

An Assessment of the Secure an Advanced Vision for Education (SAVE) Fund: Fiscal 2009 – 2015

A study by*

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Executive Summary

This study assesses Iowa's State Sales and Use Tax for School Infrastructure Act, which created the Secure an Advanced Vision for Education (SAVE) Fund. This study by Iowa State University researchers has been requested and funded by the Iowa Association of School Boards. The report delves into the finances of the SAVE Fund to evaluate the flow of resources into the Fund, the amount of revenues leveraged by those state expenditures, and the uses for which those resources were put. This report is investigatory in nature, not prescriptive – it represents a systematic inquiry into the fund's current value to the state's school districts.

The data analyzed primarily cover the fiscal 2009 through fiscal 2015 periods of SAVE Fund activity. SAVE is authorized through fiscal 2029, so this assessment serves as an early implementation inquiry. Accordingly, we are looking at school districts' adaptations to the flow of funds via this legislation. These adaptations follow the 1999 implementation of the School Infrastructure Local Option Sales Tax Act (SILO), which also allowed for sales tax resources to underwrite local school capital development and to provide property tax relief. As successor to SILO, the SAVE fund reflects a continuation of state support for school infrastructure enhancements, not a unique and clearly new program. As a result, there is no before-SAVE baseline established in this report regarding school capital spending.

SAVE Fund resources provide an important supplement to a school district's revenues. Those receipts can be used for school infrastructure improvements, to include construction, reconstruction, repair, demolition, and remodeling of schools, gymnasiums, and bus garages. The funds can be used to purchase transportation equipment, technology, and other school equipment. They can provide guaranteed revenues for debt service payments for revenue bonds, which are then used for school infrastructure purposes. Finally, the SAVE Fund receipts can be used to lower existing general obligation debt service levy rates, physical plant and equipment levy rates (PPEL), public education and recreation levy rates (PERL), and the PPEL income tax surtax rates if applicable. All levy rate reductions fall into the category of direct property tax relief.

The amount of resources distributed to the SAVE Fund since fiscal 2009 is substantial. SAVE has provided Iowa's school districts with revenues totaling just under \$2.8 billion, a funding stream that was worth \$2.933 billion in 2015 constant, or "real," dollars.¹ Iowa's schools have pledged some of these funds to leverage additional revenues from borrowing. Through fiscal 2015, districts have borrowed \$2.42 billion for capital improvements when expressed in 2015 constant dollars. The districts have received \$365.12 million in other real receipts during the first seven years of SAVE funding. If SAVE Fund receipts were averaged per student for the first seven years, the annual amounts would be \$880 in real sales taxes, \$726 in long term debt proceeds, and \$110 in all other revenues.

Save fund real expenditures over the first seven years totaled \$5.4 billion due in large part to long term debt expenditures. School infrastructure construction combined with other, primarily construction-

¹ All financial amounts in this study are converted to constant 2015 dollars to provide estimates of the current worth after accounting for inflationary changes in the value of money over time.

related, spending was 54.2 percent of the total. Transfers to pay debt service were 30.3 percent of spending, and equipment purchases a distant 6.5 percent. When SAVE Fund expenditures are compared to all other capital-related expenditures that Iowa's school districts are authorized to make, we find that SAVE Fund activity over the study period represented 45.4 percent of the total, with expenditures from general obligation debt service, PPEL, PERL, and other capital funds accounting for the remainder.

The report processes the flow of SAVE Fund receipts and associated expenditures by several school district classifications, which help to develop a more nuanced understanding of the SAVE fund and how it affected districts in different categories:

- metropolitan/nonmetropolitan status of the primary county served,
- the percentage of the district population residing in rural areas,
- size of the largest city within the district boundaries,
- the compounded annual enrollment growth trend considering the past 10 years, and
- the current school district size.

The starkest finding was the initial magnitude of difference in the distribution of SAVE resources due to residual funding allocation rules grandfathered in from SILO legislation that provided more resources to districts in counties with strong commercial centers at the expense of districts that were not in those areas. As such, districts in metropolitan counties, in a metropolitan core city, in large districts, or in most of the growing districts received, in the early years, much more SAVE Fund resources than districts that were in nonmetropolitan counties, in smaller communities, were otherwise small, or were enduring enrollment declines. This grandfathered SILO funding authority was exhausted by fiscal 2014, and all districts were receiving an average equalized real value of \$939 per certified enrollee by fiscal 2015.

Capital spending analysis over the first seven years found that higher levels of construction-related outlays per student occurred in those just-mentioned and more-advantaged district categories. The less-advantaged classifications tended to spend larger fractions of their SAVE resources on equipment. In all, the average school district dedicated \$1,003 per student for real capital-related activities annually. Higher initial capital outlays in the early years of SAVE suggest there was pent-up demand among the districts.

Available data provide at best an incomplete picture of the effects of SAVE on local property tax levies. Substantial amounts of SAVE Fund resources are transferred to "other funds," but it is not possible from the data to ascertain how much of those transfers were used for direct property tax relief over the duration of SAVE authorization. School districts were required to report their property tax relief uses of SAVE funds beginning in 2011 to remedy this gap in accounting. While there are substantial differences among the many categorical subdivisions of districts used in this study, statewide it was found that 30 percent of Iowa's districts reported using SAVE funds for property tax relief in fiscal 2011, but by 2015 that fraction fell to 16.6 percent. In 2011, the real property tax relief reported was \$47.94 million, 11.7 percent of all SAVE Fund receipts. By fiscal 2015, the real amount declined to \$26.4 million, or just 5.8 percent of SAVE Fund receipts. Further analysis of district property tax behavior over a longer period of

time demonstrated that districts' capital fund levy rates and their general fund rates tended to move inversely to one another, and that movement was influenced by the real value of the property tax base. Less clear was relationship between levy rates and the flow of SAVE resources over time.

The study documents the amount of disparity offset by transition to a statewide and ultimately equalized funding formula under SAVE versus the trade-center advantaged formula that existed under SILO. This disadvantage was eliminated in fiscal 2014. Had it not been eliminated and the old SILO formula were still the law, in fiscal 2015 \$54.34 million in extra revenues would have accrued to advantaged districts at the direct expense of all other districts in Iowa. Looking at just Iowa's nonurban areas, the amount of that subsidy would have resulted in an average penalty of \$288 per certified enrollee. Nonetheless, the previously more revenue-advantaged counties currently contain 57 percent of all certified enrollments and 17 of the state's 24 districts growing in excess of one percent annually. While there was, generally, an urban-to-rural equalization, there was also a shift of funds from a large fraction of the growth districts to low growth or declining districts.

The report produces a contingency estimate of potential future sales tax receipts. It considers the long-term growth in the state's total personal income in light of how much of that income finds its way into purchases of taxable goods and services. The resulting estimation found that real future growth in the SAVE Fund might range from a low of \$2.83 million annually to a high of \$14.96 million annually, with a middle estimate of \$8.24 million annually.

The study, after considering the uses of SAVE Fund resources for its first seven years, looked at a national evaluation of expected capital needs for Iowa's schools. It was found that Iowa had spent 97 percent of the national average on school infrastructure over the previous two decades. This amount was less than the neighboring states Illinois and Minnesota. Iowa's remaining bordering states spent substantially less than Iowa. That section questioned whether national estimates of Iowa's future capital needs were appropriate, and suggests that Iowa needs to conduct its own evaluation of expected capital needs.

The researchers also considered the following factors that might influence the flow of school infrastructure resources: amendments to the property tax base, the yield on state sales taxes and the definition of taxable sales; overall state economic performance, and state legislative or executive actions that can alter the flow of revenues to the SAVE Fund or to school districts' capital development resource base. It was shown that in all of these categories events or policies over the past two decades either influenced or had the potential to influence school districts' collective abilities to underwrite their infrastructure and equipment needs.

Finally the study discussed the possibility of SAVE Fund authorization being repealed or amended. Absent a pre-SILO and pre-SAVE baseline, which this study could not establish, it would not be possible to answer questions as to the adequacy of SAVE funds to date or as anticipated through 2029. The study finds that there were different capital demand preferences given the type or characteristic of the school districts scrutinized. Growing, more urban, and larger districts used more of their SAVE receipts

for new construction and rehabilitation. Smaller or declining districts used larger fractions of their allocations for equipment. The needs of growing, stable, and declining districts all demand further research.

The study found, however, that in recent years all classes of school districts have shifted to greater dependence on property tax-funded capital development authority. Much of that shift, importantly, must have come with local voter approval. This may indicate that SAVE funds are nonetheless insufficient to underwrite the full scope of Iowa school districts' modern infrastructure, technology, and equipment needs.

Introduction

This study is an evaluation of the State Sales and Use Tax for School Infrastructure Act, which created the Secure an Advanced Vision for Education (SAVE) Fund implemented in Fiscal 2009. The legislation dedicates a statewide one percent sales tax to Iowa's school districts for infrastructure purposes, technology and equipment, and property tax relief. This study was requested and funded by the Iowa Association of School Boards.

In 1998, the Iowa General Assembly created the School Infrastructure Local Option Sales Tax Act (SILO) that, upon local voter approval, allowed a one cent sales tax for school infrastructure or property tax relief for a 10-year period. By 2007, all counties had implemented SILO. There were, however, issues associated with the legislation as implemented: most notably the legislation allowed trade centers like metropolitan areas that enjoyed huge taxable sales surpluses to receive much more revenue per pupil than many other counties that suffered from strong taxable sales leakages to other counties. In general, non-urban counties were subsidizing more urban areas, resulting in an inequitable distribution of resources per student.

SAVE replaced SILO in 2008. It eliminated the local option sales tax and replaced it with a statewide one-percent sales tax that would eventually allocate the resources equally across the districts. According to state reports, from 2009 through 2013 the funds were distributed to the counties, and thence their school districts, in the same manner as if the SILO tax continued to exist. This "grandfathering" provision expired in 2014, and all school districts now receive the same revenues per pupil. The SAVE Fund is set to sunset in 2029, at which time the state's sales tax would be rolled back by a penny.

The uses of the SAVE Fund resources are spelled out in each school district's revenue purpose statement. The SILO legislation required this declaration of the intended uses of the funds, and, if districts do not have a current revenue purpose statement (i.e., it has expired and not been replaced), then the SAVE Fund legislation specifies sequentially how those funds may be used. Overall, SAVE fund receipts can be used for school infrastructure improvements, to include construction, reconstruction, repair, demolition, and remodeling of schools, gymnasiums, and bus garages. The funds can be used for transportation equipment and for technology and equipment purchases. SAVE funds can be pledged as debt service payments for revenue bonds, which are then used for school infrastructure purposes. Finally, the SAVE Fund receipts can be used to lower existing general obligation debt service levy rates, physical plant and equipment levy rates (PPEL), public education and recreation levy rates (PERL), and the PPEL income tax surtax rates if applicable. All levy rate reductions fall into the category of direct property tax relief.

Iowa's school districts have benefited from SILO and now SAVE resources since fiscal 1998. This study looks at the uses of SAVE Fund resources considering allocations from fiscal 2009 through fiscal 2015. In so doing, the report will:

- look at the cumulative flow of revenues into the SAVE Fund and the uses to which those resources have been put;
- evaluate the flow of funds and the uses to which they have been put considering metro, urban, and rural districts as well as growing, stable, and declining districts;
- assess the relationship between the SAVE Fund and property tax performance among the districts;
- describe the current value of the SAVE Fund resources after equalization that eliminates the per-pupil funding advantages of trade centers at the expense of non-urban districts;
- discuss and evaluate the state's school infrastructure needs and whether the current and expected future funding levels are sufficient to accommodate those needs;
- discuss what the consequences would be on a revenue basis were the law amended or repealed – especially in terms of property tax rate impacts; and
- highlight risks to the SAVE revenue flow through 2029 considering long-term patterns in taxable sales activity as well as the state's overall economic growth.

Section 1. SAVE Fund Resources and Expenditures, Fiscal 2009-2015

Data compilations from the Certified Annual Reports (CAR) of the school districts are relied upon for evaluating both revenue and expenditure characteristics of school districts. To properly evaluate the SAVE Fund, program revenues and expenditures need to be compared to other school finance accounts. Initially, though, this report focuses on the uses of SAVE Fund resources and the leverage those funds exert in support of revenue bonding activity to support capital development and infrastructure improvements among the districts.

SAVE Fund Revenues Overview

The SAVE Fund consists of a one-percent sales tax on eligible items levied statewide. The state of Iowa deposits 2.1 percent of total collections into the Property Tax Equity and Relief (PTER) Fund, which is combined with a standing state allocation and used to lower property tax rates in districts that have high additional levies. Nearly all (97.9 percent) of the revenues are distributed to the individual school districts on a per-certified-student-enrollment basis to be used for school infrastructure, equipment, and direct property tax relief.

Table 1 displays the sum of receipts over the fiscal 2009 through 2015 period. The data are presented first as actual receipts and second as values adjusted for inflation as 2015 constant amounts.² These inflation-adjusted amounts are called “real” values in the text, charts, and tables that follow. In terms of purchasing power in the last fiscal year, the summed SAVE Fund receipts of just under \$2.8 billion were worth \$2.933 billion in 2015 dollars.

Table 1

SAVE Fund Receipts, Fiscal 2009 to 2015

Nominal (Actual Receipts)	Real (Adjusted for Inflation)
\$ 2,796,594,265	\$ 2,933,331,748

SAVE Fund receipts can be used for school infrastructure or equipment. They also can be used for property tax relief. When used for school infrastructure, SAVE Funds may be pledged towards revenue bonds, which are then sold by the districts to underwrite their capital development plans. Accordingly, districts’ sales of these bonds, to be paid off in future installments, allow districts to borrow and build today and pay tomorrow given the legislation’s guaranteed revenue stream through 2029.

Table 2 presents the total nominal and real value of long term revenue bond sales. In the first seven years of SAVE, Iowa’s districts sold \$2.282 billion in revenue bonds, an amount that would be the equivalent of nearly \$2.42 billion in real 2015 dollars.

² Revenue and expenditure data over time will be presented in constant fiscal 2015 dollar amounts so as to standardize their values. The data were deflated using the GDP price deflator specific to state and local government consumption and gross investment.

Table 2

Revenues From the Sale of Long Term Debt, Fiscal 2009 to 2015

Nominal (Actual Receipts)	Real (Adjusted for Inflation)
\$ 2,281,919,879	\$ 2,416,576,753

Other resources are also deposited into school districts’ SAVE Fund accounts. Other state and federal grants, either as match or supplements, plus other local government receipts and transfers from other funds constitute the remainder of the fund. These other resources, summed, were \$349.4 million in nominal amounts, and \$365.12 million adjusting for fiscal 2015 purchasing power.

Table 3

All Other SAVE Fund Revenues, Fiscal 2009 to 2015

Nominal (Actual Receipts)	Real (Adjusted for Inflation)
\$ 349,438,782	\$ 365,117,562

Figure 1 demonstrates the pattern of real SAVE resources available for school infrastructure, equipment, or property tax relief. While the inflation-adjusted values of sales taxes receipts were more or less stable, it is evident that the first four years of SAVE resulted in the vast majority of total long-term revenue bond sales. From fiscal 2009 through 2012, 71 percent of revenue bond receipts were realized, which suggests there were significant pent-up school infrastructure demands and unmet needs that were underwritten with the new legislation.

Real SAVE Fund Resources, Fiscal 2009 to 2015

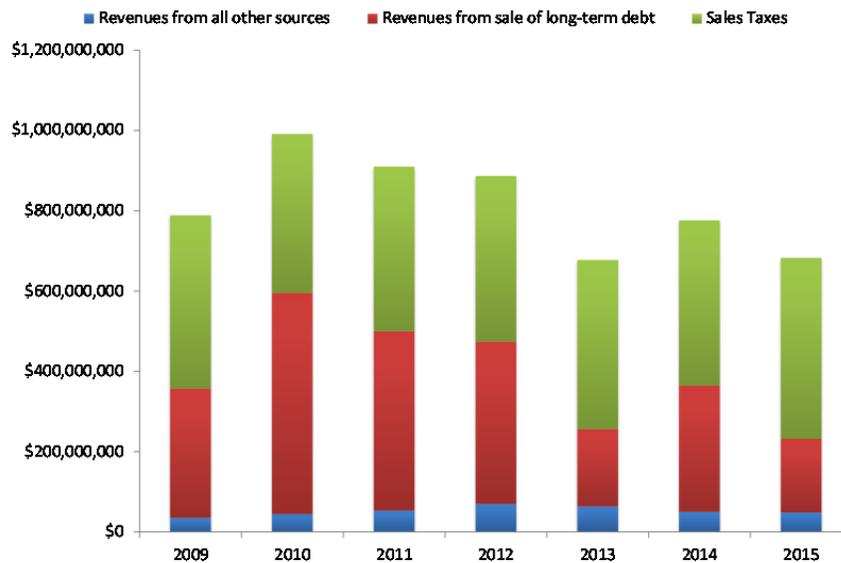


Figure 1

SAVE Fund receipts can also be standardized on a per student basis.³ Table 4 shows those yields. Between fiscal 2009 and 2015, real receipts per student from sales taxes were \$6,158, or \$880 per year. Proceeds from revenue bonds were \$5,081 per student, or \$726 annually, and all other receipts summed to \$767 per student, or \$110 per year.

Table 4

Real Per Pupil SAVE Fund Revenues, Fiscal 2009 to 2015

Sales Taxes	Sale of Long Term Debt	All Other
\$ 6,158	\$ 5,081	\$ 767
<i>Average Per Year</i>		
\$ 880	\$ 726	\$ 110

Finally, it is instructive to look at real SAVE sales tax receipts as they compare to all real property tax collections for schools over the same period as well as the longer-term trend predating SAVE.⁴ Figure 2 shows the standardized value of change over time. The data are indexed so that fiscal 2009, the first year of SAVE, is equal to 100. In inflation-adjusted terms, total school property taxes were 8 percent higher in fiscal 2015 than they were in 2009, while all real SAVE sales tax receipts were 5 percent higher. It is evident from this graph that overall real school property taxes increased progressively through fiscal 2012 before leveling off. In comparison, and not shown, certified enrollment was 1 percent higher in fiscal 2015 than in fiscal 2009.

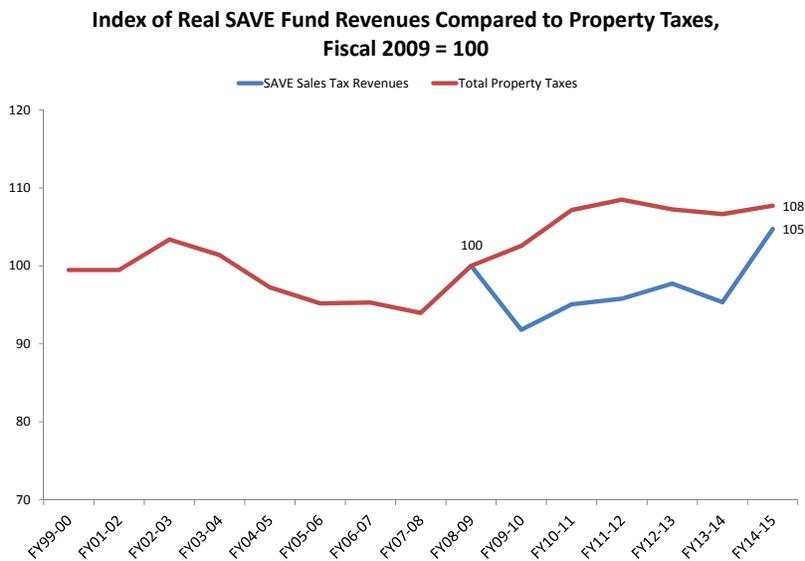


Figure 2

³ Certified enrollment is used as the unit of student standardization in the financial analyses.

