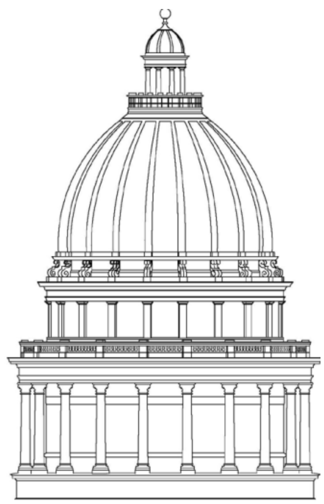
REPORT TO THE

UTAH LEGISLATURE

Number 2017-03



A Performance Audit of USBE's Aspire Student Information System

April 2017

Office of the
LEGISLATIVE AUDITOR GENERAL
State of Utah

STATE OF UTAH

Office of the Legislative Auditor General

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AUDITOR GENERAL

April 2017

TO: THE UTAH STATE LEGISLATURE

Transmitted herewith is our report, **A Performance Audit of USBE's Aspire Student Information System** (Report #2017-03). A digest is found on the blue pages located at the front of the report. The objectives and scope of the audit are explained in the Introduction.

We will be happy to meet with appropriate legislative committees, individual legislators, and other state officials to discuss any item contained in the report in order to facilitate the implementation of the recommendations.

Sincerely,

John M. Schaff

John M. Schaff, CIA
Auditor General

JMS/lm

Digest of
A Performance Audit of USBE's
Aspire Student Information System

Aspire is a student information system (SIS) created and managed by the Utah State Board of Education (USBE). SISs are programs created to track specific student information, and report it to the state. USBE collects that data to fulfill state and federal requirements. The data is then used to determine funding for each local education agency (LEA). Most large LEAs have sought out a private vendor for their SIS. This audit focuses on the following objectives:

Chapter II – What is USBE's cost to maintain and develop Aspire?
Chapter III – What are the costs, to USBE, the LEAs, and by extension, the taxpayer, of transitioning LEAs currently using Aspire to private SIS vendors?
Chapter IV – What are the potential effects of different levels of privatization? This chapter includes recommendations.
Chapter V – Has USBE appropriately reacted to the state's Free Market Protection and Privatization Board's report?

Chapter II
Aspire Cost About $1.1 Million in FY 2016

Costs Attributed to Aspire Range From $5 to $7 per Student. It cost USBE approximately $1.1 million to maintain Aspire in fiscal year 2016. Ninety-seven percent of these costs were comprised of salary and benefits for employees. In 2017, these costs are estimated to drop, as three of seven Aspire programmers have been reassigned on a permanent basis. The 2017 Aspire cost then drops to about $860,000, or $5 per student. USBE also hosts, or stores, the data for 81 percent of Aspire LEAs, at $0.27 per student. All costs were calculated as conservatively as possible, including all potentially applicable expenses.

Most of Aspire's Functionality is Necessary for State Reporting. Despite concerns that Aspire is being developed beyond the necessary requirements of state reporting, our analysis found that 87 percent of Aspire functionality is necessary to fulfill state reporting.

Chapter III
LEA Cost to Transition from Aspire Would Be Significant

Transition Costs Could Be Prohibitive for Charter Schools and Small School Districts. We estimate that first year transition costs from Aspire to a private SIS vendor would be between $3.8 and $8.1 million, or $23 to $49 per student. These estimates are designed to be as fiscally conservative as possible. We further estimate the ongoing costs would be between $2.6 and $2.8 million per year, or $16 to $17 per student. Both amounts are significantly more than the $1.1 million ($7 per student) that it currently costs USBE to run Aspire.

Aspire LEAs Have Fewer Students. Demographically, Aspire LEAs are, on average, smaller than non-Aspire schools. If USBE decided to stop supporting Aspire, these smaller LEAs would need a replacement SIS option to continue submitting required data to USBE. Of 149 LEAs in Utah, 100 of them (67 percent) use Aspire. Conversely, in 2017, of 644,678 students in Utah public schools, just 165,715 (26 percent) attend an LEA that uses Aspire. Most LEAs using Aspire are charter schools or smaller districts.

Chapter IV
Privatization Has Pros and Cons

Varying Degrees of Privatization Have Different Consequences. Different types and levels of privatization could potentially be used for student information systems in Utah. Options range from maintaining the status quo, to a fee for Aspire services, to elimination of the Aspire program completely. The various options are detailed in the chapter, followed by potential pros and cons of each level of privatization. We recommend that USBE use the information presented in this audit report to determine what level of privatization is appropriate given increased costs.

Chapter V
USBE Has Appropriately Waited to Consider Privatization

USBE Is Waiting for More Information from the Audit. Based on the request for a legislative audit, USBE chose to wait for the detail in this audit report before making an informed choice on what level of privatization, if any, should be implemented. In our opinion, USBE's delay was appropriate. Having the specific information provided in this report will allow USBE to make more informed, long-term decisions.

Privatization Board Report Appears Incomplete. Our review found that the 2015 privatization board report did not fully consider all statutorily required elements of privatization, and is therefore an incomplete analysis. We also found that the privatization board did not identify cost savings.

REPORT TO THE UTAH LEGISLATURE

Report No. 2017-03

A Performance Audit of USBE’s Aspire Student Information System

April 2017

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Chapter I
Introduction

Aspire is a student information system (SIS) created and managed by the Utah State Board of Education (USBE or the board). SISs are programs created to track specific student information, and report it to the state. USBE collects that data to fulfill state and federal requirements. The data is then used to determine funding for each local education agency (LEA).[1] Some of the information tracked by Aspire and other SISs includes:

USBE created the Aspire student information system to help LEAs submit required data.

- Academic intervention
- Academic progress
- Assessment
- Attendance
- Behavior
- Gradebook

Some SISs also include a financial component, but Aspire does not. Because of this, some LEAs have sought out a private vendor for their SIS.

In order to submit data to USBE's database, a privately offered SIS vendor must gain USBE approval by demonstrating that its system can communicate with USBE's system. There are currently nine approved SISs, including Aspire. Aspire is available to all LEAs at no cost, although not all LEAs chose to use Aspire.

The Public Education Appropriations Subcommittee requested this audit because a private SIS vendor expressed concerns that it faced unfair competition with the state's free SIS option. Because of this vendor's concerns, the state's Free Market Protection and Privatization Board (privatization board) conducted a study and released a report in January 2015.[2]

[1] Local education agencies (LEAs) are either school districts or charter schools.

[2] The Free Market Protection and Privatization Board is an advisory board created in ***Utah Code*** 63I-4a to review state activities and determine whether those activities could be privatized. It is comprised of 17 members appointed by the governor from the Legislature, public employees, private business, and local government.

The privatization board report[3] found that

> In its development, marketing, and operation of its student information system now known as Aspire, [USBE] does appear to compete unfairly in the student information system market. The board further finds that privatization of Aspire is feasible.

The privatization board recommended further study of privatizing Aspire.

It should be noted that the privatization board does not recommend privatization of Aspire but instead recommends further study. As we will discuss in Chapter V, the privatization board's review appears incomplete.

