

# Nebraska Education Finance: Evaluating the Property Tax Approach to Revenue

*May 1, 2018*

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## **EXECUTIVE SUMMARY**

This paper explores the effects of local revenue sources for public education as measured by district level property taxes on Nebraska's educational outcomes. Many states now rely heavily upon state funding instead of local funding. Nebraska appears to be behind this trend, maintaining a heavy reliance on local tax receipts.

Property tax revenues account for approximately 30 percent of total revenues for K-12 public education across the nation. For Nebraska, property taxes alone account for approximately 85 percent of total local receipts, and account for about 45 percent of total revenues for school districts. Nebraska school districts are experiencing a large divergence in funds due to the dependence on property taxes for educational financing.

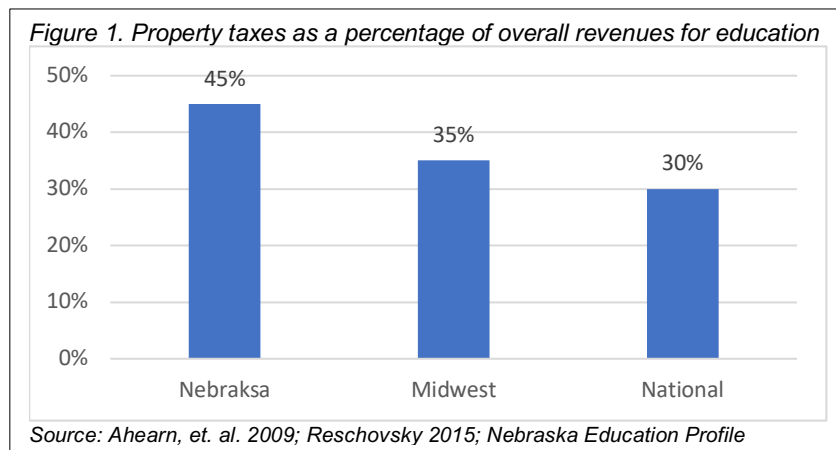
The risks of district inequity are higher when public education depends too heavily on property taxes. Property tax rates are relatively stable, but fluctuations arise when circumstances change that can disrupt the relative tax basis among districts. The tax basis can diverge when property values rise at different rates over time, or when government projects take over possession of property, which was seen in Lincoln County in Nebraska.

This paper considers the effect of having property taxes as the main revenue stream for Nebraska school districts. To explore a relationship between the relatively high dependence on property taxes and the outcomes for students, district, county, and state level budget data was used for budget comparisons and Nebraska State Accountability (NeSA) data for student performance. It concludes with potential policy implications that arise as a result of the findings.

## INTRODUCTION

Historically, funding for public school districts in the United States was comprised of a mixture of revenues raised at the local, state, and federal levels. Recently, however, variation in performance among states has increased with changes in government financing for public education. Many states now rely heavily upon state funding instead of local funding. Nebraska appears to be behind this trend, maintaining a heavy reliance on local tax receipts.

Local tax receipts consist mainly of property taxes and various forms of other taxes, such as local sales tax. On average, property tax revenues account for approximately 30 percent of total revenues for K-12 public education across the nation. In the Midwest<sup>1</sup> property taxes account for a larger portion, about 35 percent, of the total revenues for K-12 public education (Ahearn, et. al. 2009). Nebraska is well above both the national average and the average for the Midwest in relation to property tax revenues for schools. In Nebraska, local receipts, as a percent of total receipts, to finance schools account for 55 percent of revenues raised (Nebraska Education Profile). Property taxes alone account for approximately 85% of these local receipts, totaling to about 45% of revenues for school districts raised from property taxes alone (Reschovsky 2015). Nebraska school districts are experiencing a large divergence in funds raised due to the dependence on property taxes for educational financing.



This heavy reliance on property taxes has deleterious effects on Nebraska schools for a number of reasons. Since property taxes account for such a large portion of the revenue stream, a decline in property taxes results in a large decline in the revenue base (Ahearn, et. al. 2009). The decline in property taxes referred to here, often does not occur organically as a large change in tax rates from year to year. Property tax rates on whole are relatively stable. Rather, these fluctuations arise when events occur to disrupt the tax basis, such as government acquisition of large plots of land, which is the case with Lincoln County in Nebraska.

Furthermore, wealthier districts have the ability to raise more funds than non-wealthy districts, which leads to inequities (Ahearn, et. al. 2009; Arocho 2014). The money raised from property taxes in the wealthy districts is not redistributed, thus resulting in a large disparity of funds between wealthy and non-wealthy school districts. The resulting disparity is large at the national level, as expected, but is surprisingly large at the state level as well. This disparity

1. According to the U.S. Census Bureau, the Midwest is comprised of the following states: North Dakota, South Dakota, Nebraska, Kansas, Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Ohio, and Michigan.

directly affects the students because not all students are receiving the same resources in schools and thus, do not have the same educational opportunities as their counterparts in the wealthier school districts. Additionally, assessment measures vary across districts and are largely influenced by political incentives (Kent & Sowards 2000; Ross 2011). The result is ambiguity between the amount reported in property taxes and the amount taxpayers actually pay to the locality in taxes once the additional levy is considered. This creates a further divergence in funds raised across school districts.

