

ENROLLMENT MANAGEMENT: PUBLIC SCHOOL DISTRICT LEADERS'
EXPERIENCES, AND THE EFFECTS OF COMMUNITY TRUST IN LEADERS

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ABSTRACT

ENROLLMENT MANAGEMENT: PUBLIC SCHOOL DISTRICT LEADERS' EXPERIENCES, AND THE EFFECTS OF COMMUNITY TRUST IN LEADERS

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The purpose of this study was to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This study allowed school districts to examine their own individual unique enrollment management needs and potential processes for moving forward in making equitable decisions for all students while also being fiscally responsible. Trust with various stakeholders is an essential component when districts make enrollment management decisions which can affect the various community stakeholders in different ways.

This case study utilized a mixed methods approach which involved collecting, analyzing, and summarizing both qualitative and quantitative data using descriptive data analysis. Participants included Arizona superintendents who completed a survey and five superintendents from those who completed the survey were selected to be interviewed for a more in depth look at enrollment management within their own school district.

Research Question 1 addressed key components of effective PreK-12 enrollment management, as described by participants. This included many things but most often was space utilization, magnet or specialized programs, and boundaries. Utilizing an external service provider can assist superintendents in collecting and analyzing a myriad of relevant data.

Research Question 2 addressed how district leaders use enrollment management to determine the best use of resources. Understanding a district's space utilization is important in determining enrollment management steps. Additional funding sources, such as voter approved

overrides and bonds, can be vital to a district determining what they realistically can or can't do in regards to specialized programs, keeping schools updated, renovated, and if in a growing district even building new schools. Communication with stakeholders is vitally important when looking at various enrollment management initiatives.

Research Question 3 addressed how enrollment management was used to ensure educational accessibility for all students. School choice including open enrollment is prevalent in Arizona. Each school district is affected by school choice and open enrollment either positively or negatively based on the number of students registered. Superintendents reported educational accessibility for all students is an important component of making enrollment management decisions.

Research Question 4 addressed how trust affects school districts in making enrollment management decisions. Superintendents' relationships with various stakeholders determines the level of trust found when making potentially volatile enrollment management decisions. Being transparent, humble, and willing to admit mistakes goes a long way in building trust. Knowing who the movers and shakers are in a district is vital to building trust with a wide range of stakeholders.

Enrollment management is complex and what components a district will focus on will be suited to the particular needs of the school district.

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DEDICATION

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CHAPTER ONE: INTRODUCTION

Background of the Study

Traditional public school districts face a multitude of factors in deciding how best to manage student enrollment in their district. Each school district has a unique set of characteristics which determine how enrollment can be managed. Students and teachers all deserve to be in a quality school building. Filardo (2016) reported “Every school day, nearly 50 million students and 6 million adults are in close to 100,000 buildings, encompassing an estimated 7.5 billion gross square feet and 2 million acres of land” (p. 3). Most school buildings in the United States are over 40 years old with close to half of the school buildings over 75 years old which necessitates continual renovations and upgrades. (Buckley et al., 2004). Arizona’s Glendale Elementary School District (GESD), located in a Phoenix suburb, temporarily closed two schools in 2016 as they had major structural deficiencies which needed immediate corrective action (Rau, 2017). At the start of the 2022 – 2023 school year, a Philadelphia school district was forced to send students home early or cancel school at certain schools without air conditioning due to soaring heat index temperatures attributed to climate change (Juhasz, 2022). As schools grow older and are in more need of repairs and renovations, the funding gap for public schools keeps getting worse. The American Society of Civil Engineers rates the condition of America’s school buildings an overall grade of D+ (Zdanowicz & Yan, 2022).

It is important learning environments are safe, healthy, and comfortable for students and staff. In recent years, research has connected the quality of school facilities to student achievement and attitude. Additionally, there has been a correlation between the quality of school facilities and teacher attitude and behavior (Uline & Tschannen-Moran, 2008).

Whether school districts are renovating schools or building new schools due to student growth, being fiscally responsible stewards of taxpayer money is paramount. The funding of school facilities is complex and varies greatly from state to state and even within a state amongst school districts due to many factors. Filardo (2016) stated, “The structure of K-12 school facilities funding in the U.S. is inherently and persistently inequitable” (p. 3). In Arizona, capital financing has been a battle for over 30 years with school districts suing the state of Arizona several times due to inadequate funding mandated by state statute (Rau, 2017). With funding being limited, it is imperative school districts use their capital funding wisely to keep school facilities maintained and up to date, but that process can be uncertain.