These recommendations were presented to the Public Education Appropriations Subcommittee in February 2015. The subcommittee requested this audit in December 2015. During the following 2016 Legislative Session, the subcommittee authorized a fee of $4.51 per student for the use of Aspire, but did not require said fee.

Majority of LEAs Use Aspire

Aspire is used predominately by small LEAs, 80 percent of which are charter schools.

Of 149 LEAs in Utah, 100 of them (67 percent) use Aspire.[4] Conversely, in 2017, of 644,678 students in Utah public schools, just 165,715 (26 percent) attend an LEA that uses Aspire. This tells us that Aspire is used predominately by small LEAs. In fact, 80 percent of LEAs that use Aspire are charter schools. This is 74 percent of all charter schools. In addition, 49 percent of all school districts use Aspire.[5]

The format of this audit is slightly different from our standard audit because it is primarily informational in nature. We reserve our recommendations until Chapter IV, after having presented requisite information in Chapters II and III.

[3] The privatization board report will be discussed in more detail in Chapter V.

[4] This does not include the Utah School for the Deaf and Blind, which also uses Aspire.

[5] The numbers used are the official USBE student count from October 2016.

Audit Scope and Objectives

This audit seeks to provide information to the Legislature and USBE on the costs involved in privatizing Aspire. This information results in a policy question about the appropriate balance between possible competition with private industry and the cost to taxpayers for transitioning Aspire users to an alternate private SIS. The following are the objectives of this audit and the chapters in which they are addressed.

The audit information presented herein results in a policy question about the appropriate balance between possible competition and the cost to taxpayers.

Chapter II – What is USBE's cost to maintain and develop Aspire?

Chapter III – What are the costs, to USBE, the LEAs, and by extension, the taxpayer, of transitioning LEAs currently using Aspire to private SIS vendors?

Chapter IV – What are the potential effects of different levels of privatization? This chapter includes recommendations.

Chapter V – Has USBE appropriately reacted to the privatization board's report? Were the recommendations of the privatization board appropriate?

Chapter II
Aspire Cost About
$1.1 Million in FY 2016

In fiscal year 2016 the Aspire student information system cost the Utah Board of Education (USBE or the board) about $1.1 million to maintain and operate, which breaks down to approximately $7 per student. For the current fiscal year (2017), USBE reports that funding for three Aspire programmers has been reassigned, dropping the cost of Aspire to approximately $860,000, and the per student cost to $5. However, because we do not have a full year's data, these numbers are unaudited. Although some have expressed concerns that Aspire is being developed beyond necessity, most of its functionality corresponds to state reporting requirements. Finally, USBE's cost to store the data is minimal.[6]

Costs Attributed to Aspire Range From $5 to $7 per Student

Aspire costs approximately $1.1 million, or $7 per student for USBE to maintain.

It cost USBE approximately $1.1 million to maintain Aspire in fiscal year 2016. Most of these costs were comprised of salary and benefits for employees. In 2017, these costs are estimated to drop, as three of seven Aspire programmers have been reassigned on a permanent basis. Both fiscal year numbers are presented in this chapter, because fiscal year 2016 is the historic cost, while 2017 is more current, but also less representative over time. Figure 2.1 shows a breakdown of the 2016 costs. [7] All costs were calculated as conservatively as possible, including all potentially applicable expenses.[8]

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[6] Storing the data is also referred to as hosting.

[7] This number is presented as an estimate because of some limitations with the data. These limitations include employee estimates of time used for the database maintenance category, and IT support employees who only began tracking their time by projects in September, so this number was projected from three months of data.

[8] USBE would still incur some expenses listed in Figure 2.1 if they no longer maintained the Aspire system. These costs are discussed and detailed in Appendix A and Chapter IV.

Figure 2.1 The Majority of Aspire Costs in Fiscal Year 2016 Covered Salary and Benefits. This number takes into account the amount of actual USBE staff time spent on Aspire. Staff time is 97 percent of the cost.

	Cost	Percent of Total
IT Programmers	$760,142	66.8%
IT Customer Support	249,176	21.9
IT Management	99,526	8.7
Database Maintenance	13,346	1.2
Building and Maintenance	7,172	0.6
Equipment	6,496	0.6
Liability Insurance	2,256	0.2
Total	**$1,138,115**	

Source: Auditor analysis of fiscal year 2016 USBE data
Note: This total cost includes the cost of hosting, or storing the data for some Aspire students, but not all. This cost is discussed later in this chapter.

USBE IT staff expenses comprise 97 percent of the cost of Aspire.

Programmers are obviously the bulk of Aspire's expenses, followed by IT customer support, and IT management. Together they comprise 97 percent of the cost. The amounts included in each of these totals are prorated by how much of the employees' time is spent on Aspire. There were essentially seven full time Aspire programmers in 2016.

This Aspire expense can then be broken down into a per student expense. Figure 2.2 shows that calculation.

Figure 2.2 Aspire Costs About $7 Per Student. These numbers reflect fiscal year 2016 data.

Cost of Aspire	$1,138,115
Number of Students using Aspire	165,715
Total Cost per Student	**$6.87**

Source: Auditor analysis of USBE data

Fiscal year 2017 Aspire costs drop from $1.1 million to $860,000 due to programmers moving to other areas.

USBE reports that this number would be significantly lower in 2017, as they have lost three programmers, one to budget reallocations and two to higher priorities of other areas. Figure 2.3 lists the resulting estimated fiscal year 2017 Aspire costs.

Figure 2.3 Aspire Costs Drop by About $279,000 in Fiscal Year 2017. The reduction occurs because three programmers have been reassigned or the funding for their position was reallocated.

	Total Cost	Per Student
FY 2017 Total*	$858,967	$5.18

Source: Auditor analysis of USBE data
** Unaudited data reported by USBE for an incomplete year*

USBE also reports that the 2017 staff losses shown in Figure 2.3 will delay the development of some Aspire modules.

Most of Aspire's Functionality is Necessary for State Reporting

Despite concerns that Aspire is being developed beyond the necessary requirements of state reporting, our analysis found that 87 percent of Aspire functionality is necessary to fulfill state reporting requirements.

87 percent of Aspire functionality fulfills state and federal reporting requirements.

Most Aspire Modules Correspond With State Reporting Requirements

Some have expressed concern that USBE is overdeveloping Aspire and that superfluous functionality is being added. However, we found that most of the functionality corresponds with reporting standards required by the federal government, the Legislature, or USBE.

Aspire is based on operation modules. These modules include academic progress, assessment, behavior, fees, and a gradebook, among others. These modules are available to all local education agencies (LEAs) using Aspire. Figure 2.4 shows how many of these modules correspond with USBE reporting requirements.

Figure 2.4 Aspire Modules Correspond with Federal and State Reporting Requirements. 65 percent of Aspire modules are necessary to fulfill reporting requirements, and another 22 percent for necessary functionality.

