

Utah Education Funding Study

PHASE 1 REPORT

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Acknowledgements

This report was developed in consultation with stakeholders and experts across the state.

While the authors take full responsibility for the content of this report, we want to thank the Utah State Board of Education and the Utah State Superintendents Association, who facilitated the completion of this work by supporting stakeholder engagement. In particular, we would like to acknowledge the superintendents, business administrators, charter school leaders, and other stakeholders for contributing their perspective to the final report.

Thank you to David Wakelyn, John Diaz, and Chaturika Richier for their research contributions.

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Executive Summary

Utah is a changing state — it currently ranks as the youngest (Johnson, 2017) and one of the fastest growing (U.S. Census Bureau, 2019) in the country, with major shifts in its economic and demographic profile. Moreover, the student body of Utah is becoming more diverse and presents a wider set of needs and assets within the public education system. The number of English Learner (EL) students is increasing, the number of students from non-White families is increasing, and enrollment trends are shifting as well, with more students being homeschooled and a greater proportion of students served by the charter sector. In order to serve the educational and economic demands of the next generations of Utahns, the state’s education system must adjust to provide the appropriate supports for students and families.

This report is the first of two components of a broader study examining the funding system for the K–12 education system in Utah. This first report will examine in particular the alignment between Utah’s vision for students and the Minimum School Program (MSP) as defined by statute. Realizing the state’s vision of success requires alignment with the process by which education funding is distributed, including with respect to specific programs within the MSP. This also includes the state’s vision of equitable access to education, and thus an analysis of the extent to which the current MSP is equitable. Finally, this report includes an analysis of the role and balance of state and local contributions to education funding, assessment of the incentives created by and alternatives to enrollment-based funding, and the impact of year-round schooling on student achievement and spending. Through its analyses, this report provides a baseline assessment of the distance between Utah’s expectations of a minimum program and the current state and sets up a deeper evaluation for the second phase of this study in 2020 by identifying potential areas of exploration.

Methods

Organizational Framework

There are four central terms utilized in this report to support evaluation of the current system: core components, input, outputs/outcomes, and measures of success. In short, each term describes an aspect of the system examined by the study team and described in this report.

Exhibit 1. Understanding Key System Terms: Core Components, Inputs, Outputs, and Measures of Success

Core Components	Inputs	Outcomes	Measures of Success
 Categories of Inputs Linked to Outputs	 Programs, Policies, Practices	 Results	 Success Indicators

WestEd researchers employed a mix of quantitative and qualitative methods to address the study research objectives. This included a document review process, engagement with stakeholders, and quantitative data analysis.

Exhibit 2. Data collection methods with research objectives

Task	Document Review	Stakeholder Input	Data Analysis
Part 1: What are the current expectations in Utah for a Minimum School Program?			
Research Objective 1a: Identification of core components of minimum school program.	X	X	X
Part 2: How does the current system align with these expectations?			
Research Objective 1b: Evaluation of current distribution formulas	X	X	
Research Objective 1c: Analysis of role and balance of the state and local contribution	X		X
Part 3: What do other pathways offer?			
Research Objectives 3b/3c: Examination of the behaviors the current enrollment-based funding model incentivizes and alternative proxies	X	X	X
Research Objective 3d: Analysis of the impact of year-round schooling models	X	X	

The details of these methods are described in the main body of this report.

Key Findings

The findings generated by Phase 1 of the study are organized under three parts which are included below along with the key findings from each part.

Part 1. What are the current expectations in Utah for an MSP?

- ▶ Identification of the core components of a minimum school program
 - » Utah stakeholders reported that the vision set by the USBE strategic plan aligns to their own vision for Utah's schools.
 - » Stakeholders emphasized the importance of early learning, safe and healthy schools, and a focus on the teacher shortage.
 - » Stakeholders expressed confidence in the core standards and the related scope and sequence, noting them as the right path.
 - » However, stakeholders noted that there is one significant exception with respect to social-emotional learning and emphasized the need for integrating this within a holistic academic program.

Part 2: How does the current system align with these expectations?

- ▶ Evaluation of current distribution formulas
 - » There is general alignment between the expectations of the minimum school program, the target outcomes based on the PoG, and the assignment of funding based on statute in the MSP and related categorical programs.
 - » Stakeholders noted the burden of pursuing grant funding under the MSP as an area for additional exploration.
- ▶ Equitable Access to the Minimum School Program
 - » Per-student resources, revenues or expenditures, increase across the quintiles along with wealth per pupil. This may suggest that a relationship exists between local wealth and the educational resources available per ADM, and that Utah's school funding system is not as equitable as it could be.
 - » With respect to horizontal equity — comparing resources across school districts — using a standard metric in the research literature, in both years examined (2013–14 and 2017–18), only average teacher salary meets the equity standard.
 - » In regard to vertical equity, using the method of comparing resources with weighting for the need of students, for both years examined, there is little difference in the standard metric indicating that the funding formula is not providing sufficient additional resources for students with greater needs, such as economically disadvantaged students, English Learners, and students with disabilities.

-
- » In regard to fiscal neutrality examining the relationship between the wealth of a district and the resources it has for educating its students, many of the fiscal neutrality measures exceeded the standard, indicating that to some degree, district resource levels are related to district wealth.
 - ▶ Alignment with Evidence-Based Practice
 - » A growing body of rigorous research nationally provides evidence to inform future policy discussions in Utah, including directing resources to high need students, targeting investments, and building effective decision-making practices.
 - ▶ Analysis of the role and balance of the state and local contribution
 - » This analysis finds that Utah is generally more reliant on state funds than the national average, but finds no evidence that the division of funding by source bears any relationship to overall equity.
 - » Based on the review of the balance of state and local contributions, the study team recommends that Utah continue to both set a required local contribution amount, while still being cognizant of the equity issues that may arise without limits or equalization of the local revenues raised above the minimum program.

Part 3: What do other pathways offer?

- ▶ Examination of the behaviors the current enrollment-based funding model incentivizes and alternative proxies
 - » A key takeaway from the review of methods by which states count students for the purpose of education funding is that most state still utilize more traditional methods of counting students for state funding purposes, even in states that are pursuing competency-based systems.
 - » Given that no state has implemented a broad-scale state funding mechanism for competency-based education statewide, any change to how states count students for funding purposes should be modeled to demonstrate the potential impact of that change on a variety of student, school and district scenarios.
 - » Consensus from stakeholders investigating a competency-based funding systems and its interaction with funding shows that current funding laws might allow for necessary flexibilities. The work group engaged on this topic agreed to continue its investigation in the subsequent calendar year.
- ▶ Analysis of the impact of year-round schooling models
 - » While there is some suggestive evidence in Utah and other states regarding the impact of year-round schooling on costs and student outcomes, the findings are mixed and limited. This suggests that any consideration of year-round schooling as a policy matter might benefit from pilot testing or other approaches to assessing the effectiveness of the policy in meeting the intended goals within the specific implementation context in Utah.



Introduction

Utah is a changing state — it currently ranks as the youngest (Johnson, 2017) and one of the fastest growing (U.S. Census Bureau, 2019) in the country, with major shifts in its economic and demographic profile. In order to serve the educational and economic demands of the next generations of Utahns, the state’s education system must adjust to provide the appropriate supports for students and families.

This report is the first of two components of a broader study examining the funding system for the K–12 education system in Utah. This first report will examine in particular the alignment between Utah’s vision for students and the Minimum School Program (MSP) as defined by statute. Realizing the state’s vision of success requires alignment with the process by which education funding is distributed, including with respect to specific programs within the MSP. This also includes the state’s vision of equitable access to education, and thus an analysis of the extent to which the current MSP is equitable. Finally, this report includes an analysis of the role and balance of state and local contributions to education funding, assessment of the incentives created by and alternatives to enrollment-based funding, and the impact of year-round schooling on student achievement and spending. Through its analyses, this report provides a baseline assessment of the distance between Utah’s expectations of a minimum program and the current state and sets up a deeper evaluation for the second phase of this study in 2020 by identifying potential areas of exploration.

Throughout this report, the term “minimum school program” is used to refer to two distinct, yet interconnected aspects of the public education system in Utah. The first is the current statutory program which governs the distribution of the majority of state education funds (see Utah Code § 53F-2). The second use refers to the expectations of policymakers and practitioners with respect to the minimum output of the system as a result of inputs such as programs and policies. These are also described as “core components” of the system.

The choice to use the same term for these two distinct aspects of the system was intended to extend the statutory and financial term to more programmatic elements such as curriculum, the state’s vision, and target outcomes. As a concept, the minimum program is not restricted to only the financial inputs into the system, and this usage is meant to reflect this concept.

To help ensure the meaning of this term is clear, when the statutory program is referred to, it will be capitalized, as in “Minimum School Program” or “MSP.” Whereas, when the system expectations or core components are referred to, it will be lower case, as in “minimum school program.”

The State Strategic Vision

In its strategic plan, the Utah State Board of Education (USBE) articulates the following vision:

“Upon completion, all Utah students are prepared to succeed and lead by having the knowledge and skills to learn, engage civically, and lead meaningful lives.”

Moreover, the plan sets specific targets for 2022, including with respect to educational attainment and graduation. The plan sets the goal of a statewide graduation rate of 90.1% by 2022 (USBE, 2019).

In 2018, the state reports a graduation rate of 87.0% and is targeting increases of just under a percentage point each year to reach the goal.

In addition to this vision, the USBE lays out ambitious goals with associated strategies for K–12 schools in pursuit of this vision:

- **Early Learning:** Each student starts strong through early grades with a foundation in literacy and numeracy
- **Personalized Teaching & Learning:** Each student and educator has access to personalized teaching and learning experiences
- **Safe & Healthy Schools:** Each student learns in a safe and healthy school environment
- **Effective Educators & Leaders:** Each student is taught by effective educators who are supported by effective school leaders

A companion piece to the strategic plan is the Portrait of a Graduate (PoG). The PoG is a detailed description of the complementary skills and dispositions embodied by the ideal graduate who is able to reach his or her full potential upon graduation from the public education system.

Realizing these visions of success requires alignment with the process by which education funding is distributed. The statute establishing Utah’s Minimum School Program (MSP), which directs approximately 85% of state appropriations for public education, outlines three objectives:¹

1. *Equity*— All children are entitled to reasonably equal educational opportunities, regardless of their place of residence or the economic situation of their school district or other agencies.
2. *Local Participation*— Establishment of an educational system is primarily a state function, but school districts should be required to pay a portion of the cost of a minimum program.
3. *Local Control & Determination*— Local boards should be empowered to provide educational facilities and opportunities beyond the minimum program and that latitude of action is permitted and encouraged.

In fact, based on the frameworks and documents examined for this report, equity has been a consistent focus in Utah. In addition to being an objective of the MSP, equity is central to the USBE’s mission of “creating equitable conditions for student success” (Utah State Board of Education, 2019). Moreover, the current USBE strategic plan defines equity as:

¹ Utah Code § 53F-2-103

“Equity is the equitable distribution of resources based upon each individual student’s needs. Equitable resources include funding, programs, policies, initiatives and supports that target each student’s unique background and school context to guarantee that all students have access to a high-quality education.”

Finally, the Governor’s *Education Excellence Commission*, led by Governor Gary Herbert, focused on “providing support to students at risk of academic failure” and suggested that the state “consider additional state funding ... based on student risk factors” (Governor’s Education Excellence Commission, 2017). Moreover, the Governor’s recent strategic plan, *The Education Roadmap*, names equity as one of four priority policy areas and identifies eight specific strategies to ensure access and equity in the state education system.

Despite this emphasis on equity, in the last decade, achievement gaps between student groups have remained persistent.

Recent Trends

As the state seeks to close these gaps, some have noted a decrease in available resources to address them. According to the recent Utah Foundation report, *Getting by with Less*, over the past twenty years, the state’s K–12 education funding effort — or the amount spent per \$1,000 in personal income — has decreased from 7th highest in the nation to 37th as of 2014. The decline is due to a nearly 29% decrease in tax revenue, which equates to a \$1.2 billion reduction of funds — or a reduction of nearly \$2,000 in per pupil funding (Utah Foundation, 2016). And according to a more recent Utah Foundation report, as of 2017, Utah was last with respect to per pupil spending. However, it should be noted that this report concluded overall student performance was better than performance in the higher-spending states with respect to a variety of measures. The authors also point out that, despite these comparisons, Utah’s low spending raises the question of whether Utah is meeting its full potential (Utah Foundation, 2019).

In addition, the state has become more diverse and the needs of students have evolved in recent years. This includes a 33% increase in the number of English Learners (ELs), growing from 34,394 students in the 2013–14 school year to 49,374 in the 2018–19 school year, with several districts seeing increases of EL students of 40% or more (Utah State Board of Education, 2019). While rates of poverty and students with a disability in Utah have remained relatively consistent in recent years, student race and ethnicity trend data show an increase in the percentage of students of color, growing steadily though modestly from 23% in 2013–14 to 26% in 2018–19 (Utah State Board of Education, 2018).

Enrollment trends are also shifting in Utah. State data from the 2009–10 to the 2015–16 school year show a 97% increase in the number of students who are homeschooled (Utah State Board of Education, 2016). Using Census population data, this represents an increase from 1.3% of the school age population to 2.4% over the same time period (U.S. Census Bureau, Population Division, 2019).²

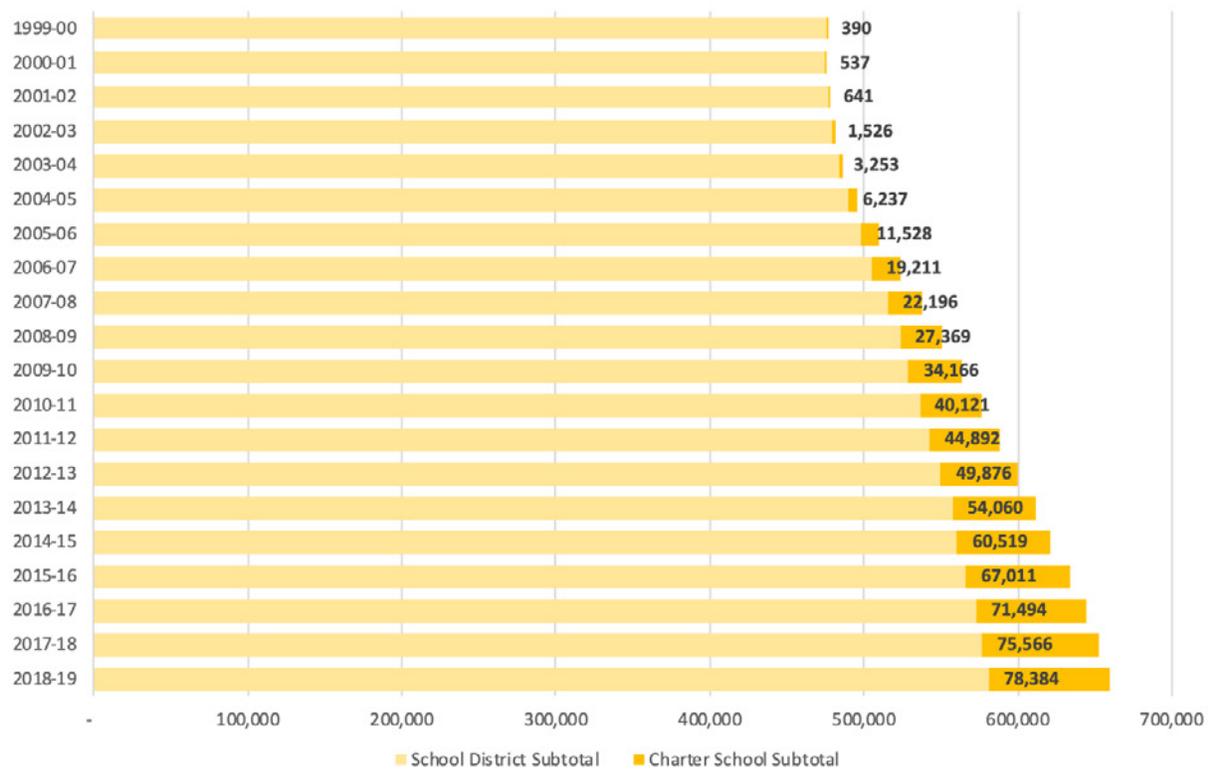
² This is a larger increase than seen nationally, though the overall proportion of students is lower. Nationally, 1.52 million students ages 5 to 17 (3.0%) were homeschooled in 2007 compared to 1.69 million (3.3%) in 2016. These national data are reported by the U.S. Department of Education, National Center for Education Statistics, Parent Survey and Parent and Family Involvement in Education Survey of the National Household Education Surveys Program (Parent-NHES:1999 and PFI-NHES:2003, 2007, 2012, and 2016). (This table was prepared February 2018.). Retrieved from https://nces.ed.gov/programs/digest/d17/tables/dt17_206.10.asp.

In contrast, enrollment of ungraded and K–12 students at Utah’s private schools also saw a slight decrease overall but has been generally flat over time. In the 2007–08 school year, 18,675 of Utah’s students were enrolled in 134 private schools and dropped slightly to 17,747 in 123 private schools in the 2017–18 school year.³

The establishment of charter schools also brought a shift in enrollment patterns, with charters expanding their enrollment numbers over time. Based on historical enrollment data from the USBE, in the last 20 years, enrollment at charter schools has steadily increased from 0.1% of the public school enrollment total in 1999–00 to 11.9% in 2018–19.

The exhibits below illustrate these changes in enrollment by type of school setting.⁴

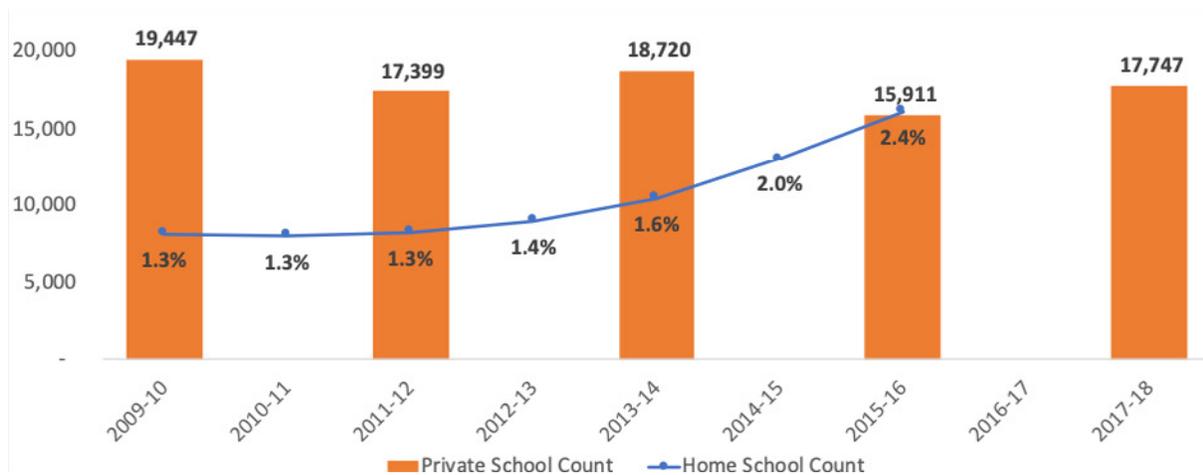
Exhibit 3. Charter School Enrollment Over Time – 1999–00 through 2018–19



³ For additional information, see U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Private School Universe Survey (PSS)”, 2017–18 ; “Public Elementary/Secondary School Universe Survey”, 2017–18 v.1a; “State Nonfiscal Public Elementary/Secondary Education Survey”, 2017–18 v.1a. Retrieved here: <https://nces.ed.gov/ccd/elsi/expressTables.aspx>.

⁴ A complete listing of the underlying data is presented in Exhibit F-1 in Appendix F.

Exhibit 4. Count of Students Served in Non-Public Settings — 2002–03 through 2017–18



Overall, the demographic analysis for this report match what stakeholders report about Utah’s schools — that the student body of Utah is becoming more diverse and presents a wider set of needs and assets within the public education system. The number of English Learner (EL) students is increasing, the number of students from non-White families is increasing, and enrollment trends across charter, public, and home school are shifting as well.

In this context of ambitious goals, and shifting conditions and needs, it is valuable to determine the extent to which Utah’s school funding system meets its intended purposes and provides equitable access to education for each and every student in the state.

The Present Study

To this end, WestEd was engaged by the Utah State Board of Education (USBE) to conduct a comprehensive review of the state’s school funding system aimed at providing the state with findings and recommendations with respect to equity in the current system and to inform consideration of changes to improve system equity. This is the third review of Utah’s school funding formula, the first being the original “Utah School Finance Study” in 1972, which established the Minimum School Program, and the second being a comprehensive assessment of Utah’s public school finance system, including the MSP.

In 1972, the Utah State Legislature commissioned a study to recommend alternative cost measures and allocation strategies for schools across the state, with the ultimate goal of building an objective formula that considered student need in its construction. The result was 16 recommendations, which became the foundation of the Minimum School Program. Key tenants of this original investigation’s recommendations include the introduction of the Weighted Pupil Unit, guaranteed funding for school operation and salary increases, and the first formulas for Necessarily Existent Small Schools, Special Education, and Career & Technical Education (Leishman & Young, 2011).

In 1990, the Utah State Legislature commissioned a second study, this time to review the existent system and its iterative progress over the past eighteen years. The study itself was an equity analysis, measuring horizontal, vertical and tax equity. Ultimately, researchers found Utah’s public school finance formulas to be equitable, but recommended that changes to enhance equity should be made and that districts should be granted more autonomy (Leishman & Young, 2011).

Drawing from these historical analyses as a guide, the present report is the culmination of activities within Phase 1 of the study, which focused primarily on providing the state with a picture of the current state of school funding in Utah. Specifically, the report focuses on how Utahns define the minimum school program and to what extent this definition matches implementation at the state and local levels.

The report also includes findings from an equity analysis that looked at several commonly used metrics in assessing the distribution of resources along measures of equity. In Phase 2, to be completed in the fall of 2020, a subsequent report will include findings from an examination of costs and resource allocation through a variety of methods, taking a deeper look at some of the topics investigated in Phase 1. Phase 2 findings will also include recommendations on how the existing system could be improved in three categories: strategic funding allocations and distribution, best practices for effective spending, and actionable policy implications. Neither report will assess or produce an estimated adequate amount of resources needed for the Utah public education system.

How to Read This Report

After a brief section dedicated to methodology, the findings generated by Phase 1 of the study are organized under three anchor probes. Specific objectives within each probe reference the research objectives in the project scope using the reference labels provided by the USBE (e.g., 1a, 2a, etc.):

Part 1: What are the current expectations in Utah for a minimum school program?

- ▶ Research Objective 1a: Identification of the core components of a minimum school program

Part 2: How does the current system align with these expectations?

- ▶ Research Objective 1b: Evaluation of the extent to which the distribution formulas of the MSP, as outlined in U.C.A. Title 53F, Chapter 2, State Funding — Minimum School Program, are:
 - » fulfilling their statutory purpose (if provided);
 - » providing each student in the state equitable access to a sound, basic education;
 - » aligned with state goals as outlined in the USBE’s strategic plan; and
 - » aligned with evidence-based best practices.
- ▶ Research Objective 1c: Analysis of the role and balance of the state and local contribution over time in Utah and compared to other states
 - » Provide proposed definitions of statutory language requiring school districts to participate on a partnership basis in the payment of a reasonable portion of the cost of a minimum school program.

Part 3: What do other pathways offer?

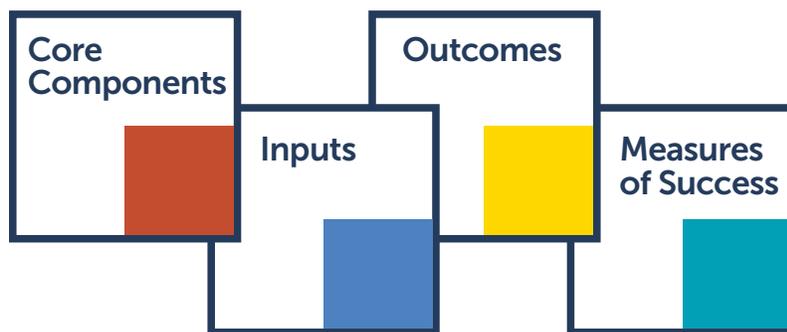
- ▶ Research Objective 3b/3c: Examination of the behaviors the current enrollment-based funding model incentivizes (e.g., counting students using average daily membership) and alternative proxies for counting students
- ▶ Research Objective 3d: Analysis of the impact of year-round schooling models in Utah in reducing costs and improving student outcomes

Organizational Framework

For the purposes of this study, we employ the target outcomes or outputs of Utah’s public education system defined by the PoG. The Minimum School Program and other relevant state statutes consist of the inputs under implementation by Local Education Agencies (LEAs) to meet the target outputs/outcomes. By examining the alignment or lack thereof between the target system outcomes and the current inputs, we identify considerations for system adjustments.

There are four central terms utilized in this report to support evaluation of the current system: core components, input, outputs/outcomes, and measures of success.

Exhibit 5. Understanding Key System Terms: Core Components, Inputs, Outputs, and Measures of Success



I Inputs

Inputs refer to the conditions, programs, practices, and individuals working in the classroom, school, and district setting to directly support students. Example inputs could be teachers, facilities, or access to high-quality curriculum.

O Outcomes

An outcome is a measurable result from implementation of collected inputs. Academic mastery for a student is the outcome of a series of inputs related to academic and social supports provided in the school.

MS Measures of Success

Measures of success are results from assessments or trends in data related to an output. The output may be an individual graduate’s demonstrated mastery through graduation, but the measures of that graduate’s performance refer to the assessment results or other data collected.



Core Components

Core components refer to categories of inputs that link to specific output measures. Core components organize inputs based on their intended output. For example, academic programs supporting literacy would be a core component. Given the universal nature of these components, in some cases the same language is used in existing policy. Any overlap is incidental, and the terms are intended to be distinct.

These terms are used in the report as a organizational framework to evaluate how Utah defines the minimum school program across collected state-produced sources, stakeholder input, and available data, and then compares this definition to the funding of the system. The purpose of this task is to identify potential areas for exploration in Phase 2 of the study, not to draw conclusions about the system’s effectiveness.

Analysis Methods

WestEd researchers employed a mix of quantitative and qualitative methods to address the study research objectives. This included a document review process, engagement with stakeholders, and quantitative data analysis.

Exhibit 6. Data collection methods with research objectives

Task	Document Review	Stakeholder Input	Data Analysis
Part 1: What are the current expectations in Utah for a minimum school program?			
Research Objective 1a: Identification of core components of minimum school program.	X	X	X
Part 2: How does the current system align with these expectations?			
Research Objective 1b: Evaluation of current distribution formulas	X	X	
Research Objective 1c: Analysis of role and balance of the state and local contribution	X		X
Part 3: What do other pathways offer?			
Research Objectives 3b/3c: Examination of the behaviors the current enrollment-based funding model incentivizes and alternative proxies	X	X	X
Research Objective 3d: Analysis of the impact of year-round schooling models	X	X	

Document Review Process

A literature review provided historical background and context for the study. Peer-reviewed journal articles and federal and state-run websites were the priority resources for topics regarding policy, legislation, and legislative practices. Additionally, a small number of newspaper sources were used to elaborate on Utah-specific content and to give some insight on the public's perspective on year-round schooling, including local accounts and reactions. The databases searched for peer-reviewed journal articles include:

- Education Resource Information Center (ERIC)
- Iowa State University Library — Dissertations and Theses portal
- U.S. National Library of Medicine — National Institutes of Health
- California Educational Research Cooperative
- Journal of Inquiry & Action in Education

Information on legislative policy and practices was collected using various state, legislative, and board of education webpages. An essential resource for researching the Minimum School Program was the **Compendium of Budget Information (COBI)**. This site details the state's \$17 billion budget and related financial authorizations and background information. The Utah State Legislature, the Utah Office of Administrative Rules, the Utah State Board of Education, and the National Center on Safe Supportive Learning Environments websites were utilized to supplement information on policy.

The document review process included an examination of articles and policies from 1989–2019 to develop a thorough background on the evolution of education policies. Information extracted from the Utah Administrative policies and current federal and state standards and policies were from 2016–2019.

Two Utah-based newspapers, the *Deseret News/Associated Press* and *Salt Lake Tribune*, were included in the literature review of this study. Common search terms for the review included: “Utah Minimum School Program,” “Utah Year Round Schooling,” “Educational Policy Background,” and “Utah School Funding.” Search terms varied based on the content topic, and sources were intended to be substantive and objective so as to minimize bias.