Student enrollment trends can vary greatly from state to state and even within a state. Some school districts might be growing while other districts are declining. Whether or not the district is considered urban, suburban, or rural can also make for different needs including whether or not the state allows for open enrollment. Open enrollment is an option to allow students to transfer from one public school to another of their choice when parents do not wish their student to attend the assigned school based on their home’s address (A.R.S. 15-816, 2022b). Open enrollment options have greatly expanded in Arizona and other states which allow for charter schools. As mentioned previously, in 2008, GESD had over 13,000 students, and by 2029 the district is forecasted to have approximately 9,000 students (GESD, 2021, p. 2). In contrast, the Queen Creek Unified School District (QCUSD) is currently experiencing strong student growth with the district expected to gain several thousand new students in the next five years (Stouard & Lamb, 2022). Both GESD and QCUSD are part of the Phoenix Metropolitan area, yet each district’s student enrollment is going in the opposite directions which can create different types of challenges for each school district. GESD is tasked with looking at which school

buildings are under capacity and how these aging schools could possibly be repurposed into, for example, an early childhood center or a community center for families to receive a variety of services (GESD, 2021). QCUSD doesn't currently have the bonding authority to build new schools, yet new students continue to come. QCUSD has reviewed what school boundaries could be moved to help ensure there is enough space for new students as well as looking to add portable classrooms to certain schools to increase the enrollment capacity of the school (Stouard & Lamb, 2022).

School districts continue to see an increase in special education, early childhood, and Title I programs (Kamerman & Gatenio-Gabel, 2007; National Center for Educational Statistics [NCES], 2021; Stevenson, 2007). In many instances, these programs require specialized classroom space in school buildings. With the growth of charter schools over the past couple of decades, school districts are increasingly looking at their own schools as opportunities for giving families options in order to prevent families from fleeing their public school district. These are often called magnet schools. Some of these specialized schools require additional classroom space (Stevenson, 2007).

With all of the complexities mentioned so far, enrollment trends can fluctuate greatly within a school district. School districts face the daunting task of looking at school boundaries which can affect families and other stakeholders within a school district in different ways. Changing boundaries can become very political for school boards and superintendents with perceived winners and losers (Lemberg & Church, 2000). School districts can find the complexities of enrollment management a challenging process to undertake by themselves. Many school districts utilize consultants such as demographers and strategic planners to assist with the

process. These individuals have expertise in certain areas and can provide a non-biased approach to what at times can be a very emotional and political process (Frantzen, 2018).

With the complexities of enrollment management, trust between various stakeholders and the superintendent and school board can quickly change. Strier and Katz (2016) have found “There is general agreement among researchers that public trust in schools has decreased significantly in the last decades” (p. 367). The lack of trust can prove to be catastrophic when school districts want to make enrollment decisions. School board members as well as superintendents can even lose their positions if enrollment management is not carefully overseen.

Statement of the Problem

There are many components found within enrollment management for traditional public preschool through 12th grade school districts to navigate. When these components are considered systematically and effectively, school districts can help ensure students and staff have access to equitable and up to date facilities while also ensuring school districts use their facilities wisely with perpetually changing enrollment and needs of the district. All features of enrollment management return to fiscal responsibility, which includes many facets including whether or not districts use their facilities efficiently in terms of their district’s needs now and into the future (Filardo, 2016).

There are several trends affecting enrollment management including school choice, the growth of school programs or choice (magnet) schools within districts, class sizes, special education, early childhood programs, and technology needs. When enrollment management decisions are made by a school district, stakeholders can have strong opinions depending upon how the changes affect them. School districts and in particular superintendents must know how to build trust as well as how to leverage it with their communities.

Purpose of the Study

The purpose of the study is to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This study allows school districts to examine their own individual enrollment management needs and potential processes for moving forward in making equitable decisions for all students while also being fiscally responsible. Public school districts in Arizona have immense pressures put on them to ensure students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders is an essential component when districts make enrollment management decisions which can affect the various community stakeholders in different ways.