Total Modules	Fulfill State Reporting Requirements	Backbone Function Necessary to Operate	Not Related to Reporting Requirements
23	15	5	**3**
Percentage	65%	22%	**13%**
Total Necessary	**87%**		

Source: Auditor analysis of fiscal year 2017 USBE data

If the main purpose of Aspire is to facilitate state reporting requirements, 87 percent of the Aspire modules support this goal. The remaining 13 percent are useful to LEAs, but have no relation to state reporting, and include locker assignments, fees, and food service.

The remaining 13 percent of functionality is useful to LEAs, but has no relation to state reporting.

Because such a high percentage corresponds to reporting requirements, separating out the functionality is unnecessary.

The Cost to Host LEA's Data is Minimal

USBE stores data for 81 percent of LEAs that use Aspire. These are primarily charter schools, with two small school districts.

As an additional service, USBE hosts, or stores, data for 81 percent of LEAs that use Aspire. Those hosted by Aspire are all charter schools, except Tintic and Wayne School Districts and the Utah School for the Deaf and Blind. The largest LEA whose data is hosted by USBE is a charter school with 4,272 students. Storing these LEAs' data costs USBE slightly over $13,000 annually. This is $0.27 per student per year to host the data, as shown in Figure 2.5.

Figure 2.5 Total Costs of Storing Data for LEAs are Minimal. The majority of those costs are for database personnel.

Expense	Total
Database Personnel Cost	$12,708
Annual Server Costs	$638
Total Costs	**$13,346**
Number Students Hosted by USBE	48,977
Hosting Cost per Student	**$0.27**

Source: Auditor analysis of USBE data

USBE hosts this data because the smaller LEAs struggled to submit accurate reports, and hosting the data helps ensure it is submitted correctly. As discussed in Chapter I, charging for this service is a policy decision and should be made by USBE.

Recommendations are provided in Chapter IV.

Because the recommendations of this report require the information provided in Chapters II through IV, they will be provided at the end of Chapter IV.

Chapter III
LEA Cost to Transition from Aspire Would Be Significant

Migrating local education agencies (LEAs) that currently use Aspire to new student information systems would cost tax payers and LEAs millions more in both the first year and subsequent years than maintaining current Aspire operations. Charter schools and smaller districts would be most impacted by the cost of the migration. These same charter schools and smaller districts make up the majority of Aspire users. In addition, the Utah State Board of Education (USBE or the board) reports that they anticipate their costs to gather required reporting data would increase.

Transition Costs Could Be Prohibitive for Charter Schools and Small School Districts

We estimate that first year transition costs from Aspire to a private student information system (SIS) vendor would be between $3.8 and $8.1 million, or $23 to $49 per student. These estimates are designed to be as fiscally conservative as possible. We further estimate that the ongoing costs would be between $2.6 and $2.8 million per year, or $16 to $17 per student. Both amounts are significantly more than the $1.1 million ($7 per student) that it currently costs USBE to run Aspire.

First year costs to switch Aspire users to a private vendor range from $23 to $49 per student.

First Year Expenses Would be Substantial

If all LEAs currently using Aspire were to switch to a private vendor SIS, transition cost estimates for the first year range from $3.8 million to $8.1 million.[9] Figure 3.1 details our cost estimates, as well as each estimate's basis.

[9] We have presented a range of estimates because of the assumptions necessary for these estimates. In order to broaden the range and accuracy of our estimates, we used multiple methods and sources of estimation. The sources, detail, and assumptions are discussed in Appendix B.

Figure 3.1 Estimated Transition Costs for the First Year Are at Least $3.8 Million. Our estimates range from $3.8 to $8.1 million.

Estimation Model	First Year	Per Student
Vendor 1*	$8.1 M	$49
Vendor 2* (Option 1)	6.1 M	37
Vendor 2* (Option 2)	3.8 M	23
Phone Calls to LEA Business Administrators	6.2 M	37
Survey of all LEAs	7.6 M	46

Source: Auditor compilation of information
** These vendors were chosen because they represent the majority of LEAs using a private vendor.*

First-year transition cost estimates include licensing, data migration, training and other costs.

These estimates include the costs of licensing, data migration, staff training, purchasing, potentially hiring new IT staff, and data hosting. Because these are estimates, there are some limitations.

First, while $3.8 million is the lowest first year estimate (Vendor 2 Option 2), it is based on a pricing model in which initial transition costs are lower, but the continuing licensing costs stay the same. Thus, the lifetime cost of the product is more expensive. Option 1 has higher upfront costs but lower year-to-year costs.

Second, the vendors could not offer concrete numbers when not responding to a specific request for proposals.

Finally, these estimates do not account for the possibility of LEAs combining into a consortium, which could potentially lower some of the expenses.

Transition Estimates Are Conservative

Our estimates seek to be as conservative as possible.

The estimates in Figure 3.1 are designed to be as fiscally conservative as possible. To accomplish that, the following are likely additional costs not included in our estimates.

- Training costs –We did not include the cost of paying teachers and staff to attend training.
- Errors in migration – Some non-Aspire LEAs may experience problems with vendors getting their systems to meet data reporting requirements in a timely and accurate fashion.
- Optional system upgrades –Many LEAs, at some point, will require some level of customization to their SISs. Our

estimates cover a general SIS start-up package without customizations.

- Hardware upgrades – An IT Consultant reported that some LEAs could need hardware upgrades to accommodate SIS requirements.

- Emergency backup costs – LEAs that are currently hosted by USBE may need to add a backup system for data in case of emergency.

Nevada recently transitioned 50,000 of its students to a state-sponsored SIS. The state's department of education paid approximately $3.5 million, or $70 per student for this transition. If these same figures were applied to the 165,715 students currently using Aspire, it would cost $11.6 million to transition all Utah students from Aspire.

Nevada SIS transition costs were approximately $70 per student, which would translate to $11.6 million for Utah.

In addition to our estimates shown in Figure 3.1, we met with a random selection of LEA administrators to discuss the possibility of migrating from Aspire to a new SIS. We asked LEA administrators to estimate the migration costs they would experience.[10] These estimates further demonstrate the conservative nature of the estimates in Figure 3.1. Costs vary based on the size of the LEA and the level of integration with other systems they have developed with Aspire. We note that these are unaudited, broad estimates made by the school district.

- Logan School District estimates it would cost $1.3 million to switch systems ($220 per student), plus the cost of hiring two new programmers for the first year. Logan has integrated many different programs into their system, but Aspire is the backbone on which everything else is based. They estimate that a complete migration would take months, if not years to complete.

- Nebo School District estimates that first-year costs would be approximately $1.25 million ($39 per student) and at least $300,000 ongoing for licensing and other costs. The district

[10] The estimates listed in the bullets are completely separate from, and not included in, those presented in Figure 3.1.

has also integrated many programs and used Aspire as the backbone. Nebo is also concerned with the amount of training that would be required for all teachers.

- Box Elder School District estimates that the first-year migration cost would be approximately $500,000 ($43 per student) and ongoing costs would be approximately $360,000.

Some charter schools expressed concern that they do not have the expertise to estimate the actual transition cost.