Findings from the document review are embedded throughout the report as relevant to the section topic and are not organized into a stand-alone section.

Stakeholder Engagement Process and Input Analysis

To contextualize the findings from the document review and initial data analysis, the team held multiple input sessions and interviews with Utah stakeholders. The objective of the stakeholder engagement was to gather the perspectives of participants on the current education system, programs, policies, and practices in Utah. This input will be utilized (in combination with other sessions) to support future case studies planned in 2020 and to inform the examination of the minimum school program for Phase 1 of the study.

“Minimum school program” Input Sessions

Members of the WestEd team led focus groups with superintendents from around the state, from districts representing the full spectrum of sizes, geography, demographics, and socio-economic levels. The groups averaged six members each and utilized consistent prompts to anchor the dialogue:

- What would you say are the components of a minimum school program?
- What would you say are the outcomes of a minimum school program?
- What are the necessary inputs to create a minimum school program?
- Using the group’s definition of a minimum school program, what data sources could be useful to assess or monitor the components and their inputs?

An additional input session was held to discuss enrollment counts during a meeting of the Student Count Advisory group. The group includes school board members, budget officers, stakeholders, and state policy staff. Priorities for the initial meeting were to understand the concerns districts have with the current student count policies in relation to competency-based funding and to begin to identify possible paths for identifying a solution.

WestEd also led an input session for business administrators focused on providing a general overview of the report and gathering information on local approaches to the decision-making processes necessary for budget allocations. This session included approximately 35 business administrators from around the state. WestEd split the business administrators into small groups of three or four with facilitators gathering written comments on post-it notes and charting discussion responses. Engagement with this group will be ongoing as the research team begins analyses in Phase 2 of this study. Major take-aways from this session included the groups’ discussion of the wide variety of methods used to make allocation decisions. Some large districts have a set process to manage the input of multiple parties (department heads, principals, superintendent, etc.), while small districts develop their budgets based on school board priorities and deliberation with the superintendent.

WestEd also led an input session with charter school directors focused on gathering reactions to the state’s vision for public education, and the role the charter sector plays in realizing this vision. This session included seven charter school directors.

Lastly, the WestEd team held 14 phone interviews with superintendents and other stakeholders. These interviews focused on the following open-ended interview prompts, with significant leeway given to respondents and interviewers to guide the conversation based on interests and local contexts:

- What do you believe are the top three things state policymakers could do to improve support for public education in Utah?
- From your perspective, which aspects of the way funds are distributed to your school district work well?
- In your view, is Utah’s school finance system equitable?
- What are the advantages and constraints of the three different funding sources — local, state, and federal — in terms of the flexibility and support they provide?

A summary of the stakeholder input is included in Appendix A and embedded throughout the report as relevant.

Equity Study Methods

The equity study was designed to examine the vertical, horizontal, and fiscal equity⁵ of Utah’s system utilizing data provided by USBE, including:

- **State and Local Revenues.** Includes all state and local revenues except capital local and debt service levies (revenue codes 1124-1129, 1174, 1178), tuition from other LEAs within the state (1320), transportation fees (1410-1440), food service receipts (1610-1690), miscellaneous revenue from other school districts (1950), tax increment fund (26), related to basic programs (3200), and capital outlay programs (3700).
- **Total Revenues.** Consists of the state and local revenues listed above with the addition of federal funds, excluding child nutrition programs (4560-4574) and federal USDA commodities (4970).
- **Total Expenditures.** Consists of district expenditures from the general fund (10), special revenue funds (20), and student activity fund (21) except for the following functions: student transportation (2700), food service (3100), facilities acquisition and construction services (4000s), and debt service (5000s).
- **Instructional Expenditures.** Consists of expenditures in the instruction function (1000) from the general fund (10), special revenue funds (20), and student activity fund (21).

To examine equity in the allocation of resources, the study team examined the resources available to students based on average daily membership (ADM) and also on a factor generated for each district referred to as Weighted ADM (WADM). WADM is a district’s ADM count adjusted by the weights described in the Equitable Access section to account for the number of students with special needs in the district.

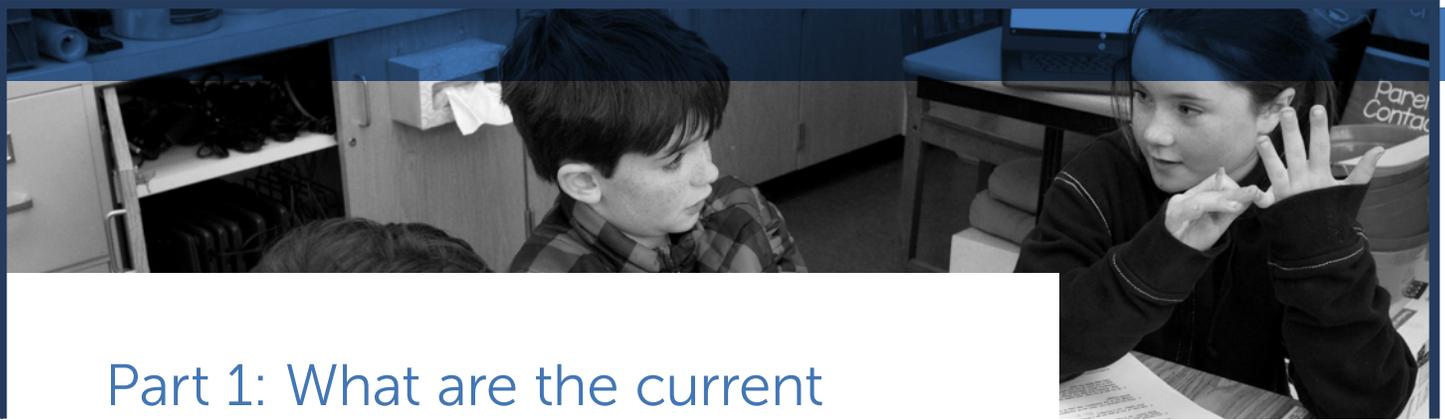
The study team also utilized standard measures of equity including the range, coefficient of variation, McLoone Index, Verstegen Index, and correlation coefficient. These terms are defined in the section Equitable Access to the Minimum School Program. The methodology used in these equity analyses are consistent with the definition of expenditures used in the assessment of other states and prior analyses.

5 As described in later sections, these terms are defined as follows:

Horizontal Equity: Concerned with how equally resources are allocated to districts or students in similar situations. It is sometimes said that horizontal equity addresses the “equal treatment of equals.” Under a school finance system with high horizontal equity, students with no special needs are funded roughly equally, regardless of which school district they attend.

Vertical Equity: Measures how well school finance systems take into account varying student and district needs. A system with high vertical equity will provide more resources for students with greater educational needs or districts with characteristics that impact costs such as very small size or geographical isolation.

Fiscal Neutrality: Assesses the link between local wealth and the amount of revenue available to support a school district. A school finance system with high fiscal neutrality minimizes the relationship between local wealth, or capacity, and district spending.



Part 1: What are the current expectations in Utah for a minimum school program?

Research Objective 1a: Identification of the core components of a minimum school program

In this section, we examine the minimum school program from multiple angles: stakeholder definition, statute definition, and reflection in state-endorsed documents and guidance. We then analyze the alignment across those areas in order to identify topics for further exploration in Phase 2 of this study.

To approximate a shared view of the minimum school program for Utahns, this study applies a conceptual framework of mapping outputs to inputs⁶ represented in state documents and by Utahn stakeholders to identify further areas of consideration for funding alignment. As reflected in the table below, the study compiles and analyzes descriptions of the inputs (programs, policies, and practices), target outcomes (results), and their related measures (success indicators) of the Utah system via stakeholders, the Portrait of a Graduate (PoG), USBE's 2022 targets, state-adopted standards, accountability measures, and relevant portions of statute. By examining where different system sources reinforce a common definition and where they diverge, the study spotlights potential areas for USBE's calibration between inputs and target outcomes. In order to identify the inputs associated with a specific outcome, we first explore the state's vision for the outcome of the public education system.

Each of these elements are described in the following section for the purpose of identifying the core components of the minimum school program.

⁶ See Exhibit 5 on page 11 for a description of the organizational framework.

The State's Vision for the Outcome of the Public Education System



Outputs/Outcomes

Results

- As defined by the PoG and USBE's vision

USBE's vision (*Upon completion, all Utah students are prepared to succeed and lead by having the knowledge and skills to learn, engage civically, and lead meaningful lives*) is used as the anchor for USBE's PoG, which "identifies the ideal characteristics of a Utah graduate after going through the K–12 system."

It should be noted that the PoG is offered in Utah as an optional model and that LEAs are encouraged to develop their own local versions to ensure the target outcomes reflect local context and values. Stakeholders involved in the input sessions for this study unanimously approved of the version of the PoG provided by the USBE.

Due to USBE's use of the PoG and the strong stakeholder recommendation, this study uses the PoG as the target outcome of the system for measuring the minimum school program. As detailed in the next section, the PoG describes the outcomes at an individual level.

Portrait of a Graduate

The PoG is an illustration of the targeted characteristics possessed by a student completing the K–12 course of study in Utah. A series of focus groups representing Utah stakeholders informed the development of the PoG. The characteristics are organized into three main categories or "keys": Mastery, Autonomy, and Purpose. Mastery is the ability to demonstrate depth of knowledge and skill proficiency. Autonomy is having the self-confidence and motivation to think and act independently. Purpose guides life decisions, influences behavior, shapes goals, offers a sense of direction, and creates meaning.

The PoG is intended to provide a "holistic view" of development. Not all of its elements align to a specific measure or assessment, but all can be developed in the course of the K–12 experience, as well as in the home and in the wider community.

Each key is broken down further into specific components captured in the table below.

Exhibit 7. Portrait of a Graduate Keys by Components

Mastery	Autonomy	Purpose
<p>Academic Mastery: Demonstrate a depth of knowledge in multiple subject areas to make informed decisions.</p> <p>Wellness: Maintain healthy lifestyles that provide balance in life and improve physical, mental, social, and emotional well-being.</p> <p>Civic, Financial, and Economic Literacy: Understand various governmental and economic systems and develop practical financial skills.</p> <p>Digital Literacy: Adapt, create, consume, and connect in productive, responsible ways to utilize technology in social, academic, and professional settings.</p>	<p>Communication: Communicate effectively through reading, writing, speaking, and listening to understand information in a variety of contexts, media, and languages.</p> <p>Critical Thinking and Problem Solving: Access, evaluate, and analyze information to make informed decisions, recognize bias, and find solutions.</p> <p>Creativity and Innovation: Imagine, visualize, and demonstrate creative practices, innovative solutions, and artistic expression.</p> <p>Collaboration and Teamwork: Contribute ideas, perspectives, and experiences to cultivate a community of shared accountability and leadership.</p>	<p>Honesty, Integrity and Responsibility: Are trustworthy, ethical, reliable, and accountable for the results they produce.</p> <p>Hard Work and Resilience: Set personal goals, apply best efforts to achieve them, and persevere when faced with challenges and setbacks.</p> <p>Lifelong Learning and Personal Growth: Continue to seek knowledge and develop skills in all settings.</p> <p>Service: Seek opportunities to help when assistance is needed and act without expecting compensation or recognition.</p> <p>Respect: Acknowledge differences by looking for the good in everyone, including oneself, and show due regard for feelings, rights, cultures, and traditions.</p>

Reaching these outcomes requires layers of inputs provided directly in the classroom, school, and community, and supported or facilitated by the family, community, district, and state.

Holding the PoG as the standard to be attained through the public education system, we now turn to a discussion of the state’s accountability measures or success indicators identified to track progress toward this outcome.

Measures of Success

Success Indicators and/or accountability measures

- Education Elevated 2022 targets
- State-adopted assessments
- Graduation rates

USBE’s strategic plan includes a set of measures to track the state’s progress toward its vision. The following measures are indicators of the general academic progress of the student body, but do not encompass the full list of assessments and data collected on student performance in Utah.

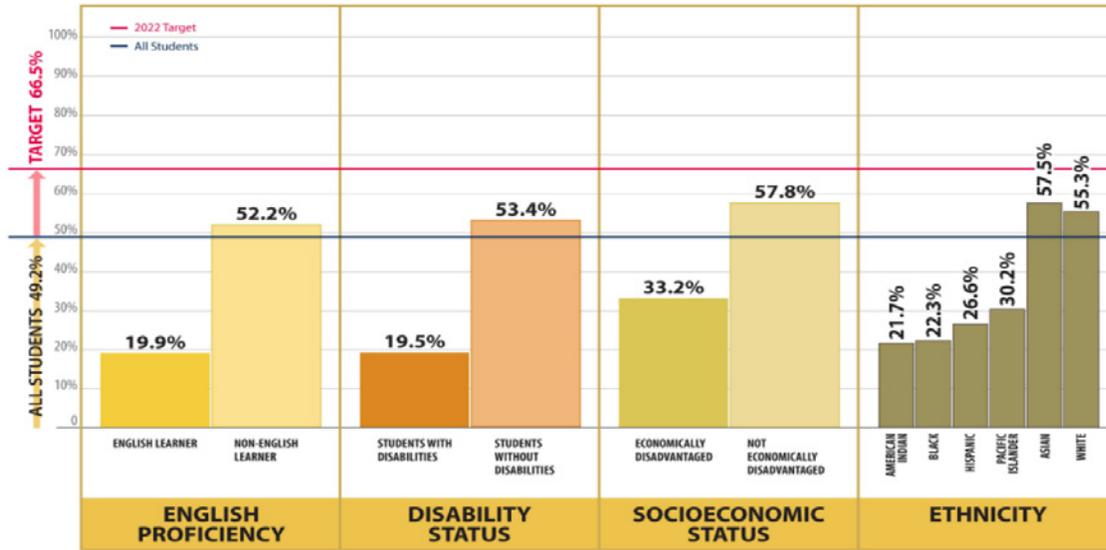
These measures include:

- College Readiness Coursework
- Scoring greater than or equal to 18 on the ACT
- High School Graduation
- Science Proficiency
- Mathematics Proficiency
- English Language Arts Proficiency
- Third Grade Literacy Proficiency

The measured targets in USBE’s strategic plan focus on addressing equity gaps as measured by the academic performance of student groups identified as having greater needs. These student groups include English Learners, students with disabilities, students from families of lower socioeconomic status, and students who identify belonging to an ethnic minority group. Exhibit 8 below illustrates the math targets and achievement gaps from USBE’s plan.

Exhibit 8. Mathematics Proficiency by Student Group, 2018

■ MATHEMATICS PROFICIENCY BY STUDENT GROUP, 2018



Note: This graphic is displayed here as published in the USBE Strategic Plan document entitled “Utah Achievement Gaps,” retrieved here: <https://www.schools.utah.gov/file/9489b372-76d2-4f04-bc5e-c6a7eab9ef9e>

When the system is meeting its intended design, its measures should map to the identified inputs in place to reach the vision set by the state. The next section examines the minimum school program inputs currently in place.

The State’s Vision for the “minimum school program”



USBE’s Goals and Strategies

USBE’s strategic plan provides the vision for statewide system-level inputs, and pursues this vision through four goals and associated strategies to meet those goals.⁷

The first goal, **Early Learning**, focuses on increased access to high-quality programs, increased family engagement, and high-quality instruction. An emphasis on instruction is evident in the second goal as well, **Effective Educators and Leaders**. This goal includes supporting schools and districts to mentor beginning teachers, personalize professional learning, improve preparation programs, and change the perception of teaching as a profession. The third goal, **Safe and Healthy Schools**, emphasizes safe and healthy learning environments, evidence-based health/wellness practices, and building educator capacity to meet students’ mental, emotional, and social needs. The final goal, **Personalized Teaching and Learning**, seeks to empower practitioners and families to access safeguarded student data, provide personalized learning plans for students, increase student access to educators trained in personalized learning, and promote new school models in this area. **Stakeholders reported that the vision set by the strategic plan aligns to their own vision for Utah’s schools. In particular, stakeholders reported the importance of early learning investments, safe and healthy schools through an increase of social-emotional learning supports, and a focus on the teacher shortage as critical to Utah’s student success.**

The USBE goals and strategies are generally aligned with the strategic plan prepared by Governor Herbert’s Education Excellence Commission, *The Education Roadmap*. This plan identifies four policy priorities and strategies associated with each: (1) Ensure Early Learning, (2) Strengthen and Support Educators, (3) Ensure Access and Equity, and (4) Complete Certificates and Degrees. Similar to the USBE’s plan, it elevates early learning and educator effectiveness. While the USBE plan does not include a specific priority related to equity, the plan vision clearly prioritizes equity across all goals, illustrating further alignment with the Commission’s plan.

State-Adopted Standards

Standards are an essential input for any public education system due to their impact on curriculum choices and the consistency of programming across a state. A state’s adopted core standards, and associated scope and sequence, guide programming for a wide range of disciplines.

⁷ See Appendix B for a full list of strategies.

In establishing the core standards for Utah public schools, the board “identif[ies] the basic knowledge, skills, and competencies each student is expected to acquire or master as the student advances through the public education system,” making an analysis of the standards a reasonable source for understanding Utah’s view of a minimum school program. Per state statute (53E-4-202, Section 1, a), the purpose of enacting standards is to enable students to: communicate effectively, both verbally and through written communication; apply mathematics; and access, analyze, and apply information. The statute clarifies that local control provides LEAs the freedom to choose their own curriculum or instructional materials in service of implementation of the standards.

In fulfillment of the duties outlined in this statute, the USBE has established the following core standards for K–12 education:

- English Language Arts
- Mathematics
- Science
- Social Studies
- Fine Arts
- Physical Education and Health
- Early childhood Education (Pre-K)

Other adopted standards with grade band variation include:

- World Languages (1–12)
- Library Media (K–12)
- Driver Education
- Financial Literacy (11–12)
- Career and Technical (subject and grade level varies)

These inputs align with Utah’s target outcome as defined by the PoG through the Mastery component. Stakeholders expressed confidence in the core standards and the related scope and sequence, with one focus group stating: “We have an excellent set of standards that assure a Utahn parent that their child can change schools mid-year and third grade will be third grade.” Stakeholders further noted that subjects currently identified as the core program are the right ones, the one significant exception being social-emotional learning. Participants consistently reported a greater need for standardization around social-emotional learning for schools when integrated within a holistic academic program.

Stakeholder Input on the “minimum school program”

In September 2019, WestEd interviewed 12 district superintendents and held two, two-hour-long input sessions in Salt Lake City. No individual is quoted directly in this summary, and every concept, theme, or perspective summarized here was captured in the notes as a group statement.

Participating superintendents unanimously agreed that the PoG is the expected standard all schools are aiming to reach as the output or outcome of the system.

The primary inputs for this target output cited by superintendents include academic subjects supported by core state standards and high-quality curriculum (Mathematics, ELA, science, and social studies), high-quality educators, strong school and district leadership, and close community ties between students, teachers,

schools, and families. Superintendents also listed integrated social-emotional learning, mental health supports, and access to a variety of non-academic subjects as necessary to fulfill the standard set by the PoG.

Generally, participants reported the funding mechanisms in place now to be equitable in their function, but reported that the funding amounts are insufficient for districts to provide the inputs required to reach the outputs described in the PoG (please see the list in Exhibit 7. Portrait of a Graduate Keys by Components for details).

Specifically, participants identified the following list of necessary inputs to support target outcomes based on their perceptions of best practice, and not based on current state law or programs in place:

- Participant-Generated Inputs List:
 - ▶ Access to a Core Academic Program: Social Studies, English/Language Arts, Mathematics, Science
 - ▶ Early Learning and Preschool
 - ▶ Access to an Expanded Curriculum Program: World Languages (1–12), Library Media (K–12), Fine Arts (K–12), Physical Education, Health, Financial Literacy
 - ▶ Social-Emotional Learning (integrated throughout the academic program)
 - ▶ Career & Technical Education
 - ▶ Digital Literacy/Computer Science
 - ▶ Athletics (after-school teams)
 - ▶ Nutrition
 - ▶ Access to Qualified Teachers
 - ▶ Access to Safe Facilities
 - ▶ Access to Qualified Leadership
 - ▶ Access to Mental and Physical Health Supports (i.e., nurses and counselors)

This participant-generated list generally aligns with the existing set of adopted standards and priorities for Utah. Participant interviews emphasized the importance of investing in the inputs related to **Autonomy** and **Purpose** as part of the minimum school program given their prominence in the expected outcomes for graduates.

Participants also discussed struggles related to the recruitment and retention of teachers to meet the demands of the academic program.

Finally, as noted elsewhere in the section, superintendents asserted the necessity of greater support for student social-emotional learning and mental health needs.

In addition to the engagement with district superintendents, on December 9th, 2019, the study team engaged charter school leaders virtually to gather their input on the state’s vision for the public education system. The schools represented a mix of elementary, middle, and high school grade bands, and included classroom-based, online, and blended learning models.

Generally, the group agreed that the PoG was an appropriate goal to describe the outputs of the Utah education system. However, some participants expressed concerns about the role of the state in implementing the PoG, specifically warning against the state determining measurement of outcomes related to the Autonomy or Purpose goals. Referring to the PoG goals, one participant stated that “if LEAs are measured and accountable for all of those things, they are not prepared to provide [them].”

Furthermore, responding to a prompt about the role of the charter sector in achieving this vision, charter school leaders emphasized the sector’s unique ability to be responsive to a very specific population of students and focus on a very specific set of aims within a small scale context. In other words, as one participant put it, charter schools “do not have to be all things to all people.”

Finding: Stakeholder expectations and state-endorsed documents reflect a generally common definition of the minimum school program. Social-emotional learning and mental health supports are the exceptions, with stakeholders strongly supporting expanded integration of Utah’s existing standards into the core academic program.

The study team completed a crosswalk comparing the Utah Core Standards, the strategic plan, and stakeholder feedback on what constitutes a minimum school program to assess consistency across the sources. The resulting list reflects the priority inputs state leaders believe are necessary to reach the outcomes defined by the PoG. Instances in which stakeholders reported that a given standard did not exist or was underutilized represented a challenge in this review. In this case, we have marked the topic as “partial,” rather than a full yes, to acknowledge this tension. If a topic, program, policy, or practice was represented across all of the sources, it is considered part of the minimum school program for the purposes of this phase of the study. It should be noted that stakeholders referred to “Mental and Physical Health Supports” as a need for expanded access to nurses and counselors on school sites, which is distinct from direct instruction for students about their mental and physical health (currently included under the existing health standards). Areas of misalignment have been noted for exploration in Phase 2.

Exhibit 9. Comparison of Stakeholder Expectations to Other Examined Sources

Stakeholder Expectations of the “minimum school program”*	Reflected in Adopted Standards?	Assessment Measure?	Reflected in Strategic Plan?
K–12 Academic Program: Social Studies, English/Language Arts, Mathematics, Science	Yes	Yes (see Appendix C for list)	Yes: College Readiness Coursework Scoring greater than or equal to 18 on the ACT High School Graduation Science Proficiency Mathematics Proficiency English Language Arts Proficiency Third Grade Literacy Proficiency
Early Learning and Preschool**	Yes (Preschool)	Yes	Yes: Early Learning Goals and strategies

Stakeholder Expectations of the “minimum school program”*	Reflected in Adopted Standards?	Assessment Measure?	Reflected in Strategic Plan?
K–12 Expanded Curriculum Program: World Languages (1–12), Library Media (K–12), Fine Arts (K–12), Physical Education, Driver Education, Health, Financial Literacy	Yes	Partially (see Appendix C for list)	Partially: Implied within the personalized learning strategies and PoG.
Integrated Social-Emotional Learning	Partially: Health Education Standards°	No	Yes: Safe and Healthy Schools strategies, PoG
Career & Technical Education	Yes	No	Yes: Personalized Learning
Digital Literacy°°	Partially	No	No
Nutrition	Partially: Health Education Standards	No	Yes: Safe and Healthy Schools strategies, PoG (wellness)
Athletics	No	No	No
Qualified Teachers	Yes	Yes (Evaluation System)	Yes: Effective educators and leaders
Safe Facilities	No	No	Yes: Safe and Healthy Schools strategies
Leadership	Yes	Yes (Evaluation System)	Yes: Effective educators and leaders
Mental and Physical Health Supports (i.e., nurses and counselors)	No	No	Yes: Safe and Healthy Schools

* This list is compiled based on identified inputs for reaching the PoG, results from stakeholder input, standards, assessments, and the strategic plan.

** Definitions of age groups for these categories vary and overlap. Early Learning encompasses birth to five, and preschool commonly supports ages 3–5, but can also be expanded to include school grades K–3 (ages 5–7).

° These standards may be underutilized based on stakeholder feedback and perception of their absence.

°° Computer Science K–12 Framework in place: <https://www.schools.utah.gov/file/46d4ca37-9d23-414e-91fd-6640b6be9df6>.

Core Components

Categories of Inputs linked to Outputs

- Identified as part of this report’s analysis

Based on the analysis presented in Exhibit 9, the following list of core components was generated and organized using identified levels of support across the sources. Please note, in some cases similar terminology is used in Utah’s existing statute and state standards. References here are distinct from existing policy and denote core components only (refer to page 12 for the definition of core component):

Exhibit 10. Minimum school program core components and subcomponents

Core Components	Subcomponents (if any)
Core Academic Program	Social Studies, English/Language Arts, Mathematics, Science Early Learning and Preschool
Expanded Curriculum Program	World Languages (1–12), Library Media (K–12), Fine Arts (K–12), Physical Education, Health, Financial Literacy
Social-Emotional Learning (integrated throughout the Core Academic Program and the Expanded Curriculum Program)	
Career & Technical Education	
Digital Literacy/Computer Science	
Qualified Educators	Qualified Teachers Qualified Leadership
Safe Facilities	
Mental and Physical Health Supports	

Based on input from stakeholders, and our analysis of state-endorsed documents, the academic program is clearly and consistently defined. The definition, role, purpose, and scope of social-emotional learning (SEL) are clearly present in the PoG and the strategic plan, and SEL is reported as in significant need of expansion by stakeholders. It is not, however, consistently present across all sources or defined consistently across the sources examined for this analysis.

This interest expressed by stakeholders in expanding SEL through deeper integration into academics reflects a national trend, with the Aspen Institute National Commission on Social, Emotional, and Academic Development reporting SEL as a top demand for expansion by teachers and parents. Additionally, a research review cited by the Commission “found students’ skills, behaviors, attitudes, and academic performance improved significantly while their emotional distress and behavior problems decreased” with integrated SEL programming (Aspen Institute National Commission on Social, Emotional, and Academic Development, 2019; p. 19). The stakeholder request for expanded SEL programming is aligned with the research, but the details of which programs and definitions to adopt would require further exploration on the part of the state. The Collaborative for Academic, Social, and Emotional Learning (CASEL), a recognized leader in the field, defines SEL as “the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions” (Bridgeland, Bruce, & Hariharan, 2013; p. 16). This definition, while expansive, is not completely clear on the boundaries between social-emotional learning and traditionally defined mental and physical health supports. This is an area of debate in the field and Utah may determine where that line is drawn in future explorations that determine state policy.

For example, currently in Utah, elements and themes related to SEL are included within the Health standards for K–12. Yet, stakeholders did not reference these standards when discussing the need for SEL integration into the regular academic program and highlighted the need for expanded mental health support for their communities.