This paper seeks to understand national trends in education financing and evaluate how well Nebraska as a state compares. By comparing school districts' education financing programs within the state of Nebraska and the reliance on property taxes, the relationship between reliance on tax receipts and funding distribution becomes clear: **Nebraska's reliance on local tax receipts, particularly property taxes, has resulted in an inequitable distribution of funding and increased revenue disparity across districts, which leads to adverse effects for Nebraska students.** These adverse effects arise in the form of lower math, science, and reading test scores for students in Nebraska. This paper will provide an overview of education financing systems based largely on property taxes and the literature that coincides with this form of funding. It will then provide economic reasoning and empirical evidence for why a heavy reliance on property taxes is undesirable and provide alternative solutions to be considered for the future.

## BACKGROUND

Relevant court cases provide insight into why education financing remains tied to property taxes even though inequities inherently occur. In the past, state courts have ruled on the constitutionality of property taxes as a means to finance public education. The resulting effect of this has been an increase in educational financing to non-wealthy districts in the form of state aid (Dee 2000).

For example, the San Antonio Independent School District V. Rodriguez case was ruled that it is constitutionally permissible to use property taxes for revenue generation because it was not deemed as providing unequal opportunity for the students (Arocho 2014). On the other hand, the Phyer V. Doe case was ruled saying that localities cannot completely deny children education (Arocho 2014). This ruling was a big step in the right direction for equality advocates. However, it did not achieve what many were hoping: to eradicate property taxes as a main revenue stream. This is because the court ruled that only a *complete* denial of education is unconstitutional, whereas property taxes only result in school district inequities (Arocho 2014).

Despite many of the rulings regarding the permissibility of property taxes for educational revenue generation, the economic literature surrounding this topic overwhelmingly agrees that this practice has detrimental effects on student's educational opportunities. Relying on property taxes for revenue generation leads to district revenue inequities, which is correlated with fewer educational opportunities. When the heavy use of property taxes is employed, there exists a large disparity in district revenues per pupil. This can be seen in Nebraska, which has a large disparity in spending per pupil compared to other Midwest states, arguably due in part to the varying amounts of revenues school districts have access to across the state. In most states, Nebraska included, property taxes account for the largest variation in revenue across districts (Ahearn, et. al 2009).

A further extension of the current argument is that district revenue inequities result because wealthier districts are able to raise more revenues than non-wealthy districts as a result of having higher property values (Ahearn, et. Al 2009; Arocho 2014; Ostrander 2015; Verstegen and Jordan 2009). Further, wealthier districts retain the ability to raise more funds at a lower cost-rate to the homeowners than non-wealthy school districts (Verstegen and Jordan 2009). For example, consider a home valued at \$100,000 in one district and another home valued at \$50,000 in an adjacent district. The home in the first district would only have to pay a rate of 2 percent to obtain \$2,000 for the school district, whereas in the second district the rate to achieve this amount is considerably higher at 4 percent, double the rate.<sup>2</sup>

The economic literature also cites the arbitrary value of property assessments as an issue with relying too heavily on property taxes. Assessment measures vary across districts (Kent and Sowards 2000), making it difficult to raise the same amount of tax revenues on comparable homes that reside in different districts. Furthermore, levy amounts are not counted as a portion of the property tax figure which is reported, thereby inflating the amount the taxpayer is actually paying versus what is recorded (Kent and Sowards 2000).

Property tax is still the main revenue base for public education financing, but this trend is shifting (Reschovsky 2013). The trend is largely moving towards more state involvement over local involvement (Ahearn et. Al 2009; Dee 2000). This is seen through state foundation formulas. In the formulas for many states additional funding is provided by the state for variables school districts are unable to control, such as student demographics, geographic isolation and overall district size (Verstegen and Jordan 2009; Ahearn et. Al 2009).

Potentially of most importance, and of particular interest, is the shift from an equity-based reform view to an adequacy-based reform view (Arocho 2014; Verstegen and Jordan 2009). In an equity-based reform, individuals are concerned with inputs, such as how much money is spent per pupil with outcomes being, in part, ignored. Conversely, in an adequacy-based reform approach, individuals are concerned with achieving adequate levels of educational outcomes and the relative inputs that are needed to help achieve those desired outcomes (Arocho 2014).