We also discussed transition costs with some charter schools, but they were less clear as to what their transition costs would be, both first year and ongoing. Some charter school administrators we talked to said it is likely that they would not know the full scope of costs without going through an actual SIS transition.

While the estimates presented by the school districts have not been audited, they demonstrate the conservative nature of the estimates in Figure 3.1.

While some LEAs might share similar needs specific to their size, budget, and history, many LEAs have unique needs that our estimates could not fully account for. For example, some LEAs currently have IT departments and/or programmers on staff who could assist in migrating to a new SIS, while other LEAs might need to hire more administrative or IT employees. Still others may be able to make due with technical support from the new SIS vendor, or from a third-party consultation company.

Ongoing Costs Per Student Could Be Between $16 and $17

Ongoing private SIS costs per student are estimated to drop, but remain between $16 and $17.

Because transition costs are unique to the first year, (data migration, staff training, and purchasing), the following years of operating would be significantly less expensive. Figure 3.2 shows our estimates of the ongoing expense of private student information systems for current Aspire schools.

Figure 3.2 We Estimate Ongoing Costs to Be at Least $2.6 Million. Our estimates range from $2.6 to 2.8 million.

Estimation Model	Ongoing Cost	Per Student
Vendor 1	$2.6 M	$16
Vendor 2 (Option 1)	2.6 M	16
Vendor 2 (Option 2)	2.8 M	17
Phone Calls to Business Administrators	2.6 M	16

Source: Auditor analysis

Ongoing costs consist mainly of licensing and hosting fees, and would be significantly lower than first-year costs. As with the first-year costs, ongoing costs would still be more expensive overall than the current cost of Aspire.

Aspire LEAs Have Fewer Students

Demographically, Aspire LEAs are, on average, smaller than non-Aspire schools. If USBE decided to stop supporting Aspire, these smaller LEAs would need a replacement SIS option to continue submitting required data to USBE.

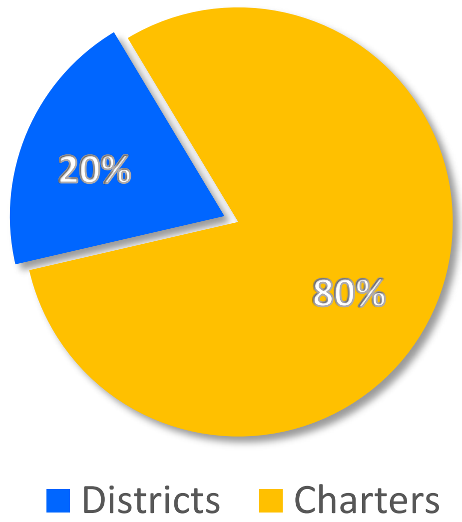
67 percent of LEAs use Aspire, but that translates to only 26 percent of students.

Of 149 LEAs in Utah, 100 of them (67 percent) use Aspire. Conversely, in 2017, of 644,678 students in Utah public schools, just 165,715 (26 percent) attend an LEA that uses Aspire.[11] This tells us that Aspire is used predominately by small LEAs.

Most LEAs using Aspire are charter schools or smaller districts. Figure 3.3 shows the demographic breakdown of Aspire LEAs.

[11] The numbers used are the official USBE student count from October 2016.

Figure 3.3 Of Those LEAs That Use Aspire, 80 Percent Are Charter Schools. The remainder are school districts.

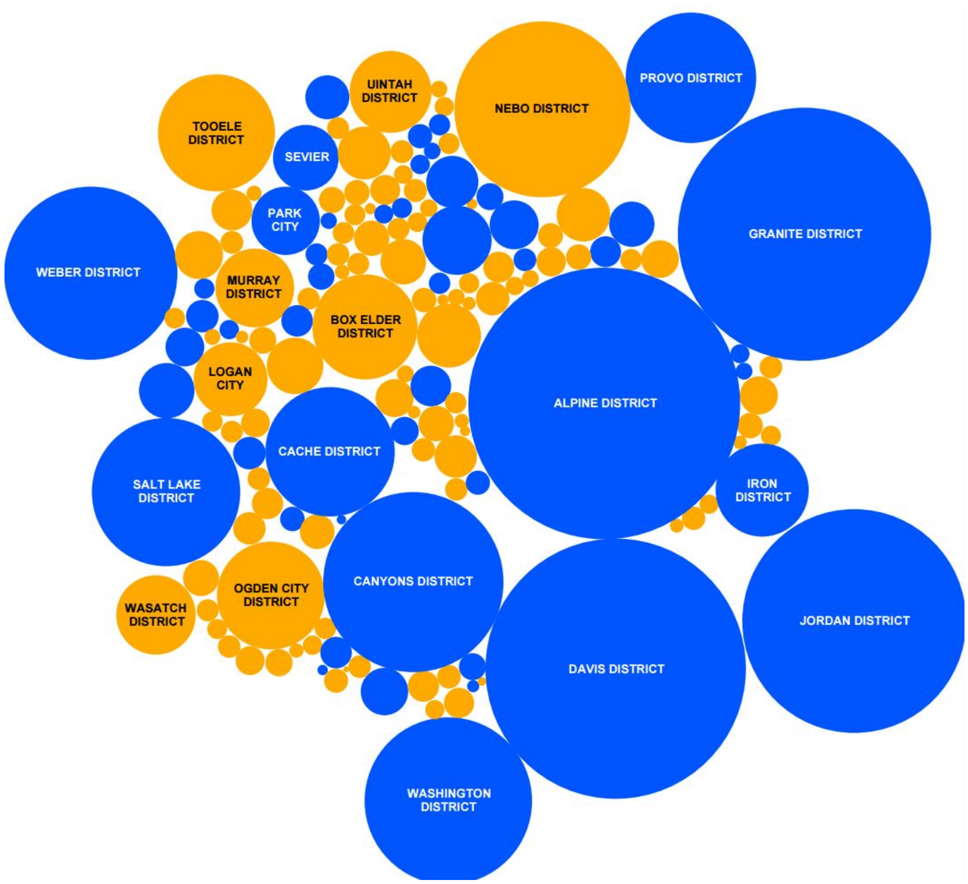


Source: Auditor analysis of USBE data

74 percent of Utah charter schools use Aspire.

Of those LEAs that use Aspire, 80 percent of them are charter schools and 20 percent are school districts. In terms of all the charter schools in Utah, 74 percent of them use Aspire, and 26 percent use other SIS vendors. In addition, 49 percent of all school districts use Aspire. On average, those school districts that use Aspire are smaller than those that use other SIS vendors. Figure 3.4 shows the size of Aspire versus non-Aspire LEAs.

Figure 3.4 On Average, Aspire LEAs Have a Smaller Number of Students Than Non-Aspire. Blue dots represent those LEAs not using Aspire, and gold dots represent Aspire LEAs. The size of each dot demonstrates the number of students in the LEA.



