

Urban School Districts Benefit from Declining Enrollment

Analysis sheds light on expected impact of tuition tax credits and charter schools on Utah's traditional public schools

Introduction

Urban school districts with declining enrollment enjoy lower pupil-teacher ratios, lower property tax rates, higher per student spending, and higher teacher salaries than their growing enrollment counterparts. Over time, this gap is widening, increasing the advantage declining enrollment districts enjoy over growing school districts. These conclusions are based on a Utah Taxpayers Association analysis of school district financial data published by the State Office of Education. A summary of these results are as follows:

- In 1996, pupil-teacher ratios in fast growing school districts were 5.5% higher than in declining enrollment districts. By 2003, the difference had increased to 11.8%.
- In 1996, property tax rates in fast growing school districts were 6.3% lower than in declining enrollment districts. By 2003, property tax rates in fast growing districts were 26.7% higher than rates in declining enrollment districts.
- Average teacher compensation in fast growing districts was 5.6% lower than in declining districts in 1996 and had fallen to 6.3% lower by 2003.

Ironically, declining enrollment districts are able to achieve these favorable financial conditions while receiving slightly fewer state income tax dollars per student than districts with growing enrollments. When enrollments decline, the local property tax base remains intact. Additionally, since declining enrollment districts have reduced capital needs, these districts can afford to allocate a larger percent of their property tax revenues towards instructional costs. These two factors enable declining enrollment school districts to spend nearly twice as much property tax per student for instruction and operation expenses than fast growing districts.

This analysis refutes the widespread belief that urban districts cannot adequately cope with declining enrollment due to fixed costs, a concern that was recently reiterated by a PriceWaterhouseCoopers study regarding tuition tax credits funded by the Utah School Boards Association. According to the Taxpayer Association analysis, not only have declining enrollment districts been able to adapt to declining enrollment, they are actually in a better financial position than their growing district counterparts.

Tuition Tax Credits, Charter Schools, and Fixed Costs

The results of this analysis are directly applicable to the tuition tax credit and charter school debates. Opponents of tuition tax credits have portrayed tax credits as “draining” money from public schools, especially public school districts with declining enrollment. This “draining” of funds and students due to tuition tax credits and charter schools parallels the current shifting of funding and students from declining enrollment districts to growing enrollment districts. Enrollment and funding shifts due to natural demographic shifts or due to tuition tax credits and charter schools are, in a financial

sense, fundamentally the same. Since declining enrollment districts have not been financially harmed by losing students and funding to growing districts, policy makers can safely assume that transferring students to charter schools or private schools will have a similar impact, depending on the amount of dollars transferred per student.

Tax credit opponents have argued that school districts cannot reduce instructional costs when “one student” leaves the system. Opponents have also argued that school districts can only reduce costs when students from one entire neighborhood leave so schools can be closed. Similar arguments are used against charter schools.

Tax credit opponents argue that educational costs are largely fixed, particularly administrative and maintenance costs but sometimes instructional costs are included as fixed costs. Therefore, opponents argue, as students and funds are “drained” from school districts, particularly districts with declining or stable enrollment, school districts must increase class sizes or raise taxes since an increasing percent of district funds must be diverted away from instruction to cover fixed costs which have not been reduced.

The Taxpayers Association analysis demonstrates that charter school and tuition tax credit proponents are correct. As the analysis clearly demonstrates, declining enrollment districts have experienced decreased pupil-teacher ratios, increased teacher pay, and stable property tax rates. The evidence indicates that these districts have actually *benefited* from declining enrollment since growing districts have experienced smaller declines in pupil-teacher ratios and much higher increases in property tax rates.

Supporters of tax credits and charter schools argue that educational costs are largely variable, especially in the long run and especially in urban school districts. As enrollment declines, school districts can consolidate schools, thereby reducing administrative and maintenance costs. To further reduce costs, districts can reduce the number of teachers (or the growth in the number of teachers) usually through attrition, without increasing the pupil-teacher ratio.