⁴ Long-term school property tax total revenues were obtained from Iowa Department of Management Local Governments Division data files.

SAVE Fund Expenditure Overview

SAVE funds can be used for the purchase of transportation equipment, technology, and other school equipment. SAVE funds can be pledged as debt service payments for revenue bonds, which are then used for school infrastructure purposes. Finally, the SAVE Fund receipts can be used to lower existing general obligation debt service levy rates, physical plant and equipment levy rates (PPEL), public education and recreation levy rates (PERL), and the PPEL income tax surtax rates if applicable. All levy rate reductions fall into the category of direct property tax relief.

Table 5 shows the inflation-adjusted value of SAVE Fund uses during its first seven years of operation. Cumulatively, \$5.4 billion in expenditures were enabled, the largest share of which, \$2.485 billion, was for school infrastructure construction (46.0 percent). Transfers to the debt service fund of \$1.633 billion (30.3 percent) reflect revenue bond servicing obligations. The next highest category, at \$445.4 million, was other expenditures, which includes purchased professional services such as architects and engineers, repairs, rentals, supplies, and other infrastructure needs such as water and sewer (8.2 percent). Equipment was 6.5 percent of the total, at \$348.6 million.

Table 5

Real Save Fund Expenditures, Fiscal 2009 to 2015

	Total Expenditures	Percent of Total
School Infrastructure Construction	2,484,575,526	46.0%
Buildings Purchased	13,659,490	0.3%
Equipment	348,621,678	6.5%
Land Purchased	48,895,262	0.9%
Other	445,444,238	8.2%
Transfers to Other Funds	424,608,044	7.9%
Transfers to the Debt Service Fund	1,633,582,211	30.3%
Grand Total	\$ 5,399,386,450	100.0%

The amount of SAVE fund expenditures that are dedicated directly to lowering property taxes via general obligation, PPEL, or PERL debt service levy reductions is not apparent from Table 5. It is reasonable to assume that portions of the \$424.61 million (7.9 percent) of funds that were transfers to other funds were used for those purposes, but it is not possible to say how much.

Figure 3 displays the pattern of real construction and other capital-related spending over the life of the SAVE Fund. The “other” category is spending for architects, engineers, and public infrastructure costs. Construction, equipment, and all other spending grew progressively through the first years of the SAVE Fund before tailing off over the past three fiscal years. Land and other buildings are never large fractions of spending, but equipment spending grew incrementally from 9 percent of the total in 2009 to 15 percent in 2015.

**SAVE Fund Real Capital Related Spending Per Student,
Fiscal 2009 to 2015**

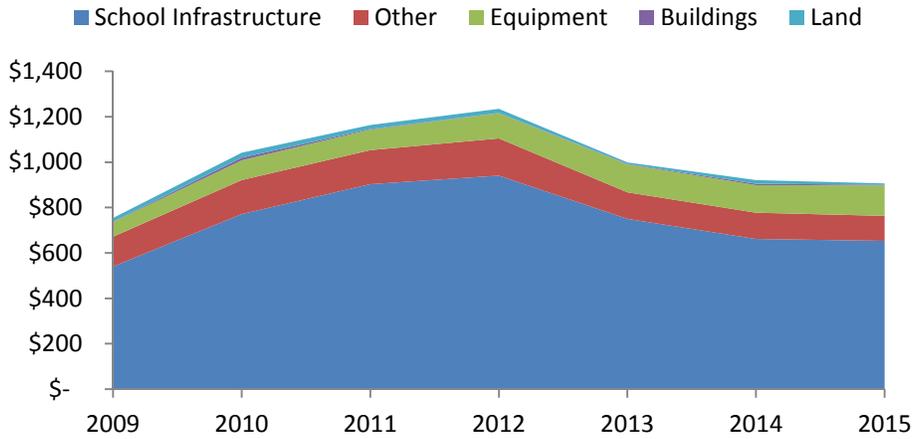


Figure 3

Table 6 shows the use of SAVE Funds along with all other capital-related spending categories for the 2009 through 2015 period. In real terms, a total of \$11.88 billion was spent. SAVE-funded projects accounted for 45.4 percent, and general obligation bond debt service was another 31 percent. Other capital projects, PPEL, and PERL made up the remaining quarter of spending.

Table 6

**Total School Infrastructure and Related Expenditures by Major Fund Type or
Authorization, Fiscal 2009 to 2015**

Category	Amount	Percent of Total
SAVE Fund	\$ 5,399,463,627	45.4%
G.O. Debt Service	3,662,974,036	30.8%
Other Capital Projects	1,481,731,982	12.5%
PPEL	1,319,534,415	11.1%
PERL	19,661,610	0.2%
Total	\$ 11,883,365,670	100.0%

Figure 4 shows the dependence on all of the capital-related funds available to school districts between fiscal 2009 and 2015. SAVE Fund spending grew to 51 percent of the total by fiscal 2012 before declining to 38 percent by fiscal 2015. General obligation debt service was 30 percent of the total in fiscal 2009, but grew to 38 percent by fiscal 2015.

Real Capital Related Spending by Fund Type, Fiscal 2009 to 2015

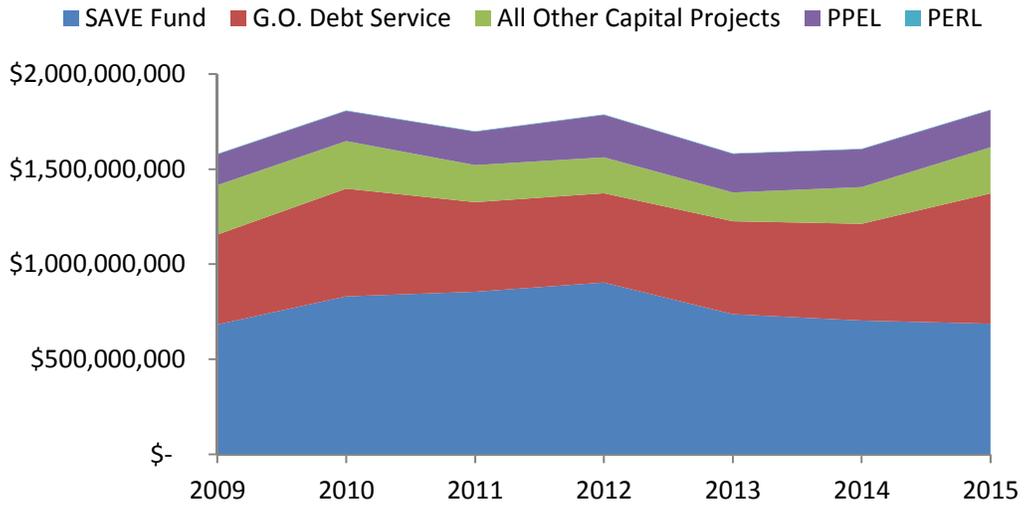


Figure 4

Section 2. SAVE Fund Resources and Expenditures Considering Levels of Urbanization and Growth Dynamics

SAVE Fund Revenues

There are profound differences in historical growth experiences across Iowa's counties, cities, and school districts. Metropolitan areas in Iowa, defined as counties or groups of counties with a core urban population of 50,000 or more, for the most part have enjoyed growth over the decades. The remainder of the state, in general, has not. Besides overall growth patterns, Iowa's school districts differ in terms of their sizes, whether they are in a large city or not, and whether enrollments are growing or not.⁵ This section looks at SAVE Fund sales tax receipts per certified enrollee considering the following categorizations:

- metropolitan/nonmetropolitan status of the primary county served by the district,
- the percentage of the district population residing in rural areas,
- size of the largest city within the district boundaries,
- the compounded annual enrollment growth trend considering the past 10 years, and
- the current school district size.

The five accompanying graphics demonstrate patterns of real SAVE Fund sales tax receipts per certified enrollee given the categories listed above.⁶ The purpose is to demonstrate how the different classifications explain the statutory allocation of SAVE resources over the first seven years of operation. As has been mentioned, initial SAVE allocations grandfathered existing SILO flows that were weighted by taxable sales in the county where the district was administered. Over the first five years, those existing SILO authorizations expired incrementally, bringing allocations to uniformity among the districts by fiscal 2014.

Figure 5 presents the metropolitan and nonmetropolitan comparison. Statewide, in fiscal 2009, \$904 in real SAVE funds were allocated per certified enrollee. Districts in nonmetropolitan counties, however, received \$794 per certified enrollee in 2009 while metropolitan districts averaged \$987 per certified enrollee. The groups converge in fiscal 2014, at \$858. Although slightly higher allocations are evident in nonmetropolitan districts than in metropolitan districts in 2015, this is an artifact due to the difference between when students are counted and when state aid is allocated.⁷

⁵ School districts are defined in this analysis using 2015 designations. All consolidations were "rolled-up" to fiscal 2015 definitions, and all of the data analyzed were likewise consolidated.

⁶ Appendix A provides describes the classifications, including a frequency table by type of classification as well as maps of the districts by type of classification.

⁷ State allocations to districts are technically uniform on a per-student basis after fiscal 2014. Minor divergences evident in Figure 5 through Figure 9 after fiscal 2014 arise from a difference between enrollment figures used by the state for allocating SAVE funds versus enrollment figures used in this report to standardize per student revenues and expenditures. The state allocates SAVE funds for the next fiscal year using certified enrollment from the previous school year, creating a one-year lag in the flow of assistance. That means that state aid underfunds growing districts and overfunds declining districts to a degree. In this study, however, we used certified

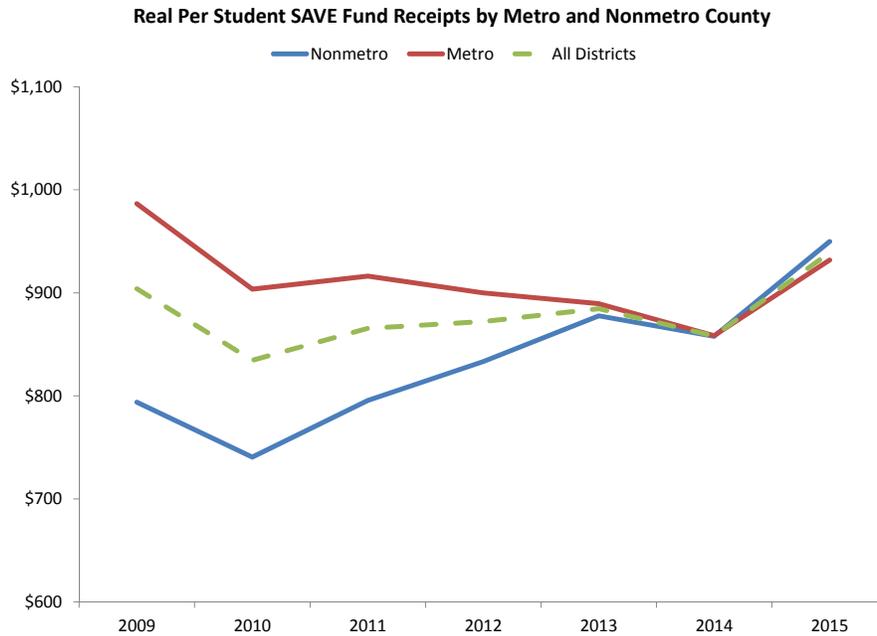


Figure 5

Figure 6 subdivides the districts by the rural or urban population of the school districts. Urban components of the school districts are communities with, as a general rule, 2,500 or more residents. Rural components are families residing in smaller communities and in unincorporated country. The initial distinctions are quite pronounced. In fiscal 2009, districts that are comprised of 75 percent or more of rural residents received \$771 in real SAVE funds per certified enrollee, those in the mixed group received \$811, and the most urban districts (those with fewer than 25 percent rural residents) received \$1,014. Convergence was achieved by fiscal 2014, where all classifications were close to the state average of \$858.

Figure 7 organizes the districts by the size of the largest city in the district. This classification resulted in the greatest per student divergence in fiscal 2009. The average district whose largest town was under 2,500 in population received \$781 per student. Districts where the largest town was under 50,000 but at least 2,500 received \$872 per student. Districts serving a central city of 50,000 or more received \$1,056 per student.

enrollments that aligned with the year in which the funds were received and used. In other words, the beneficiaries of state aid were aligned with the amount of state aid available to them for that school year. Differences between allocation year enrollment and fiscal year enrollment explain the minor variances in receipts evident across the categories in fiscal 2014 and 2015.

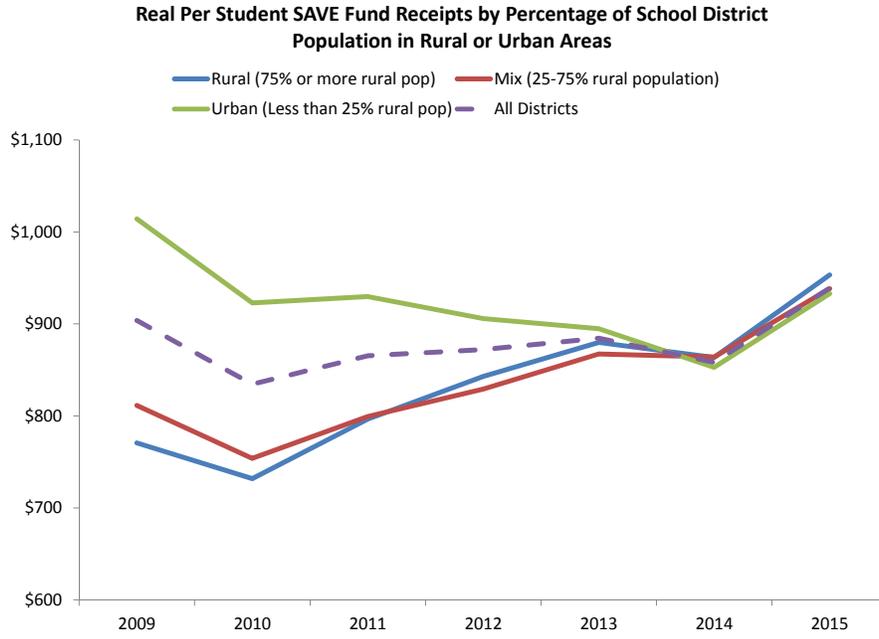


Figure 6

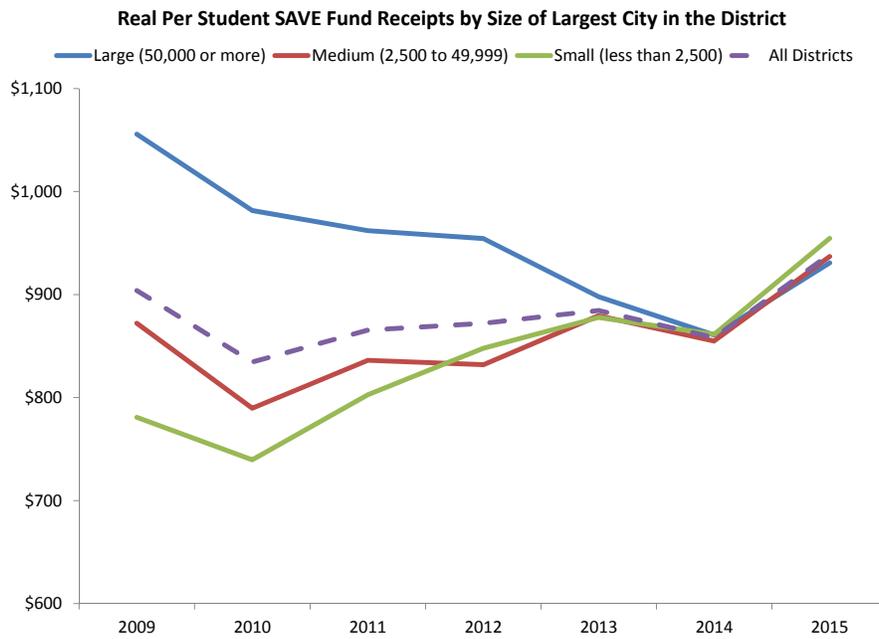


Figure 7

Figure 8 considers the growth pattern of the school districts over the past 10 years. Districts with enrollments declining by more than 1 percent (compounded) annually over the previous decade received \$775 per student in fiscal 2009. Districts that were declining by less than 1 percent per year yet not growing by more than 1 percent per year were classified as stable districts. Those districts received \$936 per student, about 3.5 percent more than the overall state average. Growing districts averaged \$997 per student. By 2013, however, allocations were greater to declining districts, though substantial convergence is evident by 2014 and 2015

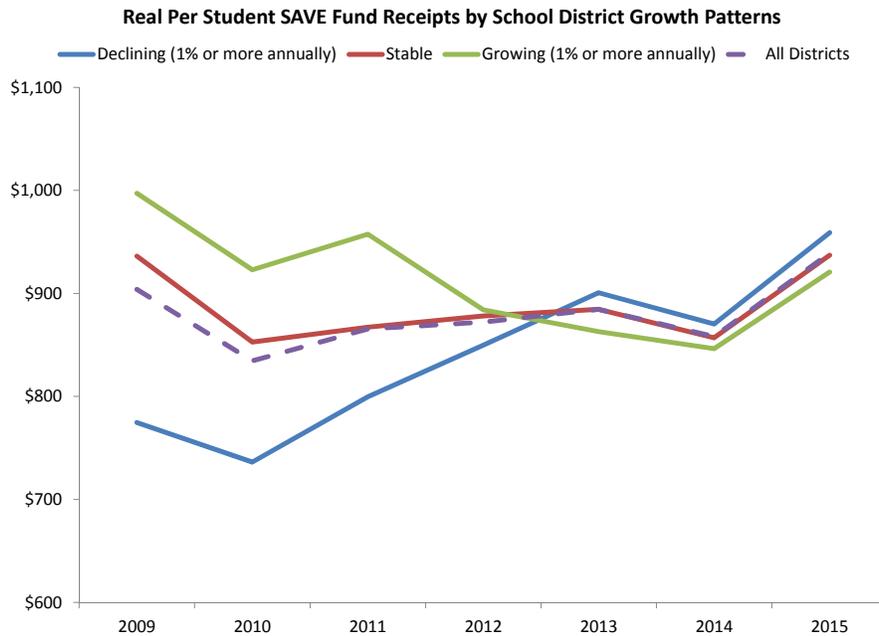


Figure 8

Finally, Figure 9 looks at small districts (certified enrollments of fewer than 250), medium districts (certified enrollments of 250 to 2,499), and large districts (certified enrollments of 2,500 or more). Initial divergence is very pronounced, with small districts receiving just \$747 per student in 2009, medium-sized districts gaining \$793 per student, and large districts reaping \$1,019 per student. Although small districts appear to be receiving substantially more than the statewide average in 2013 and 2014, this apparent variance is due to the difference in enrollment in the year SAVE funds are authorized versus the year in which the SAVE funds are received. For fiscal 2014 and thereafter, all districts receive the same amount of SAVE funds per pupil; when one looks at the overall state average and the other two classifications in this grouping, that uniformity in allocations is evident.