Source: Auditor analysis of USBE data

Aspire LEAs have an average of 1,655 students, while non-Aspire LEAs have an average of 9,775 students.[12] As seen in Figure 3.4, there are some smaller LEAs, mainly charter schools, that are using a private SIS vendor (the smaller blue dots). Some of the smallest non-Aspire LEAs told us they either operated under the umbrella of a larger, non-Aspire school district, that they had started out with a private vendor and never had transition costs, or that they needed customizations Aspire could not offer. In fact, one charter school told us they would like to change SISs, but the transition costs would be too high.

Aspire LEAs average 1,655 students, while non-Aspire LEAs average 9,775 students.

[12] This number does not include the student count for the Utah School for Deaf and Blind.

In discussions with charter schools (generally the smallest LEAs), administrators expressed concern that they would not be able to afford a private vendor or that it would be an undue burden on their resources. Given these concerns, it is likely that even if Aspire were to be replaced by a requirement for a private provider, there would still need to be some mechanism for submitting required reporting.

USBE Claims Its Costs to Report Information May Increase

USBE reports that they may need to hire additional IT customer service staff is Aspire is discontinued.

USBE reports that if Aspire were discontinued, costs to USBE for the required state reporting could increase if smaller LEAs used a non-Aspire option. For example, currently, the IT customer service staff help all LEAs submit their data. If an LEA does not use Aspire, customer service representatives essentially have to guess where the data problems could be. If all LEAs were not on Aspire, that could increase guessing and time spent assisting LEAs. According to customer service staff, charter schools already need the most help. If they were not using Aspire, this would multiply the time spent.

Recommendations are provided in Chapter IV.

Because this report's recommendations require the combined information provided in Chapters II through IV, they will be provided at the end of Chapter IV.

Chapter IV
Privatization Has Pros and Cons

Given the information presented in Chapters II and III about the cost of Aspire and transitioning from Aspire, the Utah State Board of Education (USBE or the board) should carefully examine the pros and cons of various levels of privatization to determine what scenario would best serve Utah. The financial capacity of Utah's local education agencies (LEAs) should be considered, especially given that small LEAs and charter schools represent most the Aspire users.

Varying Degrees of Privatization Have Different Consequences

USBE should consider different options for Aspire, including status quo, fee, or elimination of Aspire.

Different types and levels of privatization could potentially be used for student information systems (SIS) in Utah. Options range from maintaining the status quo, to a fee for Aspire services, to elimination of the Aspire program completely. The various options are detailed below, followed by potential pros and cons of each level of privatization.

Option One: USBE Could Maintain Status Quo

The board could decide to continue operating Aspire at its current cost, and not charge LEAs for its use.

Maintaining the status quo is the least expensive over-all option.

- Pros: Maintaining USBE operation of Aspire is the least expensive option. As presented in Chapters II and III, Aspire costs about $1.1 million for USBE to operate. Figure 4.1 shows the increased cost if Aspire were eliminated.

Figure 4.1 Private Vendors Would Cost at Least $2.7 Million More In the First Year. Ongoing years would be at least $1.5 million more expensive.

Estimate Range	First Year Increase	Ongoing Year Increase
Lowest Estimate	$2.7 million	$1.5 million
Highest Estimate	$7.0 million	$1.7 million

Source: Auditor Analysis

In addition to maintaining the lower cost, continuing the status quo would also eliminate the possibility of reporting errors that are possible when switching to a new system.

- Cons: The perception of unfair competition remains. [13] The cost of Aspire would be spread across the population instead of borne by the direct beneficiaries.

Option 2: USBE Could Charge Aspire Users a Fee

A fee of $4.51 was approved by the Legislature in the 2016 and 2017 Legislative General Sessions. If our calculations of the cost of Aspire were to be used, this fee would cover 66 percent of the cost per student. The Legislature could also consider approving the full cost of Aspire ($6.87) as discussed in Chapter II.

Under Option 2, a fee would cause the cost of Aspire to be borne by the direct beneficiaries.

- Pros: The cost of Aspire would be borne by the direct beneficiaries, instead of spread across the whole population. This would increase equality across LEAs as everyone would pay for their own services. It would also eliminate the perception of unfair competition.

- Cons: There are some concerns that the imposition of a fee would lead to some larger LEAs leaving the Aspire program. As the number of students covered drops, the cost per student rises, possibly leading other large LEAs to choose another alternative. LEAs, particularly smaller rural districts and charter schools, expressed concerns that they would still need an option as it would be difficult to afford a privately offered system. One solution discussed could be for USBE to guarantee the price would remain the same no matter how many LEAs were using Aspire.

Option 3: Offer Voucher System To Subsidize the Purchase of an SIS

Under this level of privatization, each LEA would be given a voucher per student to defray the expense of a private SIS.[14] Wyoming

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[13] The potential for unfair competition will be discussed in Chapter V. In short, we do not see evidence that this situation meets the definition of unfair competition.

[14] Some have suggested that a voucher could be given only to those schools currently using Aspire in order to allow them to determine which SIS to use. The

gives all LEAs an allotment that they are then free to use for whichever SIS they would like.[15] The first scenario uses a voucher of $6.87, or the cost per student to run Aspire. $6.87 per Utah student would cost the state $4,428,938.

Vouchers would allow LEAs to make SIS decisions with less cost pressure if Option 3 were used.

- Pro: Each LEA would be able to make an SIS decision with less cost pressure. Potential for or perception of unfair competition would be eliminated.

- Con: Transition expenses would likely be higher than the $6.87 per student in the first year, and schools would likely incur additional ongoing expenses not covered by the $6.87. In addition, it would be a sizeable expense ($4,428,938) for the state. Even subtracting the $766,638 cost of Aspire that USBE would no longer bear, this would still be an additional $3.6 million.

Another voucher option would be for the state to provide a voucher for each student for only the savings realized by no longer maintaining Aspire. This would provide a subsidy of $1.77 per student, which, based on our estimates, would cover a small amount of the switch.

Option 4:
Eliminate the Aspire System Entirely With No Voucher

Under this scenario, USBE would notify Aspire users of a date after which Aspire would no longer be available. Users would then need to find a private vendor for their SIS. In Colorado all LEAs are required to pay for their own SIS.[16]

Under Option 4, requiring private SIS use eliminates the potential for the perception of unfair competition.

- Pros: Any potential for or perception of unfair competition would be eliminated.

- Cons: The total tax payer expense for student information systems in the state would increase.[17] Small LEAs, including

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Office of the Legislative Fiscal Analyst reports that there is currently no funding allocation mechanism that would target funds to some schools (the Aspire users), and not others.

[15] Although Wyoming has only four charter schools, their LEAs are all comparatively small.

[16] Colorado has 238 charter schools.

[17] See Chapters II and III for an in-depth explanation of the costs.

$371,000 of the $1.1 million cost of Aspire would remain with USBE even if Utah SIS use were completely privatized.

most charter schools, will be predominantly impacted by this increased cost. In addition, the entire $1.1 million could not be reduced from USBE's budget allocation. As discussed in Appendix A, $371,476 of current Aspire expenses would need to remain, to cover some IT manager salaries, customer service, and building and liability expenses.