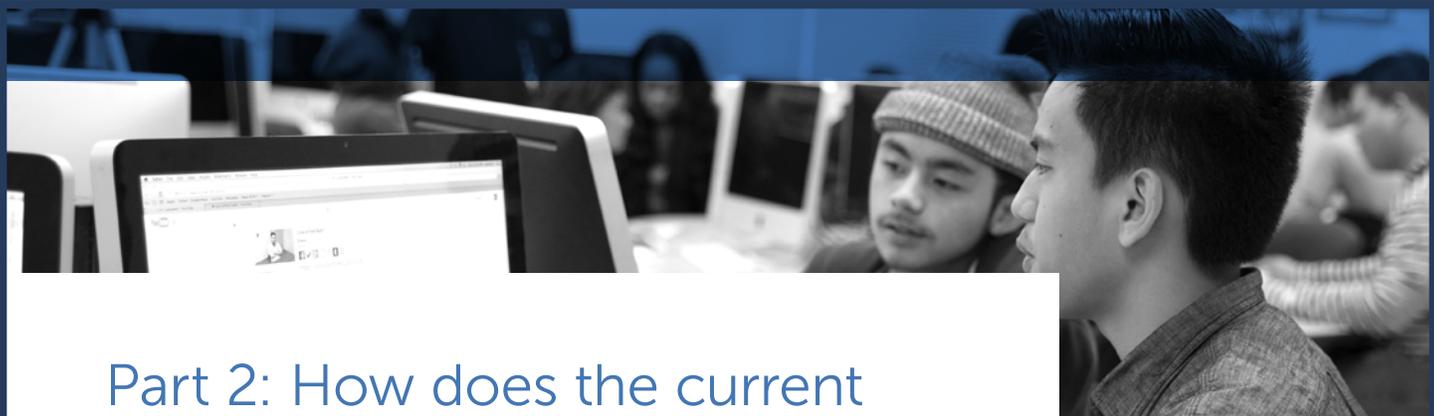
Similarly, stakeholders included nutrition and athletics as critical features of a minimum school program, but these were not consistently defined or reflected across resources and were therefore not included in the final list. Nutrition, for example, is included in Health standards to educate students about healthy eating habits. In their description of a minimum school program, stakeholders referred to the importance of supplying students with healthy food, which is a program and not an educational standard. Nutrition as a program has separate funding and refers to the direct food provision at schools, but this funding stream is not within the MSP. Athletics links to physical education (which has a set of standards), but this usage of the term was focused on afterschool and community sports. This set of distinctions does not mean that they are not implicit within the other sources (e.g., safe and healthy schools) or that these are not important to the positive experiences and development of students. This could be an area of further examination for alignment.

The definition of minimum school program in Utah currently focuses on academic programs, with stakeholders and the USBE demonstrating a strong value and need for a wider definition of academic programs that includes social-emotional learning, the arts, and physical education. While generally aligned, this point of difference is examined further in the next section, which will examine how this definition of the minimum school program aligns to the funding infrastructure of the same name (MSP).

"The demands of schooling have changed in the 21st century, and autonomy and purpose are just as important as mastery. We need a greater focus on what it takes in the classroom to build autonomy and purpose through integrated social-emotional learning supports."

– Superintendent Input Session Participants⁸

⁸ This quote is an amalgamation of multiple participants with the removal of district details to ensure anonymity.



Part 2: How does the current funding system align with these expectations?

Research Objective 1b: Evaluation of current distribution formulas

In this section, we compare the definition of the “minimum school program” from Part 1, which identifies several core components, to how the Minimum School Program (MSP) is defined in the statute, and how it is funded based on that statute. Examining this alignment identifies potential areas of exploration for Phase 2 of the study in 2020.

Description of the MSP According to Statute

The Utah education code states that the purpose of the MSP is “to provide a minimum school program for the state in accordance with the constitutional mandate. It recognizes that all children of the state are entitled to reasonably equal educational opportunities regardless of their place of residence in the state and of the economic situation of their respective school districts or other agencies” (Utah Code § 53F-2-103).

Elsewhere, the code describes the MSP as “the state-supported public school programs for kindergarten, elementary, and secondary schools as described.”

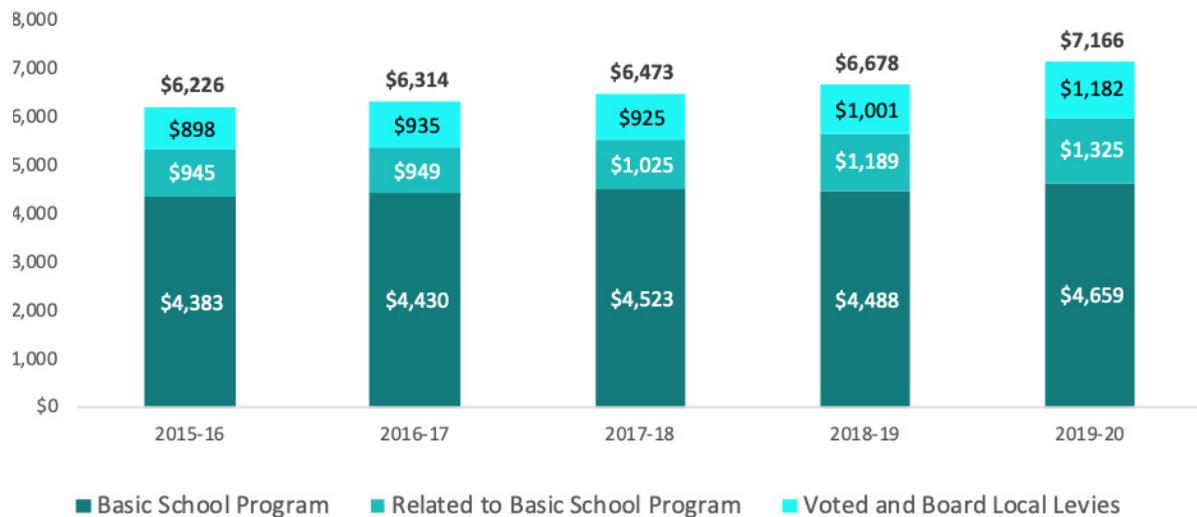
MSP funding categories include programs that are outside of the direct definition of inputs identified in Part 1 of this report. While not named as critical inputs explicitly, some of these could be examined for improved alignment. For example, resources to bring foreign exchange students into the public education system is not directly addressed in the minimum school program core components, even though there is a specific funding program within the MSP. Its absence from the minimum school program core components is not meant to suggest this is not a part of the program, rather that it is not on its own a core component.

Exhibit 11. Minimum School Program

Minimum School Program \$4,773,657,200					
Basic School Program \$3,103,563,000		Related to Basic School Program \$882,889,700			Voted & Board Levies \$787,204,500
Regular Program	Restricted Program	Related to Basic	Focus Populations	Educator Supports	
Kindergarten	SpEd Add-on	Pupil Transportation – To & From	Enhancement for At-Risk Students	Educator Salary Adjustments	Voted Local Levy \$520,950,100
\$96,342,400	\$297,463,000	\$98,461,900	\$44,836,000	\$177,945,500	Board Local Levy \$251,254,400
Grades 1-12	SpEd Self Contained	Pupil Transportation – Rural Schools	Youth in Custody	Teacher Salary Supplement	Board Local Levy – Early Literacy Program \$15,000,000
\$2,119,030,500	\$48,695,700	\$500,000	\$25,222,500	\$18,928,600	
Foreign Exchange	SpEd Preschool	Rural School Transportation Grants	Adult Education	Teacher Supplies and Materials	
\$1,158,500	\$39,484,200	\$1,000,000	\$14,175,400	\$5,500,000	
Necessarily Existent Small Schools	SpEd Extended Year	Flexible Allocation	Enhancement for Accelerated Students	Effective Teachers in High Poverty	
\$34,366,300	\$1,596,500	\$7,788,000	\$5,483,300	\$250,000	
Professional Staff	SpEd Impact Aid	Charter School Local Replacement	Centennial Scholarship Program	Elementary School Counselors	
\$197,505,900	\$7,191,200	\$195,042,300	\$269,300	\$2,100,000	
Administrative Costs	SpEd Intensive Services	Charter School Administrative Costs	Concurrent Enrollment	Teacher and Student Success Program	
\$5,262,700	\$2,776,200	\$8,112,200	\$11,750,900	\$98,950,000	
	SpEd Ext. Year for Educators	Statewide Initiatives	Title I – Paraeducators	Student Health and Counseling Support Program	
	\$3,210,600		\$300,000	\$16,000,000	
	Career & Technical Education	School LAND Trust	Early Literacy Program	Grants for Educators in High-need Schools	
	\$101,583,900	\$82,663,100	\$14,550,000	\$500,000	
	Class Size Reduction	School Library Books & Electronic Resources	Early Intervention	National Board Certified Teacher Program	
	\$147,895,400	\$850,000	\$7,500,000	\$246,300	
		Matching Fund for School Nurses			
		\$1,002,000			
		Dual Immersion			
		\$5,030,000			
		Year-Round Math & Science (USTAR)			
		\$6,200,000			
		Beverley Taylor Sorenson Elem. Arts			
		\$11,880,000			
		Digital Teaching & Learning			
		\$19,852,400			

As illustrated in Exhibit 11, the MSP is composed of three parts totaling \$4.77 billion in 2020 appropriations. There are categorical subprograms divided among the three major programs: the **Basic School Program**, the **Related to Basic School Program**, and the **Voted and Board Local Levy Program**. Exhibit 12 below displays per pupil revenue for each of these programs from 2015–16 to 2019–20.

Exhibit 12. Per-pupil revenue by MSP program, FY2016 through FY2020



Source: USBE Fall Enrollment, 2016–2020; Compendium of Budget Information (COBI), FY16–FY20.

Note: Figures are adjusted for inflation to July 2019 dollars except FY20 figures which are unadjusted. FY20 enrollment based on USBE projections.

According to background information included in the COBI, the principles of the MSP are to:

- Maintain system equity;
- Consider different LEA cost structures;
- Address individual student characteristics or educational requirements;
- Meet a statewide educational goal; and
- Support local control.

Basic School Program (BSP) (FY20: \$3,103,563,000 / \$4,659 per student)

In Utah’s education code, “basic state-supported school program,” “basic program,” or “basic school program” mean “public education programs for kindergarten, elementary, and secondary school students that are operated and maintained for the amount derived by multiplying the number of weighted pupil units for each school district or charter school by the value established each year in the enacted public education budget, except as otherwise provided [in code].”⁹ The BSP includes the funding streams that provide for the day-to-day curricular needs for students as aligned to the state standards under the subcategories Kindergarten and Grades 1–12.

⁹ WPU for Kindergarten students, special education students, and students served by charter schools are weighted differently than a regular education student.

More specifically, the BSP contains 15 categorical programs used to distribute \$2.949 billion to support all public kindergarten, elementary, and secondary students in Utah. Most of these programs rely on the Weighted Pupil Unit (WPU), with some variation.¹⁰

There are two consistent funding buckets: Unrestricted/Regular and Restricted. Unrestricted or regular program funds are the central streams of funding for public and charter schools with some exceptions.¹¹ These monies can be spent on educator compensation, textbooks, supplies, materials, support personnel, and the many other functions, people, and programs that support the basic education programs in these grades.¹²

Restricted program funding must be used according to specific guidelines. Special education funding, organized into seven sub-categories, falls under the restricted bucket and each sub-category comes with unique budget elements. For example, under Special Education Self-Contained (\$48.7 million), the students do not generate a WPU calculation. These students are counted differently through a “primary count” of qualifying students. Qualifying students are also counted under a “secondary (or add-on) count” through the Special Education Add-On program.¹³ In addition to special education funding, restricted program funding also includes Career and Technical Education-Add-On, and Class Size Reduction.

Each school district is required to contribute a portion of their basic school funding amount through a common tax levy known as the “Basic Property Tax Levy.” The revenue generated by this levy is put toward covering the prescribed amount, and state funds make up the difference. As charter schools cannot levy property taxes, their full basic school program costs are covered by the state.

Exhibit 13. Basic School Program Summary

Unrestricted/Regular Programs	Restricted Programs
Kindergarten, Grades 1–12, Foreign Exchange,* Professional Staff, Administrative Costs, and Necessarily Existent Small Schools. These programs provide the core funding for operating the public schools.	Special Education (seven subprograms), Career and Technical Education, and Class Size Reduction.

* Formerly part of the Grades 1–12 program, shifted to standalone in 2017.

Related to Basic School Program (FY20: \$882,889,700 / \$1,325 per student)

Categorical programs within the Related to Basic School Program total \$780.7 million and are split across four subcategories: *Related to Basic*, *Statewide Initiatives*, *Focus Populations*, and *Educator Supports*.

These funds complement the education program provided through the BSP and target funding to a specific educational need, content topics areas, student population sub-group, or teacher sub-group. Funding mechanisms for each of the subprograms varies, with some anchored on the WPU and others based on taxes, or set by the USBE directly.

10 See CTE funding.

11 Note: Charters do not have access to all of the funding categories, such as the NESS funding. The distribution formulas for charters are often different.

12 COBI: <https://le.utah.gov/lfa/cobi/cobi.html?cobiID=1597&tab=overviewTab&year=2019>

13 COBI <https://le.utah.gov/lfa/cobi/cobi.html?cobiID=1603&tab=overviewTab&year=2019>

Exhibit 14. Related to Basic School Program Summary

Related to Basic	Statewide Initiatives	Focus Populations	Educator Supports
<p>There are six subprograms supporting transportation (three subprograms), charter school administration (two subprograms), and a fund for “flexible allocations.” While transportation needs dominate the subcategory, an area of interest here is the flexible allocations fund. This fund has a complex background after the negotiated redistribution of funds and collapse of other categories in the BSP. It is intended to support district and school needs that fall outside a specific category. This is generated based on WPUs under the distribution formula. Notably, in the 2019 General Session, the majority of flexible allocation funding was removed and used to support the Teacher and Student Success Act Program (Office of the Legislative Fiscal Analyst, 2019).</p>	<p>There are seven subprograms included under statewide initiatives that support holistic elements of the school day. This category includes funding for school nurses, the arts, digital literacy, and school libraries. It also includes a trust fund based on state lands. This money is allocated directly to schools and intended for use to develop and implement school improvement plans and family engagement.</p>	<p>There are ten subprograms serving specific needs within the Utah public education system: youth in custody, adult education, students at risk, accelerated students, early intervention, and others.</p>	<p>This subcategory and these subprograms are dedicated to educator compensation through support for supplies, elementary school counselors, and teacher salary supplements and adjustments.</p>

Voted and Local Board (FY20: \$787,204,500 / \$1,182 per student)

This category’s levies total \$670.4 million, split across three subprograms: Voted Local Levy, Board Local Levy, and Board Local Levy — Early Literacy.

This category describes property tax guarantee programs that are state-supported and intended to balance out shortfalls between the state-guaranteed revenue per WPU and the actual property tax revenue levied by the community. The state provides allocations for the difference between the revenue generated per WPU

and the state-guaranteed amount per WPU. School districts must levy a tax on property within the school district in order to qualify for this funding, and the tax levied is in increments specified in statute (Utah Code § 53F-2-301).¹⁴

Stakeholders reported concerns about this requirement to levy local funds in order to qualify for the state contribution. Specifically, they noted that this ties funding to the local political will to raise funds in the community in which a student happens to reside. Therefore, students in communities that, for whatever reason, are not willing or able to levy these funds cannot realize the benefits of these state dollars.

Exhibit 15. Voted and Board Local Levy Summary

Voted Local Levy	Board Local Levy	Board Local Levy – Early Literacy
Property tax levy authorized to cover a portion of the costs of operation and maintenance of the state-supported MSP in a school district based on the majority vote of the electorate.	Property tax rate levied by local school board to support the district’s General Fund. The tax rate a school district may levy to is 0.0025 per dollar of taxable value.	Aligns and combines with funding in the Related to Basic Program K–3 Reading Improvement Program. This uses a local property tax component to provide a local match to state funding.

Finding: The structure of the MSP fulfills the statutory purpose by delineating the channels for funding.

In this Phase 1 analysis, we find there is general alignment between the expectations of the minimum school program, the target outcomes based on the PoG, and the assignment of funding based on statute in the MSP and related categorical programs as illustrated in the exhibit below. The most significant area of misalignment is through support for social-emotional learning, which is strongly represented as a priority for Utah in the PoG, the strategic plan, and in stakeholder input, but is not perceived to be sufficiently formally supported in the current system.

There are a number of specific set-asides for funding within the MSP that were not directly reflected in stakeholder sessions, the strategic plan, the PoG, or the state standards. This does not imply that funding not directly reflected is not deemed necessary within the MSP by the stakeholders, or that the lack of direct mention in the other sources makes them irrelevant. These categorical programs may indirectly support or reinforce the expectations of the minimum school program as described in Part 1. However, these are potential examples of funding set-asides that could be examined as part of Phase 2.

It should be emphasized that this analysis focuses on alignment only and not the levels of funding or the efficacy of that funding. Stakeholders consistently reported that outside of social-emotional learning and mental health, they believed funding streams are correctly identified as part of the MSP but not funded in sufficient amounts to meet the demands of meeting the target outcomes for the system. Stakeholders also noted the burden of pursuing grant funding under the MSP and pointed the WestEd team to look into this as an area for exploration.

¹⁴ Note that charter schools do not participate directly in the Voted & Board Local Levy Programs because they cannot levy property taxes.

Exhibit 16. Evaluation of Current Formulas and Equity Analysis

Expectations of the minimum school program*	Reflected in PoG?	Reflected in Minimum School Program funding by statute?
Academic Program: Social Studies, English/Language Arts, Mathematics, Science, Preschool	Yes: Mastery	Yes: Kindergarten, Grade 1–12, Board Local Levy Early Literacy, Early Literacy Program, Concurrent Enrollment
Expanded Curriculum Program: World Languages (1–12), Library Media (K–12), Fine Arts (K–12), Physical Education, Driver Education, Health, Financial Literacy	Yes: Mastery	Yes: Kindergarten, Grade 1–12, School Library Books and Electronic Resources, Beverley Taylor Sorenson Elementary Arts Learning, Dual Immersion, Board Local Levy Early Literacy
Social-Emotional Learning	Yes: Autonomy, Purpose	No: No specific funding program to support social-emotional learning.
Career & Technical Education	Yes: Mastery, Autonomy, Purpose	Yes: Career & Technical Education
Digital Literacy/Computer Science**	Yes: Mastery/Digital Literacy	Yes: Digital Teaching and Learning Program (Related to Basic, Statewide Initiative)
Qualified Educators: Qualified Teachers, Qualified Leaders	Not Included	Yes: Professional Staff, Administrative Costs, Beverley Taylor Sorenson Elementary Arts Learning, TSSA, Educator Supports Category
Safe Facilities	Not Included	No: Funded under School Building Program (not MSP)
Mental and Physical Health Supports	Mastery-Wellness	Yes: Matching Funding available for nurses, grants for elementary counselors and the Student Health and Counseling Support Program provides funding for a range of mental health professionals.

* This list is compiled based on identified inputs for reaching the PoG, results from stakeholder input, standards, assessments, and the Strategic Plan.

** Note: Computer Science K–12 Framework in place: <https://www.schools.utah.gov/file/46d4ca37-9d23-414e-91fd-6640b6be9df6>.

Equitable Access to the Minimum School Program

As part of Phase 1, the study team conducted an equity analysis of Utah’s school finance system. As a school finance term, “equity” is concerned with how resources are allocated across school districts and, ultimately, across schools and students. While the most common notion of equity assumes that a school finance system that distributes resources *equally* is equitable, school systems vary in a variety of ways that have implications on their ability to provide *equal opportunity*. Ultimately, a strong finance system that is truly equitable will accommodate for differences between districts in terms of (1) student resource needs, (2) district revenue-raising abilities, and (3) district characteristics.

This includes variation with respect to student needs, for students with higher needs (e.g., economically disadvantaged students, English Learner (EL) students, and special education students) require higher investment of resources to support equitable achievement of outcomes. In fact, research supports regularly reevaluating resource allocation in response to changes in student needs, such as those recently taking place in Utah.¹⁵

In addition to differences in the needs of students served in each school district, school districts differ in their abilities to raise revenues locally. Disparities in local property and income wealth mean that some school districts may be able to raise significantly higher local revenues than other districts, with a lower level of tax effort.

Finally, some districts also face factors beyond their control that can lead to higher operating costs, such as small student enrollments, low population density, or geographic isolation.

Defining Key Terms Used in This Report

Several terms and measures of district revenues and expenditures are relevant to this analysis. Brief definitions of these are provided below, and more details are included in Appendix D.

Exhibit 17. Key Term Definitions

Key Term	Definition
Need Factor	A measure used to compare the level of student need across districts. Districts with high need factors serve higher concentrations of students with additional needs than districts with low need factors.
Weighted ADM (WADM)	Weighted ADM is a district’s ADM count adjusted by pupil weights to account for the number of students with greater needs in the district. For this study, specific weights were applied to estimate a district’s level of student need. Specifically, economically disadvantaged students were assigned a weight of 0.35, EL students a weight of 0.5, and special education students a weight of 1.1. These weights were established based upon the prevailing evidence and research literature.
State and Local Revenues	Includes all state and local revenues except capital local and debt service levies, transportation fees, food service receipts, tuition and miscellaneous revenues from other LEAs, related to basic programs, and capital outlay programs.
Total Revenues	Consists of the state and local revenues listed above, with the addition of federal funds excluding child nutrition programs and federal USDA commodities.

¹⁵ For additional information on this topic, see Appendix D.

Key Term	Definition
Total Expenditures	Consists of district expenditures from the general fund, special revenue funds, and student activity fund, except for the following functions: student transportation, food service, facilities acquisition and construction services, debt service, and other debt service.
Instructional Expenditures	Consists of expenditures in the instruction function from the general fund, special revenue funds, and student activity fund.

For this study, specific weights for student need were applied to account for the additional costs of serving economically disadvantaged, EL or special education students. Specifically, economically disadvantaged students were assigned a weight of 0.35, EL students a weight of 0.5, and special education students a weight of 1.1. These weights were established by the study team based upon the team’s years of experience in estimating these additional costs.

To create a WADM, the average daily membership (ADM) count for each of these greater need categories in each district was multiplied by the appropriate weight. This WADM count is then divided by the actual ADM to calculate the need factor.

For example, if District A has 2,000 total students, 2,000 special education students, 800 at-risk students, and 60 EL students, then its need factor calculation is: $(2,000 \text{ total students} + (200 \text{ special education students} \times 1.1) + (800 \text{ at-risk students} \times 0.35) + (60 \text{ EL students} \times 0.5)) / 2,000 \text{ total students} = 1.27 \text{ need factor}$.

Defining Equity

School finance equity has been discussed and analyzed both in terms of (1) the focus on whom or what is being treated equitably and (2) the particular type of equity of interest. Most often, equity studies focus on the distribution of resources to school districts, since nearly every state calculates its state school finance formula at the district level. While equity at the school level is also worthy of analysis, because Utah’s funding system focuses primarily on funding school districts rather than individual schools (with the exception of charter schools), this study addresses how equitably resources are allocated to school districts.

The most common equity concepts addressed in school finance equity analyses are horizontal equity, vertical equity, and fiscal neutrality (Berne & Stiefel, 1984). These are described below.

Exhibit 18. Common Equity Analysis Concepts

Equity Analysis Concept	Description
Horizontal Equity	Concerned with how equally resources are allocated to districts or students in similar situations. It is sometimes said that horizontal equity addresses the “equal treatment of equals.” Under a school finance system with high horizontal equity, students with no additional needs are funded roughly equally, regardless of which school district they attend.
Vertical Equity	Measures how well school finance systems take into account varying student and district needs. A system with high vertical equity will provide more resources for students with greater educational needs or districts with characteristics that impact costs, such as very small size or geographical isolation.

Equity Analysis Concept	Description
Fiscal Neutrality	Assesses the link between local wealth and the amount of revenue available to support a school district. A school finance system with high fiscal neutrality minimizes the relationship between local wealth, or capacity, and district spending.

These three dimensions of school finance are the focus of this equity analysis.

School District Characteristics

The State of Utah has a small number of school districts compared to other states. Only Hawaii (which has one statewide district), Nevada (18), Delaware (19), Maryland (24), and Rhode Island (32) have fewer than Utah’s 41 school districts (Snyder, de Brey, & Dillow, 2016).

The districts vary considerably in terms of enrollment size, measured here by the average daily attendance, or ADM, count. In 2017–18, six of the state’s districts served fewer than 1,000 ADM, while eight districts served more than 25,000 ADM.

Exhibit D-1 (provided in Appendix D) presents summary information on a number of key district and school finance characteristics for fiscal year 2017–18. This information provides a descriptive overview of the school districts that were included in this analysis.

ADM and Weighted ADM

District ADM ranges from 165.9 to 78,279.5, with an average of 13,935. When district student counts are adjusted for need using the weights described above, WADM ranges from 201.9 to 93,541.3, with an average of 17,970.7. This shows that all districts have some level of need and that the largest system in the state has more pronounced needs than the smallest school system.

District Need Factor

District-level student need, as measured by the need factor described above, varies from 1.17 to 1.65, with a state average of 1.29. The three districts with the lowest need factor are Morgan School District (1.17), Alpine School District (1.19), and Park City School District (1.19). The two districts with the highest need factors are Ogden City School District (1.51) and San Juan School District (1.65).

State and Local Revenue

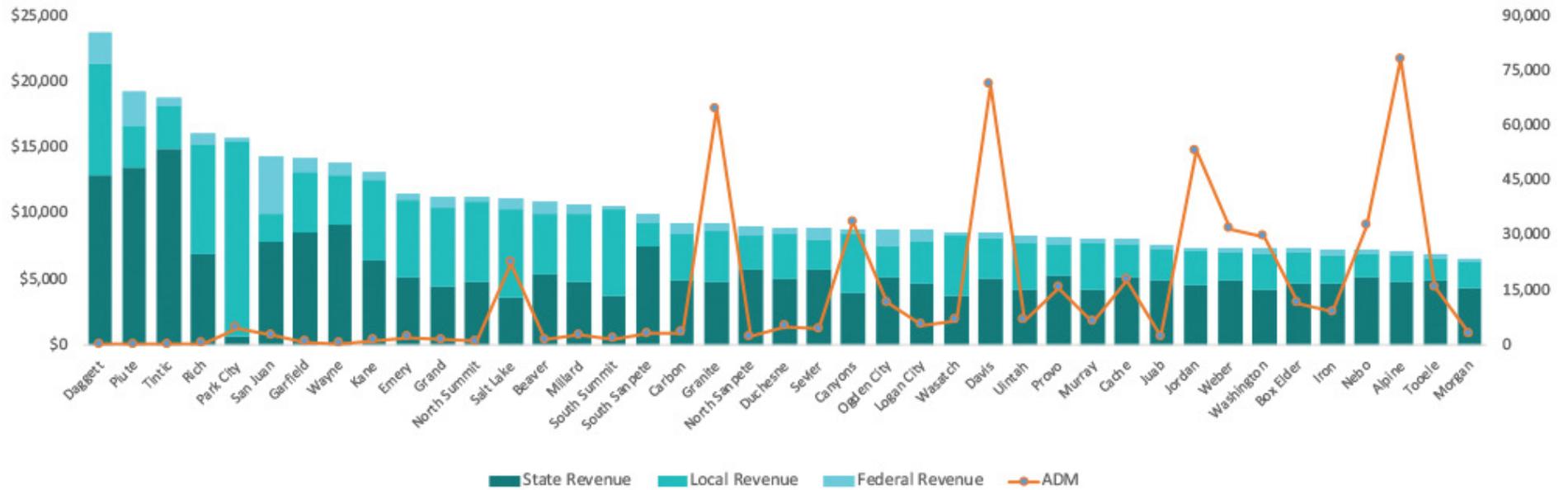
Total state and local revenues per ADM ranged from \$6,327 in the Morgan School District to \$21,425 in the Daggett School District, which is the state’s smallest district, with only 165.9 ADM. The statewide average state and local revenue amount was \$7,833. Total district revenues per ADM, which include federal funds, ranged from \$6,537, also in the Morgan School District, to \$23,768 in the Daggett School District. On average, district revenues consisted of 36.8% local revenues, 57.1% state revenues, and 6.1% federal revenues. However, these percentages also varied widely based on local wealth and student need. The San Juan School District had the lowest share of local revenues, 15.0%, and also the highest share of federal revenues, totaling 30.2%. At 94.0%, Park City School District had the highest share of local revenues along with the lowest share of state revenues (4.4%) and federal revenues (1.6%). The Tintic School District had the highest share of state revenues, with 79.3% of its revenues coming from state sources.

Per-ADM Expenditures

Per-ADM expenditures also varied widely across districts, with the variation driven primarily by enrollment size and local wealth as measured by assessed value per pupil. Following on their per-ADM revenue rankings, total expenditures per ADM ranged from \$5,805 in the Morgan School District to \$21,872 in Daggett. The state average was \$7,328 per ADM. Similarly, these two districts also had the lowest and highest instructional expenditures per ADM, with Morgan spending \$4,275 per ADM and Daggett \$12,323. The state average was \$5,044 per ADM.

Exhibit 19 below displays per pupil revenue for all 41 districts by source. District ADM is also displayed.