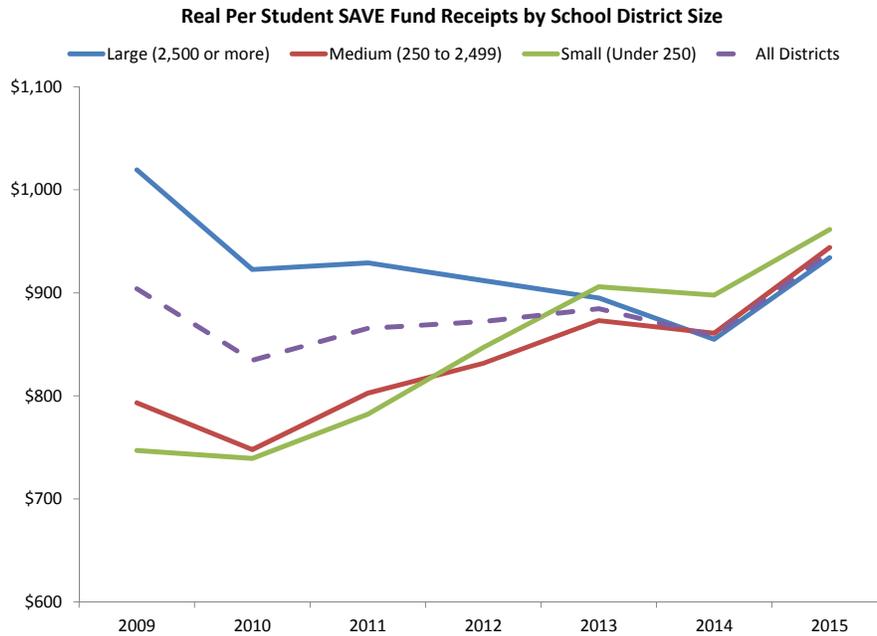


Figure 9

Table 7 lists the real SAVE fund receipts per certified enrollee by the categories just discussed. In fiscal 2009, the lowest average value of receipts per student, \$747, was in school districts whose fiscal 2015 certified enrollment was less than 250. The highest average value of receipts, \$1,056, occurred in districts with a metropolitan core city of 50,000 or greater. Metropolitan districts reaped 41.3 percent more SAVE Fund revenues per certified enrollment student than did the state’s smallest districts.

However, mean values of receipts for each of the classifications of districts by certified enrollment converged by 2014 near the state average of \$858. By fiscal 2015, the state average had grown to \$939 per student. Although there are variations across the measurement categories, those variations are a function of when student counts are used for SAVE fund allocation purposes versus how student counts were used in this study (see footnote 7). Again, for fiscal 2014 and thereafter, all districts receive the same amount of revenue per certified enrollee, but the amount of SAVE funds available in the school year are based on the previous year’s certified enrollment. This analysis aligns student counts with the fiscal year in which funds are received and used; hence the reported variations.

Table 7

SAVE Fund Real Sales Tax Revenues Per Certified Enrollee

by metro/nonmetro status of county

	2009	2010	2011	2012	2013	2014	2015
Nonmetro	\$ 794	\$ 741	\$ 796	\$ 833	\$ 878	\$ 858	\$ 950
Metro	\$ 987	\$ 904	\$ 916	\$ 900	\$ 889	\$ 858	\$ 932
Grand Total	\$ 904	\$ 834	\$ 865	\$ 872	\$ 885	\$ 858	\$ 939

by rural percentage of school district territory (using 2010 Census definition of rural and urban space)

	2009	2010	2011	2012	2013	2014	2015
Rural (75% or more rural pop)	\$ 771	\$ 732	\$ 797	\$ 843	\$ 880	\$ 864	\$ 953
Mix (25-75% rural population)	\$ 811	\$ 754	\$ 799	\$ 829	\$ 867	\$ 864	\$ 938
Urban (Less than 25% rural pop)	\$ 1,014	\$ 923	\$ 930	\$ 906	\$ 895	\$ 853	\$ 933
Grand Total	\$ 904	\$ 834	\$ 865	\$ 872	\$ 885	\$ 858	\$ 939

by size of largest city within district boundaries

	2009	2010	2011	2012	2013	2014	2015
Large (50,000 or more)	\$ 1,056	\$ 982	\$ 962	\$ 954	\$ 898	\$ 861	\$ 931
Medium (2,500 to 49,999)	\$ 872	\$ 790	\$ 836	\$ 832	\$ 879	\$ 855	\$ 937
Small (less than 2,500)	\$ 781	\$ 740	\$ 803	\$ 848	\$ 878	\$ 861	\$ 954
Grand Total	\$ 904	\$ 834	\$ 865	\$ 872	\$ 885	\$ 858	\$ 939

by 10-year enrollment trend (compounded annual rate)

	2009	2010	2011	2012	2013	2014	2015
Declining (1% or more annually)	\$ 775	\$ 736	\$ 800	\$ 850	\$ 901	\$ 870	\$ 959
Stable	\$ 936	\$ 853	\$ 867	\$ 878	\$ 885	\$ 857	\$ 937
Growing (1% or more annually)	\$ 997	\$ 923	\$ 957	\$ 884	\$ 863	\$ 846	\$ 921
Grand Total	\$ 904	\$ 834	\$ 865	\$ 872	\$ 885	\$ 858	\$ 939

by district enrollment size in 2014-15

	2009	2010	2011	2012	2013	2014	2015
Large (2,500 or more)	\$ 1,019	\$ 923	\$ 929	\$ 912	\$ 895	\$ 855	\$ 934
Medium (250 to 2,499)	\$ 793	\$ 748	\$ 803	\$ 832	\$ 873	\$ 861	\$ 944
Small (Under 250)	\$ 747	\$ 739	\$ 782	\$ 847	\$ 906	\$ 898	\$ 961
Grand Total	\$ 904	\$ 834	\$ 865	\$ 872	\$ 885	\$ 858	\$ 939

SAVE Fund Expenditures: Capital-Related

Capital-related spending from the SAVE Fund includes construction, land and building purchases, equipment, and the category “other” that comprises architecture, engineering, and public infrastructure like water and sewer systems. As already shown in the revenues discussion above, there are several classifications of school districts that help us to understand spending dynamics over time. Those classifications are:

- metropolitan/nonmetropolitan status of the primary county served by the district,
- the percentage of the district population residing in rural areas,
- size of the largest city within the district boundaries,
- the compounded annual enrollment growth trend considering the past 10 years, and
- current school district size.

Figure 3 in a previous section demonstrated the overall pattern of capital spending for all school districts using SAVE Fund resources. There was persistent growth in construction-related spending from fiscal 2009 through 2012, and then the spending tailed off. This suggests that there was pent-up demand and substantial unmet need for school infrastructure and equipment. The pattern of capital spending was similar across all of the five groupings – four years of growth followed by lower spending levels thereafter.

The five accompanying graphics demonstrate patterns of average annual real SAVE Fund sales tax expenditures per certified enrollee given the enrollment categories discussed above. The purpose is to demonstrate how the different classifications explain the capital-related utilization of SAVE resources over the first seven years of operation. Again, initial SAVE allocations grandfathered existing SILO authorizations that were weighted by taxable sales in the county where the district was administered. Over the first five years those existing SILO authorizations expired, bringing allocations closer to uniformity between districts. As a consequence, there was an imbalance in the allocation of SAVE Fund resources and their subsequent uses that favored metropolitan and other advantaged trade centers. Those advantages, however, were eliminated by fiscal 2014.

Figure 10 shows average annual real capital spending per student comparing districts in metropolitan and nonmetropolitan counties. While spending per certified student statewide averaged \$1,003, metropolitan counties spent \$1,149, nearly 44 percent more than the average nonmetropolitan school district (\$800). Construction accounted for 78 percent of metropolitan spending compared to 67 percent in nonmetropolitan counties.

Figure 11 considers capital-related spending by the percentage of the district’s population that is urban or rural. The most heavily urbanized districts, those with less than 25 percent rural, realized \$1,132 in average annual spending per pupil, compared to \$876 for the mixed group and \$843 for the most rural districts. The most urban districts dedicated 81 percent of this category to construction. The percentage allocated to spending was 72 percent for the mixed group and just 58 percent for the - most

rural group, which clearly spent proportionately more of their SAVE Fund resources on equipment than the others.

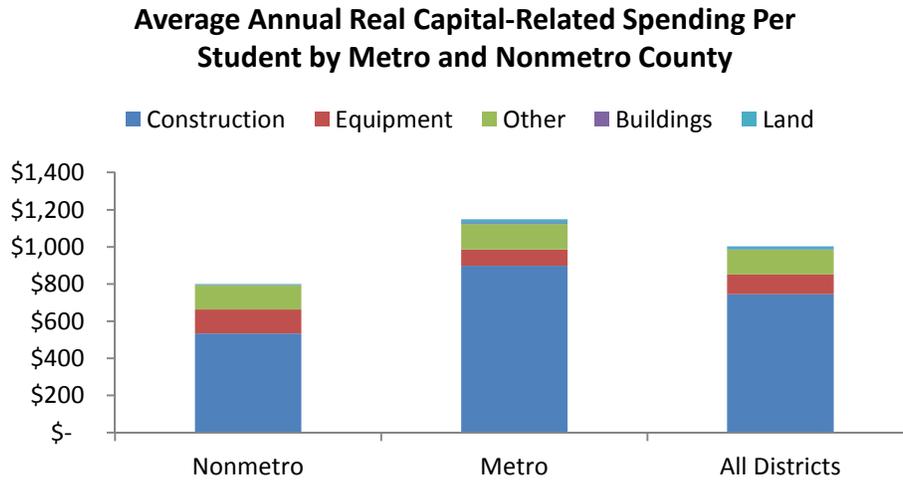


Figure 10

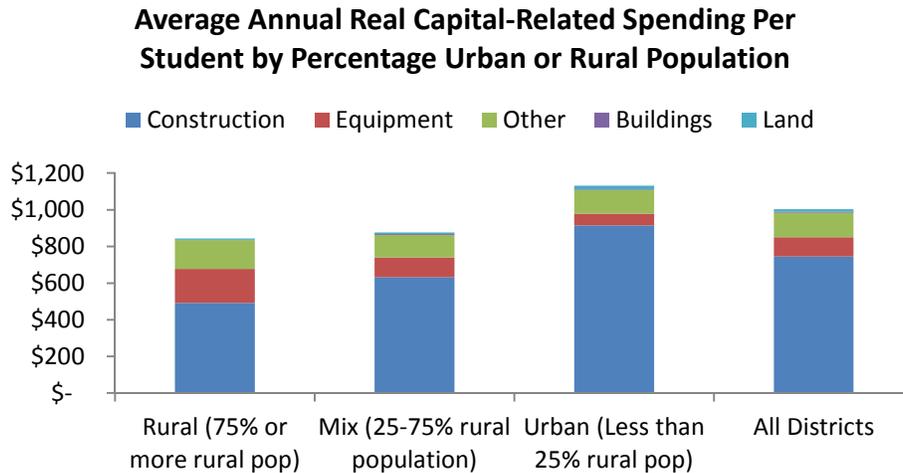


Figure 11

Figure 12 allocates spending in the districts according to the size of the largest city in the district. Among districts with a metropolitan city, average annual real spending per student was \$1,238. In the remaining urban districts spending was \$940. In the districts whose largest community had a population of fewer than 2,500, spending was \$828 per student. The large city districts spent 82 percent of this category for construction, the middle group spent 75 percent, and the districts with the smallest cities spent 57 percent. Districts serving the smallest cities spent 80 percent more than the state average on equipment and 36 percent less than the state average on construction alone.

Average Annual Real Capital-Related Spending Per Student by Size of Largest City in the School District

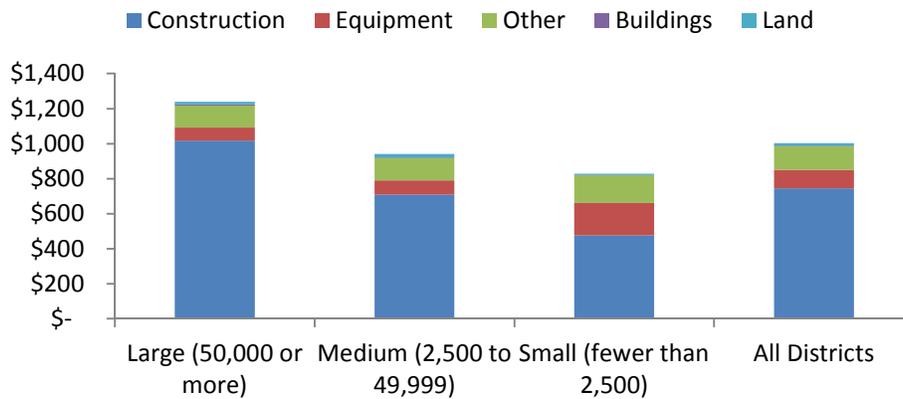


Figure 12

Figure 13 presents the data by school district growth patterns over the previous decade, where stable districts had average annual declines of less than 1 percent or average annual gains of less than 1 percent. Among districts with declining enrollments, spending averaged \$830, compared to \$1,044 in stable districts and \$1,111 in those that were growing. Using growth as the categorization there is somewhat less variance in the fractions dedicated to construction alone: 62 percent in declining, and 78 percent in both stable and growing districts. As before, the declining districts spent proportionately more on equipment.

Average Annual Real Capital-Related Spending Per Student by School District Growth Patterns

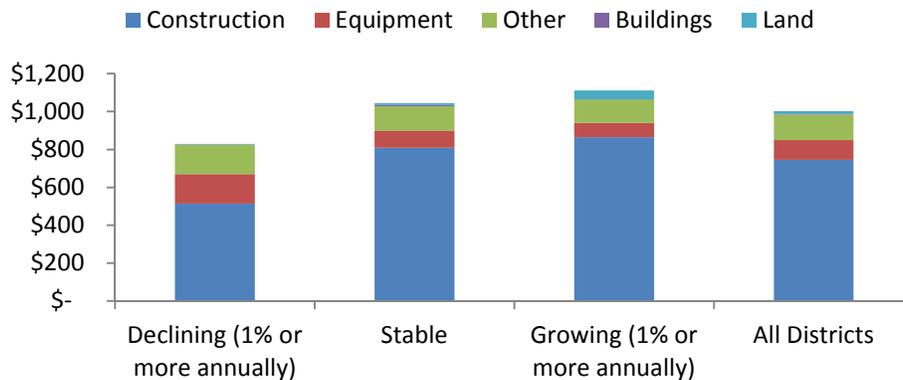


Figure 13

Figure 14 breaks down the spending pattern for capital-related spending by school district size. Districts with more than 2,500 students averaged \$1,166 in spending per certified enrollee, the middle group averaged \$839, and the small districts \$734. The variance in spending for construction is most

pronounced in this category: large districts used 81 percent of their capital spending on construction, medium districts used 66 percent, and the small districts used just 40 percent. Small-district spending on equipment was 122 percent more than the state average of \$104, and their spending on other capital-related activities was 53 percent higher than the state average.

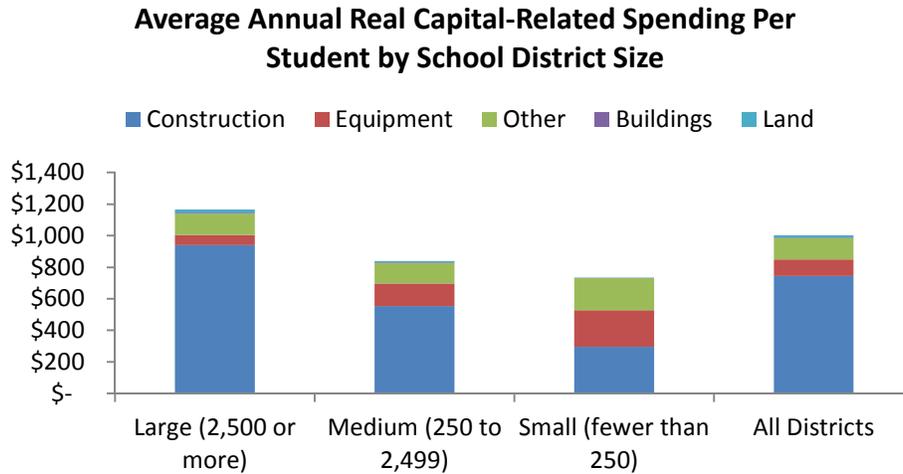


Figure 14

Table 8 displays average real annual spending per student by the categories just discussed. The lowest average amount received was \$800 for districts in nonmetropolitan counties, and the highest combined spending for all capital-related activities was \$1,238 for school districts whose largest city had a population of 50,000 or greater. For construction alone, the highest average amount per certified enrollee was again in districts serving cities over 50,000, at \$1,217, which was more than four times greater than the average spent in districts with fewer than 250 students, at \$296. Equipment spending was highest, at \$231 per student, in the state’s smallest districts and least in its largest districts and in its most urban districts, at \$65 per student.

Table 8

Average Annual SAVE Fund Capital-Related Real Spending Per Student, Fiscal 2009 to 2015

by metro/nonmetro status of county

	Construction	Equipment	Other	Buildings	Land	Total Capital Related
Nonmetro	\$ 533	\$ 130	\$ 129	\$ 2	\$ 5	800
Metro	\$ 898	\$ 87	\$ 137	\$ 5	\$ 21	1,149
All Districts	\$ 746	\$ 104	\$ 134	\$ 4	\$ 15	1,003

by rural percentage of school district territory (using 2010 Census definition of rural and urban space)

	Construction	Equipment	Other	Buildings	Land	Total Capital Related
Rural (75% or more rural pop)	\$ 492	\$ 185	\$ 157	\$ 2	\$ 6	843
Mix (25-75% rural population)	\$ 632	\$ 108	\$ 121	\$ 5	\$ 9	876
Urban (Less than 25% rural pop)	\$ 914	\$ 65	\$ 128	\$ 5	\$ 21	1,132
All Districts	\$ 746	\$ 104	\$ 134	\$ 4	\$ 15	1,003

by size of largest city within district boundaries

	Construction	Equipment	Other	Buildings	Land	Total Capital Related
Large (50,000 or more)	\$ 1,017	\$ 75	\$ 124	\$ 7	\$ 15	1,238
Medium (2,500 to 49,999)	\$ 709	\$ 82	\$ 128	\$ 4	\$ 19	940
Small (fewer than 2,500)	\$ 476	\$ 187	\$ 157	\$ 1	\$ 7	828
All Districts	\$ 746	\$ 104	\$ 134	\$ 4	\$ 15	1,003

by 10-year enrollment trend (compounded annual rate)

	Construction	Equipment	Other	Buildings	Land	Total Capital Related
Declining (1% or more annually)	\$ 513	\$ 157	\$ 153	\$ 2	\$ 5	830
Stable	\$ 809	\$ 91	\$ 128	\$ 6	\$ 10	1,044
Growing (1% or more annually)	\$ 864	\$ 76	\$ 124	\$ 1	\$ 46	1,111
All Districts	\$ 746	\$ 104	\$ 134	\$ 4	\$ 15	1,003

by district enrollment size in 2014-15

	Construction	Equipment	Other	Buildings	Land	Total Capital Related
Large (2,500 or more)	\$ 940	\$ 65	\$ 134	\$ 6	\$ 21	1,166
Medium (250 to 2,499)	\$ 554	\$ 143	\$ 132	\$ 3	\$ 8	839
Small (fewer than 250)	\$ 296	\$ 231	\$ 205	\$ 1	\$ 2	734
All Districts	\$ 746	\$ 104	\$ 134	\$ 4	\$ 15	1,003

SAVE Fund Expenditures: Revenue Bond Debt Service and Transfers to Other Funds

The Certified Annual Report data set of school expenditures also includes payments made from the SAVE Fund to service revenue bond debt secured by the annual flow of SAVE Funds. Figure 15 shows the per student flow of those payments over the life of SAVE. Real payments started at \$592 per student in fiscal 2009 and declined to a low of \$414 in fiscal 2014 before rebounding slightly to \$449 by fiscal 2015. It also shows the pattern of real spending statewide from the SAVE Fund that were transfers to other funds. This category, though its uses are not itemized, must reflect some of the transfers intended for property tax relief. Readers will notice an inverse pattern between the two values: when debt service amounts were high, transfers to other funds were low, and when debt service amounts were reduced, these transfers increased. The up and down nature of this category continued through the measurement period.