Also, LEAs would be without a built-in option for state reporting, which could cause problems when the state dispersed funding. USBE reported that they might need additional staff to facilitate required reporting from Aspire LEAs when they switch. USBE also reported a history of more reporting problems with non-Aspire LEAs.[18]

Option 5: USBE Could Sell the Code For the Aspire System

This option could be used in conjunction with any of the other options listed above. USBE would place their program on the market and sell it to an interested party. This option assumes that there are investors who would be interested in buying the product.

The Office of Legislative Research and General Counsel points out that while there is no case law for the disposition of state or education property, there is applicable case law for local governments. This case law states the following:

> Public property is held in trust for the public and may not be disposed of other than 'in good faith and for adequate consideration.' 'Adequate consideration' means that the local government must show that there is clear 'present benefit that reflects … fair market value' for whatever is given by the local government.

Under Option 5, USBE could sell the Aspire code, but would need to do so at full market value.

This means that USBE would likely need to get fair market value in any sale of the Aspire asset.

Administrative Rule R33-8-101(b) advises that a cost-benefit analysis should be conducted to determine whether the transitional

[18] This is discussed in more detail in Chapter III.

costs are "…unreasonable or cost-prohibitive." Chapters II and III of this report could be used as that analysis.

Recommendation

1. We recommend that the Utah State Board of Education use the information presented in this audit report to determine whether privatization is appropriate, given increased costs, and if so, specify which option and level of funding would be appropriate.

Chapter V
USBE Has Appropriately Waited to Consider Privatization

The Utah State Board of Education (USBE or the board) decided to wait for the information provided in this audit report before deciding about Aspire privatization. This decision is in line with legislative actions allowing for a fee, but not requiring it, and requesting this audit. The Free Market Protection and Privatization Board (privatization board) is strictly advisory, and while they concluded that USBE appeared to compete unfairly with private business, their recommendations stopped short of recommending privatization. In addition, the privatization board's review of Aspire appears to be incomplete and does not meet their definition of unfair competition. Therefore, we believe the board's decision to wait was appropriate.

USBE Is Waiting for More Information from the Audit

One of the three specific objectives of this audit was to determine what actions USBE has taken to respond to the recommendations of the Privatization Board.[19] Specifically, the Public Education Appropriations Subcommittee requested

> A performance audit of the [USBE] in examining these recommendations and making progress in determining whether or not Aspire should be privatized.

USBE chose to wait for the results of this audit before deciding to privatize Utah SIS use.

Based on the request for a legislative audit, USBE chose to wait for the detail in this audit report before making an informed choice on what level of privatization, if any, should be implemented. Specifically, the board stated in open meetings its intention to wait to determine whether to charge a fee, and if so, how much that fee should be.[20]

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[19] The recommendations made by the privatization board are discussed in detail in Chapter I.

[20] See the May and June 2016 Board meetings, and the May 2016 Finance Committee meeting.

USBE administrators also told us they were waiting to have all the audit information before making the decision.

There have also been questions about whether USBE has ignored Public Education Appropriations Subcommittee directives to privatize. Our review of minutes from this subcommittee's meetings showed no directive to privatize. In fact, the subcommittee's only motions related to Aspire were to approve a fee that USBE could charge if they wish to do so, and to request this audit.

In our opinion, USBE's decision to wait was appropriate.

In our opinion, USBE's delay was appropriate. Having the specific information provided in this report will allow USBE to make more informed, long-term decisions. In addition to needing more information to make the decision, USBE was not statutorily required to respond to the privatization board's recommendations. Of note, while the privatization board concluded that USBE did appear to unfairly compete with private vendors, it never fully recommended privatization. Instead, the report made recommendations to eliminate unfair competition, and further study privatization.

Privatization Board Is Strictly Advisory

The privatization board is advisory and has no power to compel agency actions.

The privatization board's duty is to determine situations under which privatization of state agency functions could result in efficiency or cost improvements. It is strictly advisory in nature and has no power to compel agency actions. ***Utah Code*** 63I-4a-203 lists the duties of the privatization board as follows:

> (a) determine whether an activity provided by an agency could be privatized to provide the same types and quality of good or service that would result in cost savings;…
>
> (d) recommend privatization to an agency if a proposed privatization is demonstrated to provide a more cost efficient and effective manner of providing a good or service…

The privatization board can only "recommend privatization." Our interpretation of this statute is supported by the Office of Legislative Research and General Counsel. Their opinion states the following:

> Nothing in the Act suggests that the Board's recommendations are mandatory. The Board's determinations are opinions about privatization, and the choice of the term 'recommend' suggests that the Legislature intended the Board to advise, counsel, or suggest whether to privatize rather than to compel privatization.... In conclusion, the Board's authority is limited to making determinations and recommendations about privatization and to providing assistance to an agency.

Legislative Research and General Counsel found that the privatization board's authority is limited to recommending.

Because the privatization board's duties are to recommend, not compel, we find no fault with USBE's decision to wait for our audit before making a final decision.

Privatization Board Report Appears Incomplete

Our review found that the 2015 privatization board report did not fully consider all statutorily required elements of privatization, and is therefore an incomplete analysis. We also found that though the privatization board defined competition as gaining financial advantage through statutory authority, it does not appear that USBE gains a financial advantage.

The privatization board's report did not fully consider all required elements of privatization.

Privatizing Aspire Does Not Meet Privatization Board Criteria

In its report, the privatization board states the following:

> The board finds that in its development, marketing, and operation of … Aspire, [USBE] does appear to compete unfairly in the student information system market. The board further finds that privatization of Aspire is feasible.

The report goes on to recommend that "…careful consideration be given to reviewing the pros, cons, and costs of privatizing Aspire," and that the Legislature determine the data and security needs of USBE if only private sector student information systems were used. Never does the report explicitly recommend privatization, only further study.

We found that, in finding the appearance of unfair competition, the privatization board did not fully consider all statutorily required elements of privatization. ***Utah Code*** 63I-4a-203 sets forth criteria under which the privatization board should recommend privatization. Figure 5.1 lists the criteria, and whether there was evidence in the report that showed this element had been considered.

Figure 5.1 The Aspire Privatization Board Report Does Not Fully Address All Statutory Criteria.

Statutory Requirement	Addressed by Report	Evidence/Determination Made by Report
Determine Whether Privatization Would:		
Be feasible	Yes	This is the bulk of the report
Result in cost savings	No	Recommendations would not result in cost savings
Result in equal or better quality of a good or service	?	"[USBE] cannot determine whether service will improve or diminish under private vendors."
When Making This Determination, Take into Account:		
The scope of providing the good or service	Yes	Number of Aspire schools and students
The impact on risk management	Yes	States that USBE believes the risk is high, but the privatization board believes it is low
The impact on timeliness	No*	None
The ability to accommodate fluctuating demand	No	None
The ability to access outside expertise	No	None
The impact on oversight	No	None
The ability to develop sound policy and implement best practices	No	None
Legal impediments	No	None
Practical impediments	Yes	Acknowledges there could be political opposition from "[USBE] individual school districts and charter school boards."