Exhibit 19. Per-Pupil Revenue by Source and District ADM



Assessed Value Per Pupil

Total assessed value per pupil — the most commonly used measure of local school district fiscal capacity or wealth — ranges from \$194,662 in South Sanpete School District to more than \$3.0 million in Park City School District. Eight other districts have assessed values per pupil exceeding \$1.0 million. The average assessed value per pupil for the state is \$436,893.

Other Equity Measures

In addition to local assessed value per pupil, there are several other measures available in the data that may be used to provide some indication of the equity in program quality across districts. These include:

- **Average teacher salaries**, an indication of a district's ability to attract qualified teachers;
- **The number of teachers per 1,000 ADM**, a measure of the number of teachers available to serve students in the district;
- **The number of all certified staff per 1,000 ADM**, a measure of the number of professional staff including teachers, administrators, and certified support staff, available to support students and administer the district; and
- **The student-teacher ratio**, which is not the same as class size because the teacher count used includes non-regular classroom teachers such as tutors, ELL teachers, Title I teachers, etc.

There is a large range among districts for all of these measures. Average teacher salaries range from \$41,997 to \$65,227, while the number of teachers per 1,000 ADM ranges from 39.1 to 101.1. Similarly, certified staff per 1,000 ADM range from 47.4 to 128.0. The student-teacher ratio ranges from 9.4 to 25.21.

For most of the measures discussed here, the wide range in values is explained in large part by the existence of very small districts and schools in the state and the way in which the funding formula adjusts resources to compensate for these small sizes. Daggett, the state's smallest school district, had the highest number of teachers and certified staff per 1,000 ADM (101.1 and 128.0 respectively) and the lowest student-teacher ratio (9.4). Salt Lake School District, one of the state's largest districts, had the highest average teacher salary (\$65,227) compared to Nebo School District's \$41,997. Nebo is also a large district with more than 30,000 students, but it is among the lowest property wealth districts.

In addition to a summary of fiscal measures for all 41 school districts, policymakers and analysts are interested in examining whether there are differences among groupings of districts. The most common approach to grouping districts in an equity analysis is by wealth per pupil. These analyses may group districts by percentiles, quintiles, or quartiles. Because there are relatively few districts in Utah, this analysis uses quintiles to organize districts into groups.

Exhibit D-2 (provided in Appendix D) presents key fiscal information by each wealth quintile. Quintile 1, the quintile with the lowest assessed value per pupil, includes 8 districts with an average assessed value per pupil of \$279,923. The average assessed values per pupil for the remaining three quintiles are \$337,100 in quintile 2, \$448,534 in quintile 3, \$762,288 in quintile 4, and \$1,895,990 in quintile 5. These compare to the state average of \$436,893.

The summary data in Exhibit D-2 show that per student resources, whether revenues or expenditures, increase across the quintiles along with wealth per pupil. This may suggest that a relationship exists between local wealth and the educational resources available per ADM, and that Utah's school funding system is not as equitable as it could be. This conclusion is also borne out of the equity statistics discussed later in this section.

Generally, resource indicators shown in Exhibit D-2, including per ADM revenues and expenditures, teachers and certified staff per 1,000 students, teachers' salaries, and student-teacher ratios, improve as assessed value

per pupil increases. This suggests that the state’s funding system falls short on ensuring fiscal neutrality, which is discussed further below.¹⁶

Horizontal Equity, Vertical Equity, and Fiscal Neutrality

This equity analysis examines horizontal equity, vertical equity, and fiscal neutrality, as described in an earlier section.

While there are a number of generally accepted statistical approaches to analyzing equity (Berne & Stiefel, 1984; Odden & Picus, 2014), the study team has identified several statistical measures that they have found are most useful for policymakers trying to understand the equity of a school finance system. These are described below in brief and covered in more detail in Appendix D.

Exhibit 20. Key Statistical Measures

Key Statistical Measure	Description
Range	Range describes the difference between the smallest and largest values of any given variable, like per student spending. The greater the range within a system, the less likely it is that a system is equitable.
Coefficient of Variation (CV)	The CV measures how much a given measure varies around the average. The value of the CV ranges from zero and higher and can be presented as a percentage (30%) or as a decimal (0.30). A lower number (closer to zero) indicates less variation and a higher number indicates more variation. A CV value over 0.010 suggests a higher amount of variation than is typically desirable in a school finance system (Odden & Picus, 2014).
McLoone Index and Versteegen Index	<p>The McLoone and Versteegen Indices are lesser known but nonetheless valuable measures of equity. Used together, they can help to pinpoint where — in terms of the per student revenue or expenditure distribution of school districts — a state is most equitable or inequitable.</p> <p>The McLoone Index measures the bottom half of the distribution of revenues or expenditures per student to indicate the degree of equity of those school districts below the median, and ranges from zero to 1.0, with 1.0 representing perfect equity. An index of at least 0.95 is considered desirable (Odden & Picus, 2014).</p> <p>Conversely, the Versteegen Index provides the same information for the top half of the per student revenue or expenditure distribution — those districts above the median. The ideal value of the Versteegen Index is 1.0 and the standard is no more than 1.05 (Odden & Picus, 2014).</p>
Correlation Coefficient	The correlation coefficient is the most common statistic used for measuring fiscal neutrality, or the relationship between per student property wealth and per student revenues or spending. A high-quality school finance system will exhibit little relationship between the two, since local property wealth should not determine how much money a school system has available to spend. The correlation coefficient ranges from -1.0 to 1.0, where -1.0 represents a perfect negative relationship and 1.0 represents a perfect positive relationship. A correlation of zero means there is no relationship between two items. The typical standard for an acceptable level of equity is equal to or less than 0.50 (Odden & Picus, 2014).

¹⁶ There are exceptions to this finding, including that there are slightly higher instructional expenditures per ADM and average teacher salary, and a lower student teacher ratio in the lowest quintile than in quintile 2.

The range and CV may be used for measuring both horizontal and vertical equity. However, measures of vertical equity use weighted student counts while horizontal equity uses non-weighted student counts. By using weighted student counts, which provide a measure of student need, the study team is able to assess how spending varies with student need. The study team’s expectation is that higher spending will be associated with higher levels of student need.

Horizontal Equity

Horizontal equity is a measure of how equally similarly situated students are funded across school districts. A state school finance system that is horizontally equitable should meet or exceed the standards of all of the equity statistical measures described above.

The variation in revenues or spending that exists among districts should be largely explained by differences in student need.

Exhibit 21. Horizontal Equity Summary Statistics

Horizontal Equity Measures	2013–14	2017–18
Coefficient of Variation (Standard of ≤ 0.10)		
State and Local Revenue Per ADM	0.414	0.351
Total Revenue Per ADM	0.403	0.360
Total Expenditures Per ADM	0.326	0.354
Instructional Expenditures Per ADM	0.275	0.311
Average Teacher Salary	0.081	0.092
Teachers Per 1,000 ADM	0.235	0.244
Certified Staff Per 1,000 ADM	0.237	0.248
Student/Teacher Ratio	0.153	0.188
McLoone Index — State and Local Revenues/ADM (Standard of ≥ 0.95)	0.88	0.87
Verstegen Index — State and Local Revenues/ADM (Standard of ≤ 1.05)	1.26	1.14

Exhibit 21 shows the equity statistics for the two fiscal years 2013–14 and 2017–18. Two years worth of data were examined to assess at two points in time the equity characteristics of Utah’s school finance system. The top portion of Exhibit 21 shows the CV for a number of different types of resources, including per ADM revenues and expenditures and key district characteristics.

Using the standard of the CV being equal to or less than 0.10, these results show that in both years, only one variable, average teacher salary, meets the equity standard. Another, student-teacher ratio, is relatively close to the standard, but still exceeds it. One potential reason for less variation in average teacher salaries across districts is the ongoing shortage of qualified teachers in a number of subject areas, which may lead districts to raise salaries to compete in the teacher labor market.

The other variables all exceed the standard by a factor of two to four. The McCloone and Versteegen indices also show that inequity in the system exists across the entire distribution of districts, whether below or above the median state and local revenues per ADM, since each falls short of meeting the standard.

It is unclear whether the system has become more equitable between 2013–14 and 2017–18, since some statistics improved over that time period and others worsened. The two measures of per ADM revenues improved while the measures for expenditures and district characteristics moved somewhat further from the standard. While there was little change in the McCloone Index, the Versteegen Index improved significantly, indicating that equity in the upper half of the revenue per ADM distribution improved, although it still fails to meet the standard.

It is likely that some of the apparent inequity indicated by the equity statistics may be due to the number of smaller districts in the state. The top two quintiles, which have the highest per pupil assessed value and per ADM revenues and expenditures, are also, on average, smaller than the average district in the first through third quintiles. The average district size in the fifth quintile is only 1,533 ADM. The average district size in the fourth quintile is 9,531 ADM. This is compared to average district sizes in the first three quintiles of 19,169, 25,383, and 14,048, respectively. As a result, some of the variation displayed in the data may be due to the state's policy of providing more resources per ADM to small schools to compensate for their lack of economies of scale. The issue of how equity may vary by district characteristics such as enrollment size and locale (rural, suburban or urban) is an issue that should be explored further in Phase 2 of the study.

Vertical Equity

The results for vertical equity are similar to the horizontal equity results. Vertical equity assumes that a greater amount of resources are needed to effectively educate students with greater need. This vertical equity analysis used WADM counts in the CV calculation, thereby taking into account, or controlling for, the variations in spending between districts with different numbers of students with greater need. If the school funding formula is providing enough additional resources for serving students with greater needs, the CVs should improve compared to the horizontal equity analysis using unweighted ADMs. As Exhibit 22 shows, the CV for all measures exceeded the standard of 0.10 in both 2013–14 and 2017–18.

Exhibit 22. Vertical Equity Summary Statistics

Vertical Equity Measures	2013–14	2017–18
Coefficient of Variation (Standard of ≤ 0.10)		
State and Local Revenue Per Weighted ADM	0.416	0.368
Total Revenue Per Weighted ADM	0.399	0.369
Total Expenditures Per Weighted ADM	0.319	0.366
Instructional Expenditures Per Weighted ADM	0.267	0.315
Teachers Per 1,000 Weighted ADM	0.222	0.249
Certified Staff Per 1,000 Weighted ADM	0.224	0.254

Comparing Exhibit 21 (horizontal equity) to Exhibit 22 (vertical equity) shows that for both years, there is little difference in the CVs whether using ADM or WADM. In fact, most of the CVs are somewhat larger in Exhibit 22. This result indicates the funding system may not be providing sufficient additional resources for students with greater needs, such as the economically disadvantaged students, English Learners, and students with disabilities.

This finding is supported by several correlations between the need factor and other resource measures. The correlation between the need factor and state and local revenues per WADM is -0.169 , indicating a very weak — and negative — relationship between need and per WADM state and local revenues. The relationship between need and total expenditures per WADM is similar, with a very weak correlation coefficient of -0.075 . Both of these correlations show that there is little relationship between the concentration of students with greater needs and additional funding for districts.

Fiscal Neutrality

Fiscal neutrality examines the relationship between the wealth of a district and the resources it has for educating its students. The statistical measure used here for measuring fiscal neutrality is the correlation coefficient, which assesses the strength and direction of two variables related to fiscal neutrality, namely per pupil assessed value and per ADM revenues or expenditures. In an equitable school finance system, there should be little or no relationship between local wealth and resource levels.

The results presented in Exhibit 23 show that many of the fiscal neutrality measures exceed the standard of a correlation coefficient less than or equal to 0.50 , indicating that to some degree, district resource levels are related to district wealth.

This analysis presents the correlation between per pupil assessed value and a number of different resource variables, including state and local revenues per ADM and WADM revenues, total revenue per ADM and WADM, per ADM and WADM instructional and total expenditures, and teacher salaries, teachers per 1,000 ADM, certified staff per 1,000 ADM, and the student-teacher ratio.

Exhibit 23. Fiscal Neutrality Summary Statistics

Fiscal Neutrality Measures	2013–14	2017–18
Correlation Coefficient (Standard of ≤ 0.50)		
Assessed Value/Pupil and State and Local Revenues/ADM	0.415	0.608
Assessed Value/Pupil and Total Revenue/ADM	0.386	0.547
Assessed Value/Pupil and State and Local Revenues/Weighted ADM	0.436	0.649
Assessed Value/Pupil and Total Revenue/Weighted ADM	0.413	0.607
Total Expenditures Per ADM	0.555	0.569
Instructional Expenditures Per ADM	0.562	0.491
Total Expenditures Per Weighted ADM	0.607	0.624
Instructional Expenditures Per Weighted ADM	0.622	0.559
Assessed Value/Pupil and Average Teacher Salary	0.628	0.482
Assessed Value/Pupil and Teachers Per 1,000 ADM	0.399	0.449
Assessed Value/Pupil and Certified Staff Per 1,000 ADM	0.435	0.457
Assessed Value/Pupil and Student-Teacher Ratio	-0.498	-0.513

As Exhibit 23 shows, the 2017–18 correlations with per ADM and WADM revenues and expenditures (with the exception of instructional expenditures) all exceed the 0.50 standard, although not by a very large amount.

The 2017–18 correlations between local wealth and per ADM state and local revenues, per WADM state and local revenues, and total expenditures per WADM all exceed 0.60.

The correlations between local wealth and the other resource factors such as average teacher salary (in 2017–18 only), teachers per 1,000 ADM, and certified staff per 1,000 ADM all fall below the standard in both years.

The correlation between wealth and student-teacher ratio is just above the standard in 2017–18 and is negative, an indication that there is a slightly higher than desired relationship between local wealth and smaller class sizes.

Of some concern is the fact that all of the correlations with revenues became larger between 2013–14 and 2017–18, indicating the relationship between local wealth and revenues has become stronger over time. This change over time occurred despite two recent legislative actions designed to improve equity across districts.¹⁷ The study team will take a closer look at why these equity measures worsened over time during Phase 2 of the study. Conversely, the relationship between local wealth and expenditures and local wealth and the other resource variables became somewhat smaller over that same period of time.

¹⁷ See Senate Bill 97 passed during the 2015 General Session and House Bill 293 passed during the 2018 General Session.

Findings Summary: Equity Study

This analysis raises some questions about Utah’s school funding system with respect to horizontal and vertical equity and fiscal neutrality. The majority of variables examined in this analysis fell short of meeting generally accepted benchmarks for equity statistics, although in many cases, the margin was not substantial. The analysis showed that there was greater than desired variability in per ADM and per WADM revenues, expenditures, and other resource indicators such as average teacher salaries, teachers per 1,000 ADM, certified staff per 1,000 ADM, and student-teacher ratios.

Vertical equity in particular is an area of concern. The study team’s analysis shows that taking concentrations of students with greater needs into account had little impact on equity statistics. These findings are likely related to the system’s additional funding levels for students with greater needs.

The fiscal neutrality analysis also indicated a larger than desired relationship between local wealth and district resources. Correlation coefficients between assessed value per pupil and per ADM revenues and expenditures and other resource indicators generally exceeded the benchmark of less than or equal to 0.50. Our analysis of wealth quintiles also showed that per ADM resources increased in step with per pupil assessed valuation.

Additional analyses to assess the equity impact of revenue streams that are not directly related to instruction or student support, such as transportation, food services and student activities funding, should be considered for Phase 2 of this study.

Two recent reports present more positive assessments of the equity of Utah’s school finance system. However, differences in the focus and data and analysis approaches make comparisons difficult, if not impossible. In the Education Law Center’s *Is School Funding Fair? A National Report Card*, researchers used multiple federal datasets from 2015 to examine school finance in all 50 states. In its one finance equity measure, a measure of how much per pupil funding changes between districts with zero percent poverty and those with 30 percent poverty, Utah is ranked number one and given an “A” grade. However, this is a narrow measure of vertical equity, focused entirely on poverty-based changes in funding, that ignores other student needs (EL and special education) and the issues of fiscal neutrality and funding variation. *Education Week’s* Quality Counts issue also grades the finance systems in the 50 states and District of Columbia. It includes three measures similar to those used in this analysis, including a correlation between assessed value per student and per student state and local revenues, the CV for per student expenditures, and the McLoone Index. All three of these measures are more favorable than what this analysis found.¹⁸ However, *Education Week’s* analysis also uses federal datasets rather than state-provided data, adjusts student counts to account for student need using different weights than used here, and makes adjustments for differences in cost of living. *Education Week’s* analysis also does not provide detail on which specific revenues and expenditures were included in its analyses. a deeper investigation

¹⁸ Baker, B. D., Sciarra, D. G., & Farrie, D. (2018). *Is School Funding Fair? A National Report Card* (7th ed.). Newark, N.J.: Education Law Center. https://edlawcenter.org/assets/files/pdfs/publications/Is_School_Funding_Fair_7th_Editi.pdf. Education Week, Quality Counts 2019. Grading the State. <https://www.edweek.org/ew/collections/quality-counts-2019-state-finance/index.html>. The Quality Counts analysis, using 2016 federal data, found a correlation of 0.221 between per student assessed value and per student state and local revenues. Its CV for per student expenditures was 0.175, and its McLoone Index was 0.96.

of equity and raise the possibility that there is room for improvement in providing an equitable school finance system.

The next section examines the system’s alignment with evidence-based best practices based on available research and documented practice.

Alignment with Evidence-Based Practice

Though rigorous research into general resource allocation strategies is limited, valuable lessons can be drawn from the evidence that is available to support policy discussions in Utah. Should Utah policymakers decide to change their investments in K–12 education, this section summarizes the most recent, rigorous evidence on effects of changes in school spending.

Impact Analysis of Funding Changes in Other States

Recent research links increased school spending to positive outcomes for students that include higher graduation rates, higher lifetime wages, and increased college attendance.

The question about whether or not “money matters” has been subject to intense debate. In the late 1980s and early 1990s, Eric Hanushek summarized a series of school finance studies and famously concluded that there is no relationship between spending and outcomes. However, about a third of the studies he cited (Hanushek, 1997) found significant improvement. Most of the research he summarized — with positive and negative findings — was also based on correlations between spending and achievement, and it could not clearly rule out the influence of other factors. In fact, in a more recent publication, Hanushek points out that while improvements resulting from resource policies are not “discernible,” this “does not mean that money and resources never matter (Hanushek, 2003; p. F89)”

In the last two decades, a new wave of studies, using more rigorous research methods and larger datasets, allow researchers and practitioners to make stronger causal inferences. More and more, economists are able to utilize “natural experiments” where real-world conditions (e.g. policy adoptions and discontinuations, group selection that is essentially random within small populations) allow for approximated randomized experiments. As a result, we can be more confident in the validity of these more recent findings.

A multitude of recent state school finance reforms allow for these types of studies. They exploit sudden changes in rules about how schools are funded. School spending regularly changes due to factors that are caused by policy, not factors under the control of families and schools. This allows researchers to determine what happens to student achievement and to safely rule out alternate explanations.

There are many recent and credible school spending studies that use these more rigorous methods with national data or multi-state datasets. Jackson, Johnson, and Persico (2016) study the effect of school finance reform–induced changes in public school spending on long-term adult outcomes. They link school spending and school finance reform data to detailed, nationally representative data on children born between 1955 and 1985 and followed through 2011. They find that a 10% increase in per pupil spending each year for all 12 years of public schooling leads to 0.31 more completed years of education, about 7% higher wages, and a 3.2 percentage point reduction in the annual incidence of adult poverty. Effects are much more pronounced for children from low-income families.

LaFortune, Rothstein, and Schanzenbach (2018) find that state-level school finance reforms markedly increased the progressivity of school spending. The reforms did not accomplish this by “leveling down” school funding, but rather by increasing spending across the board, with larger increases in low-income districts. Schools used these additional funds to increase instructional spending, to reduce class size, and for capital outlays. Using nationally representative data on student achievement, the authors find that these reforms were productive. School finance reform raised achievement in a district with log average income one point below the state mean, relative to a district at the mean, by 0.1 standard deviations after ten years.

Approximately 90% of studies that look across the entire nation find a positive and significant impact of total spending on student outcomes. This tells policymakers and school leaders that, on average, money absolutely matters. But it does not necessarily mean money matters in every context, in all settings, and in all school districts, as myriad “nonmonetary” factors are associated with student outcomes.

Namely, Epstein (1992, 1995) summarizes that a student’s academic outcomes are influenced by not just instruction, but by three larger overlapping environments: the overall school experience, their family life, and the community in which they live. Each of these contexts have their own factors that stimulate or impede a student’s academic, social and personal development.

Within the school, increases in school safety and higher academic expectations for students correspond to increases in student achievement (Kraft, Marinell & Yee, 2016), while exposure to violence is associated with lower self-esteem (Patton, Woolley, Hong, 2011), and teacher turnover is associated with lower academic performance (Kraft, Marinell & Yee, 2016).

Overall, though money within schools is the central subject of analysis in the present report and research finds positive associations with its compounding impact on learning outcomes, it is incomplete to suggest that other factors such as family or community experience does not impact them as well. In the second phase of this project, the study team will consider how factors, like those described above, may influence student success in Utah.

Single-state studies also support the broad finding that money matters. Relying on discontinuities inherent in the funding formulas in Massachusetts, Guryan (2001) finds that increased school spending improves test scores. Similarly, using a regression-discontinuity design, Lee and Polachek (2018) find that increased school spending led to increased high school graduation rates.

Hyman’s 2017 study of Michigan’s school finance reform finds that students exposed to \$1,000 (10%) more spending were 3 percentage points (7%) more likely to enroll in college and 2.3 percentage points (11%) more likely to earn a postsecondary degree. The effects were concentrated among districts that were urban and suburban, lower poverty, and higher achieving at baseline. Districts targeted the marginal dollar toward schools serving less poor populations within the district

In New York, a quirk in the state’s funding formula allowed some districts to receive extra funding even though they had falling enrollments. Gigliotti and Sorenson (2018) found that the extra dollars led to slightly higher scores on state exams. Similar research in Texas, but this time, of the state’s adjustment for small districts, finds a 1 percentage point decrease in dropout rates and a 6 percentage point increase in college enrollment for every additional 10% increase in expenditures (Kreisman & Steinberg, 2019).

After the overhaul of California’s school funding formula in 2012, Johnson and Tanner (2018) find that a \$1,000 increase in district per pupil revenue from the state experienced in grades 10–12 leads to a 5.3 percentage-point increase in high school graduation rates, on average, among all students. Those gains are just as large, or larger,

among students from high-poverty families. Additional research by Lee and Fuller (2017) found that Latino students benefited from extra grant funding in California districts with higher concentrations of poverty.

Clark (2003), a study of Kentucky, is a rare example of a single-state study of unrestricted funds that does not find positive and statistically significant effects. The author finds that the increased spending induced by the Kentucky Education Reform Act did not improve test scores overall, though African-American students did see a modest increase in achievement.

Kogan and colleagues (2017) use a regression-discontinuity design to examine the impact of passing a referendum to increase school spending in Ohio. They find that referendum failure (as opposed to passage) led to lower instructional spending and lower student achievement growth.

There is also research showing the negative effect of spending cuts. Studies in the wake of the Great Recession in 2008–09 showed that in some states, taxes fell rapidly, and states were forced to suddenly reduce per pupil spending. Children in schools during the recession where per pupil spending levels dropped, compared to students who were in those schools before the recession, saw a decline in test scores and high school graduation rates. Jackson and colleagues (2015) found that a 10% drop in school spending over the previous four years reduced high school graduation rates by 1.5 percentage points and reduced test scores by 6% of one standard deviation.

Common Approaches to Targeting Investments to Improve Student Achievement

Shifting from Horizontal to Vertical Equity

Over the past 30 years, some of the most impactful changes in state K–12 education finance reform have involved governments replacing traditional funding models to address “horizontal equity” with new models more focused on “vertical equity” (Berne & Stiefel, 1984; Lafortune, Rothstein, & Schanzenbach, 2018).

Research on the impact of shifting from horizontal equity to funding based on considerations of vertical equity through reform is limited, primarily because this is a recent trend in education finance. In nearly every study involving a shift to funding based on considerations of vertical equity, however, effective reform events are associated with sharp, immediate, and permanent increases in the progressivity of school finance, with absolute and relative increases in revenues in low-income school districts (Lafortune, Rothstein & Schanzenbach, 2018). The targeted increase in revenues in low-income school districts is a key differentiating component of this type of reform from others, and most research will find pronounced learning outcomes in these districts, as the marginal effect of extra funds is higher in low-income areas. The immediate influx of funding is an important element of reforms focused on vertical equity as well, as examples of funding increases that failed to produce positive outcomes for students tend to see gradual increases to supplements for high-need students phased in over many years (Hanushek & Lindseth, 2009; Neymotin, 2010).

It is important to note that the positive impact in school finance reforms focused on vertical equity is also attributable to the increase in funding all students experience when these models are implemented, as opposed to the ‘leveling down’ a state or district might implement under a model focused on horizontal equity (Lafortune, Rothstein & Schanzenbach, 2018). These results agree with the previous findings that increased school spending generally raises student achievement described in the above section.

Categorical Programs, Weighted Student Formulas, & Block Grants

There are three common approaches through which supplements to improve vertical equity are disbursed: categorical programs, block grants and weighted student formulas (Education Commission of the States, 2019). Each model offers advantages in its specific approach that can fulfill state and district needs in implementation.

Categorical Programs

Categorical programs, which distribute restricted dollars to districts to run designated programs, are the most fiscally constraining of the three funding models. This model can be advantageous for districts that are in need of structure to push towards vertical equity; Levin (1985) notes that targeting funds to specific populations and activities through categorical programs creates accountability and assures that dollars are being spent efficiently. On the other hand, practitioners have long encountered regulatory obstacles in practice. Kimbrough and Hill (1981) identified that when multiple categorical programs are being run at one school site, excessive administrative time is needed to establish compliance with statute. Furthermore, the lack of flexibility to cross-subsidize between programs creates impractical conflicts for staff who work in multiple program areas (Kimbrough & Hill, 1985). Nonetheless, there are several examples of categorical programs being used effectively.

In Utah, the MSP is made up of some 50 categorical programs. While each program has a stated purpose and fund allocation based on weighted pupil units (WPU), these programs vary widely in their scope and regulatory nature, as approximately 75% of state funding is unrestricted, with the ultimate goal of enabling local school boards to allocate funds autonomously.¹⁹

In some cases, categorical programs define a particular model for improvement. For example, in Ohio, 62 low-performing schools with high concentrations of poverty saw standardized test score gains after the implementation of the federal School Improvement Grant (SIG) categorical program and its Turnaround Model. SIG is designed to provide schools with additional financial resources, contingent upon schools using those funds to make significant changes to many aspects of their educational delivery. Ohio's Turnaround Model involves replacing a school's principal, supplanting at least 50% of the staff, and implementing a number of instructional and operational reforms, coinciding with rapid increases of \$1,500 - \$3,000 in funding per student in award schools. Ohio schools that accepted funds and complied with this model saw gains up to 0.26 standard deviations in math and 0.27 standard deviations in reading for students in recipient schools within just two years of implementation. The restrictions on spending in this categorical program proved valuable, as struggling districts may have been prompted to undergo less rapid and comprehensive change within schools if given the autonomy, such as focusing funds on hiring additional staff without supplanting existing staff (Carlsen & Lavertu, 2018).

A similar example of a categorical program with a specific design model and evidence of effectiveness is a comprehensive school reform design, wherein a district receives supplemental funds to re-structure general program operations in low-performing schools according to a state model. In their book *Restoring Opportunity*, Greg Duncan and Richard Murnane draw several lessons from studies examining these types of programs. One is that large-scale improvement is possible. A second is that the tools, guidance, and training provided to teachers clearly improve students' reading skills, though these designs are much less effective when implemented in schools with high rates of teacher turnover (Duncan & Murnane, 2014). At the high school level, there are particular design models with evidence of effectiveness such as Talent Development, First Things First, Check and Connect (a mentoring and monitoring program) and Achievement for Latinos Through Academic Success. In an analysis prepared for Minnesota policymakers, Levin and Belfield (2007) find that all four of these designs

¹⁹ There are, however, some restricted categorical programs within Utah's Basic School program such as all Special Education programming, Career & Technical Education and Class Size Reduction.

generate benefits to the taxpayer which easily exceed the costs. When they calculate the benefits divided by the costs of the interventions, they find a ratio that varies from 2.9 to 6.7 for every dollar spent.²⁰

There are other examples of categorical programs specifying particular improvement models seeing success, such as the New Small Autonomous School District Policy in Oakland, CA (see Vasudeva, Darling-Hammond, Newton & Montgomery, 2009) or the Comprehensive School Reform (CSR) grants in Texas (see Booker, Gross, & Goldhaber, 2006).