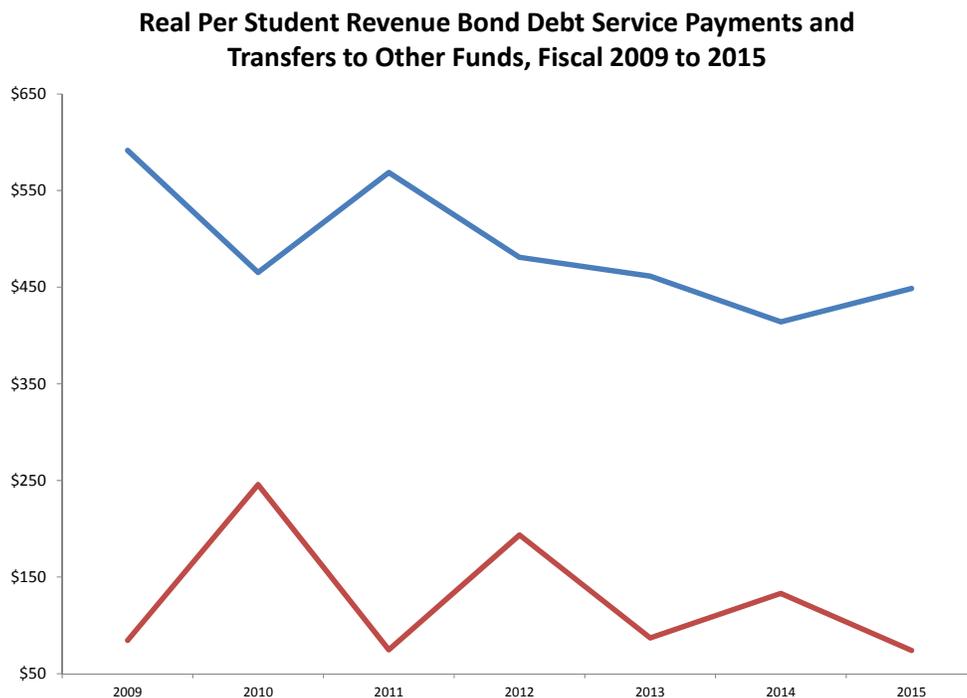


Figure 15

Table 9 informs us that the highest spending category for debt service, at \$559 per student, over the life of SAVE was in urban districts, where fewer than 25 percent of the population were classified as rural. The least amount was in school districts with fewer than 250 students, at \$148 per student, 70 percent less than the state average of \$490.

According to Table 9, real transfers to other funds per student averaged \$128 per year. The highest value of \$191 per student was found among the districts that were classified as mixed in that from 25 percent to 75 percent of their district population was classified as rural. The least amount was \$20 per student in districts serving cities of 50,000 or more residents, followed by \$30 per student in districts with certified enrollment below 250 students.

Table 9

Average Annual SAVE Fund Real Spending Per Student, Fiscal 2009 to 2015: Revenue Bond Debt Service and Transfers to Other Funds

	Revenue Bond Debt Service	Transfers to Other Funds
by metro/nonmetro status of county		
Nonmetro	\$ 457	\$ 143
Metro	\$ 514	\$ 116
All Districts	\$ 490	\$ 128
by rural percentage of school district territory (using 2010 Census definition of rural and urban space)		
Rural (75% or more rural pop)	\$ 360	\$ 143
Mix (25-75% rural population)	\$ 478	\$ 191
Urban (Less than 25% rural pop)	\$ 559	\$ 90
All Districts	\$ 490	\$ 128
by size of largest city within district boundaries		
Large (50,000 or more)	\$ 504	\$ 20
Medium (2,500 to 49,999)	\$ 549	\$ 181
Small (fewer than 2,500)	\$ 358	\$ 157
All Districts	\$ 490	\$ 128
by 10-year enrollment trend (compounded annual rate)		
Declining (1% or more annually)	\$ 413	\$ 117
Stable	\$ 526	\$ 112
Growing (1% or more annually)	\$ 481	\$ 188
All Districts	\$ 490	\$ 128
by district enrollment size in 2014-15		
Large (2,500 or more)	\$ 548	\$ 93
Medium (250 to 2,499)	\$ 439	\$ 165
Small (fewer than 250)	\$ 148	\$ 30
All Districts	\$ 490	\$ 128

Section 3. The SAVE Fund and Property Tax Relief

Absent first SILO and later SAVE legislation, all net new capital funding enabled by those sales tax-driven resources would have fallen largely on local property taxes – schools have no other independent sources of revenues for capital development beyond the rate-limited income tax surcharge that can supplement PPEL. Without SILO and SAVE, districts would have faced several possible courses of action: (1) utilize existing discretionary levies to generate resources, (2) defer maintenance and replacement, (3) utilize existing facilities more intensely, as would be the case of a growing district, or (4) resort to general obligation bonding to underwrite capital development. General obligation bonding requires a super majority of voter approval. Nearly all of these costs would have been paid by property taxes. In that sense, one can argue that all of both SILO and SAVE represented significant property tax relief as school infrastructure costs were shifted significantly from taxes on capital ownership and realty to taxes on consumption.

The legislation authorizing SAVE specifies the kind of property tax relief for which the fund can be used. An initial 2.1 percent of collections are retained by the state of Iowa to be used for general property tax relief to selected districts through the school aid formula.⁸ If not used expressly for land, buildings, equipment, or all costs associated with capital development, then the funds must buy-down existing general obligation tax rates, PPEL and PERL rates, and, if applicable, PPEL-linked income surtaxes. Previous analyses in this report, however, do not tell us precisely how districts in the aggregate or in functional groupings utilize annual SAVE revenues to reduce local property tax rates directly.

Direct Property Tax Levy Reductions

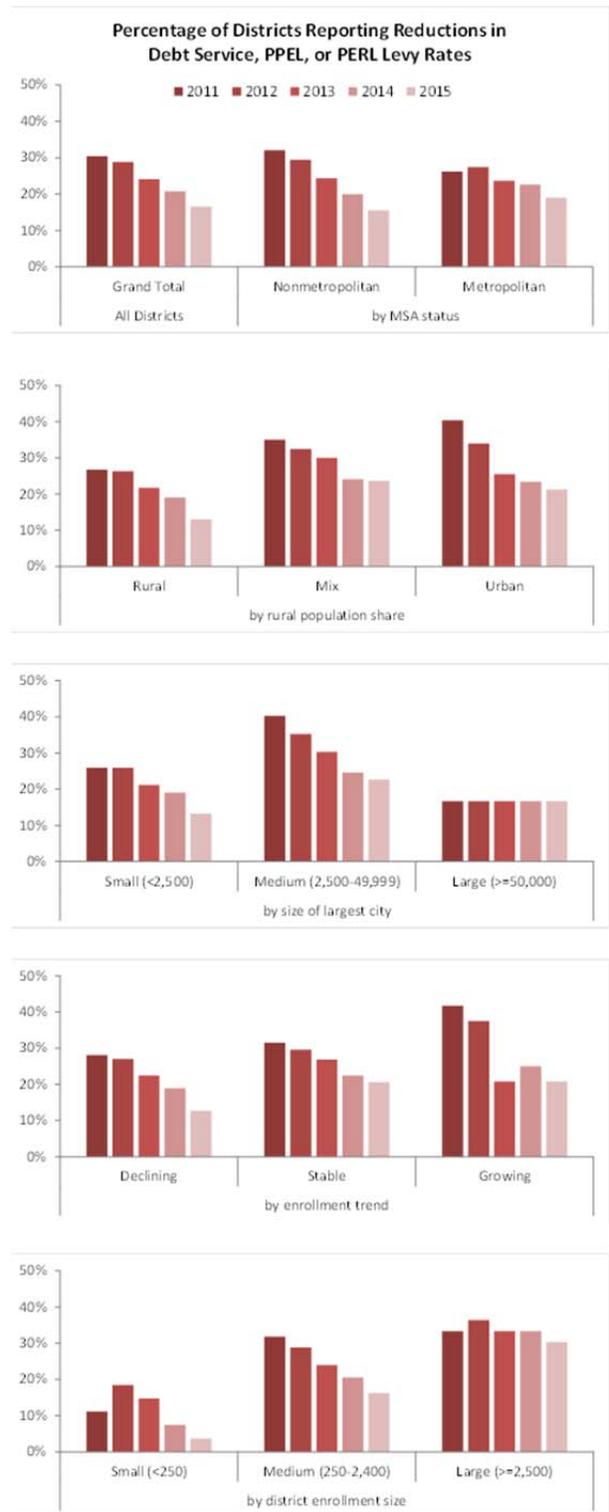
Although districts have always provided an annual accounting of SAVE funds that were spent for infrastructure purposes, districts were not initially required to itemize annual SAVE fund expenditures for direct property tax relief until fiscal 2011. Since that year, districts have reported reductions in the amount of bond levies, PPEL levies, and PERL levies, in terms of dollars and cents per one thousand dollars of taxable valuation and in total amount of property tax dollars.

Figure 16 displays patterns of district usage of SAVE revenues for property tax levy reduction. Overall, 30 percent of Iowa's school districts reported using SAVE funds for direct property tax relief in 2011. The percentage declined annually since 2011, falling to 16.6 percent of districts in 2015.

Several conclusions arise from looking at the five sets of district categorizations:

⁸ The Property Tax Equity and Relief Fund (PTER) is used to provide property tax relief for districts with the highest adjusted additional levy rates. Rates for these districts are lowered incrementally to approach the statewide average until PTER funds are exhausted. About \$11 million per year have been diverted annually to PTER since fiscal 2011, to supplement a regular \$24 million state appropriation.

- Among districts in metropolitan and nonmetropolitan counties: nonmetropolitan area districts initially were more likely to use some SAVE resources for property tax relief, but more recently their collective percentage has actually fallen below metropolitan area districts.
- Considering urbanization level of territory within the district: the most rural districts, in which fewer than 25 percent of residents live in urban areas, have been consistently less likely to use SAVE resources for property tax relief compared to more urbanized districts. In 2011, 26.7 percent of rural districts used SAVE resources for property tax relief, compared to 35 percent for the mixed group and 40.4 percent of the urban group. By 2015, only 13 percent of the rural districts, 21.3 percent of the urban districts, and 23.7 percent of the mixed districts were using SAVE funds for property tax relief.
- Considering the size of the largest city served by the district: the medium category, where the largest community ranges from 2,500 to 49,999 residents, showed 40.3 percent of the districts reporting property tax rate reductions, compared to 25.9 percent of small city districts and 16.7 percent of the districts serving metropolitan core cities. Notably, the fraction of metropolitan core city districts reporting property relief uses stayed fixed over the reporting period, while the other groups showed pronounced declines. In fiscal 2015, just 13.3 percent of the small districts reported tax rate savings uses.



- By district enrollment growth experiences: 41.7 percent of the growing districts reported tax rate reductions from SAVE initially, but the percentage reported dropped to 20.8 percent by fiscal 2015. Of the stable districts, 31.5 percent initially claimed property tax reductions, declining to 20.6 percent by the last report. Just 28.1 percent of the declining districts reported property tax savings in the first year of reporting, but by 2015 that fraction had dropped to only 12.7 percent.
- Finally, in considering district enrollment size: one-third of the largest districts were claiming property tax reductions initially, and that value stayed relatively stable, ending at 30.3 percent. Medium-sized districts started at 31.6 percent and ended at 16.2 percent. Of the small districts, only 11.1 percent used their resources for property tax reduction purposes in 2011, a rate that dropped to a mere 3.7 percent in the most recent fiscal year.

The pattern of districts dedicating their SAVE funds for direct property tax reduction is very clear: overall, the likelihood has gone down markedly since fiscal 2011.

Table 10 summarizes the dollar value of direct property tax relief effort by districts across the state. The 30.4 percent of school districts reporting levy reductions in fiscal 2011 dedicated \$47.94 million of their SAVE resources, representing 11.7 percent of total SAVE Fund receipts. In fiscal 2015, the 16.6 percent of districts reporting levy reductions spent \$26.4 million, or 5.8 percent, of SAVE Fund receipts.

Table 10

Reported Property Tax Relief From the use of SAVE Resources, Fiscal 2011 to 2015

	2011	2012	2013	2014	2015
Used for Property Tax Relief (Real Amounts)	\$ 47,941,251	\$ 43,025,045	\$ 32,551,029	\$ 28,638,380	\$ 26,367,475
As a Percentage of SAVE Fund Receipts	11.7%	10.4%	7.7%	7.0%	5.8%

Table 11 reports similar detail for the different school district categorizations. A consistent, albeit small, allocation of SAVE funds for property tax relief appears among school districts serving Iowa’s largest cities. All other categorizations demonstrate a pattern of decline. The highest fraction for this purpose was 16 percent in fiscal 2011 for the growing districts. The lowest fraction was 0.6 percent among the districts with enrollment under 250.

Table 11

SAVE Fund Amounts Used Specifically for Property Tax Relief, Fiscal 2011 to 2015

by metro/nonmetro status of county

	2011	2012	2013	2014	2015
Nonmetropolitan	15.6%	14.2%	9.1%	8.5%	7.2%
Metropolitan	9.3%	7.9%	6.8%	5.9%	4.9%
State Total	11.7%	10.4%	7.7%	7.0%	5.8%

by rural percentage of school district territory (using 2010 Census definition of rural and urban space)

	2011	2012	2013	2014	2015
Rural (75% or more rural pop)	14.1%	10.7%	7.6%	7.3%	3.9%
Mix (25-75% rural population)	15.8%	13.9%	11.3%	9.5%	9.1%
Urban (less than 25% rural pop)	9.0%	8.8%	6.2%	5.7%	5.2%
State Total	11.7%	10.4%	7.7%	7.0%	5.8%

by size of largest city served by district

	2011	2012	2013	2014	2015
Large (50,000 or more)	4.7%	4.6%	4.8%	4.1%	3.7%
Medium (2,500 to 49,999)	15.6%	14.6%	9.7%	8.9%	8.2%
Small (under 2,500)	14.1%	10.5%	7.5%	6.9%	3.8%
State Total	11.7%	10.4%	7.7%	7.0%	5.8%

by 10-year enrollment trend (compounded annual rate)

	2011	2012	2013	2014	2015
Declining (1% or more annually)	14.9%	12.8%	11.3%	9.6%	7.8%
Stable	9.1%	9.2%	6.3%	6.4%	5.4%
Growing (1% or more annually)	16.0%	11.1%	7.4%	5.4%	4.7%
State Total	11.7%	10.4%	7.7%	7.0%	5.8%

by district enrollment size in 2014-15

	2011	2012	2013	2014	2015
Large (2,500 or more)	9.5%	9.1%	6.8%	6.3%	5.9%
Medium (250-2,499)	14.5%	12.0%	8.7%	7.8%	5.9%
Small (under 250)	3.2%	8.2%	8.5%	2.2%	0.6%
State Total	11.7%	10.4%	7.7%	7.0%	5.8%

Indirect Property Tax Relief

The beginning of this section indicated that, at a fundamental level, all SILO and SAVE spending represented some form of property tax relief, in that nearly all of school district capital funding authority absent those mechanisms comes from property tax sources. The last five years of the SAVE Fund reporting data indicate a declining propensity among districts to utilize SAVE funds expressly for property tax relief.

There is a case to be made, however, that the robust flow of resources from SAVE delivered fiscal relief to the school property tax effort and may have contributed to stability in total property tax levies. SAVE annual reporting since fiscal 2011 requires that districts indicate whether they would have increased property taxes through a bond referendum, regular or voted PPEL, or PERL but for the flow of resources available from SAVE. Well over half of districts have responded “yes” to that question since reporting began. That percentage has grown from 60 percent in 2011 to 69 percent in 2015.

The assertions by districts about foregone levy rate increases resulting from SAVE cannot be quantified in dollar terms of property tax savings, nor can they be independently verified. An alternative approach is to examine longer-term trends in property tax rates to look for any indication that rate pressures were eased after implementation of SAVE.

To investigate that question, the ensuing section relies upon Iowa Department of Management school property tax files to examine trends in general and capital-related levy rates before and after passage of SAVE. Capital-related levies include those for debt service, regular and voted PPEL, and PERL. Changes in these levy rates are illustrated for all districts and for the selected school district groupings utilized thus far.⁹

Figure 17 through Figure 22 document changes in four variables since fiscal 2003: real school district property valuations, average general levy rates, average capital-related levy rates, and enrollment. Each variable is indexed to its value in fiscal 2003 so that changes in all four indicators can be compared in a standardized manner. The data are presented on a statewide basis, by metropolitan and nonmetropolitan status of the county in which the district is located, and whether the district is classified as growing, stable, or declining in its enrollment size.

Figure 17 displays the statewide results. The real value of the state’s property tax base declined from 2003 through 2008 and then recovered gradually by 2015. In theory, a real decline in the tax base should have put upward pressure on tax rates to maintain revenues.¹⁰ School district general levy rates did indeed grow from 2003 through 2011; however, capital-related levy rates declined. Those trends reversed after 2011, with general levy rates declining and capital-related levy rates growing. By fiscal

⁹ See Appendix C for a table describing capital-related authorities for school districts.

¹⁰ Readers will notice that real taxable valuations declined between 2003 and 2008. The state’s tax base actually grew in nominal terms, but when adjusted by the appropriate state and local government deflator, the statewide tax base actually lost ground relative to inflation.

2015, capital-related levy rates were 6 percent higher than in 2003. Statewide certified enrollment remained relatively flat throughout the entire period.

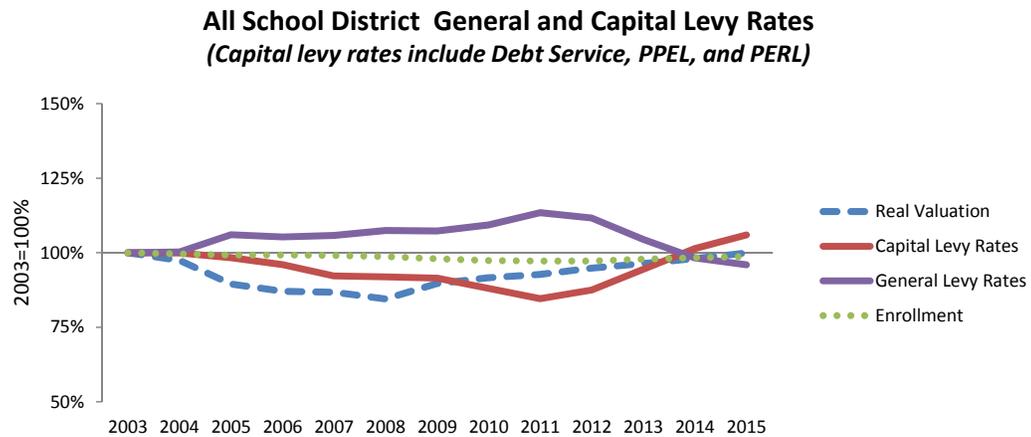


Figure 17

School districts in nonmetropolitan counties (Figure 18) generally followed statewide trends in valuations and levy rates, although they experienced steeper initial declines in real valuations and capital-related levies. Valuations declined by 22 percentage points by 2008 and recovered to only 93 percent by fiscal 2015. Capital-related levy rates declined by nearly 25 percentage points as general levies grew from fiscal 2003 to 2011, and they climbed back to 97 percent as general levy rates fell. Unlike the state overall, these districts experienced gradual enrollment decline during the period examined.

Metropolitan districts demonstrated a different pattern, especially in the years prior to fiscal 2011 (Figure 19). Enrollment grew slowly throughout the period. Real valuation eroded slightly, but recovered by 2011. Capital-related levy rates grew along with general levy rates until their trends diverged in fiscal 2009. After a brief downturn from fiscal 2009 to 2011, capital-related levies began climbing again, until by fiscal 2015 capital-related levy rates in metropolitan districts were 21 percent higher than in fiscal 2003. Enrollments were 8 percent higher.

