significant

Table 4b: IL vs IA Average Teacher Salary Comparison ROEs 28 and 49

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	31	\$53,819	\$8,790	<0.05*	1.043	Large
Iowa	14	\$60,300	\$5,940			

*Statistically significant

Table 4c: IL vs IA Average Teacher Salary Comparison ROEs 8 and 47

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	32	\$55,416	\$7,907	>0.05	0.072	Negligible
Iowa	32	\$55,820	\$7,307			

APPENDIX C – ILLINOIS VS. KENTUCKY

Table 5: IL vs KY Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	0.8070	Large
Kentucky	167	\$50,571	\$3,959			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.001*	0.83	Large
Kentucky (Outliers Removed)	162	\$50,137	\$3,059			

*Statistically significant

Table 6a: IL vs KY Average Teacher Salary Comparison ROEs 21 and 30

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	46	\$52,325	\$8,668	>0.05	0.3490	Small
Kentucky	12	\$50,128	\$3,929			

Table 6b: IL vs KY Average Teacher Salary Comparison ROE 20

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	21	\$49,085	\$5,249	>0.05	0.02	Negligible
Kentucky	15	\$49,160	\$3,428			

APPENDIX D - ILLINOIS VS. MICHIGAN

Table 7: IL vs MI Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.05*	0.142	Negligible
Michigan	544	\$57,726	\$9,480			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.05*	0.15	Negligible
Michigan (Outliers Removed)	526	\$58,061	\$8,088			

*Statistically significant

Table 8a: IL vs MI Average Teacher Salary Comparison ROE 15

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	6	\$64,619	\$13,638	Inconclusive**	0.9630	Large
Michigan	13	\$55,327	\$7,392			

**Too few school districts selected

Table 8b: IL vs MI Average Teacher Salary Comparison ROEs 5 and 34

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	91	\$79,496	\$17,873	<0.001*	1.976	Very Large
Michigan	27	\$54,525	\$7,303			

*Statistically Significant

APPENDIX E - ILLINOIS VS. MISSOURI

Table 9: IL vs MO Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	1.436	Very Large
Missouri	563	\$43,802	\$7,811			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.001*	1.78	Very Large
Missouri (Outliers Removed)	531	\$42,497	\$5,781			

*Statistically significant

Table 10a: IL vs MO Average Teacher Salary Comparison ROEs 30 and 45

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	35	\$50,546	\$6,927	>0.05	0.526	Medium
Missouri	53	\$47,969	\$9,905			

Table 10b: IL vs MO Average Teacher Salary Comparison ROEs 41 and 50

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	36	\$58,111	\$6,763	>0.05	0.369	Small
Missouri	37	\$56,344	\$11,344			

Table 10c: IL vs MO Average Teacher Salary Comparison ROEs 1 and 40

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	34	\$47,376	\$6,555	>0.05	0.367	Small
Missouri	30	\$45,674	\$8,392			

APPENDIX F - ILLINOIS VS. TENNESSEE

Table 11: IL vs TN Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	0.798	Medium
Tennessee	126	\$50,662	\$4,950			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.001*	0.82	Large
Tennessee (Outliers Removed)	120	\$50,291	\$3,423			

*Statistically significant

Table 12a: IL vs TN Average Teacher Salary Comparison ROEs 21 and 30

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	45	\$52,398	\$8,751	<0.05*	0.593	Medium
Tennessee	21	\$48,725	\$2,601			

*Statistically significant

Table 12b: IL vs TN Average Teacher Salary Comparison ROE 20

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	21	\$49,085	\$5,249	>0.05	0.133	Negligible
Tennessee	13	\$49,579	\$2,436			

APPENDIX G – ILLINOIS VS. WISCONSIN

Table 11: IL vs WI Average Teacher Salary Comparison

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	858	\$59,251	\$15,218	<0.001*	0.42	Small
Wisconsin	421	\$54,734	\$5,930			
Illinois (Outliers Removed)	813	\$56,856	\$11,389	<0.001*	0.29	Small
Wisconsin (Outliers Removed)	416	\$54,511	\$5,594			

*Statistically significant

Table 12a: IL vs WI Average Teacher Salary Comparison ROEs 34 and 44

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	66	\$70,706	\$16,580	<0.001*	1.04	Large
Wisconsin	42	\$58,517	\$6,753			

*Statistically significant

Table 12b: IL vs WI Average Teacher Salary Comparison ROEs 4 and 8

State	#Districts	Mean	St. Dev.	p-value	Cohen's D	Interpretation
Illinois	24	\$58,082	\$9,028	<0.05*	0.642	Medium
Wisconsin	30	\$53,981	\$4,669			

*Statistically significant