Tax credit proponents argue that school districts will benefit financially as long as the amount of the tuition tax credit is less than the amount of the per student variable cost.

Opponents of parental choice have claimed that declining enrollment has forced schools to cancel programs. However, since per student spending, pupil-teacher ratios, and other financial measures have improved in declining enrollment districts, in absolute terms and relative to growing school districts, program cancellations reflect changing district priorities instead of impact of declining enrollment.

Additionally, decreases in enrollment due to tuition tax credits and charter schools will be coupled with existing decreases in enrollment in declining enrollment school districts due to natural demographic shifts. Districts will be able to handle enrollment declines due to tuition tax credits and charter schools just as they have been handling enrollment and funding shifts to growing school districts.

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Summary of Findings and Conclusions

1. Declining enrollment districts and slow growing districts are financially better positioned than fast growing districts by every significant measure including pupil-teacher ratios, property tax rates, assessed valuation per student, percent of property taxes dedicated to cover operational costs, and total spending per student. As declining enrollment districts continue to lose enrollment to growing districts, their financial advantage over growing districts continues to increase.
2. Declining enrollment districts receive significantly more property tax dollars for operational purposes per student. As enrollment declines, the local property tax base stabilizes or continues to grow thereby increasing property tax revenues per student as enrollment decreases. Additionally, declining districts are able to dedicate a larger share of property tax revenues to cover day-to-day operation costs since declining districts' capital needs are much lower than those of fast growing districts.
3. On a per student basis, growing enrollment districts are more expensive to state income taxpayers than declining enrollment districts. State income taxpayers spend 5.4% more per student in fast growing districts than in declining districts.
4. Educational costs are largely variable as demonstrated by the ability of declining enrollment school districts to reduce class sizes and increase teacher salaries even faster than growing school districts while generally avoiding the large tax increases that growing districts have had to impose. Despite significant property tax increases and higher state income tax subsidies, growing enrollment districts continue to maintain higher pupil-teacher ratios than declining districts and have actually lost ground relative to declining districts. Declining enrollment districts cope financially by reducing the number of teachers (or reducing the growth in the number of teachers) generally through attrition, and by consolidating schools.
5. Growing enrollment districts “drain” funds from declining enrollment districts just as opponents of parental choice have argued that charter schools and tuition tax credits will “drain” public schools. Nevertheless, declining enrollment districts have not been harmed financially. This indicates that charter schools and tuition tax credits for private schools also will not harm public schools, including schools located in declining enrollment districts.
6. Opponents of meaningful education reform have argued that charter schools and tuition tax credits will divert too few students to allow existing public schools to reduce costs. However, even districts with very gradually declining enrollment are financially better positioned than fast growing districts. Additionally, any diversions from declining enrollment districts due to tuition tax credits and charter schools would be coupled with existing enrollments shifts from declining enrollment to growing districts, thereby allowing districts to continue to reduce costs. Fixed costs are not an issue when students are diverted to charter schools or private schools from growing districts since these districts would have to build more schools and hire more teachers to accommodate this growth.

Summary of Data

The following charts compare several financial measures of three groups of urban districts: fast growing districts, slow growing districts, and declining enrollment districts. All data in these charts are based on information found in the 1996-97 and 2002-03 Annual Report of the State Superintendent of Public Instruction with some additional calculations by the Utah Taxpayers Association. Property tax rates are based on State Tax Commission data for fiscal year 2004.

Enrollment Changes

This analysis focuses on urban districts and classifies them into three groups based on enrollment growth from 1996 to 2003.

District Enrollment Changes, 1996 to 2003

Fast Growing		Slow Growing		Declining	
District	Growth Rate	District	Growth Rate	District	Growth Rate
Tooele	33.9%	Jordan	2.9%	Provo	-2.3%
Nebo	23.2%	Ogden	2.7%	Salt Lake	-3.6%
Wasatch	15.6%	Weber	1.3%	Murray	-7.4%
Alpine	15.0%	Davis	1.3%	Granite	-9.1%
Washington	12.6%	Logan	0.6%		
Total	17.8%	Total	2.0%	Total	-7.1%

Pupil-Teacher Ratios

Declining enrollment districts enjoy lower pupil-teacher ratios than growing districts, and the gap has widened in the past seven years. Class size reduction has been a high funding priority, probably the highest public education priority, for all fifty states in recent decades. In the last twenty years, pupil-teacher ratios have declined roughly 20%, even in Utah, which still has the nation's highest pupil-teacher ratio.