Alternatively, categorical programs may specify a particular subject or grade which the investment is targeting, as opposed to a specific improvement model. One notable example of this is investment in early childhood programs, especially given research suggesting that such investments may be particularly cost-effective (e.g., Belfield, Nores, Barnett, & Schweinhart, 2006). Evaluations of prekindergarten programs in Boston and Tulsa find impacts that are larger than those found in evaluations of programs in other states. The size of the impact is sufficient to close more than half of the gap in academic skills between children from low-income families and more affluent ones at entry for kindergarten (Weiland & Yoshikawa, 2013; Phillips, Gormley, & Anderson, 2016). In addition, the mathematics, literacy, and language skills of children who participated in these programs were considerably more advanced than those of similarly-aged children who spent the year in other childcare settings.²¹

The impressive evidence from the Boston and Tulsa programs provides support for the notion that a carefully designed and implemented early learning program has the potential to improve long-term education outcomes for children from low-income families. In Tulsa in particular, when examined against middle school students who did not participate, students who participated in CAP Head Start produced significant positive effects on achievement test scores in math and on both grade retention and chronic absenteeism for middle school students as a whole, including positive effects for girls on grade retention and chronic absenteeism; for white students on math test scores; for Hispanic students on math test scores and chronic absenteeism, and for students eligible for free lunches on math test scores, grade retention, and chronic absenteeism (Phillips, Gormley, & Anderson, 2016).

Weighted Student Formulas

Weighted student formulas provide additional funds or weights to LEAs on a per pupil basis determined by mathematical equation. These funds act as a supplement to the allocation a district would receive based on its total students, using a formula to determine the extra dollars per qualifying student necessary to fund a specific program. Utah uses Weighted Pupil Units (WPU) in determining its “above-the-line” programs: State allocations are determined by a statutorily set rate of funds generated by each pupil within an LEA, with added WPU counts for districts with qualifying characteristics, such as rural areas that require busing over large distances for students to attend school. Utah’s systems has higher weights for career and technical education

20 One may ask, “What is the IMPACT of a graduate?” Compared to a high school dropout, an individual graduate gains \$475,900 in extra lifetime earnings. The economic benefits to state taxpayers are significant, with \$251,900 in increases in tax revenues and lower expenditures on health, crime, and welfare. In Minnesota, the state gains the equivalent of \$1,059,000 from the individual and taxpayer benefits, plus lower crime rates and faster economic growth (Levin & Belfield, 2007).

21 From a policy design perspective, it is important to note that the Boston and Tulsa programs are open to children from all backgrounds, regardless of family income. This approach increases costs, but also increases political support for the programs. The mix of children from different backgrounds may expose children from low-income families to children with larger vocabularies and other advantages. Each class has both a teacher and a full-time aide. The programs provide them with in-depth training and devotes resources to high-quality implementation of proven literacy and math curricula.

and students with disabilities, but not for other student groups. Additional WPU for most of Utah’s programs are allocated through a prior-year average daily membership (ADM) plus growth formula, wherein the previous year’s ADM is added to the total growth, then multiplied by a statutorily set factor. The product is the amount of WPU that will be allocated to run the program for that year.

Weights are usually derived from fractions of the base student population and are expressed as dollar amounts or as additional pupil counts (Hinojosa, 2018). An advantage of weights is that they can place an explicit dollar amount on the supplemental funding each student within a population qualifies for, which can create concrete benchmarks for spending in schools. Weighted student funds also have restrictions to serve their target student populations, but these funds are not usually bound to a single school program. Thus, they provide LEAs some of the structure of categorical programs while maintaining flexibility to meet greater programmatic needs.

However, for this reason, weighted student formulas have been criticized for failing to hold districts accountable for sufficiently targeting student funding to higher need populations in line with state plans. In 2015, a lawsuit was filed against the Los Angeles Unified School District (LAUSD) by the ACLU of Southern California for underfunding programs for pupils with identified high needs under the Local Control Funding Formula (LCFF), California’s weighted student funding model (Superior Court of California, County of Los Angeles, 2015). The State of California ruled that LAUSD had been directing special education and low-income student funding to the general school program, underfunding schools by up to \$450 million annually since 2013. Ultimately, LAUSD was ordered to allocate \$150 million in supplemental funding for vulnerable student populations from the district general fund in the 2017–2018 budget (White, 2017).

Many states use weighted funding formulas to determine each LEA’s supplemental funding allocation. Darling-Hammond (2010) found that New Jersey’s weighted formula approach for high-need students, which ties research on quality and costs with funding allocations, has contributed to steep increases in overall performance and reductions in the achievement gap. The formula is based on free and reduced-priced lunch program participation and is allocated according to a sliding scale of weights depending on the percentages of identified populations of need housed in a given LEA, similar to Title I, part A of the Every Student Succeeds Act (ESSA) (Hinojosa, 2018).

In Massachusetts, Guryan (2001) found improved 4th grade standardized test scores as a result of an improved design of the Massachusetts state finance system to include weights that offered more funding to students with greater need. Under this formula, an LEA’s total enrollment is calculated, creating a “foundation” budget allocation, then enrollment is multiplied by different factors of its student population, where each student population group is given a different per student weight depending upon assessed needs (Hinojosa, 2018).

Block Grants

Block grants refer to programs where a district submits a plan or application and receives funding in accordance with state assessed student population need, grade level or geographic characteristics. Entirely unrestricted once awarded, block grants offer autonomy to districts to set goals and create frameworks for programs without compliance as an incentive. As Brueckner (2000) points out, unrestricted funding through block grants promotes innovative programming that could save money in the long run while still meeting goals. However, the “innovative” programs under block grants may effectively operate as modified categorical programs. Levin (1985) asserts that it is difficult to compare fully unrestricted block grants to more restrictive programs like categorical or weighted student formulas, as it is unclear whether block grants could function if initiated without a pre-existing structure. Specifically, research contends that restricted programs provide the framework or

“fly-paper” for block grant spending, giving practitioners implicit guidance in how to generally run their autonomous programs. For example, if a categorical literacy program in state elementary schools produced strong results but was reported by educators to (1) have burdensome administrative work and (2) exclude populations that could benefit from the program due to its categorical requirements, a block grant may provide the autonomy needed to address these concerns. However, the overall design of the program would remain the same, or “stick,” as the categorical program structure was already sufficient to meet programmatic goals.

Block grants are also limited in their long-run economic efficiency. Almost always, block grants are fixed at a pre-set dollar amount to last through the life of a program and are therefore unable to adjust for student need as the economy matures over a grant cycle. Categorical or weighted student formulas do not fall victim to this limitation, as they are re-calculated annually using student demographic counts, and are often to the state’s general fund by proportionality statute. Both Brueckner (2000) and Powers (2000) noted that the rigidity of block grants caused limitations in U.S. welfare reform, which switched from a matching grant structure to block granting in 1996. Where matching grants saw larger federal contributions as benefits to recipients increased, fixed grant amounts, even with the aid of a maintenance of effort formula, could not appropriately control for increases in the cost of living or participant need, leading to overall lower spending on welfare programs.

In North Carolina, Henry, Fortner, and Thompson (2010) examined the impact of the Disadvantaged Student Supplemental Fund (DSSF) on “North Carolina EOC” standardized test scores. In this program, the 16 districts considered most disadvantaged by North Carolina’s index system were granted additional funds for two years if they submitted a budget but were not mandated to follow a set spending structure as would be the case under a categorical program. Expenditures included teacher salaries, materials, professional development and instructional support. Results found High School EOC test score gains in DSSF recipient schools amounted to .13 of a standard deviation higher than those of non-participant schools, about a 1.2% higher EOC score.

Utah currently administers many grant programs, including: Year-round Math & Science (USTAR), The Beverly Sorenson Elementary Arts program, and Digital Teaching and Learning. These grants are awarded on a competitive basis, but do contain some restrictions, making them different from traditional block grants.

Though categorical programs, weighted student formulas and block grants are all focused on vertical equity, they hold distinct characteristics. Categorical programs are restricted in nature, and do not allow for cross-subsidization across programs. Weighted student formulas have restrictions to serve their target student populations but are not usually bound to a single school program. Block grants are unrestricted entirely, offering districts autonomy to spend funds how they see fit. These differences offer unique advantages, along with key areas of limitation worth further analysis.

Ultimately, evidence shows that each model has important limitations that balance out its strengths. Still, there have been multiple examples of each model producing significant gains for large student populations, particularly among low-income and low-achieving pupils. The best model is then a matter of context and history for a state government. For example, if districts are exhausted with regulation and function well with serving high-need populations, a weighted student formula may be a useful supplement to existing structures. Alternatively, if a state is experiencing a general fund windfall and has strong systems in place to support new and innovative programming, block grants may be the best way to invigorate school systems. Finally, in a state with a high influx of inward migration, categorical programs can assist in establishing structures for new programming demanded by larger demographic representation of diverse student groups.

Effective Decision-Making

Decision making has become more important than ever in the era of funding models focused on vertical equity, particularly in state education offices. In the past, local property tax revenue determined the allocation and capability of a given district to provide services to its students without regard for equity or adequacy, while states provided mostly categorical aid. Today, state governments lead the way as policy initiators, allocating funds to LEAs to equalize revenues across districts based on need (Sykes, O'Day & Ford, 2009). Moreover, effective decision-making maximizes the impact of increases in education funding, especially those targeted to particular purposes and intended to support improvements in vertical equity. In addition to the evidence presented in this report, the study team will continue to examine decision-making at the local level in Utah specifically.

State and District Collaboration

Along with a state's expanded role in local school finance as a policy initiator comes responsibility as the primary determinant of efficiency in schools and their programs. Specifically, there are two forms of efficiency that a state education office must work towards: allocative efficiency, which refers to providing the proper amount of education for each student, and productive efficiency, providing that education at the lowest possible cost. States face challenges in determining these efficiencies, as budgets and their allocations can only be made using previous student outcomes and previous costs as data points. States simply do not have the capacity to measure the effort, input quality or student ability associated with the outcomes or costs they derive, because they cannot be in schools observing teachers on a daily basis to track such inputs. Thus, it is difficult to know when a school or program is overfunded/underfunded (inefficient) or properly funded (efficient) without actually observing it in practice (Hoxby, 1996).

If states are not independently able to determine efficiency, they must rely on LEAs and their schools as collaborative partners to establish this on their behalf. In this way, school districts exist in the unique position of being both policy initiators as well as interpreters, accountable for enacting programs that direct the work of their schools in alignment with collective bargaining, while simultaneously holding responsibility for implementing programs that originated at the federal and state levels (Sykes, O'Day & Ford, 2009). In order to ensure the efficiency of the programs they administer in alignment with state goals, district leaders should draw support from the state through existing systems and resources.

A strong example of how this symbiotic relationship can exist is found in a review of local administrator feedback after the implementation of California's Local Control Funding Formula. Plank, O'Day, and Cottingham (2018) found that, five years after the policy was enacted, local leaders self-reported implementation to be largely successful, and student achievement scores echoed this sentiment. Researchers noted several key relational differences between LEAs and the state office that made LCFF's implementation unique from past reforms: First, district leaders feel that when their LEAs are in need of support, they can seek help from a variety of sources, including state boards, state agencies, county offices and non-governmental entities. Second, the state support system is designed to help districts do more than simply comply with statute. Rather, the policy is focused on the state empowering districts to "analyze their own problems of practice, discover the underlying root causes, and create their own solutions...to work in partnership with districts to create the conditions in which local leaders learn how to work with teachers, parents, and other stakeholders to discern what works best for the students in their local context." Overall, the state acts as a cooperative support for districts, rather than a compliance entity, with agencies from outside of the government serving as thought

partners. Ultimately, it is collaboration with districts that allows states to understand the strengths and needs of its member schools, as districts offer deeper insight into the process of learning.

Even if state and district leaders collaborate regularly, the content of their collaboration is key to the change it produces. As Fullan (2001) posits, “collaborative cultures, which by definition have close relationships, are powerful, but unless they are focusing on the right things they may end up being powerfully wrong”. Central components of these “right things” include having a moral purpose, a focus on results, and a desire to understand the viewpoints of those who disagree. Groups of leaders from both the state and the district must be aligned in these areas if they hope to have success in their larger educational mission.

Supporting Schools

Once healthy collaboration is established, it is the districts that must ensure the mission of the state is carried out swiftly in their member schools, and thus their role in decision-making and efficiency cannot be understated. In a national review of school district improvement efforts and the factors of reform that produce the most positive outcomes for students, Honig, Copland, Rainey, Lorton, and Newton (2010) found that districts do not tend to see comprehensive improvements in teaching and achievement outcomes without substantial engagement by their central offices in helping all schools build the necessary capacity. In the same way that state governments support LEAs, by helping to provide and build capacity as partners, districts in turn can assist their schools.

However, as the sheer volume of schools that can reside within a school district makes for a widely diverse set of needs. In Sykes, O’Day, and Ford’s (2011) review of the school district role in instructional improvement, three management challenges are outlined for district leaders. First, leaders must manage the political dynamics of their community so they can build a coalition around improvement. Second, leaders must understand how to manage administrative tasks while also tending to the larger instructional agenda of their institution; maintaining this balance can most effectively be done by working as a team on core functions. Third, leaders must organize the activities and practices of teachers around the basic tenets of professionalism. Taken together, meeting these challenges is a strong factor in actualizing institutional progress, as it grants leaders the political, administrative, and professional capital to produce changes in the norms and practices of schools.

A key strategy for better understanding and accommodating the diverse needs of schools within a district is involving both school and community members in the district budgeting process. This allows for greater transparency and can produce stronger understanding as to the programmatic needs of schools and their surrounding neighborhoods. Participatory budgeting is an emerging method from city planning focused on integrating community members into the budget development cycle. This method designates a portion of the general fund budget to local control, such that residents can vote on the use of the funds as they see fit. This process begins with project ideas and spending plans created directly by residents, which are eventually voted on and funded to be part of the larger city or program budget. A key strength of this program found in early case studies is its ability to draw greater voter turnout than past elections in participant communities (Participatory Budgeting Project, 2016). Elements of the stakeholder engagement processes used in this method translate to the district setting with some modification by allowing stakeholders to wrestle with budget trade-offs collectively to reach targeted goals.

Finally, to further assist with the general challenge of aligning resources to student achievement goals at the district level, the Government Finance Officers Association (GFOA) has developed a series of best practices in school district budgeting. GFOA emphasizes that budgeting efficiently through the duration of a program maximizes its potential to be effective. The GFOA recommends the following five steps for the budgeting processes of a district to ensure strategic efficiency:

1. Plan and Prepare: This refers to establishing and developing key tenants of the program in conjunction with financial data.
2. Set Instructional Priorities: Ensuring that the grant program is aligned with the master plans of the district in regards to the students being served is a foundation for allocating funds to specific areas.
3. Pay for Priorities: The district should conduct a cost analysis to identify the most efficient use of resources, then prioritize how funds will be allocated.
4. Implementation: Before resources are allocated, to ensure optimal implementation, two plans should be developed and enacted:
 - ▶ Strategic financial plan: This offers a three to five year view of how the program will pursue its instructional priorities and how success will be measured.
 - ▶ Plan of action: A clear plan of roles and responsibilities within the program must be developed and followed.
5. Ensure sustainability: The budgeting process should be planned and replicated in the future to ensure districts have a uniform understanding of how to administer future programs (GFOA, 2015).

General Strategies for Effective Decision-Making

Overall, districts face the challenge of addressing the diverse needs of their member schools with limited resources, but research shows that many strategies have proven effective in advancing achievement and quality in districts on a comprehensive level. The power to affect how effectively and efficiently resources are used fundamentally rests with the decision-makers — i.e., local education leaders at the district and school level — who direct how available funds will be spent. Organizational behavior research suggests that while institutions may be tempted to try to hire individuals who possess an inherent “effective decision-making” capability, attempts to do so have limited success, as this skill is not strongly correlated with experience (Dalal & Bolunmez, 2016).

Indeed, intelligence can lead decision-makers to rely on cognitive shortcuts rather than engaging in a deeper analytical process (Stanovich, 2009), and experience can lead decision-makers to be overconfident and fail to weigh all possibilities (Russo & Schoemaker, 1992). Rather, research indicates that effective decision-making is a skill that can be developed and which strongly benefits from utilizing proven strategies.

Three such strategies include: (1) “consider the opposite,” (2) taking an outside view, and (3) constructing a linear decision model. Each of these can be routinized in an organization, helping build leaders’ decision-making capacities and limiting the likelihood that a decision-maker will default to common biases.

In the “consider the opposite” strategy, decision-makers are tasked with generating reasons why their initial decision may be the wrong choice (Larrick, 2004). This approach prompts decision-makers to consider information that they otherwise may not have thought about and prompts them to plan for a greater range of possible scenarios. Akin to this approach is what Klein (2007) calls a “pre-mortem”: take twenty minutes after project planning and imagine a decision has not worked out: what could have been the reason(s)?

Numerous studies have shown that the “consider the opposite” strategy increases decision-makers’ accuracy when estimating the probability of a given result occurring (Lord, Lepper, & Preston, 1984; Hoch, 1985; Soll & Klayman, 2004). When making decisions, the ability to make the best choice largely hinges upon the ability to accurately gauge the likelihood of various outcomes. By improving this gauge — specifically by reducing overconfidence and expanding the information base — this strategy can thus lead to better and more well-informed decision-making.

One possible limitation of the above strategy is if the decision-maker's biases hinder his or her ability to think of the true "opposite." For example, research has shown that when tasked with thinking of a worst-case scenario that could result from a decision, a decision-maker often thinks of only a mildly undesirable scenario, rather than the true worst case (Kahneman & Lovallo, 1993). Bringing in outside parties can help with this, such as in the "devil's advocate" form of this strategy, in which another person is enlisted to argue against the decision-maker's initial choice. However, a more effective way to combat this limitation may be through the addition of the next strategy: taking an outside view.

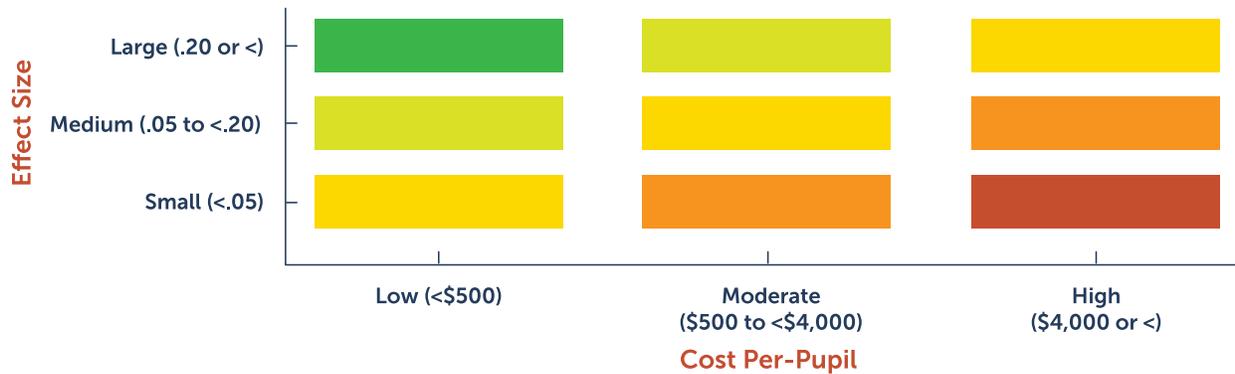
In the "outside view" strategy, a decision-maker must research several previous decisions, made by others, that share similarities with the current favored decision. The decision-maker can then examine these similar decisions through the lens of an outsider. Tetlock (2015), studying superforecasters in the Good Judgment Project, finds that the best decision-makers combine the inside and the outside views. With the inside view, individuals tend to rely on our own information and perception. No event is completely unique, and a great forecaster will always consider the outside view by looking at the base rate of similarly occurring events. While both are important in good judgment, psychologists have shown that individuals commonly rely too much on the inside view. Making individuals aware of the outside view can help reduce this bias.

In order to reduce an optimistic bias, these examples must include some similar decisions that could be seen as failures. Some researchers suggest that the decision-maker should seek out at least six similar decisions for comparison (Lovallo & Sibony, 2010). The decision-maker can then study the various properties of these previous decisions and use this data to inform the current one. For example, this might inform the decision-maker's estimates as to how likely the decision is to produce the desired outcome(s), how long it will take to implement the decision, and possible pitfalls.

As decision-makers begin to carefully examine data, this leads to the third — and more advanced — strategy: constructing a linear decision model. Also known as a "weighted additive" model or an "actuarial" model, this decision-making process requires the decision-maker to: (1) determine the available options, (2) determine the factors involved in each option, (3) assign importance ratings or "weights" to each factor, (4) rate each option on each factor, (5) use these cumulative ratings to calculate the overall "score" for each option, and (6) choose the option with the highest score. This model is frequently used, for example, when admissions committees consider various applicants. To reduce admissions committee members' biases and more accurately compare applicants on all of their respective assets, the committee might assign a weighted value to applicants' essays, test scores, etc. Once each of these factors is graded, the applicant can receive a total score, which can more easily be judged against other applicants' scores. Linear models have been shown to consistently improve decision-making in terms of both accuracy and transparency (Rolf, 2005).

This type of model can also be used more simply by including fewer factors in a given decision. For example, Kraft (2018) offers a two-factor framework for how any state or district might consider making more effective and efficient resource allocation decisions in the future. In Exhibit 24 below (recreated here based on the figure in Kraft (2018), p. 20), cost and impact are considered simultaneously. Across the top, one can classify the unit cost (or cost per student) of an intervention. Along the side, one can classify the impact, or effect size, as small, medium, or large. This approach is in line with a "weighted additive" model, but better suited to framing a discussion about cost in connection with expected outcomes. An intervention might be expensive per student, but if it has a large impact, it is ultimately "cheap." Similarly, an online tutoring program might only cost \$10 per student served. But if it has an effect size of .01, it is money that is not well spent.

Exhibit 24. Cost-Effectiveness Ratio (ES/Cost)



One of the major take-aways from the stakeholder session with business administrators was the groups’ discussion of the wide variety of methods used to make allocation decisions. Some large districts have a set process to manage the input of multiple parties (department heads, principals, superintendent, etc.), while small districts develop their budgets based on school board priorities and deliberation with the superintendent. The research provided in this section may be helpful information for decision-makers in Utah as they consider different paths forward for the funding system. Within the Phase 2 report, additional research will be included that will focus more specifically on funding approaches for identified inputs in Utah’s MSP in relation to the broader topics included in this section.

Research Objective 1c: Analysis of the role and balance of the state and local contribution

The Utah education code includes two sections particularly relevant to the balance of state and local contributions to education funding. The first (*Utah Code 53F, Chapter 2 § 103 (2)*) recognizes that “although the establishment of an educational system is primarily a state function, school districts should be required to participate on a partnership basis in the payment of a reasonable portion of the cost of a minimum program.” The second (*Utah Code 53F, Chapter 2 § 103 (3)*) describes “the manner in which the state and the school districts shall pay their respective share of the costs of a minimum program,” and “recognizes that each locality should be empowered to provide educational facilities and opportunities beyond the minimum program and accordingly provide a method whereby that latitude of action is permitted and encouraged.”

States fund K–12 education through a mix of federal, state, and local sources. Federal funding is generally provided to serve specific student populations or purposes, such as special education (IDEA funding), low-income students (Title I), and CTE (Perkins). State revenues include a state’s share of its funding formula(s) for unrestricted operating revenues and often also include specific funding for special student populations, and any additional funding streams a state may have, such as categorical and grant funding to be used for specific educational purposes. Local revenues include the local contributions required by state level funding formulas and any additional funds raised by local LEAs or municipalities to support students.

Each state varies in the mix of state, local, and federal revenues included in the total amount of funding available for students. To examine these differences, the study team used Common Core of Data (CCD) information from the National Center for Education Statistics (NCES) for the 2015–16, 2010–11, and 2005–06 school years.

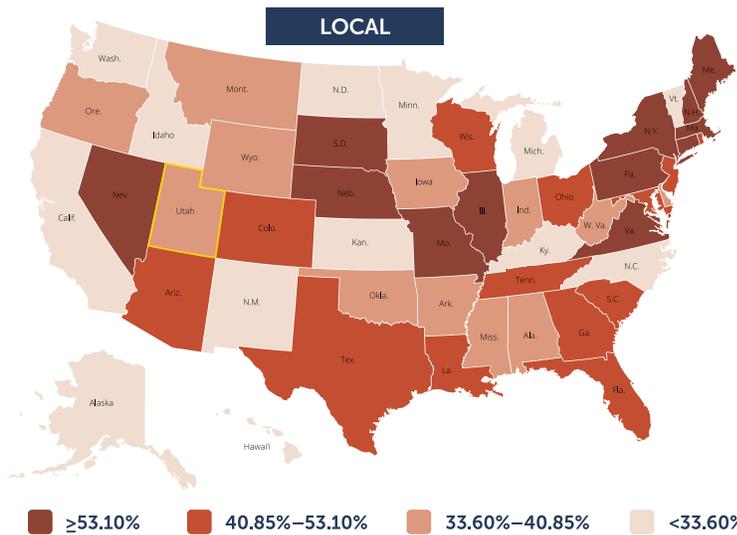
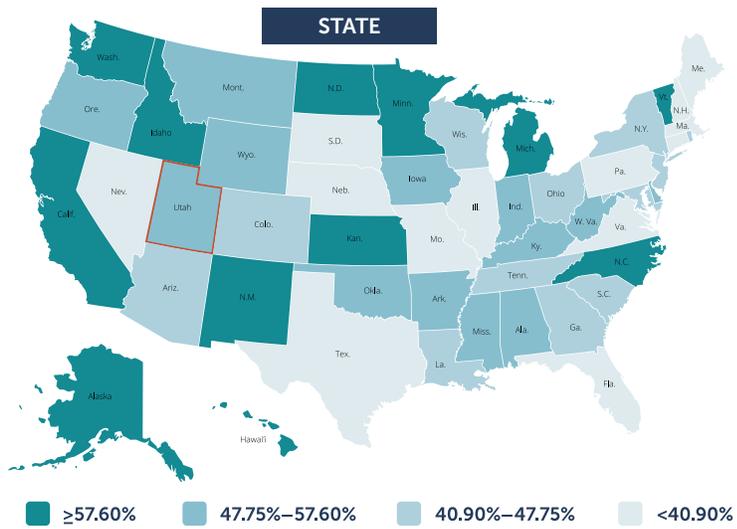
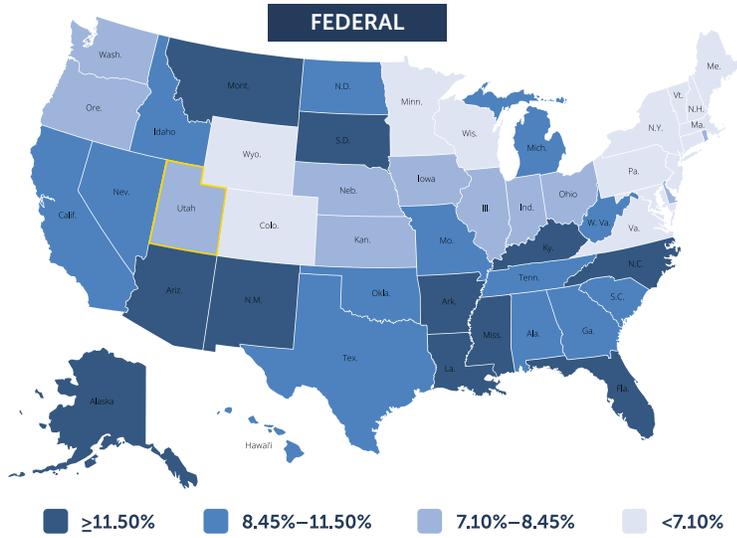
The 2015–16 school year is the most recent year for which fiscal data is available for all states and the two additional years allow for examination of how revenues have changed over time.

As shown in Exhibit 26, in 2015–16, Utah’s state share equaled 55% of total revenue, with local revenue at 37.0%, and federal revenues accounting for the remaining 8%. The national average of the 50 states is 50% state, 41% local, and 9% federal revenue. Utah has about a five percentage point higher reliance on state revenue compared to the national average and about a four percentage point lower reliance on local revenue, while receiving one percentage point less federal revenue than the national average (U.S. Department of Education, 2016).