## **RISKS WITH PROPERTY TAX RELIANCE**

As previously stated, a large decline in property taxes has detrimental effects on school districts. This has been seen first-hand in Nebraska's Lincoln County. To meet the requirements of the Republican River Compact of the Nebraska Cooperative Republican Platte Enhancement Project (N-CORPE) the state acquired 19,000 acres of land in Lincoln County (Goss & Associates 2017). The purchase of these 19,000 acres in Lincoln County by the state removed this land from the state tax rolls (Goss & Associates 2017). Due to this loss of tax revenue from the acquisition, the projected effects on the school districts in Lincoln County for the years 2014 – 2021 are as follows (see Figure 2): Hershey school district will experience a loss of \$266,096; Maywood district will experience a loss of \$486,339; North Platte district will experience losses of \$322,850; and Wallace district will lose approximately \$2,280,681. These losses are expected to total \$3,315,966 for the surrounding school districts (Goss & Associates 2017).

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2. Homeowners do not actually pay 4% in property taxes. This figure is used to demonstrate the magnitude of the difference between districts.

Additionally, it is significantly easier for wealthier districts to raise more money due to higher property values (Ahearn, et. Al 2009; Arocho 2014; Ostrander 2015; Verstegen and Jordan 2009). The differences in revenues that arise as a result of this are not entirely corrected for in Nebraska’s state foundation formula. These inequities result in an unequal distribution of educational opportunities for students across the state. This is of significant concern because adequate education results in an increase in human capital.

*Figure 2. Projected revenues lost by school district in Lincoln County from 2014 to 2021*

School District	Projected lost revenues
Hershey	\$266,096
Maywood	\$486,339
North Platte	\$322,850
Wallace	\$2,280,681
Total	\$3,315,966

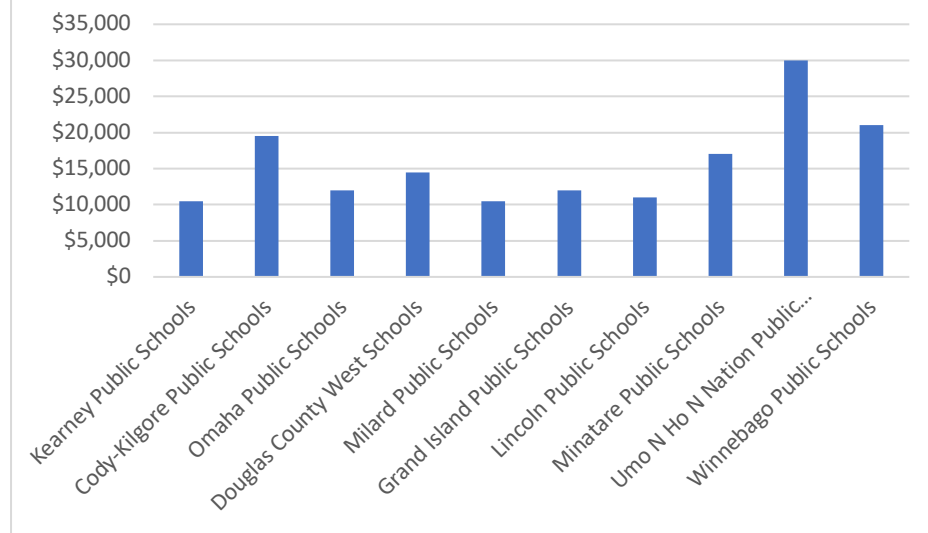
*Source: Goss & Associates 2017*

Without providing students with an opportunity to succeed in an educational setting, Nebraska is restricting its ability to increase human capital within the state. This has spillover effects resulting in a decrease in production and productivity for the state. Furthermore, this has the potential to result in the brain drain, in which high achieving students leave the state after receiving their diploma. High human capital, and thus equal educational opportunities, should be a priority for Nebraska policy makers, so the state can continue to incentivize businesses and residents to move to and remain in the state.

## **RELATING PROPERTY TAXES TO EDUCATIONAL PERFORMANCE**

Figure 3 displays how spending varies across selected Nebraska school districts. Average district spending per pupil across Nebraska varies from approximately \$9,000 per pupil to roughly \$35,000 per pupil (Nebraska Department of Education and School Finance). This large discrepancy leads to district inequities and may be a direct result of the varying levels of property taxes in these districts. The inequities that result make it substantially difficult for school districts across Nebraska to provide relatively equal levels of educational opportunity. This is not to suggest that all school districts should provide the same exact level of funding for students, as increasing spending does not necessarily lead to better educational outcomes (Kirabo et. Al. 2015). Educational spending experiences diminishing marginal returns, so increased spending is beneficial to a certain point and after that point, further spending continues to matter less and less. Rather, decreasing the \$26,000 gap slightly – allowing districts to supply their students with similar levels of resources - instead of applying a standard number across the board, between districts may help to correct for some of the inequities.