Nonmetropolitan School District General and Capital Levy Rates
(Capital levy rates include Debt Service, PPEL, and PERL)

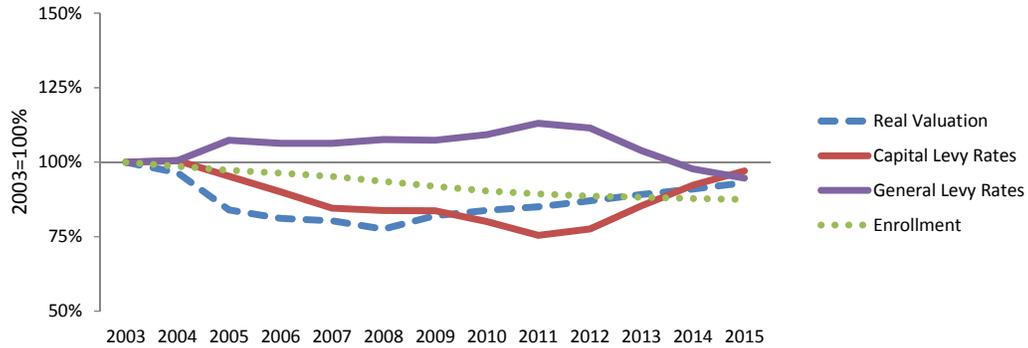


Figure 18

Metropolitan School District General and Capital Levy Rates
(Capital levy rates include Debt Service, PPEL, and PERL)

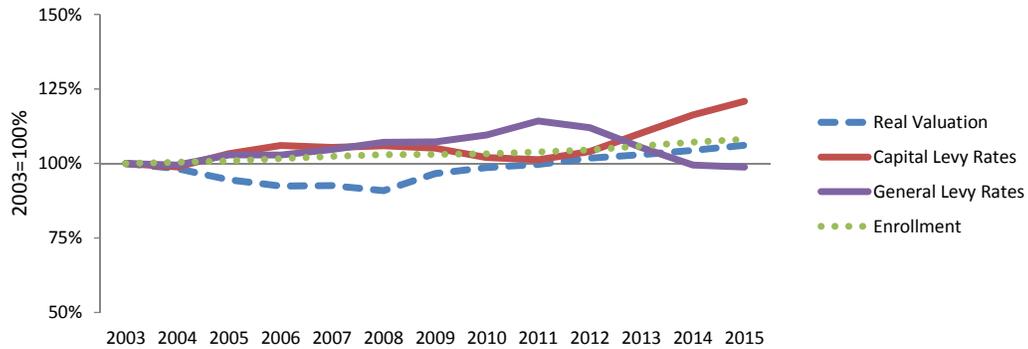


Figure 19

Shifting to declining, stable, or growing districts, Figure 20 reveals the stark erosions in the index of the fiscal values for declining districts during the early period as well as the persistent erosion in enrollment. Overall, the declining districts lost 20 percent of their students by 2015. Their real tax base contracted 24 percent by 2008, and then began a gradual recovery. Capital-related levy rates declined by 27 percent by fiscal 2011, and general levies declined by 43 percent. Rates and real levies have climbed since. Nonetheless, both rates were 7 percent lower in 2015 than in 2003, as also was taxable valuation.

Declining-Enrollment District General and Capital Levy Rates
(Capital levy rates include Debt Service, PPEL, and PERL)

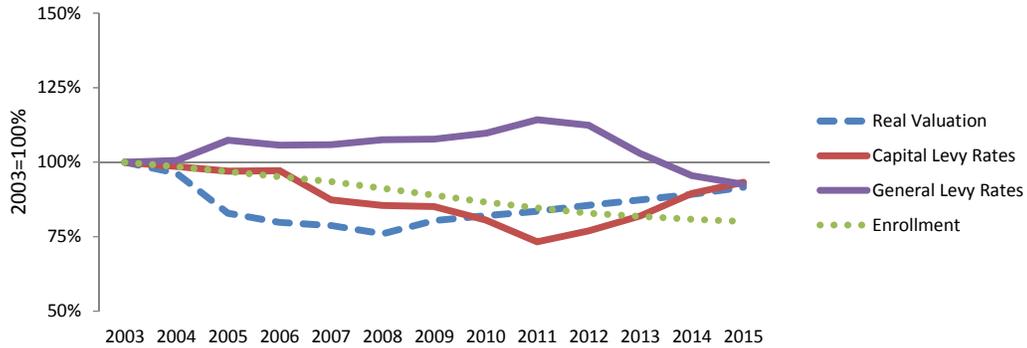


Figure 20

The stable districts displayed in Figure 21 lost only 2 percent of enrollment throughout the overall period and behaved similarly to the state average values shown in Figure 17. The tax base contracted by 15 percentage points by fiscal 2008, and recovered to 97 percent of its 2003 value by fiscal 2015. General levy rates peaked at 112 percent in fiscal 2011 and then dropped back to 100 percent during the next four years. Capital-related levy rates were reduced by slightly more than 12 percentage points by fiscal 2010. By fiscal 2015, they had risen to 109 percent of their initial level.

Stable-Enrollment District General and Capital Levy Rates
(Capital levy rates include Debt Service, PPEL, and PERL)

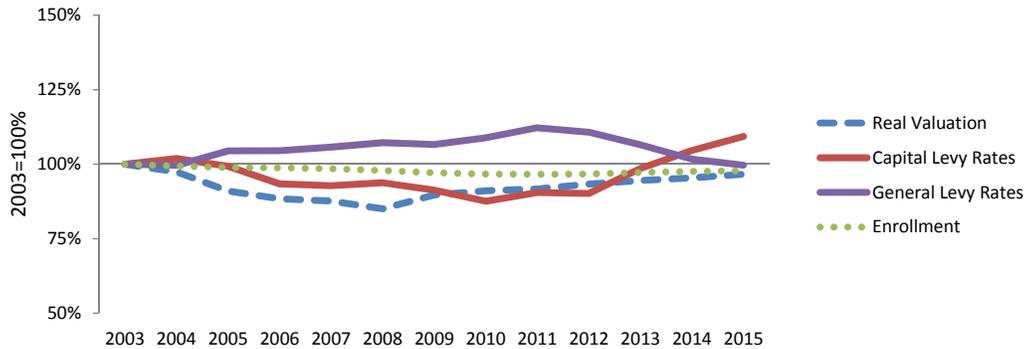


Figure 21

Last, we look at growing districts in Figure 22. The growing districts are very distinct from all other characterizations, with the exception of their general levy trends. Enrollment in Iowa’s growing districts was 45 percent greater in fiscal 2015 than in 2003. Real valuations were 35 percent higher. Other than a notable drop from fiscal 2010 to 2011, capital-related levies grew persistently after 2006, with rates 46 percent higher in fiscal 2015 compared to 2003. General levy rates, in contrast, climbed gradually to 114 percent in 2011 before retreating to 98 percent by fiscal 2015.

Growing-Enrollment District General and Capital Levy Rates
(Capital levy rates include Debt Service, PPEL, and PERL)

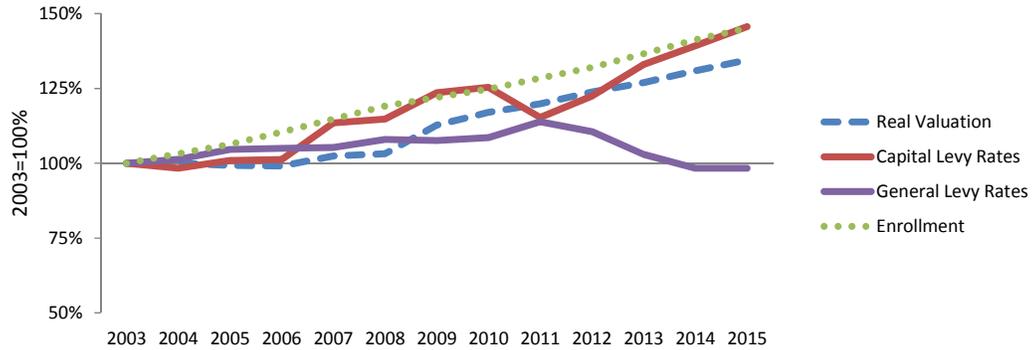


Figure 22

The data presented in this section suggest that fiscal 2003-2011 was a period of constrained opportunity to generate new property tax revenues for school infrastructure spending. Only after real property values were growing and pressures on general levy rates were easing did capital-related levies for the average district begin to rise. One can assume that SILO and early SAVE resources alleviated some of the capital-related fiscal stress faced by districts during this period. Still, the comparatively rapid rise in capital-related levy rates after 2011, which occurred despite no enrollment growth in most cases, suggests that many districts had substantial remaining need for capital spending. Statewide, average capital-related levy rates were 25.3 percent higher in fiscal 2015 than in 2011, and associated real dollar amounts levied were 31.4 percent greater. Figure 23 shows changes in average levy rates per \$1,000 of taxable valuation for debt service, PPEL, and PERL for all districts in fiscal 2011 and 2015. General obligation debt service rates have grown the most rapidly since fiscal 2011, followed by voted PPEL, then regular PPEL, and finally PERL levies.

Average Capital-Related Levy Rates by Type

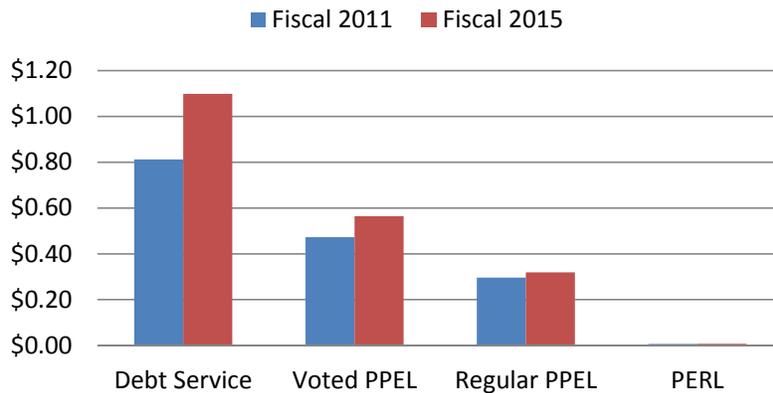


Figure 23

Across the board, school districts have increased their capital funding efforts using property tax resources since fiscal 2011, after most districts had eased those efforts from 2003 to 2011. These dynamics are illustrated in Figure 24 where real levy amounts per student are displayed for growing, stable, and declining districts.

Statewide, capital-related property tax levies per student declined from \$582 to \$492 between fiscal 2003 and 2011. Since then, however, those levies rose to \$636, a 29 percent increase. More pronounced declines were seen among the stable and declining districts. Their property tax-based levies per student declined to less than \$400 by fiscal 2010 and 2011. Stable districts' levies per student grew by 24 percent after 2011, but declining districts' levies per student grew by 51 percent. Growing districts' real average levies were always substantially higher. They grew through fiscal 2009, to \$1,008 per student, dipped, and then finished fiscal 2015 with an average of \$1,069.

Real Average Debt Service, PPEL, and PERL Levies per Student by District Enrollment Trend

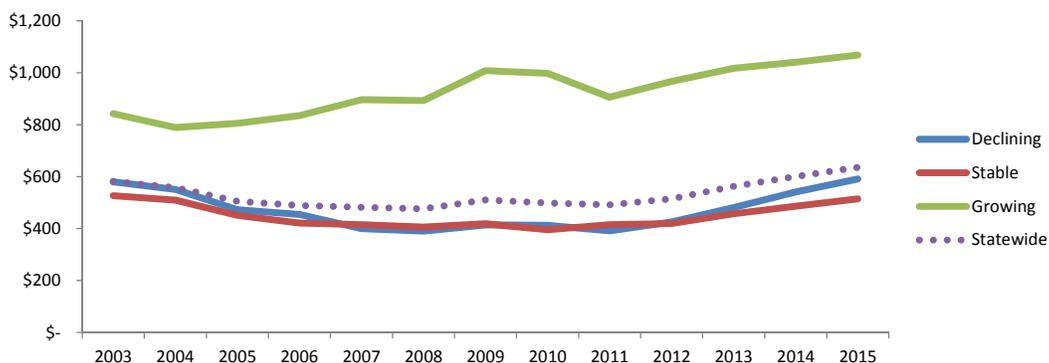


Figure 24

Changes in property tax rates alone cannot reliably indicate whether SAVE resources are meeting or exceeding school district capital funding needs. Property tax rates are influenced by many factors beyond the districts' control, including the performance of the local tax base and somewhat rigid controls placed by state legislation. Rate fluctuations can result from property valuation change, changes in levels of state support, and tangible growth or decline in the taxable base due to state legislation change or municipal or county uses of tax abatement or tax increment financing authority. The timing of rate increases or decreases may not coincide with capital needs, and districts may defer projects until fiscal conditions improve or voter sentiment is more accommodating.

After evaluating these data on property tax dynamics as well as trends in overall SAVE Fund expenditures previously, it appears that for new capital outlays school districts are shifting reliance away from SAVE resources back toward the property tax base. That shift was demonstrated and described in Figure 4, which showed that since 2011 SAVE fund capital expenditures represent a declining share of total capital-related expenditures.

It is likely that pent-up capital demand resulted in the initial flows of SAVE funds being pledged for revenue bond debt service, which now consumes a high fraction of annual SAVE revenues as opposed to new capital outlays. The shift toward property taxes suggests that districts' overall capital needs continue to exceed SAVE Fund allocations. One should note that taxpayer support is required for increases in G.O. debt and a portion of the PPEL levy, so a large portion of these shifts is occurring with voter approval.

Section 4. A Demonstration of the School Infrastructure Equalization Value of SAVE

The precursor to the SAVE Fund, the School Infrastructure Local Option Sales Tax (SILO), allowed for a voter approved sales tax to be collected at the county level to benefit local schools in those counties. The structure of SILO, however, allowed metropolitan areas and other dominant trade center counties to generate much more revenue per student than would be generated in other counties that suffered from trade leakages to those trade centers. In short, non-urban counties, via their purchasing patterns, were subsidizing students in trade center counties at the expense of students in their home counties.

SAVE legislation remedied this cross-subsidization problem over time. It grandfathered in SILO allocation formulas initially, but by fiscal 2014 funds were distributed equally across school districts irrespective of local taxable sales performance. The gradual effects of this equalization were evident in Figure 5 through Figure 9, which showed stark differences in early SAVE receipts per student among districts based on their urbanization level.

The funding inequity that was alleviated by SAVE can be better appreciated by demonstrating how inter-county shopping patterns would redirect revenues from a one percent sales tax assuming that original SILO arrangements were still in effect. For this exercise, we use compilations of county taxable retail sales data from the Iowa Department of Revenue to estimate county taxable sales surplus and leakage values in fiscal 2015.

County sales surplus and leakage estimates describe the difference between actual and expected taxable sales. Expected sales for each county are derived by multiplying its local population size by average statewide retail spending per person and adjusting for cross-county income differences. Counties where actual sales exceed expected sales have surpluses, while counties where actual sales are below expected sales have sales leakages.

By applying a one percent sales tax rate to county surplus and leakage estimates, we can quantify the funding inequities that existed under SILO. Figure 25 demonstrates the worth of SAVE equalization. The map displays each county's net gain or loss in one percent sales tax revenues had SILO still been in effect in fiscal 2015. Dollar values are displayed in millions of dollars, with red and blue dots indicating both the direction and magnitude of cross-subsidization. Only counties indicated with blue dots posted taxable sales surpluses in 2015 – just 17 of the 99 counties. All other counties posted leakages.

As is evident, Iowa's metropolitan counties would have realized strong comparative advantages – all underwritten by counties that did not enjoy taxable sales surpluses. The sum of the estimated sales tax collection advantages equals the sum of the disadvantages; thus, \$54.34 million extra revenues would have accrued to advantaged districts at the expense of all other districts in the remaining counties.

Table 12

Net Taxable Sales Surpluses by Level of Urbanization, Fiscal 2015

County Type	Sales Tax Surplus or Deficit	Per Pupil Gains or Losses
Metropolitan (City over 50,000)	\$ 34,921,180	\$ 122
Micropolitan (City over 10,000)	\$ (332,010)	\$ (4)
All Other Counties	\$ (34,589,170)	\$ (288)

The equalizing effects of the SAVE legislation removed the “where-one-shops” penalty for school district funding. One should note, however, Iowa’s 17 counties with the aforementioned sales tax advantages prior to the SILO system phase-out currently contain 57 percent of all certified enrollment and 17 of the state’s 24 school districts that posted growth in excess of 1 percent annually over the past decade. These districts have different capital development needs and pressures than most of the rest of the state’s school districts. The current SAVE Fund allocation formula may not address acute growth-driven capital needs.

Section 5. Future Sales Tax Revenue Stream Analysis

The SAVE Fund relies on a one-percent statewide sales tax on taxable goods and services. Taxable sales in Iowa over the long run are a function of total personal income (TPI) and the propensity of consumers to use their incomes to purchase taxable goods and services. Total personal income is the money that people receive from working, investments, and intergovernmental transfers like Social Security and Medicare. Projecting future taxable sales therefore requires an assessment of total personal income growth in Iowa over a relatively long period.

Figure 26 shows the pattern of TPI growth from 2000 to 2015 and projected out to 2029. The equation for the projection was based on nominal (not inflation-adjusted) TPI growth in Iowa from 1976 to 2014. That estimation exercise produced an expected long-term compounded annual growth rate of 3.33 percent through 2029, with a lower limit of 2.98 percent and an upper limit of 3.80 percent per year. These values represent the likely ranges within which Iowa's TPI will grow given its historical pattern of growth.