In 1996, pupil-teacher ratios were 5.5% higher in fast growing districts than in declining enrollment districts. By 2003, the difference had increased to 11.8%.

Pupil-Teacher Ratios, 1996 and 2003*

District Type	1996	2003	% Change
Fast Growing	23.98	23.27	-2.9%
Slow Growing	23.82	22.98	-3.5%
Declining	22.73	20.82	-8.4%

*Ratios are calculated by dividing total number of pupils in each group by total number teachers in each group as opposed to arithmetically averaging the pupil-teacher ratios of the districts in each group.

These results indicate that educational costs are largely variable, not fixed. According to the fixed cost theory, a district that experiences declining enrollment, especially if funding is diverted to growing districts (or charter schools or private schools), will have to increase pupil-teacher ratios since a large percent of education expenditures are allegedly fixed in non-instructional overhead.

These results also disprove the “one-student” and “one-neighborhood” theories which claim that declining enrollment does not financially benefit districts since no costs can be reduced when one student leaves the system or unless all students from one neighborhood leave the system. Naturally, individual students leaving the system, whether due to natural demographic shifts or due to charter schools and tuition tax credits, translate into thousands of students collectively which allows declining enrollment districts to reduce cost through reductions in workforce and consolidation of schools.

Property Tax Rates

Comparing school district property tax rates is problematic since rates are dependent upon average property values. Salt Lake City School District, for example, can generate a significant amount of property tax revenue with a low tax rate since downtown property valuations are very high.

However, these valuation differences are not an issue when comparing *changes* in property tax rates since property tax bases generally change very slowly. (Washington and Wasatch are notable exceptions). When comparing property tax rates or tax rate changes, the state-wide basic levy must be subtracted from the district total levy because school districts receive one less state income tax dollar for each dollar generated by the statewide basic levy.

Property tax rates grew dramatically from 1996 to 2003 in fast growing districts while property tax rates in declining enrollment districts experienced a comparatively modest increase.

Property Tax Rates, excluding Basic Levy, 1996 and 2004*

District Type	1996	2004	% Change
Fast Growing	0.004017	0.005916	47.3%
Slow Growing	0.005025	0.005845	16.3%
Declining	0.004288	0.004670	8.9%

*Enrollment-weighted averages

Percent of Property Taxes Used for Operations

Fast growing school districts have higher property tax rates but spend a smaller percent of their taxes on day-to-day operations. Fast growing districts have very high capital requirements, and these capital needs consume a large percent of the districts' tax rate. Declining districts have lower capital needs, typically restricted periodic renovations, and are therefore able to dedicate a larger portion of property tax revenue to cover operational costs.

Percent of District Property Taxes Used for Operations, excluding Basic Levy*

District Type	1996	2004	% Change
Fast Growing	30.1%	30.4%	0.8%
Slow Growing	47.4%	40.4%	-14.8%
Declining	55.9%	48.1%	-14.0%

*enrollment-weighted averages

Assessed Valuation per Student

Declining enrollment districts enjoy a significant advantage over growing districts relative to assessed valuation per student. Since 1996, assessed valuation per student has increased slightly faster in fast growing districts than in declining districts, but assessed valuations per student are still much higher (52%) in declining enrollment districts than in fast growing districts.

Assessed Valuation Per Student, 1996 and 2004*

District Type	1996	2004	% Change
Fast Growing	\$117,383	\$206,623	76.0%
Slow Growing	\$116,508	\$206,247	77.0%
Declining	\$194,750	\$313,936	61.2%

*enrollment-weighted averages

Teacher Salaries

Teacher compensation in declining districts was 6.8% higher than compensation in fast growing districts in 2003. From 1996 to 2003, teacher compensation in declining districts grew slightly faster than compensation in growing districts.