** We requested the documentation used to create this report to determine whether these areas were addressed in the process but not in the report, however, documentation could not be found.*

While some of these criteria were addressed in the report, we believe they were not addressed fully. In particular, we are concerned about the requirement of determining whether privatization would result in cost savings. As discussed previously, ***Utah Code*** 63I-4a-203 emphasizes that the privatization board should determine whether privatizing activities would result in cost savings or a "more cost efficient and effective manner of providing a good or service." The privatization board report did not identify cost savings, and as demonstrated by Chapters II and III of this report, privatizing Aspire would increase costs to small LEAs.

The privatization board's report did not determine whether privatization would result in cost savings.

The statute also advises the privatization board to determine "…ways to eliminate any unfair competition with a private enterprise," but this assessment is to be done only in conjunction with the criteria listed in Figure 5.1. In addition, one recommendation made by the privatization board (to shift funds used for USBE IT support of Aspire to LEAs) is not possible under current fiscal operations, according to the Legislative Fiscal Analyst.

As discussed in previous chapters of this audit, we disagree with some of the findings regarding these elements. We do not believe privatization would result in overall cost savings, and, in fact, it would result in increased costs to the taxpayer. We also recognize USBE's valid concerns over the risk of inaccurate data submission, and decreased timeliness of required reporting without the Aspire program. There are also legal impediments to some methods of privatization, as discussed in Chapter IV.

USBE is Not Profiting By Maintaining Aspire

The privatization board report states that "unfair competition exists when either the governmental agency or a private business gains a financial advantage as a result of statutory authority." It does not appear that USBE meets this definition as it is not gaining a financial advantage, and in fact spends money to maintain Aspire, as discussed in Chapter II.

USBE does not meet the privatization board's definition of unfair competition by providing Aspire to LEAs.

Appendices

Appendix A

Appendix A
Some IT Costs Would Remain Without Aspire

If USBE no longer maintained Aspire, some of the costs we attribute to Aspire in Chapter II would not be eliminated. The figure below details the costs that would remain, and those that would not.

USBE Would Retain $371,000 of Aspire Expenses if Aspire Were Privatized. Exclusive Aspire costs are then about $766,638.

Expense	Remain if Privatized?	Cost Remaining
Programmers	No	$0
IT Customer Support	Yes	249,176
IT Management	Yes	99,526
Database Maintenance	Yes	13,346
Building and Maintenance	Yes	7,172
Equipment	No	0
Liability Insurance	Yes	2,256
Total		**$371,476**

Source: Auditor analysis of USBE data

Because $371,476 are sunk costs that USBE would be responsible for regardless of Aspire's existence, Aspire's actual cost is then about $766,638.

The expenses that would remain would do so either because they are comprised of staff who spend partial time on Aspire, but are still needed for other functions, or because they are part of USBE's infrastructure and would continue to be necessary to the remainder of USBE's operations. In addition, USBE administration has demonstrated a backlog of IT projects, and has expressed to us their intention to try to keep some or all of the Aspire programmers and assign them to different projects if the Legislature and the Board of Education decide to suspend Aspire operations. If this were the case, all Aspire expenses would remain at USBE – they would just be distributed to different areas.

Appendix B

Appendix B
Process for Transition Estimates

We were asked to estimate the cost of transitioning local education agencies (LEAs) that use Aspire to private-vendor student information systems (SIS). A more accurate method for finding such estimates would involve having each Aspire LEA assess their needs, submit requests for proposal, and then sum the anticipated costs – including the RFP results - for each of these LEAs to transition to a new SIS. Since obtaining individual RFPs was not an option, we attempted to make as comprehensive an estimate as possible using four models for estimating migration costs. Each model has strengths and limitations, but when taken as a whole, they present a more accurate estimation of potential costs than any one of them on their own.

Aspire LEAs significantly differ one from another, from large school districts with substantial IT resources and experience, to small charter schools in rural areas with little to no resources and experience. That being the case, we attempted to group similar-sized schools together whenever doing so would present a more accurate estimate.

Model 1 - Vendor 1

According to this model, migrating Aspire students to Vendor 1 would cost $8.1 million or $49 per student. The two vendor models are based on pricing packages from two private SIS vendors whose systems serve more students in Utah than any other SIS. The total migration cost estimate involves multiplying the vendor's price estimates for licensing and hosting by the number of students affected in an SIS transition. This model also uses RFP, training, and programming cost averages from the survey model.

Figure 1 Vendor 1: Cost Transition Estimates. The total transition is estimated to exceed $8 million.

Type of Cost	Estimate	Per Student
SIS Licensing (& Implementation)	$5,727,520	$34.56
Hosting	248,573	1.50
Programming	913,512	5.51
RFP	191,025	1.15
Training	999,842	6.03
Total	**$8,080,471**	**$48.76**

Source: Auditor analysis of vendor data

Representatives from both vendors emphasized that their prices could change a little depending on the total number of students involved and the amount of functionality that schools wanted to add. Since there is no way to know if or how many schools would want to form consortiums, these vendor models assume that all schools would purchase the SIS licensing individually.

In addition, while it is likely that some schools would want to purchase more expensive SIS packages that include extensive functionality, these models assume that all schools will be content with a basic version of the services that these vendors offer. Therefore, these models attempt to be as conservative as possible in how they reflect cost. Each of these two vendor models also assume a situation where all Aspire LEAs decide to migrate to the same vendor, instead of the more-likely scenario where the various LEAs would select several different vendors. In the case that Aspire LEAs select an assortment of various SIS vendors, the total cost would likely be higher due to less opportunity for sharing information, training costs, and other expenses.

Model 2 - Vendor 2

This vendor offers two different pricing options. One of the options (Option 1) involves paying an increased amount for licensing in the first year, and less during the following year. That option costs more in the short term and less in the long term. The other option (Option 2) involves paying the same amount every year. This ends up costing relatively less in the short term, but more in the long term. The vendor noted that small schools often choose this option to avoid high upfront costs.

According to the Vendor 2 model (Option 1), migrating Aspire students to new SISs would cost $6.1 million, or $37 per student. The same migration would cost $3.8 million or $23 per – student according to the Vendor 2 model (Option 2). As was the case with the Vendor 1 model, this model is based on an SIS vendor's prices for services such as licensing, hosting, and training, multiplied by the number of students currently using Aspire. This model also uses the predicted cost averages of conducting RFP which we obtained from the survey to LEA business administrators.

Several LEAs that currently use this vendor also use a 3rd party programing/consultation company to help with customizing the SIS to their needs. This model takes into consideration that while some transitioning LEAs would not require programing, some would likely employ this consulting company, and some would pay for other programing options.

Figure 2 Vendor 2: In the First Option, Upfront Costs Are High, While Ongoing Costs Are Lower. Estimated first-year costs are about $6 million.

Type of Cost	Estimate	Per Student
SIS Licensing	$3,463,444	$20.93
Implementation	469,650	2.83
Hosting	497,145	3.00
Programming	461,856	2.79
RFP	190,572	1.15
Training	1,010,000	6.09
Total	**$6,092,667**	**$36.77**

Source: Auditor analysis of vendor data

Figure 3 Vendor 2: In the Second Option, Lower Upfront Costs, Higher Cost Overall. Estimated first-year costs are about $3.8 million.