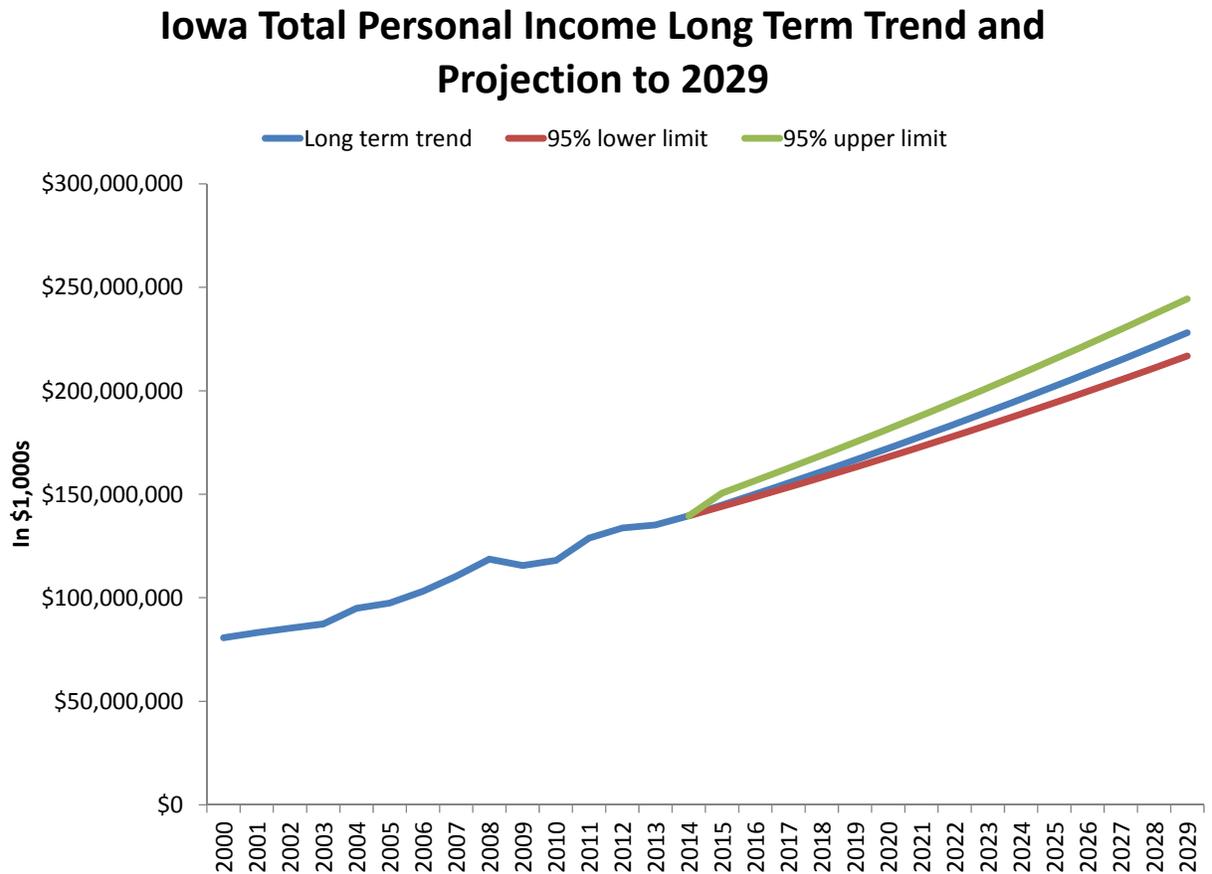


Figure 26

TPI growth, however, is just one dimension of taxable sales. The other dimension is the uses to which consumers put their incomes. Figure 27 displays Iowa total taxable sales over time as percentages of total personal income. The long-term trend is decidedly downward: in 1980, for example, taxable sales represented nearly 47 percent of TPI; by 2014, that value had declined to less than 27 percent. Reasons for these persistent reductions include higher fractions of incomes made up of health-related transfers like Medicare, higher rates of homeownership and more income going to service both consumer and mortgage debt, reductions in the number of taxable items or services, and, most recently, the rapid growth of online retail sales.

One could also project, as was done with the TPI projection, the long-term trend considering an upper and lower limit, but in the accompanying projection a different approach was used. As the declining percentage stabilized between 2012 and 2014, an initial and optimistic assumption is that the taxable sales as a percentage of TPI plateaus and remains stable for the remainder of the projection period. The middle estimate reduces the percentage by one-half of the long-term trend, and the most pessimistic assumption allows the 1976 through 2014 long-term trend to continue through 2029.

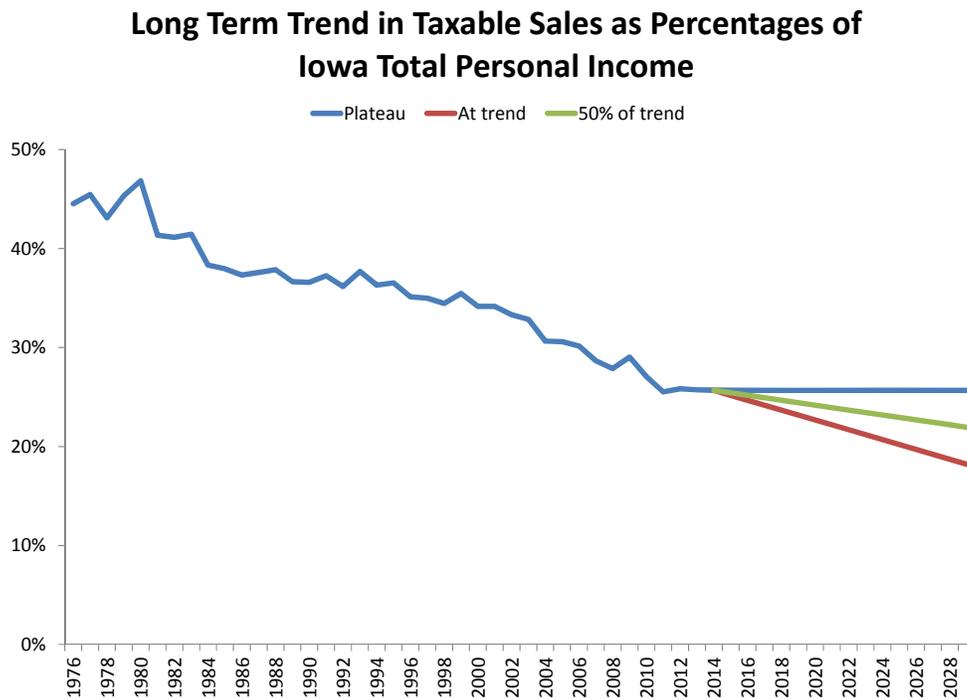


Figure 27

One can combine the results of these analyses to estimate the potential annual growth in sales tax revenues through 2029 for Iowa in general and specifically for the SAVE Fund. TPI is projected given the three future value estimates, and the fraction of TPI that is taxable likewise can be projected given the three change scenarios just discussed. By taking one percent of the resulting estimates, one gets the annual and, summed through 2029, total revenues realized given each contingency. As that would make

for a large table, there is a simplifying standardization step taken to make the analysis more manageable and to translate it to annual fiscal worth.

The future sales taxes represent expected levels of growth from fiscal 2015 forward. A way to characterize that growth involves discounting the nine categories of future revenue stream estimates back to their fiscal 2016 present values using a reasonable expectation for inflation (or erosion in purchasing power).¹¹

Table 13 shows the results. If total personal income in Iowa grows through 2029 according to its long-term trend formula, the annual increase in sales tax revenues (after discounting for future inflation) would be \$13.276 million if the percentage of TPI going to taxable sales plateaus, \$8.237 million annually if the taxable sales percentage changes by just one-half of the long term trend through 2029, and bottoms out at \$3.198 million if the long-term trend in taxable sales continues. Given the nine contingencies, annual retail sales tax growth for the SAVE Fund might range as high as \$14.961 million or as low as \$2.828 million. The middle value of 8.237 million annually in 2016 constant amounts represents the average of all of the scenarios.

Table 13

**Estimated Annual Change in Sales Tax Revenues, 2015 to 2019, Discounted to 2016 Values
(Amounts in \$Millions)**

		Total Personal Income Growth		
		95% Lower Limit	At Trend	95% Upper Limit
Percent of Total Personal Income Taxed	Plateau	\$ 11.590	\$ 13.276	\$ 14.961
	One-Half Trend	\$ 7.209	\$ 8.237	\$ 9.265
	At Trend	\$ 2.828	\$ 3.198	\$ 3.568

These results reveal very wide degrees of uncertainty. The uncertainty is driven less by the long-term estimation of TPI and more by the eroding fraction of Iowa TPI that finds its way into taxable sales. It is reasonable to assume that the long-term erosion in retail sales may not continue through the projection period, but we have no durable intelligence to tell us that may not be the case other than a brief ebb in the downward march in that percentage in recent years. At just the one-half of trend erosion, real annual increases in sales taxes would range from \$7.2 million to \$9.3 million in 2016 constant dollar amounts. But if patterns of retail sales erosions continue at just the pace of the past 15 years or so, then

¹¹ The compounded annual average rate of inflation in the U.S. between 2001 and 2015 using the personal consumption deflator from the Bureau of Economic Analysis was 1.85 percent, which was used to discount the future value stream back to 2016 amounts in this estimation.

the expected annual increase in the SAVE fund would be much less, and the “At Trend” row of the table expresses that pessimistic scenario. The likelihood that real gains in SAVE will exceed \$10 million annually in constant \$2016 amounts is not borne out by this analysis. Only one-third of the cells report values that high, and those all occur only if the erosion in taxable sales as a percentage of TPI plateaus and remains fixed through the 2029 life of SAVE.

Section 6. Anticipating Future Capital Needs

Beginning with the authorization of SILO in 1999, and continuing under SAVE Fund legislation, Iowa school districts energetically invested in school infrastructure and equipment. This report is evaluating school district activity primarily during the SAVE Fund authorization, fiscal 2009 through 2015. A question arises, though, as to whether the flow of revenues into SAVE is adequate to fully fund or significantly supplement capital needs throughout the remainder of the legislation’s life through fiscal 2029 in light of recent efforts.

Perspectives and insights into past and future school capital funding are discussed at length in *State of Our Schools: K-12 Facilities*.¹² Relying on long-term data from the National Center for Educational Statistics, the study provides a baseline for determining Iowa’s capital spending situation as compared to other states and the nation, as well as the cost of future needs. The report looks at both maintenance and operation efforts, spending that comes out of current accounts, as well as capital spending, which typically occurs in capital budgets and is accounted separately. The capital investment component of the report applies directly to the question about Iowa school district future capital needs.

According to that study, Iowa, over the fiscal 1994-2013 period, spent \$18,793 per student (in constant 2014 dollar amounts), where the student count was from 2013 (see Table 14). The national average was \$19,454. There was very wide variance considering Iowa’s neighboring states. Illinois and Minnesota spent more than the national average, while the remaining neighbors spent considerably less.

Table 14

Real Capital Spending Per Student, Fiscal 1994-2013

	Spending Per Student In Constant \$2014	As a Percentage of the U.S. Average
Iowa	18,793	97%
Illinois	20,010	103%
Minnesota	25,556	131%
Missouri	14,698	76%
Nebraska	13,925	72%
South Dakota	16,740	86%
Wisconsin	14,325	74%
U.S.	\$ 19,454	100%

Source: State of Our Schools 2016. 21st Century School Fund

¹² Filardo, Mary. *State of Our Schools: America’s K-12 Facilities 2016*. Washington, DC. 21st Century School Fund. 2016.

In all, they estimate Iowa spent \$499 million a year on capital construction on average over this measurement period, but they also assert that, in the future, the state should be spending \$968 million per year (in constant 2014 dollar amounts) plus another \$25 million annually to accommodate growth. They then determined that Iowa's capital funding history suggested Iowa will underspend on school infrastructure by 53 percent. They established this "gap" in spending by using what they call broad industry standards that apply fixed whole percentages times the current replacement value of school infrastructure in light of that infrastructures' depreciation schedules to estimate, nationally, ideal capital investment levels. Those ideal values are then apportioned down to the states based on the square footage and age of the state's infrastructure. They justify this gap in future spending, versus historical effort, in that modern learning environments require climate control, technology, different learning environments, and safety components that were not considerations or not needed in previous decades.

Were a shorter set of years used to evaluate the states' capital spending, Iowa would likely fare much better in this evaluation because of the combination of sales tax-driven revenue streams each district received, which grew rapidly between fiscal 1999 and 2013 (the last year of the State of Our Schools study). Notably, Iowa's effort peaked and then plateaued during the depths of the Great Recession, whereas the rest of the nation's combined effort at school infrastructure spending dropped by a third between fiscal 2009 and 2013, according to their charts. The point is that the dynamics of Iowa's modern school infrastructure effort, especially over the life of the SAVE Fund, run in contradistinction from the overall national pattern of capital spending. Accordingly, the ostensible gap in Iowa spending projected by the study, irrespective of the validity of the ideal amount of spending, is likely smaller than projected with their methodology.

A clear picture of Iowa's recent capital development effort can be obtained by analyzing the Certified Annual Report (CAR) data for Iowa's school districts. Though total levels of spending by many different categories have already been documented, what matters is the flow of revenues in support of school infrastructure spending. Figure 28 represents the sum of local revenues (primarily property taxes) and state revenues deposited to the districts' PPEL, PERL, SAVE, other capital, and debt service accounts. Over the life of SAVE, there has been an overall upward slope in real receipts into those capital accounts. The annual average amount was \$738.1 million. Excluding general obligation bond debt service, the amount was \$604.45 million annually. In all, Iowa's recent experience and expected-to-be-sustained similar effort in the near future suggests that Iowa's school capital stock situation is significantly better than described in the State of Our Schools Report.

As to the adequacy of those resources to meet both school infrastructure needs, a prudent and targeted approach for the state would involve analyzing a wide range of cost-of-construction and modernization payments in recent years as standardized on a square footage or per-student basis, and to then project those values forward depending on the characteristics of district capital demand. Considering the past decade's enrollment trends, just 24 districts were growing, 141 stable districts grew by less than 1 percent but declined by less than 1 percent, and another 173 were declining. Average capital costs in those three categorizations as well as the mix of costs will be different, and Iowa school planning officials will be better served by carefully evaluating cost characteristics in those groupings than relying

on the single, gross capital needs multiplier generated from national-level cost assumptions. This is especially so given the state's energetic efforts over the past 17 years with both SILO and SAVE and the fact that SAVE funding authority will not sunset until 2029.

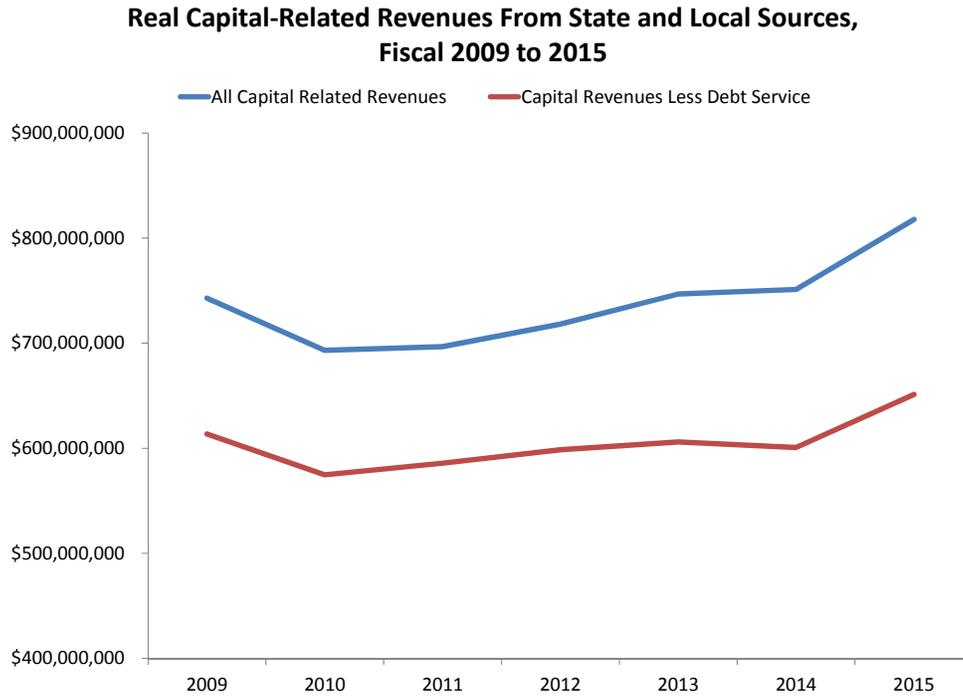


Figure 28

Section 7. Factors That May Influence the Flow of School Infrastructure Resources

A number of considerations can influence districts' capital funding decision. For example,

- there can be amendments or market-driven changes to the property tax base,
- the yield on the state sales tax may vary,
- state economic performance may fluctuate, and
- state legislative or executive actions can alter the flow of funds.

School districts, like all other Iowa local governments, are adapting to legislation that reduces the fraction of commercial and industrial property that is subject to taxation from nearly 100 percent down to 90 percent by fiscal 2017. While the state will reimburse local governments their losses, those reimbursements are frozen after 2017. In addition, over time the taxable value of rental housing will reduce to the same rolled-back level as homeowners' property. There is no state reimbursement associated with that adjustment. Finally, that legislation reduced the maximum growth rate for residential and agricultural property from 4 percent to 3 percent. If there is robust appreciation of those market values, their taxable value growth will be constrained. The degree to which these factors affect school districts depends on the degree to which their tax bases are made up of the classes of property benefitted by the legislation. Overall, the legislation will result in a statutory redefinition of the tax base that will change its real rate of growth in future years.

Iowa has gone through these definitional adjustments in the past. In the 1980s, the state eliminated personal property from the tax base. In the 1990s, the state eliminated manufacturing machinery and computing machinery from the tax base. In the latter example, a handful of counties had substantially higher dependence on the manufacturing machinery component than the remainder of the state. Though the state partially reimbursed governments for their losses, those counties' tax bases were significantly reduced after the full phase-out, which, in turn, put substantial upward pressure on all local government tax rates in those counties. For school districts, this resulted in the creation of bond-rate adjustment authority to adjust previously authorized levy rates in districts where more than 20 percent of the tax base was in machinery and equipment (see, Chapter 298.18A Iowa Code).

As demonstrated in the section on the likely future receipts from the sales tax, that revenue source can be victim to both the economy and legislative decisions. During the Great Recession, all state revenues dipped, including sales taxes, and state governments do not possess counter-cyclical mechanisms for rapidly offsetting such declines: state governments, by law and like local governments, must balance their budgets and cannot borrow to sustain current operations.

Additionally, the definition of taxable sales may change over time. Over the years, for example, sales taxes were phased out on residential utilities. In recent years, the state of Iowa has forgiven computer equipment sales taxes for new data centers and for other large capital development projects. In addition, by executive action during the most recent general assembly, a component of manufacturing purchases previously subject to sales taxation was initially eliminated, but subsequent legislative action

limited the impact of that decision (see HF 2433). As in the case above with the property tax base, local and state government officials are often keen to grant tax concessions to business, and, to the degree that state law enables them, they will use that authority for economic development purposes, fiscal impacts on other governments notwithstanding. This indifference to collateral consequences is clearly demonstrated in the profligate use of tax increment financing among cities and, increasingly, counties.

Iowa's economy, too, can grow in fits and starts. It endured a prolonged, seven-year recovery during the 1980s farm debt crisis, and it took a full six years in the last economic downturn for the state's employment to recover to pre-recession levels. It is currently enjoying rapid capital investment growth, and for a time during the 2008 to 2012 period the state enjoyed record farm incomes. But the rest of the state's economy endured the full brunt of the Great Recession and has recovered, for the most part, only as fast as the nation, as measured by jobs and nonfarm income change. Further, there are stark differences in economic recovery comparing metropolitan areas with nonmetropolitan areas. For the most part Iowa's metropolitan counties have enjoyed robust growth. Iowa's nonmetropolitan counties, to the contrary, in the aggregate are yet to retain the level of employment they had prior to the most recent economic downturn. Shifting the funding of SAVE away from the previous SILO authority was fortuitous in that they now receive much more school infrastructure resources, on average, than would have been the case with SILO, but the remainder of their economic resources and public finance capacities are lagging the rest of the state.

Finally, school finances are only one of many interests competing for scarce state and local resources. Property tax breaks for commercial and industrial property in fiscal 2015 consumed a very large fraction of the state government's net revenue growth. Because state-level reimbursements for those commercial and industrial property tax reductions are to be frozen in fiscal 2017, any remaining losses will have to be made up by local government resources after that. Further, the state of Iowa passed a constitutional amendment allowing for a three-eighths of one cent tax to create a Natural Resources and Outdoor Recreation Trust Fund, though the authority to levy that tax has not been granted by the Iowa General Assembly. Moreover, the Iowa governor, in the last legislative session, proposed limiting schools' future SAVE gross receipts growth to a fixed amount and redirecting the remaining portion of future growth in the sales tax allotted to schools to be used for water quality remediation. . Although there is very strong legislative resistance to increasing the state's current sales tax structure, there are ideas and proposals that are competing for reallocating or otherwise diversifying the uses of the sixth cent of the state sales tax currently enjoyed by the SAVE Fund recipients.

In addition, Iowa's recent revenue-producing past, when forecast forward, yields quite a bit of medium term uncertainty. These projections are contained in Appendix B of this study, and they demonstrate the uncertainty that underlies the science of anticipating future revenues. The previous analysis, which produced a simplified contingency table of state sales tax increments, had future real annual SAVE sales tax growth averaging in the range of from \$2.83 million in the most pessimistic assumption to \$14.96 million in the most optimistic. That is a high amount of future revenue uncertainty, and all longer-term revenue forecasts from all sources ought to be scrutinized carefully and, as applied to any policy choices, cautiously.