Teacher Salaries and Benefits, 1996 to 2003*

District Type	1996	2003	% Change
Fast Growing	\$43,618	\$51,937	+19.1%
Slow Growing	\$45,034	\$53,504	+18.8%
Declining	\$46,186	\$55,448	+20.1%

*Average salaries and benefits are calculated by dividing total teacher compensation for each group by total number teachers in each group as opposed to arithmetically averaging total teacher compensation of the districts in each group.

Declining districts generally have higher teacher compensation because teachers in these districts typically have more experience. Growing districts, on the other hand, are constantly hiring recently graduated teachers who earn less. Nevertheless, the critical issue is that declining districts can *afford* to pay their teachers more than growing districts can.

Spending per Student

Declining enrollment districts spend more per student than growing districts while receiving slightly less state income tax funding per student as shown in the chart below.

2003 Per Student M&O Funding: Local, State, and Federal*

District Type	Local	State	Federal	Total
Fast Growing	734	3,219	273	4,227
Slow Growing	864	3,146	292	4,302
Declining	1,335	3,054	406	4,815

*Average per student spending is calculated by dividing total funding for each group by total number of students in each group as opposed to arithmetically averaging per student spending of the districts in each group.

In 2003, fast growing districts received 5.4% more state funding per student than declining districts, slightly lower than 5.9% in 1997. The most significant funding difference is the \$734 per student local funding in fast growing districts and the \$1,355 per student local funding in declining districts. This disparity has not changed significantly in the past seven years.

This analysis divided fourteen urban school districts into three groups: fast growing, slow growing, and declining enrollment school districts. Data for each of the three groups of schools was determined by combining all districts in one group and then determining the data for that group as a whole as opposed to averaging data from each school district within each group equally. To determine the pupil-teacher ratio for fast growing school districts, for example, this analysis summed the number of students in all fast growing school districts and divided this sum by the sum of all teachers in all fast growing school districts as opposed to simply averaging the pupil-teacher ratios of each district in the group. Simply averaging the pupil-teacher ratios without consideration to district size would not accurately describe how tax dollars are being spent on a state-wide basis.

This analysis compares fourteen urban districts using six financial measurements for a total of 84 data points. A few anomalies emerge on a district-by-district basis, most notably Wasatch and Washington School Districts. Both are fast growing school districts. Washington School District has experienced significant property valuation growth due to an influx of retirees. These retirees do not burden the local school district with children. As a result, Washington School District has been able to significantly reduce class sizes, especially relative to other fast growing school districts, without significant property tax increases. Wasatch School District has also experienced significant increases in property valuations, mainly due to the increased property values along the Wasatch Back. Combined with significant property tax increases, this has enabled Wasatch to significantly reduce pupil-teacher ratios, especially in comparison to other fast growing districts.

Experience in these two districts is definitely anomalous and is not realistically expected to be repeated in other fast growing school districts. Despite these demographic anomalies, Wasatch and Washington were included in this analysis. Without Wasatch and Washington, the difference between fast growing districts and declining enrollment districts is even greater.

Final Notes

The comparison between enrollment shifts between public school districts due to natural demographic changes and shifts due to increased parental choice is contingent upon a couple assumptions, especially with regards to tuition tax credits. First, this comparison assumes that tuition tax credits will be used primarily by those who are not already sending their children to private schools and would not in the future were it not for the tax credit. Second, the comparison also assumes that the value of the tuition tax credit will be equal to or less than the amount of state income tax dollars spent for maintenance and operation. For fast growing districts, this amount equaled \$3,219 in school year 2002-2003.

This comparison has focused on urban districts. Rural districts are typically not able to reduce costs as quickly and as efficiently as urban districts. Densely populated urban districts like Provo, Granite, Murray, and Salt Lake can more easily consolidate or close schools than rural districts whose school children are spread out over great distances.