Type of Cost	Estimate	Per Student
SIS Licensing	$1,118,576	$6.75
Implementation	469,650	2.83
Hosting	497,145	3.00
Programming	464,714	2.80
RFP	190,572	1.15
Training	1,010,000	6.09
Total	**$3,750,658**	**$22.63**

Source: Auditor analysis of vendor data

Both vendors presented a range of prices which vary depending on the package and the number of students involved. Whenever possible, these models assume that LEAs would choose the less expensive option. For example, a vendor sales representative stated that schools choose to pay for anywhere from 4-25 days of training. To stay conservative, these models assume that all schools would pay for only four days of training.

Phone Call Model

We gathered cost estimates for this model through phone calls to LEA business administrators who use various SIS vendors. According to the phone call model, migrating Aspire students to new SISs would cost $6.17 million, or $37.22 per student. Given the high number of Utah charter schools that would be affected by an SIS migration, we created this estimation model, which includes price estimates from a vendor who currently provides SIS to more charter schools than any other vendor in Utah (excluding Aspire). This model reflects the averages of how much licensing and hosting cost these schools, multiplied by the number of students who currently use Aspire. The total migration cost for this model also includes RFP, training, and programming cost averages from the survey model.

Figure 4 Phone Call Model: Non-Aspire LEAs Estimated Their Licensing and Hosting Expenses. Estimated first year costs are about $6.2 million.

Type of Cost	1st Year Estimate	Per Student
SIS Licensing	$3,480,015	$21.00
Hosting	582,870	3.52
Programming	913,512	5.51
RFP	191,025	1.15
Training	998,842	6.03
Total	**$6,159,746**	**$37.22**

Source: Auditor analysis of LEA reported data

This estimate assumes that the first-year SIS licensing amount includes SIS licensing and implementation costs. If the reported cost did not include implementation costs, the actual total will be higher.

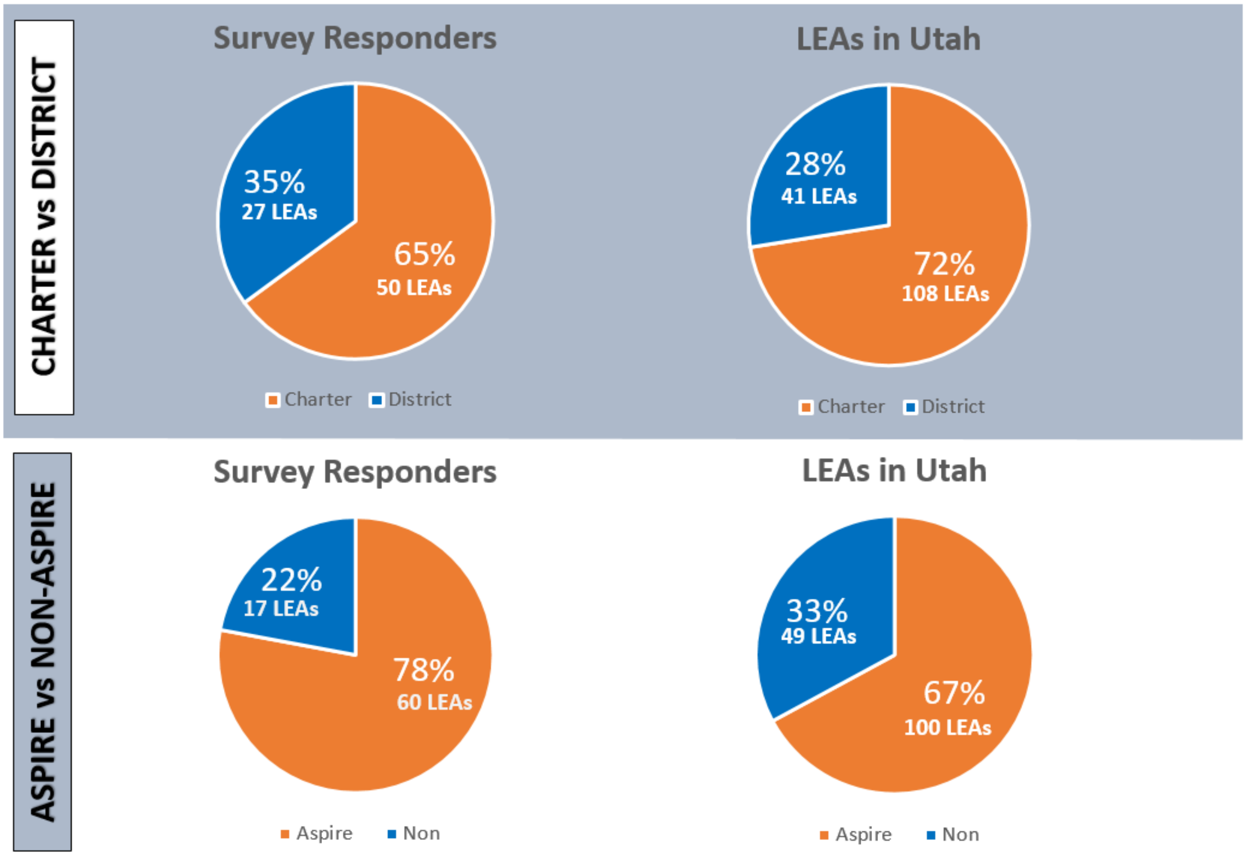
Survey Estimation Model

According to the survey model, migrating Aspire students to new SISs would cost $7.6 million, or $46 per student. We sent a survey to administrators of every LEA in Utah. In the survey, LEA administrators estimated the migration costs they would experience if they were to switch to a new student information system. They offered cost estimates for the following migration areas: RFP costs, SIS licensing costs, programmer costs, servers/hardware costs, training costs, third-party program implementation costs, data costs, and other. Survey instructions encouraged business administrators to answer to the best of their knowledge, to pass along the questions to the person on their staff who would best know how to answer them, or to enter "0" when the question was unknown or not applicable.

Because survey model totals were calculated differently, a summary figure for the survey model would not be helpful. The survey data showed that on average, LEAs anticipated spending a total of $45.80 per student. When multiplied across the entire population of migrating students, this resulted in an estimated total cost of $7,589,256 .

Figure 5 shows the composition of survey responders compared to that of all Utah LEAs. The proportion of charter schools and districts who responded to the survey is reasonably close to that of charter schools and districts in Utah. Likewise, the proportion of Aspire and non-Aspire LEAs who responded to the survey is similar to that of Aspire and non-Aspire LEAs in Utah.

Figure 5 The Makeup of Survey Responders Loosely Reflects That of Utah's LEAs. Relatively more districts and Aspire users responded to the survey.



Source: Auditor analysis of survey results
Note: LEAs responded to different parts of the survey based on whether they use Aspire or another SIS.

Representatives from every LEA in Utah received a copy of the survey. Fifty of 108 Utah charter schools (46 percent) responded to the survey, and 27 of 41 districts (66 percent).

Agency Response