While state revenue accounts for 50% of funding on average nationally, Illinois provides the lowest level of state support at 24%. Illinois’ local share is the highest in the country at 67%. Vermont provides the vast majority of total funding for its districts with 89% of revenues from the state and just 4% coming from locals. Vermont’s local share is only exceeded by Hawaii’s, which operates as a single statewide school district. Mississippi receives the highest share of federal funds at 15% of all revenues, with New Jersey having the lowest reliance on federal funding at just 4% of total funding.

Exhibit 25 displays by state the percent of total revenue in 2015-16 for each funding source; federal, state, and local.

Exhibit 25. Revenue by Source, 2015–16



Note: Only states are reported. Other jurisdictions, or entities, such as Washington, DC, are not included.

Exhibit 26 shows the national average and Utah figures for 2015–16, 2010–11 and 2005–06. In 2005–06, the national average split between state, local, and federal funding was very similar to 2015–16, with 49% of funding coming from the state, 41% from local, and 10% from the federal government. The 2010–11 numbers show the impact of the Great Recession nationally. State funding dropped to 47% of total revenue, while federal stimulus dollars, known as American Recovery and Reinvestment Act (ARRA) dollars, helped to increase federal share to 13%.

Utah saw a very similar pattern in funding over this 10-year period. The 2005–06 figures are consistent with the 2015–16 figures, with state share at 55%, local share slightly lower at 35%, and federal funding slightly higher at 10%. In 2010–11, state share dipped by 4 percentage points to 51%, while local share increased to 37% and federal share rose to 13%. Overall, Utah’s state share was higher than the national average in all years, while its local share was lower than the national average. Utah also had lower than average federal share in all years.

Exhibit 26. National Average and Utah Revenues by Source, 2005–06, 2010–11, and 2015–16

Year	State or National	State Share Percentage	Local Share Percentage	Federal Share Percentage
2015–16	Utah	54.6%	37.0%	8.3%
2015–16	National Average	49.9%	41.1%	9.0%
2010–11	Utah	50.9%	36.5%	12.6%
2010–11	National Average	46.7%	40.0%	13.3%
2005–06	Utah	55.1%	35.3%	9.6%
2005–06	National Average	49.1%	40.9%	9.9%

Examining the 50 states shows a wide variation in the distribution found across the three revenue sources. There is no specific research on the “best” distribution, and each state’s finance system and state policies and laws dictate its final distribution. This includes the required local match each state mandates and the ability for local districts to generate additional funding above that provided by the state funding system.

Several organizations measure the equity of funding systems, including Education Week, the Urban Institute, and the Education Law Center. These groups look at the progressiveness and regressiveness of each state’s funding system. In other words, they measure how well the funding systems provide additional funding for students with special needs, often measured by those students in poverty. Many of these groups provide a letter grade for each state, and Education Week also publishes an Equity Score.

Using Education Week’s Equity Score from their *Quality Counts 2019* publication, which examines 2015–16 revenue data, the study team examined the relationship between state and local share percentages and each state’s Equity Score. Exhibit 27 shows the equity score for each state. A complete table of state and local share, and equity scores is included in Appendix E. The study team examined the correlation between both the state and local share percentages and equity score for the states.

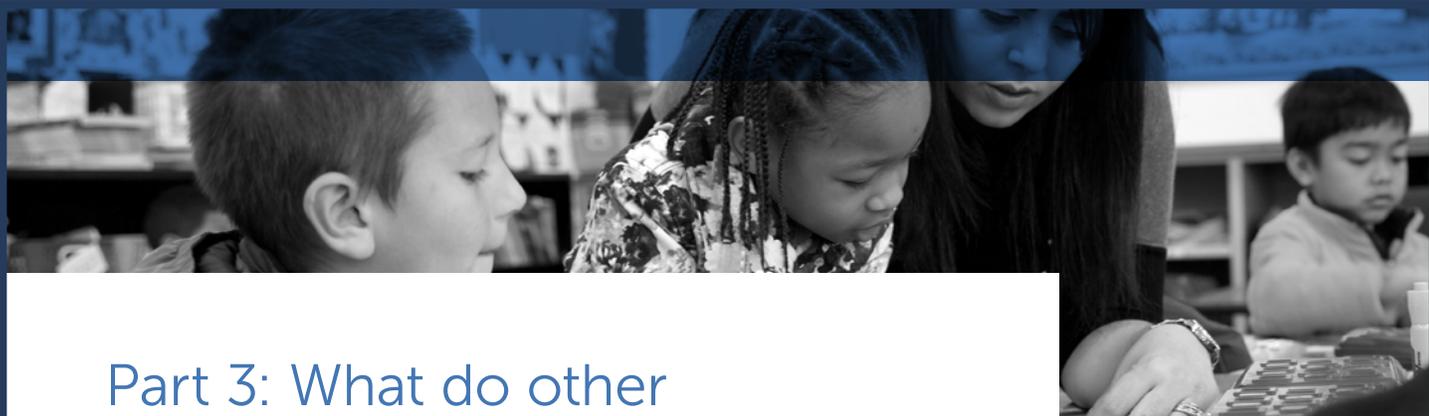
Maryland offers an example of a state that goes beyond setting a local contribution and instead sets a distinct goal for the local and state split of funds. Since the implementation of its latest funding formula in the early 2000s, the state has targeted a 50/50 split for each of its four funding formulas. This includes its foundation, compensatory education, English Learner, and special education formulas. The state calculates the targeted funding within each formula, generates a 50/50 split based on districts' wealth and then provides a minimum level of state funding within each formula to ensure every district receives some state funding. Since local share is determined as percent of total funding, tax rates are not fixed and local effort may need to fluctuate to meet the full local share.

An alternative to setting a specific required percentage would be to continue to set a required local contribution, as Utah currently does, but to increase the required level to generate a higher local share to more evenly split the share of funding from state and local sources. Two examples of this are **Ohio** (44.90% state, 47.40% local) and **Wisconsin** (45.50% state, 47.30% local).

In either scenario, the state would also need to consider how to address local revenues in excess of what is required to fund the minimum program in order to address equity. Two examples illustrating the range of approaches include **Wyoming** and **Nevada**. Wyoming establishes a district's foundation program, then compares the amount of funding needed to provide that program against a district's available local revenue sources raised by the required local effort. If a district has less revenues than needed, the state provides additional funding. If a district has additional revenues, then these districts must rebate these funds back to the state through a recapture process; these funds are then redistributed to the other districts. This promotes taxpayer equity in the state, both setting the same level of tax burden in each district and ensuring that funding is not based upon the wealth of a community. Nevada takes a different approach. It sets a required tax rate, but then considers just one-third of the taxes collected as available local funds for the minimum program, with two-thirds of funds available to the local district. This has led to large differences in the level of funding in districts in the state.

Appendix E offers full statutory language for all example states.

The study team recommends that Utah continue to both set a required local contribution amount, while still being cognizant of the equity issues that may arise without limits or equalization of the local revenues raised above the minimum program.



Part 3: What do other pathways offer?

In Part 3, the study examines other possible pathways for funding equity in the system. The first section examines enrollment-based funding model incentives. To complete this portion, the study team engaged in a focus group with Utah stakeholders to discuss the possible fiscal impacts of changing student counts. Using the results of the literature review, examination of policies in other states, and data modeling, the study team identifies the advantages and disadvantages of the different methods.

Additionally, the policy of Year Round Schooling (YRS) is examined. Based on a review of existing literature and current policies, the study team summarizes available evidence of the impact of this alternative calendar both within Utah and across the country.

Research Objective 3b/3c: Examination of the behaviors the current enrollment-based funding model incentivizes and alternative proxies

Funding for schools is often the largest single funding item for state governments. The student count processes used across states determine the total level of funding allocated through state funding formulas.

For states, decisions can be related to the types of incentives a state wants to build into the funding policy, or the level of precision it attempts to build into the counting and budgeting processes. These state decisions can have significant funding implications for districts. This section examines the key policy decisions each state makes when designing its student count, the impact those decisions can have on the count, and the counts used across the states. It also includes a discussion of competency-based funding as an alternative approach to current student count practices.

The first policy decision that states make is whether student counts are based upon membership or attendance:

- Membership is the number of students that are enrolled on a given day or during a given period.
- Attendance is the number of students that are present on a given day or during a given period.

Defining enrollment as membership works to identify the total number of students served by a district, and often also the count used for accountability purposes. Membership counts tend to produce the highest student counts, as students do not need to be present to be counted. Attendance, on the other hand, would produce lower student counts as attendance tends to be at a lower rate than full membership. Attendance rates are also

commonly correlated with the need of a district, meaning a district with higher student need is more likely to have increased rates of absenteeism. As such, high-need districts can be negatively impacted by count policies that rely on attendance. Conversely, a criticism of the membership approach is that it does not incentivize districts to focus on maintaining high attendance to receive funding.

The second key policy decision is the specific count mechanism used. These various mechanisms can be considered broadly in four different categories.

Exhibit 28. Specific Count Mechanisms

Specific Mechanism	Description
Single count:	count of students on a specific day
Multiple counts:	count of students on more than one specific day
Average (short period):	the average count of students over a shorter set period of time, such as a 20-day window
Average (long period):	the average count of students over a longer set period of time, typically the majority or entirety of the school year

As with the issue of whether students are counted based upon membership or attendance, the method for counting students will also have both fiscal impacts and other incentives for districts.

Counting students on a single day, while straightforward, can have the unintended consequence of not providing funding for students that enroll in a district after the count day and further does not incentivize districts to ensure student attendance throughout the year. Using more than one count day can partially address these two issues, while using an average over an extended period of time further increases the likelihood that districts' student counts accurately reflect the number of students they serve.

States also make decisions regarding how to address declining enrollment or growth, as well as how to address students enrolled less than full time.

Utah's Current Student Count

Utah uses an ADM count that examines the average membership for each district over the course of the school year, measuring membership on each day of the school district's year. As will be shown in the section below, 38 states use ADM as part of their student count, but the variation in how ADM is applied is wide and few states measure ADM in exactly the same way. One important consideration is that Utah utilizes the 180/990 rule, requiring both a minimum number of school days (180) and a minimum number of hours (990). These minimums can have impacts on students counts for districts looking to provide alternative instructional programming such as Competency-Based Education. The section below examines the different approaches used nationally, including how states address students that attend school less than 100 percent of the time.

Policy Scan of Current Statewide Student Count Practices

The study team reviewed how students are counted for state funding formulas in all 50 states and the District of Columbia (DC). While each state is unique in the specifics of how it counts students, there are a number of commonly used approaches.

Most states (38, including DC) base their student counts on membership. However, states still vary in the specific mechanisms they use to count either student attendance or student membership.

The following exhibit summarizes the approach taken by each state.

Exhibit 29. Specific Count Mechanism Taken by State

Specific Mechanism	Membership	Attendance
Single Count	Delaware, District of Columbia, Indiana, Louisiana, Maine, Maryland, Massachusetts, New Jersey, South Dakota, West Virginia	Colorado, Connecticut, Iowa, Kansas
Multiple Counts	Florida, Georgia, Michigan, Montana, New Mexico, South Carolina, Washington, Wisconsin	
Average (short period)	Alabama, Alaska, Ohio, Vermont	Kentucky, Illinois
Average (long period)	Arizona, Arkansas, Hawaii, Minnesota, Nebraska, Nevada, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Virginia, Wyoming	California, Idaho, Mississippi, Missouri, New Hampshire, New York, Texas

Within each of these categories, the specifics of the exact dates, frequency of count days, and length of count windows vary. Examples of each type of student count are provided below.

Single Count

Typically, states using a single count day have chosen a day early in the school year. For example, **South Dakota** uses the number of students that are enrolled on the last Friday of September, while **Connecticut** uses the number of students that are in attendance on October 1st.

Multiple Counts

States basing their student count on one or more days range in the number of days they consider, from two days (typically one day in the fall and one in the spring) up to nine days (**Florida**). For example, **Montana** bases its student count on the number of students enrolled the prior year's October 1st and February 1st, while **New Mexico** uses the number of students enrolled on the prior year's 80th and 120th days of school.

Average (short period)

A limited number of states base their Average Daily Membership (ADM) or Average Daily Attendance (ADA) on a shorter set window of time. **Alabama, Alaska, and Vermont** base their ADM on a set 20-day window, while **Ohio** bases its ADM on the average number of students in attendance during the first full week of October. **Kentucky** and **Illinois** based their ADA upon a window of time instead of a full year. Kentucky's is based upon the highest two-month average of students in attendance over the past two years, and Illinois similarly uses the highest three-month average in the prior year.

Average (long period)

Utah's primary approach to counting students, ADM, falls into this category (with a secondary count to adjust for growth). Most states that use ADA or ADM base these figures on the average number of students over the entire school year, or at least the majority of a school year. States using a partial school year include **Arizona** (the first 100 or 200 days of the school year), **Arkansas** (first three quarters), and **Idaho** (highest 28 weeks). All other states in this category, including **Nevada, North Dakota, and Utah**, use an average of the entire school year.

Other Factors

There are two other key decisions that states make to address student counts: (1) how to address declining enrollment or growth, and (2) how to count students that are enrolled less than full time.

Addressing Declining Enrollment or Growth

States make different adjustments to account for either increasing or declining enrollment. To address declining enrollment, some states use an average across years (of count days, windows, or annual figures). To address growth, some states make adjustments for when current year student counts are higher than the prior years. **Utah** is an example of the later. Utah uses prior-year ADM, but also adjusts this figure based on a growth factor determined by fall enrollment counts. One approach to address both declining and increasing enrollment is to use a “best of” or “greater of” approach, such as in **Wyoming**. Wyoming determines a district's ADM based upon the greater of either the average enrollment of the prior three years (addressing declining enrollment) or the prior year's enrollment.

Partial Student Counts

Finally, states differ on how they count students that are enrolled less than full time. For example, **South Carolina** counts any student enrolled at least 50% time as a 1.0 (Full-Time Equivalent) FTE, and anything less as a 0.5 FTE. In **Wyoming**, the threshold is higher, with students enrolled less than 80% time counted as partial FTEs, and anything above that threshold as 1.0 FTE. **Alaska** similarly determines membership based upon the number of days in which an enrolled student is scheduled to attend a school, rounded to the full day (therefore anything above 4 days a week, 80%, would be a full FTE).

Exhibit 30 below identifies student count polices for all 50 states and DC.

being advanced in aligning their state policies to competency-based education: **Iowa, Kentucky, Maine, New Hampshire, and Oregon**. The report found that the leading states have funded efforts to develop definitions of competency-based education, to develop and implement common assessments and grade-level or course-specific competencies, and to develop resources and networks to pilot competency-based education. However, it did not identify any changes in state funding formulas to distribute funding differently (Brodersen, Yanoski, Mason, Apthorp, & Piscatelli, 2016).

A June 2018 iNACOL report, *State Funding Strategies to Support Education Innovation*, identifies “17 states, including Utah, that have comprehensive policy alignment and/or have established an active state role to build educator capacity in local school systems for competency-based education. Thirteen states have open state policy flexibility for local school systems to transition to competency-based education” (iNACOL, 2018). The report documents examples of funding strategies to support competency-based education, including:

- **Utah** — In 2016, the Utah legislature created the Utah Competency-Based Education Grants Program, a pilot program provides grants to school districts and charter schools to transform learning to personalized, competency-based learning. In the 2017–18 school year, USBE, in partnership with national experts and LEA leaders, conducted site visits to competency-based education sites, hosted a state workshop and released the Utah Competency-Based Education Framework. A planning grant program will be released in FY 2021 to support LEA planning for competence-based education, with a competitive competence-based education implementation grant program slated for FY 2021–22.²²
- **Vermont** — The Vermont Agency of Education used one-time, repurposed state funds to enable school districts to participate in a series of professional development seminars on a systemic approach to proficiency-based learning. Approximately half of Vermont’s school districts participated in the series.
- **Rhode Island** — The Rhode Island Office of Innovation categorized and cataloged the state’s work for student-centered learning through a Statewide Personalized Learning Initiative. In partnership with the Rhode Island Department of Education, the Highlander Institute, and other organizations, the office launched the initiative with a white paper, creating shared definitions and an understanding of what personalized learning means (and does not mean) in Rhode Island. This white paper served as a tool for organizations to raise funds for creating a community of practice for personalized learning.
- **South Carolina** — The South Carolina Department of Education (SCDE) developed the South Carolina Framework for Personalized Learning, which identifies the essential elements in transforming learning systems to ensure students attain the knowledge, skills, and characteristics of the Profile of a South Carolina Graduate. It also repurposed approximately \$1 million in recurring funds from SCDE’s operating budget and created an Office of Personalized Learning with staff to work as liaisons with schools, engage communities, provide professional development, and support school leaders and educators working to implement personalized, competency-based learning.

A handful of states have implemented a completion-based funding model for online schools, which may provide an example of how states might consider different funding formulas for competency-based education. It is important to note, however, that completion-based is not the same as competency-based; completion-based funding compensates schools when students meet predefined milestones, which are not necessarily competency-based (Miller, Just, & Cho, 2016; p. 5).

New Hampshire utilizes a completion-based funding model for the state’s online/virtual high school, the Virtual Learning Academy Charter School (VLACS). Through a memorandum of understanding, the state

²² For more information see: <https://www.schools.utah.gov/curr/competencybased?mid=4181&tid=0>.

converts the school’s completions into membership, enabling the state to distribute funds based on average daily membership, as required by the state. The state funds “VLACS based on predicted completions each year and then reconciles predicted with actual completion rates at the end of the academic year. Any surplus or deficit carries over to the following year’s funding” (Miller, Just, & Cho, 2016; p. 6). **Florida** utilizes a completion-based funding model for students taking online courses, but completion is measured by passage of an end-of-course assessment (Miller, Just, & Cho, 2016; p. 3). **Minnesota** also funds based upon completion of online courses and calculates the average daily membership equivalent as the basis for payment (Minn. Stat. 124D.095 (2019), Subd. 8).

As no state has implemented a broad scale state funding mechanism for competency-based education state-wide, beyond the traditional means of counting students, any change to how states count students for funding purposes should be modeled to demonstrate the potential impact of that change — and identify any unintended consequences — on a variety of student, school, and district scenarios.

Student Count Advisory Group

On September 20th, the Student Count Advisory Group met. The advisory group including school board members, budget officers, stakeholders, and state policy staff. The meeting was focused on understanding the concerns districts have with the current student count policies in relationship to competency-based funding and on beginning to explore possible paths for identifying a solution.

Stakeholders identified that districts have a perverse incentive to restrict students from progressing more quickly, as districts can lose funding if students do not take a full course load in later grades.

District staff and board members discussed the difficulty in providing flexibility to students and families within the current student count structure. Districts are working to allow students to progress through the system at a pace that best meets their academic needs, which includes students taking courses outside of the traditional school calendar and/or showing competencies in subjects earlier in their academic progression than the usual course progression.

The group did not focus on the need for a new student count system in total, but instead focused on adjustments to the current approach that would allow for more flexibility for students and families.

A possible solution would allow districts to receive full funding, in this case 13 years of funding, regardless of when competency is shown. It was highlighted that current funding laws might allow for this with the restrictions actually aligned to rules/policy versus law. It was agreed that the group would investigate the alternatives during its further work.

Research Objective 3d: Analysis of the impact of year-round schooling models

Today, school calendars have settled into a common approach wherein students attend school continuously from fall to early summer, except for holiday breaks, and then take a long break over the summer. However, this typical calendar has not always been the norm, and some districts have always employed alternative approaches. Generally, these alternatives are referred to under the broad name of Year-Round Schooling (YRS), also referred to as a “balanced calendar.”

YRS typically structures instructional time so as to provide students with shorter and more frequent breaks, in some cases also extending instructional time, though this is typically viewed as a separate policy.

Two common types of YRS are the **single-track** and **multi-track**. Single-track variation comes in the form of 45 days on and 15 days off or 60 days on and 20 days off. The defining aspect of this type is that students are all on the same calendar. In contrast, multi-track refers to multiple school calendars or “tracks.” Generally, as many as three tracks may exist at one time (Boyd, 2018). The exhibit below illustrates the difference between these two types.

Exhibit 31. Multi-Track vs. Single-Track

Single-Track

AUG Instruction	SEP Instruction	OCT Break	NOV Instruction	DEC Instruction	JAN Break	FEB Instruction	MAR Instruction	APR Break	MAY Instruction	JUN Instruction	JUL Break
ALL STUDENTS											

Multi-Track

AUG Instruction	SEP Instruction	OCT Break	NOV Instruction	DEC Instruction	JAN Break	FEB Instruction	MAR Instruction	APR Break	MAY Instruction	JUN Instruction	JUL Break
STUDENT GROUP A											
AUG Break	SEP Instruction	OCT Instruction	NOV Break	DEC Instruction	JAN Instruction	FEB Break	MAR Instruction	APR Instruction	MAY Break	JUN Instruction	JUL Instruction
STUDENT GROUP B											

History of YRS in the United States and in Utah

Historically, the school year calendar, whether it be YRS or traditional school year, was based on community needs, and varied community to community. In fact, before 1890, schools in urban regions were following an 11-month calendar. But by 1900, the traditional school year calendar began to gain popularity, though it still competed with the YRS calendar in some regions (Presden, 2012). Locations such as Bluffton, Indiana; Newark, New Jersey; Aliquippa and Ambridge, Pennsylvania; Nashville, Tennessee; and Omaha, Nebraska implemented a year-round calendar system between 1904 and 1924.

In some cases, YRS was implemented in cases of high population growth. For example, as late as 1968–1970, YRS was established in Missouri, Illinois, Minnesota, and California to specifically address the rapid growth in population (Presden, 2012). And in 1972, California began to create multi-track schools to further address growth. It was during this time that educators gathered to create the National Association for Year-Round Education (Presden, 2012).

In Utah, YRS began to increase in the late 80s/early 90s, according to an article written in 1991 in the *Deseret News*. Specifically, in 1987, YRS surged after legislatures closed down buildings that did not operate at 70% capacity or more. With capital expenditures declining and enrollment growing, YRS was seen as a strategy for accommodating this growth. In 1990–91, there were 65 YRS schools in Utah, all but five of which were elementary schools. Among the typical YRS schedules, the most popular in Utah is 45 days on and then 15 days off (Desert News, 1991).

Relevant YRS Research

Generally, research into the value of YRS over traditional school calendars has been limited. The research that does exist tends to focus on three areas: (1) impact on student achievement, (2) impact on costs, and (3) local impact/support. In fact, these areas of research align with the common arguments for and against adopting YRS. This may suggest that the interest in assessing YRS is often driven by advocacy one way or the other. The exhibit below outlines the common arguments on both sides of the issue (Skinner, 2014).

Exhibit 32. Common Arguments For and Against YRS

For YRS	Against YRS
Impact on Student Achievement	
<ul style="list-style-type: none">• Mitigates “summer learning loss”• Creates opportunities for remediation• Increases student achievement	<ul style="list-style-type: none">• Distracts from more effective reforms
Impact on Costs	
<ul style="list-style-type: none">• Results in cost savings	<ul style="list-style-type: none">• Adds costs for facilities, operations, staff, etc.• General challenges with implementing multi-track schools
Local Impact/Support	
<ul style="list-style-type: none">• Prevents staff burnout	<ul style="list-style-type: none">• Creates scheduling issues for families• Eliminates summer job opportunities• Negatively impacts local summer industries

Note: The National Association for Year-Round Education (NAYRE) advocates for YRS, while the National Coalition for the Traditional School Year and Summer Matters advocate against it.

Summary of Available Research

The limited available research into the impact of YRS on student achievement is mixed. While Cooper, Valentine, Charlton, and Melson (2003), in a meta-analysis, found some evidence for a positive impact on achievement, the authors noted there were often weak research designs and caution against strong inferences. More recent studies are also somewhat mixed, including a 2010 study employing more rigorous research methods, which found no impact of YRS on achievement (Wu & Stone, 2010).

With respect to its impact on costs, there is some evidence supporting cost savings resulting from multi-track school calendars, particularly with respect to capital and operational costs (Daneshvary & Clauretje, 2001). However, some research suggests these savings come at a cost to achievement (Graves, 2010), and there is some evidence that other approaches, such as single-track calendars, may actually *cost more* (Joint Legislative Audit and Review Commission [JLARC], 2012).

Finally, assessments of public opinion on YRS have evolved over time. An early meta-analysis, Cooper et al. (2003), suggested attitudes were generally positive. However, more recent studies find negative reactions to be more likely (von Hippel, 2015), and suggest there may be unintended impacts on the local workforce. For example, a 2013 study finds that maternal employment declines when available childcare is broken up into shorter intervals (Graves, 2013).

YRS Implementation in Utah

In 1996, Utah had the second highest number of year-round schools (Shields, 1996). Between the years 1990 to 1995, data from a school district in Utah were used to compare a multi-track YRS calendar and a traditional calendar. There were several findings that came out of this small study. First, it was revealed that YRS schools provided “slightly superior educational experience” in regard to reading ability. Non-academic outcomes between YRS schools and traditional calendars were the same; however, “student academic performance in YRS over a 6-year period exceeded the performance of students in traditional schools” (Shields, 1996). In a 2015 news article, Butterfield Canyon Elementary and Herriman Elementary, both of which are part of the Jordan School District in Utah, were converting from YRS to traditional calendars. The article took a look at the primary reaction to this change. During this time, Jordan School District was — and still is — ranked as the fourth largest school district in Utah. With respect to local support, the news article found that 80% of teachers favored the YRS, whereas 70% of parents preferred the traditional calendar (Wood, 2015). As of 2019, both of these schools are currently on a traditional school year calendar.

Assessment of YRS Impact on Spending Efficiency and Student Learning

Impact on Spending Efficiency

Regarding the cost savings of utilizing YRS, studies have not conclusively proven it to be effective. As an example of construction costs, it was found that districts did save money without having to build new structures (or as many) compared to a traditional calendar school (Inger, 1994). Another study found that when “average daily attendance, test performance and socioeconomic variables” were taken into account, YRS indicated spending efficiencies compared to traditional calendars (Daneshvary & Clauretje, 2001).

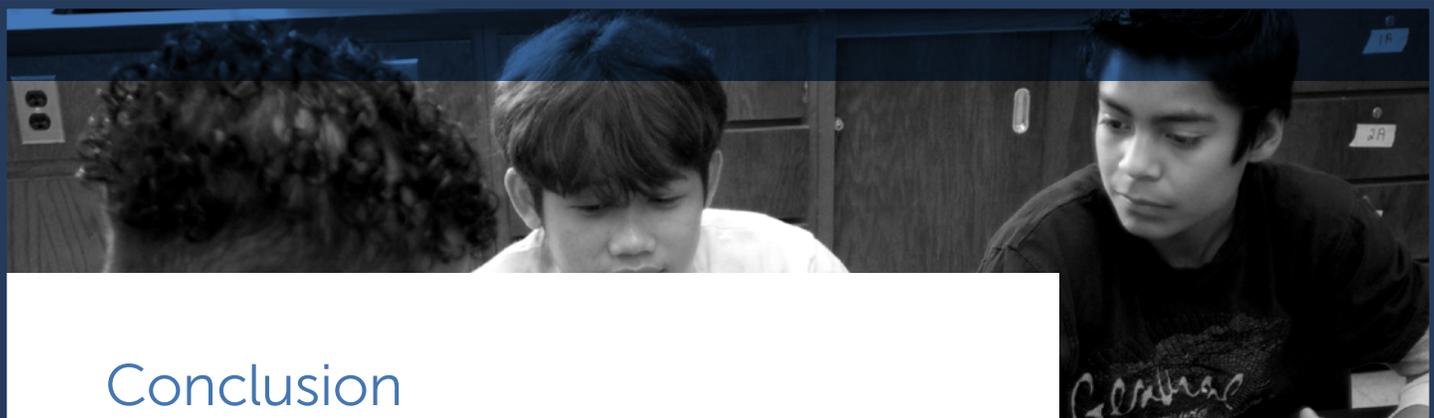
However, based on the Joint Legislative Audit and Review Commission, “literature indicates that YRS using a multi-track design may delay or avoid projected capital expenses, while a single-track design may *increase* operating costs” (JLARC, 2012). When transition costs from traditional to YRS were included — such as “feasibility studies, administrative planning time and teacher in-service training,” and operating costs of a school running for approximately 242 days a year, maintenance, utility increase, and availability of administrators and staff for 12 months — the cost savings were mixed (Inger, 1994). And, as noted above, some research suggests any savings may come at a cost to achievement (Graves, 2010).