Section 8. Amending or Repealing the SAVE Fund Authorization

Current legislation funds SAVE through fiscal 2029. There are, however, potential risks to the fund given emerging and competing statewide interests. The SAVE Fund and its predecessor SILO have contributed substantially to meeting school district capital needs. In real 2016 amounts, SILO produced \$2.33 billion in revenues between fiscal 1999 and 2008, and SAVE has produced \$3.1 billion in total revenues. Added to those values were also substantial ongoing and new spending levels that leveraged districts' general obligation bonding authority along with allowable PPEL and PERL levies and income tax surcharge amounts. Assessing the adequacy of this funding stream as well as future needs requires additional analysis beyond the scope of this study, and until that analysis is completed the particular consequences of amending or repealing SAVE cannot be projected on a financial basis.

This is a study of the flow of funds into the SAVE Fund, their uses, and their residual impacts on property taxes. There is no baseline analysis in this study regarding the condition of the state's school capital stock prior to SILO and SAVE or the condition of the state's stock after 17 years of funding effort. What is known from this analysis is the gross flow of funds and broad categories of their uses. Analysis in preceding sections helped us understand the uses of those funds by different school district categorizations. Nothing in that analysis informed us, however, as to the adequacy of funding.

As would be expected, there were different types of capital demands given the type of school district categorization, meaning that there are broad differences in preferences for the use of SAVE funds. We know that growing, more urban, and larger districts used much more of their SAVE receipts for construction and rehabilitation. Smaller or declining districts used significant fractions of their resources for equipment. It is obvious that if the SAVE Fund were repealed, those costs would shift to property taxes. There are, however, limits on the extent to which property taxes can be levied in the name of capital investment and equipment. There are statutorily-set levy rate constraints as well as borrowing constraints. Added to that is the requirement of a super majority for general obligation bonding; in practice, this imposes a substantial political constraint.

Although authorized through 2029, there have been suggestions to amend the SAVE fund by limiting the amount of future revenue increments that it receives through its current authorization or even to extend the fund's authorization if the lawmakers accept the modifications. The impact of that kind of modification is simply not knowable. As described previously, just two dozen school districts in Iowa are growing at a rate in excess of one percent annually. The remaining districts are more or less stable or are in a pattern of persistent decline. The state's enrollments are not growing as rapidly as the overall population base, but in areas that are growing enrollments are growing sharply – in districts posting at least one-percent growth per year in the past decade, enrollments have swelled by 19 percent.

Iowa's current and future school district infrastructure needs, therefore, are multi-layered. The consequences of amending SAVE negatively on a fiscal basis will be felt differently by different groups of school districts. Analysis of recent data indicate that school districts across the board have had to shift back to using more property tax resources to underwrite school capital needs – the fraction of capital costs coming from SAVE has gone down, and the fraction coming from debts service and other capital-

related and equipment-related levies has gone up. This finding suggests that SAVE and SILO prior to it both helped jump start school infrastructure capital development for which there was substantial pent-up demand, but that over time a combination of state-equalized and local resources is needed to continue to maintain modern school infrastructure and equipment needs.

The evidence in this report indicates that Iowa's school districts are finding, and receiving voter-approved funding for, school infrastructure needs in excess of the flow of funds from SAVE in recent years. At face value, this fact suggests that reducing or altering the flow of SAVE funds will have negative consequences regarding property tax relief and tax rate stabilization, resulting in a further shifting of school infrastructure costs from consumption taxes to owners of taxable property. And as the period prior to fiscal 1999 demonstrated, those primarily property tax-based resources proved inadequate to meet the state's school infrastructure needs.

Appendix A: School District Classifications

General procedures for classifying school districts

Classification schemes for Iowa's school districts were applied to geographic delineations in effect during fiscal year 2015, which began on July 1, 2014. Iowa had 338 active school districts in that year. For historical revenue, expenditure, and other compilations, the values for any merged districts were aggregated to correspond with fiscal 2015 district boundaries.

Classification Schemes

Metropolitan and non-metropolitan status of the primary county served by the district:

Iowa has nine metropolitan statistical areas (MSAs) that together contain 21 of the state's 99 counties. MSAs are defined around a core county or counties containing an urbanized area with a population of 50,000 or more. Surrounding counties are included as part of the MSA if they have a strong economic linkage with the core county, as evidenced by commuting flows. The MSA status of U.S. counties is determined by the Office of Management and Budget.

Iowa's school districts were classified as metropolitan or nonmetropolitan according to the MSA status of the county containing the district's administrative offices or, in some cases, the county containing the majority of the district's resident population. Under this classification scheme, Iowa had 105 metropolitan school districts and 233 non-metropolitan districts in fiscal 2015.

Rural percentage of the district population:

Although many people use the terms "urban" and "metropolitan" interchangeably, they describe slightly different concepts that are each useful in characterizing regions. Unlike metropolitan areas, urban areas can refer to regions smaller than counties. The U.S. Census Bureau defines urban territory as a densely settled region containing a core of 2,500 or more residents. Rural territory is essentially defined as any geographic space that is not urban. Under these definitions, it is possible for metropolitan counties to contain large areas of rural space and nonmetropolitan counties to contain a high proportion of urban space.

In fiscal 2015, Iowa had 215 school districts that were 75 percent or more rural. Another 76 districts, classified as "mixed," contained between 25 to 75 percent rural space. The remaining 47 "urban" districts contained less than 25 percent rural territory.

Size of largest city served

The prior two classification schemes employ constructs that describe urbanization levels within the entire district. Another way to evaluate our districts is by considering the characteristics of the communities they serve. For this grouping, we identify the population size of the largest city served by the district. Cities with less than 25 percent of their population residing within district boundaries were excluded from consideration.

Only 12 school districts served large cities with 50,000 or more residents in fiscal 2015, while 115 districts served medium-sized cities with 2,500 to 49,999 residents. The remaining 211 districts served one or more small cities with populations not exceeding 2,500 residents.

District enrollment trend

The direction of enrollment change provides another useful basis for comparing the fiscal and other characteristics of school districts. Enrollment trend groupings were based on the compounded, average annual rate of certified enrollment change during the last decade (fiscal 2005 to 2015).

Declining districts, which numbered 173, experienced average rates of enrollment decline of one percent or more per year. Only 24 districts met the growing district criteria with average annual growth of one percent or higher. The remaining 141 districts, which grew or declined less than one percent per year, were classified as stable.

District enrollment size

The final grouping uses certified enrollment in fiscal 2015 to distinguish among small, medium, and large districts. Small districts, which have fewer than 250 students, are subject to special limitations on their utilization of SAVE revenues for capital spending. Iowa had 27 school districts with certified enrollment under 250 in fiscal 2015. Large districts, which have 2,500 or more certified enrollees, numbered 33 in fiscal 2015. The state's remaining 278 districts fall into the medium-sized grouping of districts with 250 to 2,499 certified enrollees.

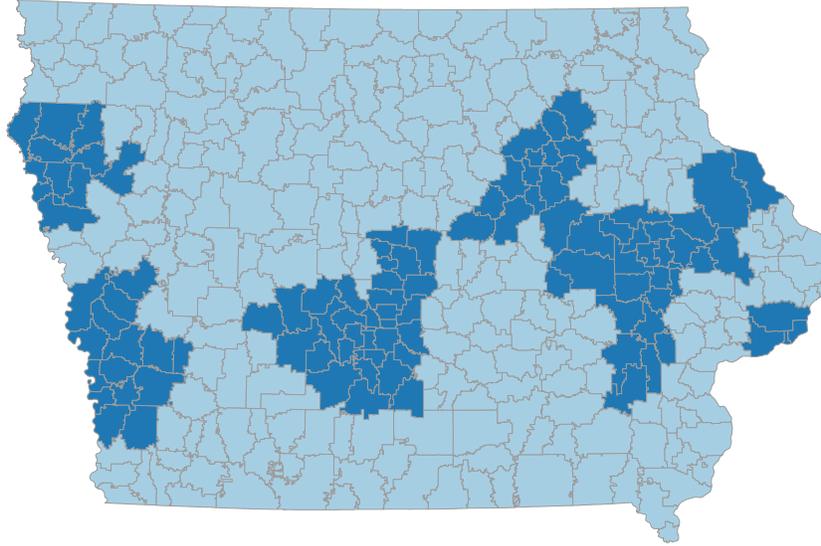
Table A1 summarizes the district groupings. Included for each group in the table are district counts, certified enrollment and statewide enrollment shares, and counts and percentages of public school buildings. The locations and distributions of districts by group are illustrated in Figures A1-A5.

Table A1

Summary Statistics for School District Groupings, Fiscal 2015

District grouping		Number of districts		Certified enrollment		Number of buildings	
		Count	% of total	Sum	% of total	Count	% of total
MSA status of county	Nonmetro	233	69%	195,005	40.6%	724	53.1%
	Metro	105	31%	285,767	59.4%	640	46.9%
Rural population percentage	Rural	215	64%	114,040	23.7%	571	41.9%
	Mix	76	22%	115,053	23.9%	321	23.5%
	Urban	47	14%	251,679	52.3%	472	34.6%
Size of largest city served	Small	211	62%	109,745	22.8%	552	40.5%
	Medium	115	34%	226,758	47.2%	552	40.5%
	Large	12	4%	144,269	30.0%	260	19.1%
10-year enrollment trend	Declining	173	51%	111,934	23.3%	489	35.9%
	Stable	141	42%	279,175	58.1%	709	52.0%
	Growing	24	7%	89,663	18.6%	166	12.2%
District enrollment size	Small	27	8%	4,967	1.0%	43	3.2%
	Medium	278	82%	229,161	47.7%	879	64.4%
	Large	33	10%	246,645	51.3%	442	32.4%

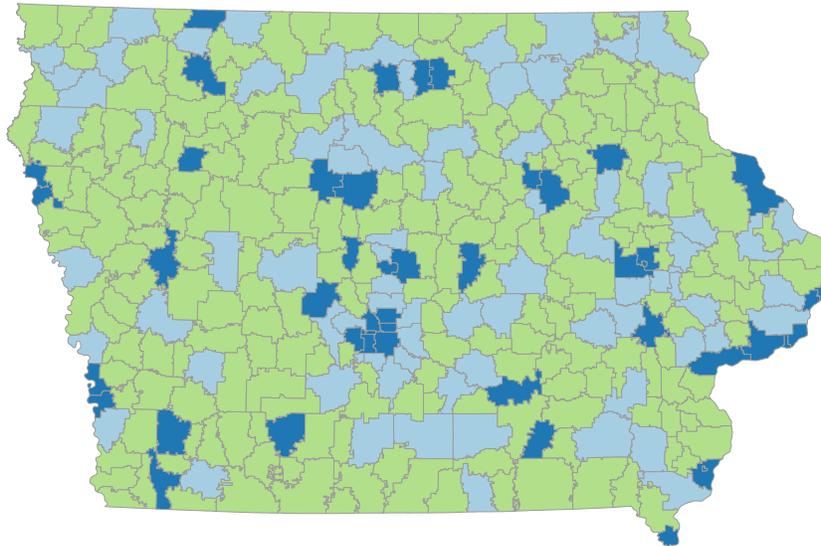
Metropolitan Status Peer Group Assignments



MSA status of district's primary or administrative county (2013 MSA definitions)
Nonmetropolitan Metropolitan

Figure A1

Rural and Urban Population Share Peer Group Assignments



Rural percentage of the population (2010 Census definition)
Rural (75 percent or more rural) Mix (25 to 75 percent rural) Urban (below 25 percent rural)

Figure A2

City Size Peer Group Assignments

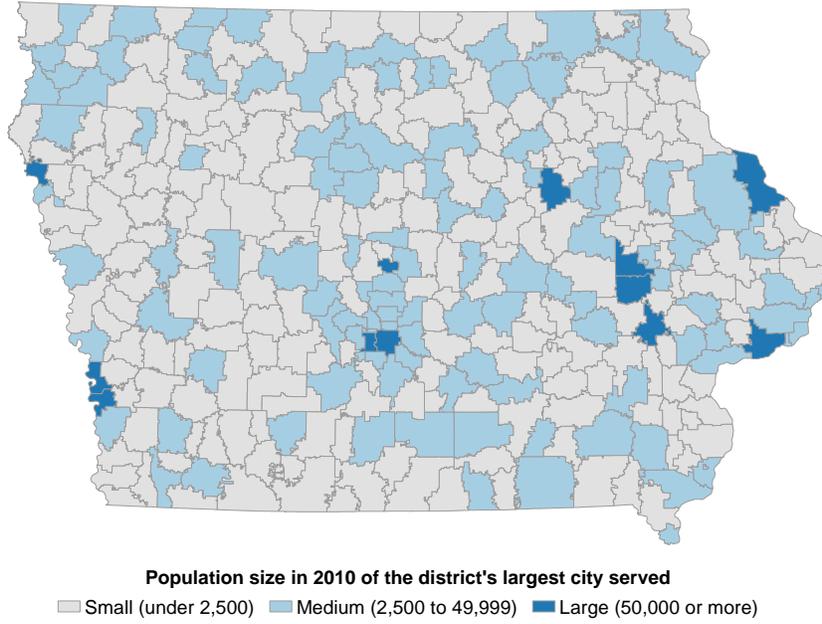


Figure A3

Enrollment Trend Peer Group Assignments

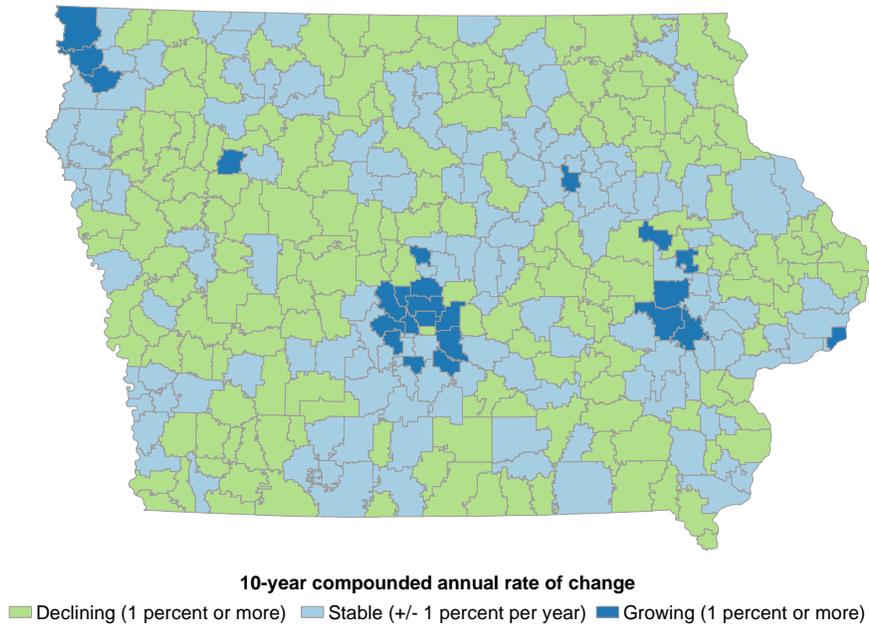


Figure A4

District Enrollment Size Peer Group Assignments

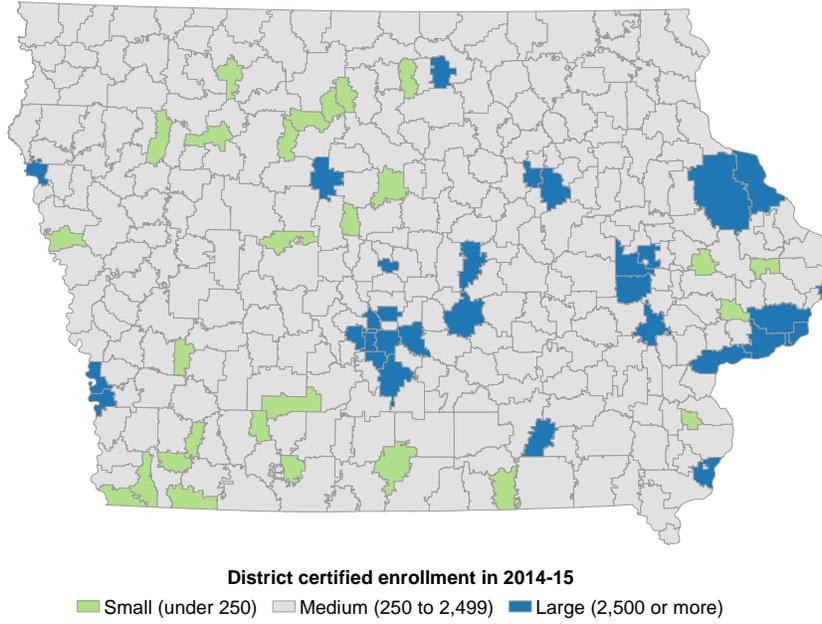


Figure A5

Appendix B: Models and Forecasts for State Tax Revenue

Related to the discussion above of the past, current, and prospective future status of the SAVE Fund, statistical models were estimated using quarterly state data from the first quarter of fiscal year 2005 to the fourth quarter of fiscal year 2016. These models were estimated for the following specific data:

- Total Taxes
- Sales & Use Taxes
- Personal Income Taxes
- Corporation Taxes
- All Other Taxes

Each of these five models was estimated using the ARIMA (autoregressive integrated moving average) approach that gives more weight to more recent data values and less weight to earlier data values while accounting for patterns of VOLATILITY within the data by analyzing the changes from one data value to another (this process is known as differencing). SAS (Statistical Analysis System) software was employed to conduct the data analysis. Each model includes parameters that estimate each data value as the result of (a) its immediately preceding data value from the previous fiscal quarter and (b) the data value from the same quarter of the previous fiscal years. Following estimation, each of the relevant models is then utilized to forecast future results based on the assumption that “history repeats itself,” that is, that the specified model would remain valid for future fiscal quarters. An arbitrary decision was made to forecast 24 quarters (that is, 6 fiscal years) into the future; it is important to note that forecasted values that are farther out from the end of the actual historical data have increasingly larger margins of uncertainty (“forecast error”), reflecting the reality that uncertainty increases as one attempts to project farther into the future with associated increased risk that revenue forecasts may be compromised by the myriad variables and exogenous events that influence future trends.

The sales and use tax model results are most pertinent to this study, as that is the source of funding for SAVE. It is important to note that these results highlight the imputed uncertainty shown in other results presented above that were employed in estimating average annual real gains in sales tax receipts through the end of the SAVE funding. In addition, the projected future total state taxes are of interest because overall state government funding uncertainty affects its ability to underwrite allowable growth and otherwise support education.

Just the projection graphs for the revenue items are appended as Figures B1-B5.