Figure 3. Difference in spending across school districts in Nebraska. Displays cost per pupil for average daily attendance (ADA) for the 2015–2016 school year



Source: Nebraska Department of Education and School Finance

Figure 4 displays the percentage of students who are below, meet, or exceed the Nebraska State Accountability (NeSA) math, English, and science exam standards for grades four and eight during the 2016–2017 school year. The property tax request by school district for ten<sup>3</sup> school districts in Nebraska is also listed. ACT scores are not used in Figures 4 and 5 because they do not represent the most robust metric in determining the effect of property taxes on student outcomes in Nebraska. This is because not all students in Nebraska were required to take the ACT until the 2017-2018 school year (Dejka 2017).

Figure 4. Percentage of students who are below, meet, or exceed NeSA math, English, and science standards for the 2016–2017 school year for grades four and eight and total property tax request by school district for some of the top schools by property tax request

School District	Property Tax Request (000s)	Grade 4 Math Below	Grade 4 Math Meet	Grade 4 Math Exceed	Grade 8 Math Below	Grade 8 Math Meet	Grade 8 Math Exceed	Grade 4 English Below	Grade 4 English Meet	Grade 4 English Exceed	Grade 8 English Below	Grade 8 English Meet	Grade 8 English Exceed	Grade 8 Science Below	Grade 8 Science Meet	Grade 8 Science Exceed
Lincoln	\$240,400	18	46	35	33	45	22	35	42	23	42	38	20	31	45	25
Kearney	\$41,95	16	46	38	33	55	13	34	48	18	43	39	19	29	53	18
Millard	\$27,525	13	50	37	28	54	18	30	46	24	38	46	16	20	47	33
Norfolk	\$27,336	19	54	27	34	51	15	40	45	15	57	34	10	23	44	33
North Platte	\$26,235	20	58	21	26	57	17	48	40	12	52	37	11	26	51	23
Cody-Kilgore	\$1,560	NA	53	47	NA	58	NA	53	41	NA	42	50	NA	NA	58	NA
Douglas County West	\$1,217	11	35	54	30	52	19	37	45	18	56	30	15	NA	50	46
Winnebago Public	\$1,106	58	35	NA	88	12	NA	80	18	NA	93	NA	NA	86	14	NA
Minatare	\$449	NA	50	NA	28	72	NA	60	NA	NA	83	NA	NA	61	39	NA
Umo N Ho N Nation	\$234	97	NA	NA	NA	NA	NA	95	NA	NA	NA	NA	NA	96	NA	NA

Source: (statespending.nebraska.gov; Nebraska Education Profile).

3. The top five and bottom five school districts by property tax request.

Those districts which did not require all of their students to take the ACT examination, likely have skewed test results because only students who anticipated going to college, from those districts took the ACT, making their average district scores higher than they otherwise may be. For this reason, NeSA examination results are a more appropriate indicator of student outcomes, as all public-school students in Nebraska were required to take the NeSA examination (Dejka 2016).

From the above tables, it is clear that property taxes have less of an effect on students in each grade for each subject who exceed the NeSA standards. As property taxes levied for the district increase, the percent of students who exceed the NeSA standard for math, English, and science do not increase. It can be deduced, however, that the amount of property taxes levied per school district, has a significant impact on the percent of students who meet the NeSA standards or who lie below the standards. Overall, as the amount of property taxes levied increases, the percent of students who do not meet the NeSA standard decreases. This trend provides indication that property taxes have an effect on students of lower educational ability.

## **CONCLUSION**

As demonstrated, utilizing property taxes as a main revenue stream has adverse effects on Nebraska students, particularly students of lower academic achievement levels. Nebraska's reliance on local tax receipts, particularly property taxes, has resulted in an unequitable distribution of funding. These negative effects are realized in the form of increased disparity between districts in property tax request, per pupil spending by average daily attendance, and NeSA examination scores.

These effects can likely only be countered by increased state involvement in public education financing. Diversification of revenues using state funds is a potential solution that much of the current literature favors (Ahearn et. al. 2009; Kent and Sowards 2000; Schunk and Porca 2005). In addition to increasing state involvement, Nebraska could opt for a focus on the adequacy-based approach as opposed to an equity-based approach. This shift in focus could help ensure that students in Nebraska are achieving a desired level of education regardless of the school district in which they reside. Lastly, as is primarily the case for Lincoln County, the state of Nebraska should be required to compensate for local receipts from land which it acquires. This would ensure that the land is in effect not taken off of the tax rolls in the event of an acquisition and that the schools in the surrounding districts are not affected by a large loss of taxable property. Overall, the effects of property taxes as a main revenue stream can be mitigated by increased state involvement and a focus on an adequacy-based approach, leaving a better future for the students of Nebraska.



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