Impact on Student Learning

In a very small case study with three schools, it was found that YRS students compared to traditional calendar students “outperformed” compared to “mean scores for fifth grade reading national percentiles and the growth from third to fifth grade in both subjects” (Ramos, 2006). The authors continued that reading achievement compared to traditional calendar year was not statistically significant (Ramos, 2006). In fact, studies have failed to show significant differences between YRS and traditional schools due to limited evidence (Zykowski et al., 1991; Cooper et al., 2003; Wu & Stone, 2010). Hence, additional research is needed to validate if student learning is positively impacted by YRS.

In conclusion, while there is some suggestive evidence in Utah and beyond regarding the impact of YRS on costs and student outcomes, the findings are mixed and limited. This suggests that any consideration of YRS as a policy matter might benefit from pilot testing or other approaches to assessing the effectiveness of the policy in meeting the intended goals within the specific implementation context in Utah.

In Phase 2, the study team will conduct some analysis regarding the extent to which YRS implementation is a significant factor in spending efficiency.



Conclusion

As the state of Utah continues to evolve and change, its public education system must adjust to provide the appropriate supports for students and families in order to serve the educational and economic demands of the next generations of Utahns.

This study examines the function of the funding system for the public education system with a specific lens towards alignment between Utah's vision for students and the Minimum School Program as defined by statute. It serves as a baseline analysis of the distance between Utahns' expectations of a minimum school program and how the Minimum School Program (as defined in statute) structures the flow of funds to students in the state of Utah. It does so by examining distribution formulas and the roles of state and local jurisdictions in funding the needs of Utah's students.

Part 1: What are the current expectations in Utah for a minimum school program?

The analysis in Part 1 examines the state-endorsed or adopted standards, assessments, and strategic documents and compares them to stakeholder perceptions of an ideal minimum program. It concludes by identifying core components and subcomponents of a minimum school program, organized using identified levels of support across the sources of information considered.

In summary, Utah stakeholders reported that the vision set by the USBE strategic plan aligns to their own vision for Utah's schools, and they emphasized the importance of early learning, safe and healthy schools, and a focus on the teacher shortage. Stakeholders also expressed confidence in the core standards and the related scope and sequence, noting them as the right path. However, they noted that there is one significant exception with respect to social-emotional learning and emphasized the need for integrating this within a holistic academic program.

Part 2: How does the current funding system align with these expectations?

The analyses in Part 2 consider the extent to which the current statutory Minimum School Program aligns with these core components, the equity of the current system, alignment with evidence-based practices, and a review of the balance between state and local contributions to the education system in Utah.

Research Objective 1b: Evaluation of current distribution formulas

With respect to alignment between statute and the identified core components, this report finds that there is general alignment between the expectations of the minimum school program, the target outcomes based on the PoG, and the assignment of funding based on statute and related categorical programs. However, stakeholders noted the burden of pursuing grant funding under the Minimum School Program as an area for additional exploration.

Research Objective 1b: Equitable Access to the Minimum School Program

In terms of equity, this study finds that per student resources, revenues or expenditures, increase across the quintiles along with wealth per pupil. This may suggest that a relationship exists between local wealth and the educational resources available per ADM, and that Utah's school funding system is not as equitable as it could be.

With respect to horizontal equity — comparing resources across school districts — using a standard metric in the research literature, in both years examined (2013–14 and 2017–18), only average teacher salary meets the equity standard, and, when comparing resources with weighting for the need of students, there is little difference in the standard metric, indicating that the funding formula is not providing sufficient additional resources for students with greater needs.

Finally, with respect to fiscal neutrality, examining the relationship between the wealth of a district and the resources it has for educating its students, many of the fiscal neutrality measures exceeded the standard, indicating that to some degree, district resource levels are related to district wealth.

Research Objective 1b: Alignment with evidence-based practices

The review of evidence-based practices points to a growing body of rigorous national research providing evidence to inform future policy discussions in Utah, including directing resources to high need students, targeting investments, and building effective decision-making practices.

Research Objective 1c: Analysis of the role and balance of the state and local contribution

The review of the balance of state and local contributions in this section finds that Utah is generally more reliant on state funds than the national average, but finds no evidence that the division of funding by source bears any relationship to overall equity.

Moreover, the study team recommends that Utah continue to both set a required local contribution amount, while still being cognizant of the equity issues that may arise without limits or equalization of the local revenues raised above the minimum program.

Part 3: What do other pathways offer?

Finally, Part 3 of this report examines two specific, policy-relevant topics: the incentives and alternatives to enrollment-based funding, and the impact of year-round schooling.

Research Objective 3b/3c: Examination of the behaviors the current enrollment-based funding model incentivizes and alternative proxies

A key takeaway from the review of methods by which states count students for the purpose of education funding is that most states still utilize more traditional methods of counting students for state funding purposes, even in states that are pursuing competency-based systems.

Given that no state has implemented a broad scale state funding mechanism for competency-based education statewide, this section of the report concludes that any change to how states count students for funding purposes should be modeled to demonstrate the potential impact of that change on a variety of student, school and district scenarios.

The engagement with stakeholders investigating competency-based funding systems and its interaction with funding reveals a consensus that current funding laws might allow for necessary flexibilities. However, the conversation is ongoing. Modeling of any changes should be conducted prior to implementing.

Research Objective 3d: Analysis of the impact of year-round schooling models

This analysis of research into year-round schooling finds that while there is some suggestive evidence in Utah and other states regarding the impact of an alternative calendar on costs and student outcomes, the findings are mixed and limited.

The section concludes that any consideration of year-round schooling as a policy matter might benefit from pilot testing or other approaches to assessing the effectiveness of the policy in meeting the intended goals within the specific implementation context in Utah.

Looking ahead to Phase 2

The aims of this report and the first phase of this study overall were primarily to examine and reflect the current system in Utah with respect to a few key aspects of the system. While the study team identifies key findings and reaches some conclusions, generally this first phase represented the beginning of the work, not the end.

In the second phase of the study, the team will draw on a broader base of quantitative and qualitative data, continue to engage with Utah stakeholders, and conduct more comprehensive analysis. This includes conducting a few specific analyses, including:

- a cost function analysis to examine cost differences by educational context,
- a deeper examination of current equalization programs, including the impact on equity of requiring a local funding match, and

-
- a modified successful schools analysis to understand how high-performing districts allocate resources and utilize non-monetary resources to improve student outcomes.

Ultimately, Phase 2 of this study will conclude with a final report detailing the results of these analyses, and including actionable recommendations to address discrepancies between funding and intended purposes or how to otherwise improve equitable access in the state of Utah.

Appendix A

Stakeholder Summary

The following summarizes the stakeholder engagement approach for Phase 1 of the study. All quotes are not verbatim, and are slightly modified for brevity. Participants are not identified.

Engagements²³

- Enrollment Input Session: September 20th, 2019
- MSP Input Session 1: September 17th, 2019
- MSP Input Session 2: September 18th, 2019
- MSP Input Session 3 (Business Administrators): October 24th, 2019
- MSP input Session 4 (Charter LEA Directors): December 9th, 2019
- Phone Interviews: 11 total interviews held throughout September

Stakeholder Profiles

Minimum school program Input Sessions #1 and 2

- 15 total stakeholders participated
- The stakeholders who engaged in this Phase 1 report were superintendents representing the full geographic and demographic range of Utah, as well as district business administrators
- 8 Superintendents or Assistant Superintendents
- 6 Business Administrators
- One Director of Accounting

Minimum school program Input Session #3 (Business Administrators)

- 35 Business Administrators

Minimum school program Input Session #4 (Charter LEA Directors)

- 7 Charter School Directors

²³ Note: Some individuals participated in both an interview and an input session

Districts Represented

- Alpine School District
- Cache School District
- Duchesne School District
- Granite School District
- Iron School District
- Juab School District
- Millard School District
- Nebo School District
- North Summit School District
- Ogden School District
- Provo School District
- Rich School District
- San Juan School District
- Sevier School District
- South Sanpete School District
- Weber School District
- Athenian eAcademy
- Guadalupe School
- Lumen Scholar Institute
- Monticello Academy
- Roots Charter High School
- Success Academy
- Summit Academy

Detailed Summary

Minimum school program Input Sessions #1 and 2

The superintendents shared a concern that the current funding is not sufficient to support an expanding set of goals that schools are expected to accomplish, and they value local control with state guidance and support.

Participating superintendents reported strong agreement that the current funding system is equitable. According to their comments, the MSP and Weighted Pupil Units structure works as a tool for distributing funds. Rural district superintendents shared that the funds provided from Necessarily Existent Small Schools (NESS) help them adjust for a lack of economies of scale. “Core mastery is what we’re accountable for,” the superintendents agreed. They are confident in the quality of the K–12 curriculum with a solid scope and sequence that helps students grow academically. They are proud of steps taken to ensure high school students take more challenging coursework. They believe the core work should be around preparing all students for college and entry level jobs in the workforce. The superintendents would like the opportunity to pilot innovative approaches that inform teaching and learning that suit the local context.

Superintendents shared an interest in increased support for meeting the needs of ELs, students impacted by trauma, and support for the effects of poverty.

Some participants shared an interest in moving to a system that weights funding by pupil needs, especially for the rapidly growing districts with larger high-poverty and EL populations, but this finding needs further exploration with a wider pool of stakeholders. Several superintendents made strong statements in favor of equity (as defined based on student need) over funding systems based on equality. Multiple rural districts shared that the pressure to pursue grant funding takes away from their capacity to attend to other district needs.

Additionally, integrated social-emotional learning and expanded mental health support is necessary throughout the public education system.

“The demands of schooling have changed in the 21st century, and autonomy and purpose are just as important as mastery.” All twelve superintendents say they have rapidly growing needs to work with students on strengthening social and emotional learning. Two of the superintendents in our focus groups had just dealt with traumatic incidents in their districts. They reported needing more counselors, psychologists, and nurses to support the mental and emotional health components of the Portrait of a Graduate.

Career and Technical Education is an asset.

Stakeholders emphasized that any definition of an MSP needs to allow for free movement of students and not stigmatize or lock in those students who choose a career track. Preserving multiple pathways, all equally valued, is a priority for the superintendents. The superintendents do want to see the labor market data for various careers and to share those with students to help them inform their educational choices.

A shortage of teachers is a priority issue for superintendents.

Offering pay increases in direct competition with other districts that can afford to raise salaries without straining local fiscal capacity is an issue. All districts face recruiting challenges, with rural districts reporting only one qualified applicant for an opening. In rural districts, there remains a concern about being able to offer enough advanced math and science courses so that students are prepared to succeed at Utah universities due to a lack of both qualified staff and resources.

Early Learning should be expanded.

The superintendents made the case for the need to invest more in early learning. They shared an observed gap in school readiness between students that attend preschool and students that do not, making the first years of schooling more challenging for the public education system.

A unanimously supported quote shared by a superintendent summarized the sentiments of the two input sessions:

“We don’t have enough resources overall. Don’t redistribute what’s in an already too small pie — increase the size of the pie for all.”

Minimum school program Input Session #3 (Business Administrators)

On October 24th, WestEd joined a larger meeting of Business Administrators (BAs) to gather input on the Phase 1 of this report, with a focus on processes in place for decision-making with respect to school funding. Approximately 35 BAs were in the room. While there was no specific identification of districts represented, the number of BAs out of the total number of districts in Utah assured ample representation in the room.

The following key prompts were used in the session:

Describe your local decision-making process for strategically allocating resources.

What should we consider as we prepare for Phase 2 analyses?

The BAs reported a variety of methods for allocating resources and no single process reflected the group. Common elements included use of the district's strategic priorities, conferring with superintendents and/or a small cabinet of department leads, and a small number included other district stakeholders.

No direct stakeholder quotes were collected in this session due to the size of the group. Instead, facilitators gathered input via post-it notes at the close of the session with an open request for additional comments. Common themes (3 or more post-its out of 20 collected) from the post-it notes are included below:

The research team should examine...

- Role of bonds (4 post-its)
- Grant requirements for funding (3 post-its)

Funding is impacted/influenced by...

- School boards and Local politics (3 post-its)
- Economic gaps in local populations impacting district funding (state vs. local role)

Minimum school program Input Session #4 (Charter LEA Directors)

On December 9th, a virtual session was held with seven charter school representatives. The schools represented a mix of elementary, middle, and high school grade bands. They also included classroom-based models, online, and blended learning.

Generally, the group agreed that the Portrait of a Graduate was an appropriate goal to describe the outputs of the Utah education system. However, some of the participants had concerns about the role of the state in determining the pathways for reaching the outcomes described by the PoG. Some leaders specifically warned against the state getting involved in determining measurement of outcomes related to Autonomy or Purpose goals.

The following key prompts were used to anchor the discussion:

What reactions do you have to Portrait of the Graduate as the target of the system?

How does this align with your school model?

Selected responses to these prompts are included below:

"If LEAs are measured and accountable for all of those things, they are not prepared to provide [them]. These dilute the charge of the LEA. This is too ambitious."

"We mesh really well with PoG in that we take a holistic view. We are a college prep school with a well-rounded program and we have this built in based on a college-bound culture. We are working on different models of learning, like competency-based education. It's difficult for traditional public schools to do what we do because we are small and nimble."

We use the [Autonomy] & [Purpose] to fuel the [Mastery] in our model. I'm not sure the state could or would measure this.

How is your charter school unique in its approach to implementing core components?

What about the charter sector in Utah overall?

Selected responses to these prompts are included below:

"Specialization — we don't have to be general like regular schools do. We get to zero in on skills and needs of the community we serve."

"By design, we are able to shift quickly. We are structured to do so. We can reach outcomes because we are faster to change."

Appendix B

USBE Strategic Plan: List of Strategies

Early Learning

- 1A: Promote high-quality instruction in every early grade classroom
- 1B: Increase optional access to high-quality extended day kindergarten programs
- 1C: Increase optional access to high-quality preschool
- 1D: Increase engagement of families with young children in early learning experiences

Effective Educators & Leaders

- 2A: Support districts and schools in providing effective mentoring for beginning educators and leaders
- 2B: Assist districts and schools in providing continuous personalized professional learning for each educator and leader
- 2C: Evaluate and support educator preparation programs in meeting requirements established by the Board while providing room to innovate
- 2D: Lead in changing the perception of teaching as a profession

Safe & Healthy Schools

- 3A: Support districts and schools in creating and maintaining conditions for safe and healthy learning environments
- 3B: Increase adoption of evidence-based student health and wellness practices
- 3C: Build capacity of educators and other stakeholders to meet students' mental, emotional, and social needs

Personalized Teaching and Learning

- 4A: Empower the USBE, educators, parents, and students with access to timely, useful, safeguarded data
- 4B: Support LEAs in providing a personalized learning plan for each student
- 4C: Increase access to qualified school personnel to design personalized learning plans in partnership with teachers, students, and families
- 4D: Promote new school system models for personalized learning implementation

Appendix C

Partial List of Utah Assessments

- Pre-Kindergarten Entry and Exit Profile (PEEP); Kindergarten Entry and Exit Profile (KEEP)
- Formative Assessment Tools: Acadience Reading (K-2)
- State Assessments (as required by the Every Student Succeeds Act)
- English Language Arts and Mathematics Grades 3-8
- Utah Aspire Plus end-of-grade tests in English, Mathematics, Reading, and Science in grades 9 and 10
- ACT, grade 11
- Utah Core Standards Benchmarks: Productivity testlets for Grades 9-12
- Science, Grades 4-8
- Writing, Grades 5 and 8
- American Civics Education Initiative: Passage of basic civics test as condition of graduation as of 2016. LEAs may build their own test from USCIS naturalization test. LEAs record passing rates and report to USBE as requested. (S.B. 60, 2015; R-277-700-8)
- Readiness Coursework (Advanced Placement, Concurrent Enrollment)
- ACT Benchmarks
- Graduation
- High School Feedback Reports published by Utah System of Higher Education (USHE): show how Utah's high school graduates are making the transition to higher education. Most recent is for the class of 2017.

Appendix D

Equity Analysis Technical Appendix

As part of Phase 1, the study team conducted an equity analysis of Utah’s school finance system. As a school finance term, “equity” is concerned with how resources are allocated across school districts and, ultimately, across schools and students. While the most common notion of equity assumes that a school finance system that distributes resources *equally* is equitable, school systems vary in their number of students with additional needs, and thus will vary in the level of resources required to provide *equal opportunity*.

Furthermore, school districts differ in their abilities to raise revenues locally. Disparities in local property and income wealth mean that some school districts may be able to raise significantly higher local revenues, with a lower level of tax effort, than other districts. Some districts also face factors beyond their control that can lead to higher operating costs. For example, districts may have small student enrollments or low population density. Ultimately, a strong finance system that is truly equitable will accommodate for differences between districts in terms of (1) student resource needs, (2) district characteristics, and (3) district revenue-raising abilities.

The equity analysis in this report makes use of generally accepted statistical methods used in studies across the country to assess the equity of states’ school finance systems. The analysis examined the fiscal equity of Utah’s school finance system for fiscal years 2013–14 and 2017–18. The USBE provided all of the data used in this analysis, including datasets of district revenues, expenditures, taxable values, student counts and demographics, and staff counts and salaries.

What follows is an overview of key terms, a definition of school finance equity, key school district characteristics, the results of the horizontal equity, vertical equity, and fiscal neutrality analyses, and key conclusions of this analysis.

Defining Terms and Data Elements Used in This Report

Need Factor. The need factor is a measure used by the study team to compare the level of student need across districts. Districts with high-need factors serve higher concentrations of students with additional needs than districts with low-need factors. The need factor is calculated by first applying student weights to adjust counts of economically disadvantaged, EL, and special education students. A weight represents the expected additional resources needed to serve a student above the needs of a general education student. These weights were taken from a study of student weights used in state funding formulas, as well as those recommended in numerous school finance costing-out studies conducted over the past two decades.

For this study, specific weights for student need were applied to account for the additional costs of serving economically disadvantaged, EL or special education students. Specifically, economically disadvantaged students were assigned a weight of 0.35, EL students a weight of 0.5, and special education students a weight of 1.1.

These weights were established by the study team based upon the team’s years of experience in estimating these additional costs.

Weighted ADM (WADM). Weighted ADM is a district’s ADM count adjusted by pupil weights to account for the number of students with greater needs in the district. For this study, specific weights were applied to estimate a district’s level of student need. Specifically, economically disadvantaged students were assigned a weight of 0.35, EL students a weight of 0.5, and special education students a weight of 1.1. These weights were established based upon the prevailing evidence and research literature.

State and Local Revenues. Includes all state and local revenues except capital local and debt service levies (revenue codes 1124-1129, 1174, 1178), tuition from other LEAs within the state (1320), transportation fees (1410-1440), food service receipts (1610-1690), miscellaneous revenue from other school districts (1950), related to basic programs (3200), capital outlay programs (3700), and revenues from the tax increment fund (26).

Total Revenues. Consists of the state and local revenues listed above with the addition of federal funds excluding child nutrition programs (4560-4574) and federal USDA commodities (4970).

Total Expenditures. Consists of district expenditures from the general fund (10), special revenue funds (20), and student activity fund (21), except for the following functions: student transportation (2700), food service (3100), facilities acquisition and construction services (4000), and debt service (5000s).

Instructional Expenditures. Consists of expenditures in the instruction function (1000) from the general fund (10), special revenue funds (20), and student activity fund (21).

Defining Equity

School finance equity has been discussed and analyzed both in terms of (1) the focus on whom or what is being treated equitably and (2) the particular type of equity of interest. Most often, equity studies focus on the distribution of resources to school districts, since nearly every state calculates its state school finance formula at the district level. While equity at the school level is also of concern, resource allocations to individual schools are, in nearly all cases, the result of local school board policies and procedures.

However, it is also reasonable to be concerned about how equitably resources are ultimately directed toward schools and individual students. Are resources being allocated fairly to schools within districts? Are more resources being targeted toward students with greater educational needs? Taxpayers comprise another legitimate focus of equity. Are some taxpayers subject to much higher tax rates solely because they live in a school district with little wealth? Do other taxpayers enjoy the ability to raise much higher levels of revenues at lower tax efforts because they live in wealthier communities? Because state funding systems, including Utah’s, focus primarily on funding school districts rather than individual schools (with the exception of charter schools) or students, this study addresses how equitably resources are allocated to the state’s school districts.

There are multiple equity concepts that are typically addressed in school finance equity analyses. The most common equity concepts are horizontal equity, vertical equity, and fiscal neutrality (Berne & Stiefel, 1984). These concepts are described below.

Horizontal equity is concerned with how equally resources are allocated to districts or students in similar situations. It is sometimes said that horizontal equity addresses the “equal treatment of equals.” That is, an equitable school finance system will provide a roughly equal amount of resources to students with similar educational

needs. Under a school finance system with high horizontal equity, students with no additional needs are funded roughly equally, regardless of which school district they attend.

Vertical equity measures how well school finance systems take into account varying student and district needs. A system with high vertical equity will provide more resources for students with greater educational needs or districts with characteristics that impact costs, such as very small size or geographical isolation. In this way, a system with high vertical equity provides additional resources for supporting the programs and interventions that are required for students with greater educational needs to succeed in school. It also incorporates mechanisms for providing resources to offset the effects of characteristics that influence costs that are outside the control of districts.

Fiscal neutrality assesses the link between local wealth and the amount of revenue available to support a school district. A touchstone of school finance theory asserts that there should be little or no relationship between local wealth, such as the local property tax base, and the amount of resources available to a local school district. A school finance system with high fiscal neutrality minimizes the relationship between local wealth, or capacity, and district spending.

These three dimensions of school finance are the focus of the study team’s analysis of school finance equity in Utah.

School District Characteristics

The state of Utah has a small number of school districts compared to other states. Only Hawaii (which has one statewide district), Nevada (18), Delaware (19), Maryland (24), and Rhode Island (32) have fewer than Utah’s 41 school districts (Snyder, de Brey, & Dillow, 2019). The districts vary considerably in terms of enrollment size, measured here by the average daily attendance, or ADM, count. In 2017–18, the state’s smallest district, Daggett School District, enrolled 165.9 ADM, while its largest district, Alpine School District, enrolled 78,279.5 ADM. Six of the state’s districts serve fewer than 1,000 ADM, while eight districts serve more than 25,000 ADM.

Exhibit D-1 presents summary information on a number of key district and school finance characteristics for fiscal year 2017–18.

Exhibit D-1. Key School District Enrollment and Fiscal Characteristics: FY 2017–18

Variable	Minimum	Maximum	Range	Mean	Median
Student Counts					
ADM	165.9	78,279.5	78,113.6	13,935.4	4,724.1
Weighted ADM	201.9	93,541.3	93,339.4	17,970.7	5,935.3
Need Ratio	1.17	1.65	0.48	1.29	1.31
Wealth					
Assessed Value Per Pupil	\$194,662	\$3,026,544	\$2,831,882	\$436,893	\$487,734
Revenues Per Student					
Local Revenues Per ADM	\$1,623	\$14,816	\$13,193	\$3,070	\$3,316
State Revenues Per ADM	\$698	\$14,935	\$14,237	\$4,763	\$4,958
State and Local Revenues Per ADM	\$6,327	\$21,425	\$15,098	\$7,833	\$8,402
Federal Revenues Per ADM	\$209	\$4,334	\$4,124	\$507	\$541
Total Revenues Per ADM (includes federal funds)	\$6,537	\$23,768	\$17,231	\$8,340	\$8,911
Expenditures Per Student					
Total Expenditures Per ADM	\$5,805	\$21,872	\$16,068	\$7,328	\$8,215
Total Instructional Expenditures Per ADM	\$4,275	\$12,323	\$8,048	\$5,044	\$5,319
District Characteristics					
Average Teacher Salary	\$41,997	\$65,227	\$23,230	\$51,402	\$50,952
Teachers Per 1,000 ADM	39.1	101.1	62.0	44.0	48.1
Certified Staff Per 1,000 ADM	47.4	128.0	80.6	55.0	59.9
Student-Teacher Ratio	9.4	25.2	15.8	22.1	20.2

For most of the measures discussed here, the wide range in values is explained in large part by the existence of very small districts and schools in the state and the way in which the funding formula adjusts resources to compensate for these small sizes. Daggett, the state’s smallest school district, had the highest number of teachers and certified staff per 1,000 ADM (101.1 and 128.0 respectively) and the lowest student-teacher ratio (9.4). Salt Lake School District, one of the state’s largest districts, had the highest average teacher salary (\$65,227) compared to Nebo School District’s \$41,997. Nebo is also a large district with more than 30,000 students, but is among the lowest property wealth districts.

In addition to a summary of fiscal measures for all 41 school districts, policymakers and analysts are also interested in examining whether there are differences among groupings of districts. The most common approach to grouping districts in an equity analysis is by wealth per pupil. These analyses may group districts by percentiles, quintiles, or quartiles. Because there are relatively few districts in Utah, this analysis uses quintiles to organize districts into groups.

Exhibit D-2 presents key fiscal information by each wealth quintile.

Exhibit D-2. Key School District Enrollment and Fiscal Characteristics by Wealth Quintiles: FY 2017–18

School Finance Variables	State Total	Wealth Quintiles–1 (Lowest)	Wealth Quintiles–2	Wealth Quintiles–3	Wealth Quintiles–4	Wealth Quintiles–5 (Highest)
Districts	41	8	8	9	8	8
Students (ADM)	571,353	153,350	203,063	126,429	76,248	12,262
Need Factor		1.25	1.26	1.37	1.33	1.25
Total Wealth per ADM	\$436,893	\$279,923	\$337,100	\$448,534	\$762,288	\$1,895,990
State and Local Revenue per ADM	\$7,833	\$7,083	\$7,500	\$7,996	\$9,139	\$12,930
Total Revenue per ADM (includes federal funds)	\$8,340	\$7,525	\$7,970	\$8,606	\$9,704	\$13,425
Sum of Voter and Board Approved Levies and Guarantee per ADM	\$1,611	\$1,270	\$1,347	\$1,698	\$2,405	\$4,410
Total Expenditures per ADM	\$7,328	\$6,754	\$6,913	\$7,528	\$8,508	\$11,956
Instructional Expenditures per ADM	\$5,044	\$4,835	\$4,827	\$5,082	\$5,592	\$7,461
Certified Staff per 1,000 ADM	55.0	51.1	53.2	57.9	60.6	70.9
Teachers per 1,000 ADM	44.0	41.4	43.0	45.8	47.2	56.6
Student-Teacher Ratio	22.1	20.5	22.4	19.6	18.9	16.4
Average Teacher Salary	\$50,776	\$50,498	\$48,925	\$50,493	\$52,817	\$54,392

Horizontal Equity, Vertical Equity, and Fiscal Neutrality

This equity analysis examines horizontal equity, vertical equity, and fiscal neutrality. Horizontal equity is concerned with how equally similarly situated students are funded across school districts. Vertical equity assumes that a greater amount of resources is needed to effectively educate some students, such as special education students, EL students, and economically disadvantaged students. Fiscal neutrality examines the relationship between the wealth of districts and the amount of money that districts spend on educating their students.

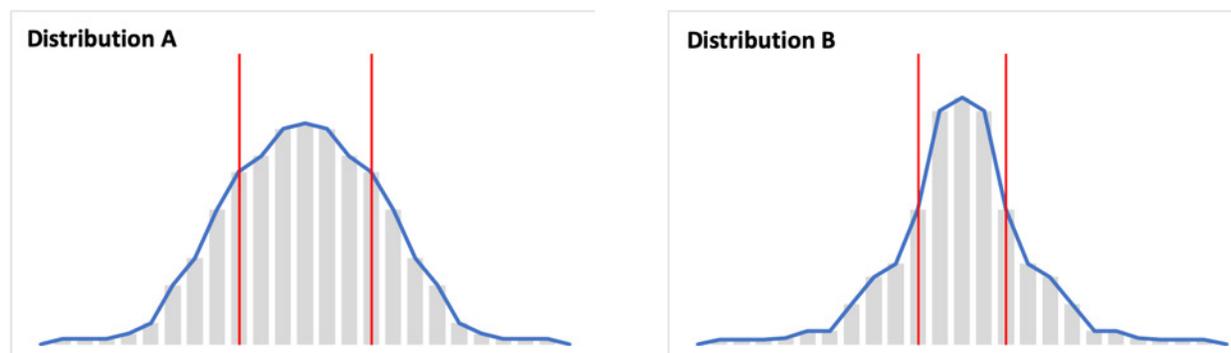
While there are a number of generally accepted statistical approaches to analyzing equity (Berne & Stiefel, 1984; Odden & Picus, 2014), the study team has found that there are several statistical measures that are most useful for policymakers trying to understand the equity of a school finance system. These statistical measures are described below:

Range: Range describes the difference between the smallest and largest values of any given variable, like per student spending. The greater the range within a system, the less likely it is that a system is equitable.