Total State Government Tax Revenues Forecast

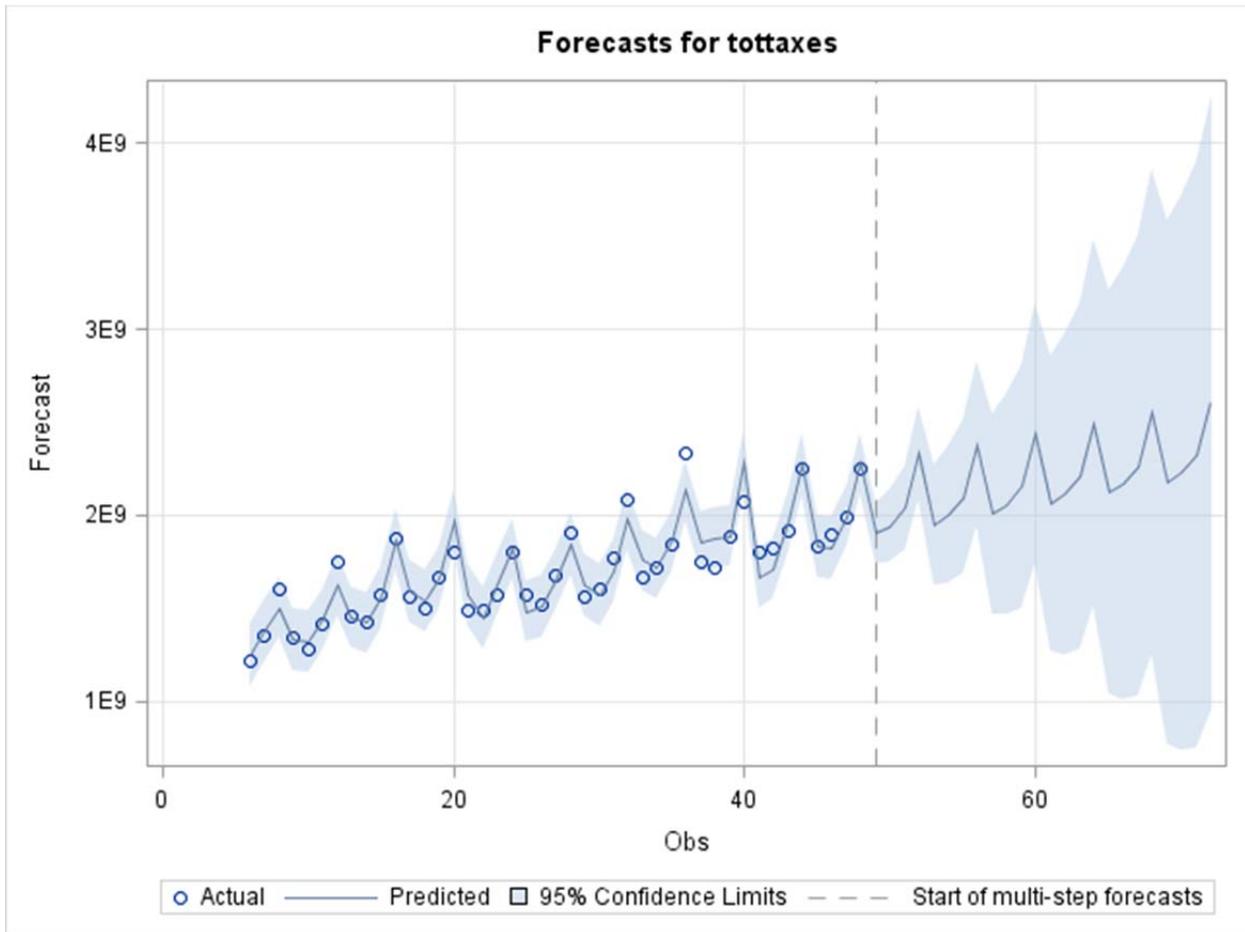


Figure B1

Total Sales and Use Taxes Forecast

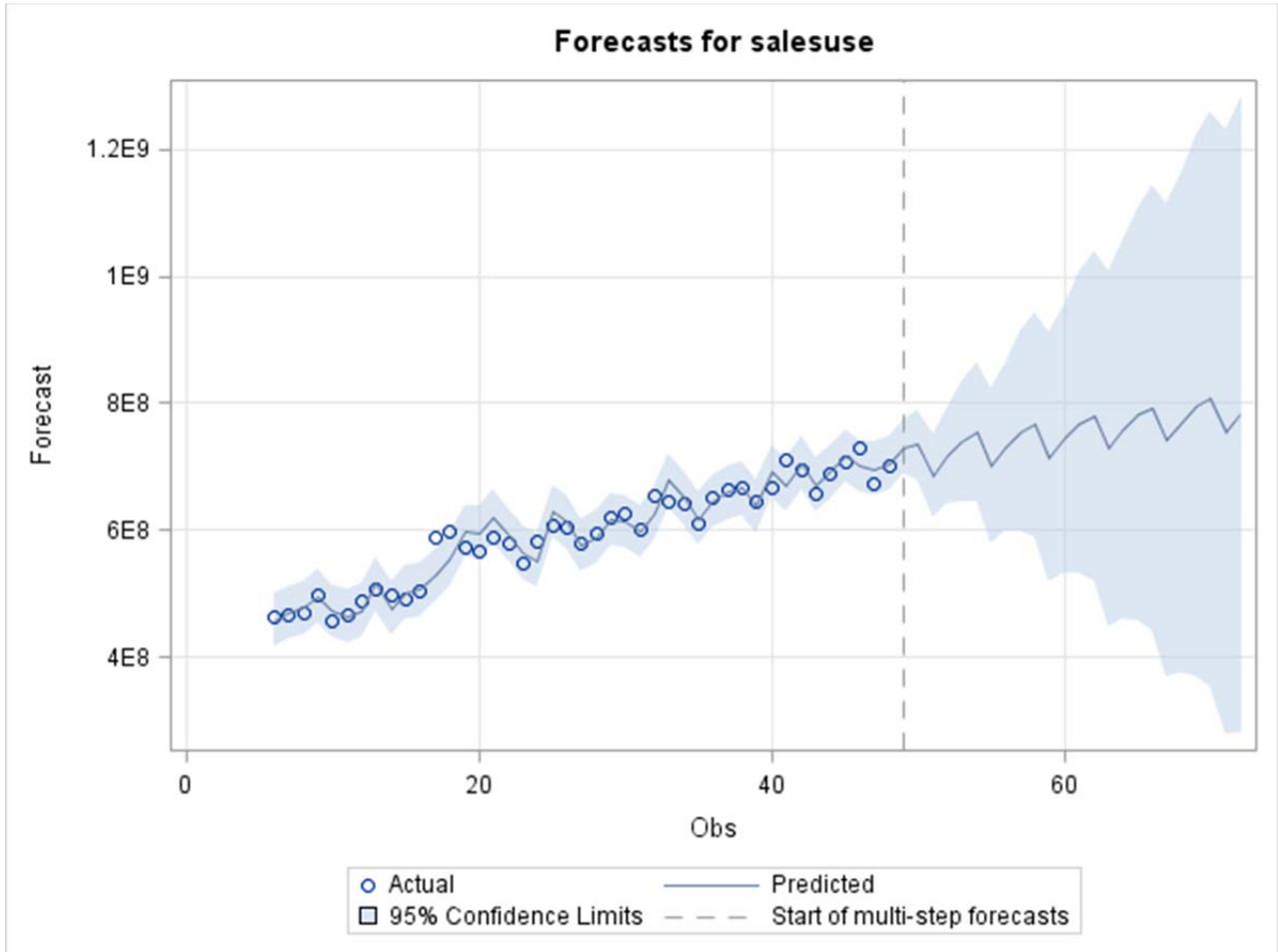


Figure B2

Total Personal Income Tax Forecast

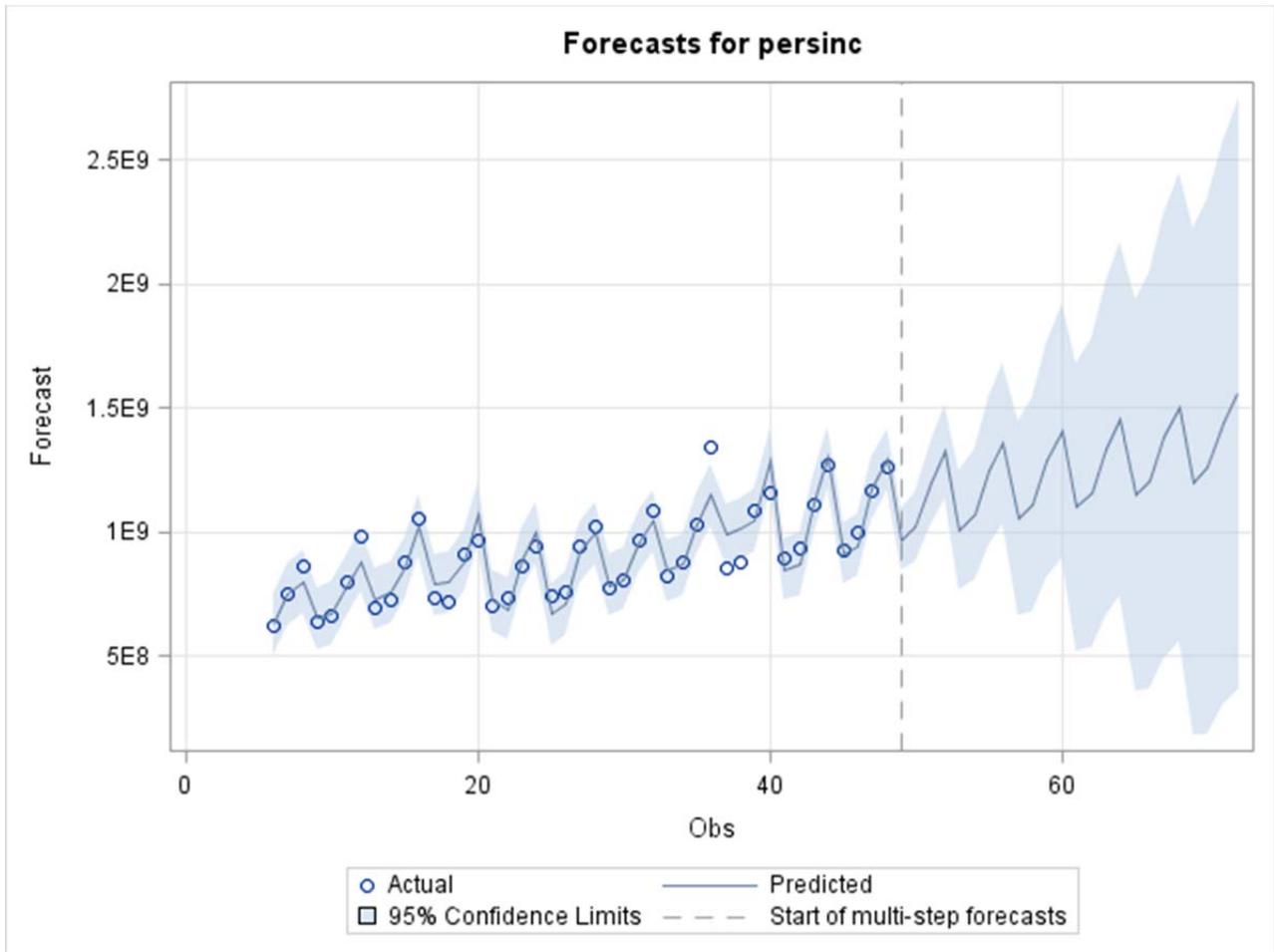


Figure B3

Total Corporation Income Tax Forecast

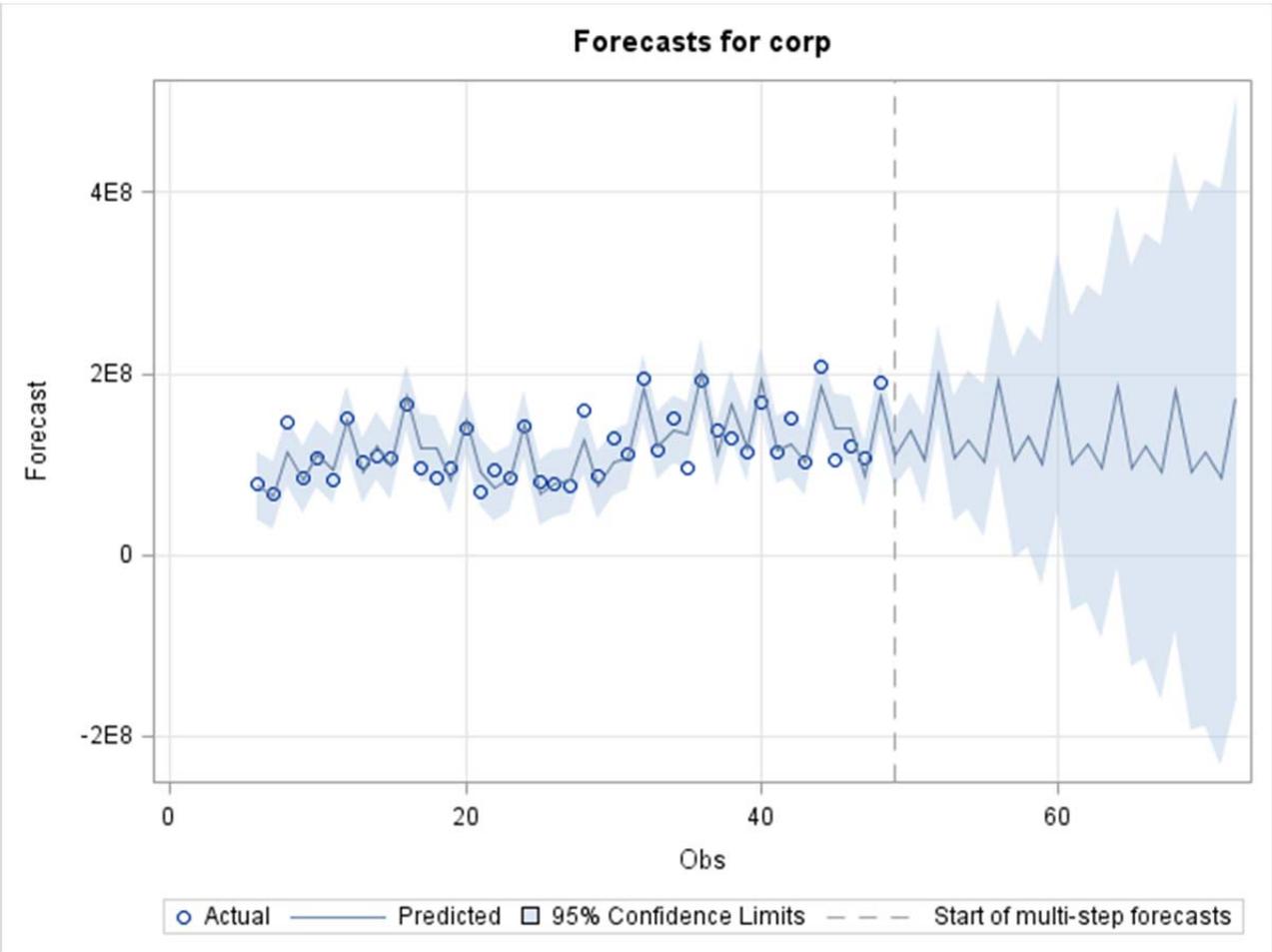


Figure B4

Total All Other Taxes Forecast

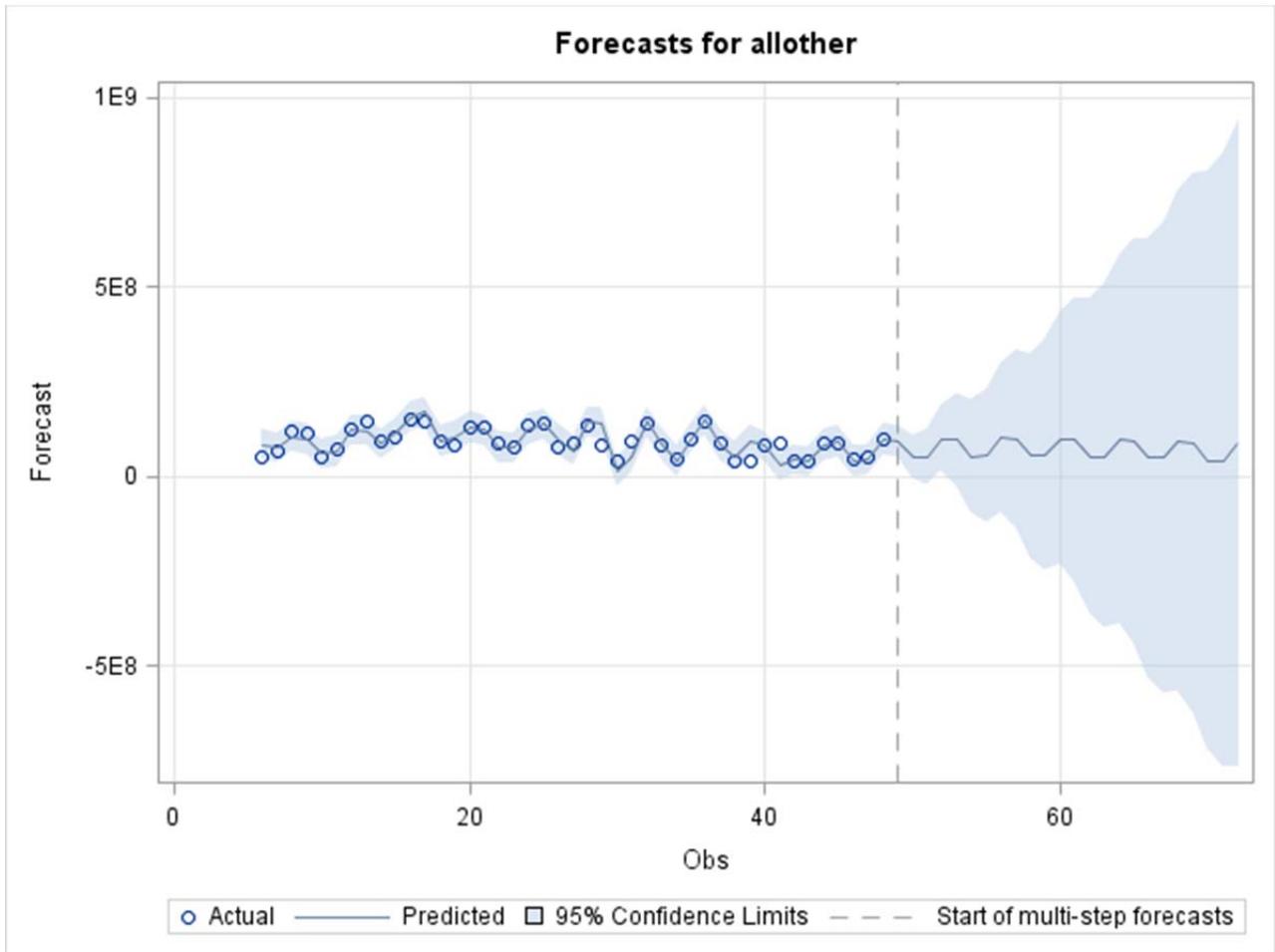


Figure B5

Appendix C: Capital-Related Property Tax Levies

Levy and/or Fund Name	Levy Limit and Duration	Purpose	Additional Notes
Debt Service Levy, Debt Service Fund, and Capital Projects Fund	\$2.70 with voter approval for less than or equal to 20-year bonds; \$4.05 with voter approval, but rate in excess of \$2.70 must be specified on the measure	Service bonded indebtedness to acquire or construct major capital facilities	<p>Proceeds from bond sales are deposited in the Capital Projects Fund</p> <p>Levy proceeds are deposited in the Debt Service Fund and used to retire bond principal and interest</p>
Regular Physical Plant and Equipment (PPEL)	\$0.33 school board approved and annually certified	Purchase and improvement of grounds; construction of schoolhouses or buildings; purchase or lease of technology; energy conservation expenditures; transportation equipment purchases, etc.	May be not be used to repay interest on bonds
Voted Physical Plant and Equipment (VPPEL)	\$1.34 voter approved for a period not exceeding 10 years		Future revenues may be pledged to secure loans, and revenues may be used to repay principal and interest
Public Education and Recreation (PERL)	\$0.135 with voter approval, remains in effect until rescinded by voters	Build and maintain recreation facilities and playgrounds in school buildings and grounds; provide free educational and recreational activities	Least used of the capital authorities