Coefficient of Variation (CV): The CV measures how much items vary around an average. In statistical terms, CV is the standard deviation divided by the mean (average). If per student expenditures do not vary greatly across districts (low variation), then all of the expenditure figures will be tightly packed around the average. If expenditures do vary greatly across districts (high variation), then the expenditure figures will be widely dispersed from the average.

Exhibit D-3 below illustrates two sample normal distributions, one in which there is relatively more variation (Distribution A), and one with relatively less variation (Distribution B). The red lines indicate observations within a standard deviation comprising of about 68% of all observations. As can be seen, in Distribution A, the observations within a standard deviation, are not as tightly clustered around the mean as those in Distribution B, indicating generally more variation and a higher CV.

Exhibit D-3. Sample Distributions Illustrating Differences in Variation



The value of the CV ranges from zero and higher and can be presented as a percentage (30%) or as a decimal (0.30). A lower number (closer to zero) indicates less variation and a higher number indicates more variation, with a number over 0.010 showing a higher amount of variation than is typically desirable in a school finance system (Odden & Picus, 2014). The range and CV may be used for measuring both horizontal and vertical equity. However, measures of vertical equity use weighted student counts while horizontal equity uses non-weighted counts. By using weighted student counts, which provide a measure of student need, the study team is able

to assess how spending varies with student need. The study team’s expectation is that higher spending will be associated with higher levels of student need.

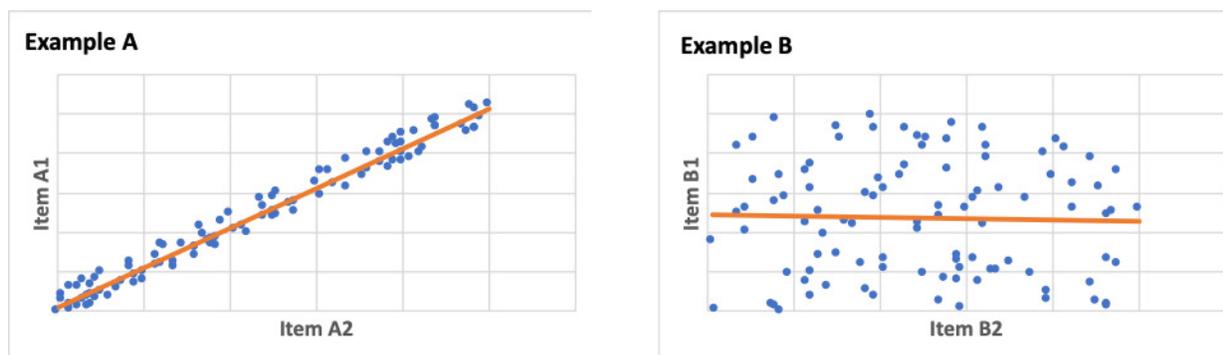
McLoone Index and Verstegen Index: The McLoone and Verstegen Indices are lesser known but valuable measures of equity. Used together, they can help to pinpoint where — in terms of the per student revenue or expenditure distribution of school districts — a state is most equitable or inequitable. The McLoone Index was created to measure the bottom half of the per student distribution of school districts to indicate the degree of equity of those school districts below the median value of revenues or expenditures per student (or the 50th percentile). The McLoone Index ranges from zero to 1.0, with 1.0 representing perfect equity. An index of at least 0.95 is considered desirable. Conversely, the Verstegen Index provides the same information for the top half of the revenue or spending distribution — those districts above the median revenues or expenditures per student. The ideal value of the Verstegen Index is 1.0 and the standard is no more than 1.05.

Correlation Coefficient: The correlation coefficient is the most common statistic used for measuring fiscal neutrality, or the relationship between per student property wealth and per student revenues or spending. A high-quality school finance system will exhibit little relationship between the two, since local property wealth should not determine how much money a school system has available to spend.

The correlation coefficient ranges from -1.0 to 1.0, where -1.0 represents a perfect negative relationship and 1.0 represents a perfect positive relationship. In a perfect negative relationship, a one-unit increase in one item — such as a one-unit increase in per student property wealth — results in a one-unit decrease in another item (e.g., per student spending). In a perfect positive relationship, a one-unit increase in one item results in a one-unit increase in the other item. A correlation of zero means there is no relationship between two items. The generally accepted standard for an acceptable level of equity is equal to or less than 0.50.

Exhibit D-4 below illustrates sample relationships between two things, one with a strong, positive relationship (Example A), and the other with no clear relationship (Example B). As can be seen, in Example A, it is evident that as the value of Item A1 goes up, the value of Item A2 also increases, suggesting a positive relationship. In Example B, there is no clear expected change in Item B2 based on a change in Item B1. Thus, the correlation coefficient would be much stronger for Example A than Example B.

Exhibit D-4. Sample Data Illustrating Correlation Coefficients



Appendix E

Role and Balance of State and Local Contributions – Additional Tables

Exhibit E-1. Revenue by Source, 2015–16

State	State Share Percentage	Local Share Percentage	Federal Share Percentage
Alabama	54.7%	34.2%	11.2%
Alaska	64.6%	23.0%	12.4%
Arizona	45.9%	41.5%	12.6%
Arkansas	51.1%	37.3%	11.6%
California	59.4%	32.1%	8.5%
Colorado	43.7%	49.2%	7.1%
Connecticut	40.3%	55.3%	4.3%
Delaware	57.4%	34.3%	8.3%
Florida	39.3%	49.2%	11.6%
Georgia	45.8%	44.6%	9.5%
Hawaii	89.4%	1.9%	8.6%
Idaho	65.3%	24.1%	10.6%
Illinois	24.1%	67.4%	8.4%
Indiana	55.6%	36.4%	8.0%
Iowa	53.8%	38.9%	7.3%
Kansas	63.1%	28.4%	8.4%
Kentucky	54.7%	33.6%	11.6%
Louisiana	43.5%	43.8%	12.7%

State	State Share Percentage	Local Share Percentage	Federal Share Percentage
Maine	39.4%	53.6%	7.0%
Maryland	43.9%	50.2%	5.8%
Massachusetts	37.8%	57.2%	5.0%
Michigan	60.2%	30.9%	8.9%
Minnesota	66.8%	27.5%	5.6%
Mississippi	51.2%	34.1%	14.7%
Missouri	33.0%	58.4%	8.6%
Montana	47.8%	39.6%	12.6%
Nebraska	33.0%	58.6%	8.3%
Nevada	35.6%	55.5%	8.9%
New Hampshire	32.9%	61.4%	5.7%
New Jersey	42.7%	53.1%	4.2%
New Mexico	70.0%	16.2%	13.7%
New York	41.7%	53.2%	5.0%
North Carolina	62.1%	26.3%	11.6%
North Dakota	57.8%	33.1%	9.1%
Ohio	44.9%	47.4%	7.7%
Oklahoma	48.3%	40.2%	11.5%
Oregon	52.3%	40.0%	7.6%
Pennsylvania	37.6%	55.6%	6.8%
Rhode Island	41.4%	50.9%	7.7%
South Carolina	47.7%	42.8%	9.5%
South Dakota	30.4%	55.8%	13.8%
Tennessee	46.2%	42.3%	11.5%
Texas	40.9%	48.6%	10.6%
Utah	54.6%	37.0%	8.3%

State	State Share Percentage	Local Share Percentage	Federal Share Percentage
Vermont	89.3%	4.0%	6.6%
Virginia	39.5%	53.8%	6.6%
Washington	62.2%	30.4%	7.4%
West Virginia	55.5%	34.1%	10.4%
Wisconsin	45.5%	47.3%	7.1%
Wyoming	57.6%	36.4%	6.1%
Average	50.0%	41.0%	8.9%

Note: Only states are reported. Other jurisdictions, or entities, such as Washington, DC, are not included.

Exhibit E-2. State Share, Local Share, and Equity Score, 2015–16

State	State Share Percentage	Local Share Percentage	Education Week Equity Score
Alabama	54.7%	34.2%	89.0
Alaska	64.6%	23.0%	73.3
Arizona	45.9%	41.5%	86.7
Arkansas	51.1%	37.3%	87.2
California	59.4%	32.1%	88.8
Colorado	43.7%	49.2%	87.4
Connecticut	40.3%	55.3%	85.6
Delaware	57.4%	34.3%	83.0
Florida	39.3%	49.2%	92.6
Georgia	45.8%	44.6%	86.8
Idaho	65.3%	24.1%	80.7
Illinois	24.1%	67.4%	81.5
Indiana	55.6%	36.4%	89.8
Iowa	53.8%	38.9%	90.4
Kansas	63.1%	28.4%	89.0

State	State Share Percentage	Local Share Percentage	Education Week Equity Score
Kentucky	54.7%	33.6%	90.8
Louisiana	43.5%	43.8%	84.0
Maine	39.4%	53.6%	83.5
Maryland	43.9%	50.2%	90.4
Massachusetts	37.8%	57.2%	83.9
Michigan	60.2%	30.9%	87.9
Minnesota	66.8%	27.5%	88.5
Mississippi	51.2%	34.1%	88.9
Missouri	33.0%	58.4%	87.4
Montana	47.8%	39.6%	82.5
Nebraska	33.0%	58.6%	85.0
Nevada	35.6%	55.5%	85.4
New Hampshire	32.9%	61.4%	80.6
New Jersey	42.7%	53.1%	86.0
New Mexico	70.0%	16.2%	87.4
New York	41.7%	53.2%	86.7
North Carolina	62.1%	26.3%	89.3
North Dakota	57.8%	33.1%	89.5
Ohio	44.9%	47.4%	84.3
Oklahoma	48.3%	40.2%	89.1
Oregon	52.3%	40.0%	89.4
Pennsylvania	37.6%	55.6%	85.3
Rhode Island	41.4%	50.9%	87.7
South Carolina	47.7%	42.8%	85.5
South Dakota	30.4%	55.8%	86.7
Tennessee	46.2%	42.3%	91.1

State	State Share Percentage	Local Share Percentage	Education Week Equity Score
Texas	40.9%	48.6%	87.7
Utah	54.6%	37.0%	86.7
Vermont	89.3%	4.0%	79.5
Virginia	39.5%	53.8%	86.3
Washington	62.2%	30.4%	89.5
West Virginia	55.5%	34.1%	89.5
Wisconsin	45.5%	47.3%	90.6
Wyoming	57.6%	36.4%	90.0

Note: Hawaii was removed from the analysis, as it did not receive an equity score since it is a single statewide district. National average is calculated as the average percentage of each of the 50 states. Numbers do not add up to 100% due to rounding. Only states are reported. Other jurisdictions, or entities, such as Washington, DC, are not included.

Exhibit E-3. Student Count Policies, 50 States

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
Alabama	Membership	Average (Short Period)	20 days after Labor Day
Alaska	Membership	Average (Short Period)	20 days ending on 4th Friday of October
Arizona	Membership	Average (Long Period)	First 100 or 200 days of the school year
Arkansas	Membership	Average (Long Period)	First 3 quarters of the school year

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
California	Attendance	Average (Long Period)	Total days of student attendance divided by the total days of instruction
Colorado	Attendance	Single Count	October 1st count day
Connecticut	Attendance	Single Count	October 1st count day
Delaware	Membership	Single Count	Count day on last day of September
District of Columbia	Membership	Single Count	October 5th count day
Florida	Membership	Multiple Counts	Up to 9 counts
Georgia	Membership	Multiple Counts	Count day in October and March
Hawaii	Membership	Average (Long Period)	
Idaho	Attendance	Average (Long Period)	Highest 28 weeks of prior year

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
Illinois	Attendance	Average (Short Period)	Highest 3 months prior year
Indiana	Membership	Single Count	1 count day in September
Iowa	Attendance	Single Count	1 count day in October
Kansas	Attendance	Single Count	September 20th count day
Kentucky	Attendance	Average (Short Period)	Higher of the first 2 months of the past 2 years
Louisiana	Membership	Single Count	Prior February 1st count
Maine	Membership	Single Count	October 1st, two most recent years
Maryland	Membership	Single Count	Prior year funding
Massachusetts	Membership	Single Count	October 1st
Michigan	Membership	Multiple Counts	90% for in year count and 10% of final audited count from prior year

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
Minnesota	Membership	Average (Long Period)	
Mississippi	Attendance	Average (Long Period)	Three-year average, adjusted for growth
Missouri	Attendance	Average (Long Period)	
Montana	Membership	Multiple Counts	October 1st and February 1st, average used for next year
Nebraska	Membership	Average (Long Period)	Prior year adjusted to fall membership
Nevada	Membership	Average (Long Period)	Average membership reported quarterly (October 1, January 1, April 1, and July 1)
New Hampshire	Attendance	Average (Long Period)	Prior year average
New Jersey	Membership	Single Count	Count day on last school day prior to October 16th

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
New Mexico	Membership	Multiple Count	Average of the prior year's student enrollment on the 80th and 120th day
New York	Attendance	Average (Long Period)	Average over all school days in session
North Carolina	Membership	Average (Long Period)	Initial allotments are based on the higher of the prior year's actual first 2 months of ADM or the projected higher of first 2 months of ADM.
North Dakota	Membership	Average (Long Period)	
Ohio	Membership	Average (Short Period)	Average over the first full week of October
Oklahoma	Membership	Average (Long Period)	
Oregon	Membership	Average (Long Period)	
Pennsylvania	Membership	Average (Long Period)	

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
Rhode Island	Membership	Average (Long Period)	
South Carolina	Membership	Multiple Count	Measured on 45th and 135th day
South Dakota	Membership	Single Count	Count day on last Friday of September
Tennessee	Membership	Average (Long Period)	
Texas	Attendance	Average (Long Period)	Average over required days of instruction
Utah	Membership	Average (Long Period)	From prior year, adjusted based on October 1st count growth
Vermont	Membership	Average (Short Period)	20-day count period (11th through the 30th day of the school year)
Virginia	Membership	Average (Long Period)	Start of school year through March 31st
Washington	Membership	Multiple Count	Monthly counts — 4th school day of September and 1st school day of October through June

State	Attendance vs. Membership	Count Mechanism	Additional Policy Detail
West Virginia	Membership	Single Count	Last school day of the 2nd month of the year
Wisconsin	Membership	Multiple Count	Two count days on the 3rd Friday of September and the 2nd Friday of January
Wyoming	Membership	Average (Long Period)	Greater of the average of the district's ADM counts completed at the end of the 3 immediately preceding school years or the district's ADM for the previous school year

Exhibit E-4. State Statute Language with Respect to Defining State and Local Contributions

State	Statutory Language
Florida	<p>FS Title XLVIII, Section 1000.03. Function, mission, and goals of the Florida K–20 education system</p> <p>(3) Public education is a cooperative function of the state and local educational authorities. The state retains responsibility for establishing a system of public education through laws, standards, and rules to assure efficient operation of a K–20 system of public education and adequate educational opportunities for all individuals. Local educational authorities have a duty to fully and faithfully comply with state laws, standards, and rules and to efficiently use the resources available to them to assist the state in allowing adequate educational opportunities.</p> <p>Florida Statute Title XLVII, Section 1011.62. Funds of operation of schools</p> <p>(4) Computation of district required local effort. The Legislature shall prescribe the aggregate required local effort for all school districts collectively as an item in the General Appropriations Act for each fiscal year. The amount that each district shall provide annually toward the cost of the Florida Education Finance Program for kindergarten through grade 12 programs shall be calculated as follows:</p> <p>(a) Estimated taxable value calculations.</p> <p>1. a. Not later than 2 working days before July 19, the Department of Revenue shall certify to the Commissioner of Education its most recent estimate of the taxable value for school purposes in each school district and the total for all school districts in the state for the current calendar year based on the latest available data obtained from the local property appraisers. The value certified shall be the taxable value for school purposes for that year, and no further adjustments shall be made, except those made pursuant to paragraphs (c) and (d), or an assessment roll change required by final judicial decisions as specified in paragraph (15)(b). Not later than July 19, the Commissioner of Education shall compute a millage rate, rounded to the next highest one one-thousandth of a mill, which, when applied to 96 percent of the estimated state total taxable value for school purposes, would generate the prescribed aggregate required local effort for that year for all districts. The Commissioner of Education shall certify to each district school board the millage rate, computed as prescribed in this subparagraph, as the minimum millage rate necessary to provide the district required local effort for that year.</p>

State	Statutory Language
Florida (continued)	<p>b. The General Appropriations Act shall direct the computation of the statewide adjusted aggregate amount for required local effort for all school districts collectively from ad valorem taxes to ensure that no school district's revenue from required local effort millage will produce more than 90 percent of the district's total Florida Education Finance Program calculation as calculated and adopted by the Legislature, and the adjustment of the required local effort millage rate of each district that produces more than 90 percent of its total Florida Education Finance Program entitlement to a level that will produce only 90 percent of its total Florida Education Finance Program entitlement in the July calculation.</p> <p>2. On the same date as the certification in sub-subparagraph 1.a., the Department of Revenue shall certify to the Commissioner of Education for each district:</p> <p>a. Each year for which the property appraiser has certified the taxable value pursuant to s. 193.122(2) or (3), if applicable, since the prior certification under sub-subparagraph 1.a.</p> <p>b. For each year identified in sub-subparagraph a., the taxable value certified by the appraiser pursuant to s. 193.122(2) or (3), if applicable, since the prior certification under sub-subparagraph 1.a. This is the certification that reflects all final administrative actions of the value adjustment board.</p> <p>(b) Equalization of required local effort.</p> <p>1. The Department of Revenue shall include with its certifications provided pursuant to paragraph (a) its most recent determination of the assessment level of the prior year's assessment roll for each county and for the state as a whole.</p> <p>2. The Commissioner of Education shall adjust the required local effort millage of each district for the current year, computed pursuant to paragraph (a), as follows:</p> <p>a. The equalization factor for the prior year's assessment roll of each district shall be multiplied by 96 percent of the taxable value for school purposes shown on that roll and by the prior year's required local-effort millage, exclusive of any equalization adjustment made pursuant to this paragraph. The dollar amount so computed shall be the additional required local effort for equalization for the current year.</p> <p>b. Such equalization factor shall be computed as the quotient of the prior year's assessment level of the state as a whole divided by the prior year's assessment level of the county, from which quotient shall be subtracted 1.</p> <p>c. The dollar amount of additional required local effort for equalization for each district shall be converted to a millage rate, based on 96 percent of the current year's taxable value for that district, and added to the required local effort millage determined pursuant to paragraph (a).</p>

State	Statutory Language
Florida (continued)	<p>3. Notwithstanding the limitations imposed pursuant to s. 1011.71(1), the total required local-effort millage, including additional required local effort for equalization, shall be an amount not to exceed 10 minus the maximum millage allowed as nonvoted discretionary millage, exclusive of millage authorized pursuant to s. 1011.71(2). Nothing herein shall be construed to allow a millage in excess of that authorized in s. 9, Art. VII of the State Constitution.</p> <p>4. For the purposes of this chapter, the term "assessment level" means the value-weighted mean assessment ratio for the county or state as a whole, as determined pursuant to s. 195.096, or as subsequently adjusted. However, for those parcels studied pursuant to s. 195.096(3)(a) 1. which are receiving the assessment limitation set forth in s. 193.155, and for which the assessed value is less than the just value, the department shall use the assessed value in the numerator and the denominator of such assessment ratio. In the event a court has adjudicated that the department failed to establish an accurate estimate of an assessment level of a county and recomputation resulting in an accurate estimate based upon the evidence before the court was not possible, that county shall be presumed to have an assessment level equal to that of the state as a whole.</p> <p>5. If, in the prior year, taxes were levied against an interim assessment roll pursuant to s. 193.1145, the assessment level and prior year's nonexempt assessed valuation used for the purposes of this paragraph shall be those of the interim assessment roll.</p>
Maryland	<p>(7) "Local contribution rate" means the figure that is calculated as follows:</p> <ul style="list-style-type: none"> (i) Multiply the statewide full-time equivalent enrollment by \$624, and multiply this product by: <ul style="list-style-type: none"> 1. 0.46 in fiscal year 2004; 2. 0.47 in fiscal year 2005; 3. 0.48 in fiscal year 2006; 4. 0.49 in fiscal year 2007; and 5. 0.50 in fiscal year 2008 and each fiscal year thereafter; (ii) Multiply the statewide full-time equivalent enrollment by the amount that the annual per pupil foundation amount exceeds \$624, and multiply this product by 0.50; (iii) Add the two products calculated in items (i) and (ii) of this paragraph, and divide the resulting sum by the sum of the wealth of all of the counties in this State; and (iv) Round the result obtained in item (iii) of this paragraph to seven decimal places and express as a percent with five decimal places. <p>(8) "Local share of the foundation program" means the product of the local contribution rate and a county's wealth.</p> <p>Maryland Code, Education § 5-202</p>

State	Statutory Language
Nevada	<p>NRS 387.163 Local funds available for public schools; reserve of net proceeds of minerals.</p> <ol style="list-style-type: none"> 1. Except as otherwise provided in subsection 2, local funds available are the sum of: <ol style="list-style-type: none"> (a) The amount of one-third of the tax collected pursuant to subsection 1 of NRS 387.195 for the school district for the concurrent school year; and (b) The proceeds of the local school support tax imposed by chapter 374 of NRS, excluding any amounts required to be remitted pursuant to NRS 360.850 and 360.855. The Department of Taxation shall furnish an estimate of these proceeds to the Superintendent of Public Instruction on or before July 15 for the fiscal year then begun, and the Superintendent shall adjust the final apportionment of the current school year to reflect any difference between the estimate and actual receipts. 2. The amount computed under subsection 1 that is attributable to any assessed valuation attributable to the net proceeds of minerals must be held in reserve and may not be considered as local funds available until the succeeding fiscal year. <p>(Added to NRS by 1977, 705; A 1979, 1243, 1588; 1983, 1906; 1999, 2925; 2003, 2941; 2005, 2080, 2375; 2007, 1560; 2013, 3139) — (Substituted in revision for NRS 387.1235)</p> <p>NRS 387.195 Levy of tax for county school district; deferred use of money attributable to net proceeds of minerals.</p> <ol style="list-style-type: none"> 1. Each board of county commissioners shall levy a tax of 75 cents on each \$100 of assessed valuation of taxable property within the county for the support of the public schools within the county school district. 2. The tax collected pursuant to subsection 1 on any assessed valuation attributable to the net proceeds of minerals must not be considered as available to pay liabilities of the fiscal year in which the tax is collected but must be deferred for use in the subsequent fiscal year. The annual budget for the school district must only consider as an available source the tax on the net proceeds of minerals which was collected in the prior year. 3. In addition to any tax levied in accordance with subsection 1, each board of county commissioners shall levy a tax for the payment of interest and redemption of outstanding bonds of the county school district. 4. The tax collected pursuant to subsection 1 and any interest earned from the investment of the proceeds of that tax must be credited to the county's school district fund. 5. The tax collected pursuant to subsection 3 and any interest earned from the investment of the proceeds of that tax must be credited to the county school district's debt service fund. <p>[127:32:1956] — (NRS A 1979, 1244; 1981, 301; 1983, 1635, 1950; 1987, 639; 1999, 2925; 2013, 3139)</p>

State	Statutory Language
Utah	<p>Utah statutes for minimum school program (2018 code): Title 53F, chapter 2, Part 3, section 301.5 Current language:</p> <p>(a) "Basic levy increment rate" means a tax rate that will generate an amount of revenue equal to \$75,000,000.</p> <p>(d) "Equity pupil tax rate" means the tax rate that is:</p> <ul style="list-style-type: none"> (i) calculated by subtracting the minimum basic tax rate from the rate floor; or (ii) zero, if the rate calculated in accordance with Subsection (2)(d)(i) is zero or less. <p>(e) "Minimum basic local amount" means an amount that is:</p> <ul style="list-style-type: none"> (i) equal to the sum of: <ul style="list-style-type: none"> (A) the school districts' contribution to the basic school program the previous fiscal year; (B) the amount generated by the basic levy increment rate; and (C) the eligible new growth, as defined in Section 59-2-924 and rules of the State Tax Commission multiplied by the minimum basic tax rate; and (ii) set annually by the Legislature in Subsection (3)(a). <p>(f) "Minimum basic tax rate" means a tax rate certified by the commission that will generate an amount of revenue equal to the minimum basic local amount described in Subsection (3)(a).</p> <p>(g) "Rate floor" means a rate that is the greater of:</p> <ul style="list-style-type: none"> (i) a .0016 tax rate; or (ii) the minimum basic tax rate.

State	Statutory Language
Wyoming	<p>2113102. Maximum rate of school district tax; recapture of excess; equalization of permissive levies.</p> <p>(a) Except as otherwise provided by law, the maximum rate of school district tax that may be levied for all school purposes, exclusive of bond interest and redemption, for any school district in any school year on each dollar of assessed valuation within the school district is as follows:</p> <ul style="list-style-type: none"> (i) In a unified school district: Twenty-five (25) mills shall be levied for combined elementary, junior high and high school purposes. (ii) In any nonunified school district consisting of kindergarten through grade eight (8): Twenty-five (25) mills shall be levied for school purposes. <p>(b) For each school year:</p> <ul style="list-style-type: none"> (i) A school district whose revenues from the sources provided by W.S. 2113310 exceed the foundation program costs determined under W.S. 2113309 by more than three hundred percent (300%), as estimated to the districts on or before August 15 and as subsequently certified to the districts on or before March 1 of the current fiscal year under subsection (e) of this section, shall rebate fifty percent (50%) of the excess revenues to the department of education by January 15 of the applicable school year. The balance of the excess revenues shall be rebated to the department on or before June 15 of that school year; (ii) A school district whose revenues specified under W.S. 2113310 for any school year exceed the foundation program costs determined under W.S. 2113-309 by three hundred percent (300%) or less, as estimated and certified under subsection (e) of this section, shall rebate forty percent (40%) of the excess revenues to the department by January 15 of the applicable school year. The balance of the excess revenues shall be rebated to the department on or before June 15 of the applicable school year; (iii) Amounts rebated under paragraphs (i) and (ii) of this subsection shall be credited to the public school foundation program account defined in W.S. 2113101(a)(ix). <p>Wyoming Title 21 Education</p>

Appendix F

Supplemental Tables

Exhibit F-1. Enrollment by School Type – 1999–00 through 2018–19

School Year	Total Enrollment	District Enrollment	Charter School Enrollment	% Charter Enrollment	School Age Population (5–17)	Home School Count	Private School Count
1999–00	475,974	475,584	390	0.1%	-	-	-
2000–01	475,269	474,732	537	0.1%	-	-	-
2001–02	477,801	477,160	641	0.1%	-	-	-
2002–03	481,143	479,617	1,526	0.3%	-	7,037	-
2003–04	486,938	483,685	3,253	0.7%	-	6,950	-
2004–05	495,682	489,445	6,237	1.3%	-	7,573	-
2005–06	510,012	498,484	11,528	2.3%	-	8,540	-
2006–07	524,003	504,792	19,211	3.7%	-	8,808	-
2007–08	537,653	515,457	22,196	4.1%	-	8,895	18,675
2008–09	551,013	523,644	27,369	5.0%	-	9,177	-
2009–10	563,273	529,107	34,166	6.1%	-	8,154	19,447
2010–11	576,335	536,214	40,121	7.0%	-	8,023	-
2011–12	587,745	542,853	44,892	7.6%	-	8,260	17,399
2012–13	600,060	550,184	49,876	8.3%	-	8,988	-
2013–14	611,711	557,651	54,060	8.8%	-	10,438	18,720
2014–15	621,237	560,718	60,519	9.7%	-	13,033	-
2015–16	633,398	566,387	67,011	10.6%	666,974	16,085	15,911
2016–17	644,476	572,982	71,494	11.1%	676,459	-	-
2017–18	652,347	576,781	75,566	11.6%	684,631	-	17,747
2018–19	659,438	581,054	78,384	11.9%	693,269	-	-

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Utah

Education Funding Study

PHASE 1 REPORT



AUGENBLICK,
PALAICH AND
ASSOCIATES