Research Questions

This study examined how school districts can effectively use various enrollment management processes to meet the unique needs within their school district. The following research questions guided this study:

1. What are the key components of effective PreK-12 enrollment management, as described by participants in this study?
2. How do district leaders use enrollment management to ensure the best use of resources?
3. How is enrollment management used to ensure educational accessibility for all students?
4. How does trust affect school districts making enrollment management decisions?

Significance of the Study

Barrett et al. (2019) stated:

School buildings are deeply rooted in the communities that they serve, and both pupils and teachers interact with the social and built environment around each school. In most communities, school buildings are the most prominent public building, the center of many civic activities, social life, and sports events, in addition to cultural and educational activities. Also in many cases, school buildings are the largest capital asset in a residential neighborhood. (p. 37)

School districts across Arizona face the daunting challenge of managing their limited financial resources to maximize the many components of enrollment management to ensure the needs of their facilities are met now and into the future. During the 2022 – 2023 school year, Arizona public school districts received \$502.33 per PK-8 student and \$549.33 per 9-12 student for capital funding or what the state calls District Additional Assistance (DAA) (GPS, 2022a, p. 3). Capital expenditures include costs associated with school construction, land, buildings, facilities improvements, and equipment. Capital funding is essential to school districts providing safe and healthy as well as up to date learning environments for students and staff. Additionally, with Arizona being a strong advocate for school choice, it is important school districts use their funds to stay competitive with surrounding public school districts as well as charter and private schools.

The components of enrollment management including the funding of facilities, quality of facilities, enrollment trends, fiscal considerations, space utilization, and boundaries can be complex. Trends affecting enrollment management include school choice, the growth of school programs or choice schools within districts, class sizes, special education, early childhood

programs, and technology needs. Enrollment management components and trends apply to each school district based on their unique needs and characteristics. Having an understanding of these components can assist school districts to ensure both short-term and long-term needs are met for the students, staff, and community while also ensuring the limited financial resources are used prudently.

The role of trust between the superintendent and the various stakeholders in the community can increase if school districts use the components of enrollment management along with effective communication to show the community how changes need to be made to meet the overall needs of students across the school district.

Definitions of Terms

Average Daily Membership (ADM). In Arizona, this means “the total enrollment of fractional students and full-time students, minus withdrawals, of each school day through the first 100 days in a school year” (A.R.S. 15-901, 2022c). Fractional students include preschool students, kindergarten students, and other part time students such as some high school students (A.R.S. 15-901, 2022c). In Arizona, kindergarten students are funded by the state as a half-time student or 0.5 ADM even though most districts provide full day kindergarten. Most school districts routinely absorb this cost and provide free full day kindergarten (Rau, & Cano, 2017).

Capital expenses. As defined by the National Center for Education Statistics (NCES) defines capital “as all costs for school construction, land, buildings, facilities improvements, and equipment (Filardo, 2016, p. 13).

Charter schools. “A public school established by contract with the Arizona state board of education, the state board for charter schools, a university under the jurisdiction of the Arizona board of regents, a community college district or a group of community college districts

pursuant to article 8 of A.R.S. 15-501 to provide learning that will improve pupil achievement” (A.R.S. 15-101, 2022a).

Current Replacement Value (CRV). When maintenance and capital renewal standards are used to estimate the lifespan of the facility, and the cost to build a new one. “CRV is derived by multiplying new construction costs per gross square foot by the total gross square foot by the total gross square footage of facilities” (Filardo, 2016, p. 21).

District Additional Assistance (DAA). The funding provided to Arizona school districts for capital expenses (Rau, & Cano, 2017).

Early childhood programs. A term used to describe a variety of preschool programs for both general education and special education students (Encyclopedia of Children’s Health, 2022).

Geographic Information Systems (GIS). Software tools used to look at school district demographics and enrollment analysis (Lemberg, & Church, 2000).

Magnet school. A school with a specialized program or focus not offered at all schools within a school district designed to attract and meet the needs of certain students. Magnet schools are sometimes called choice schools (Stevenson, 2007).

Maintenance and Operations (M&O). Typically, the largest funding source school districts receive. M&O goes towards the functions, duties and labor associated with the daily operations and normal repairs, replacement of parts and structural components. Salaries and benefits typically take up the vast majority of this funding source (Filardo, 2016).

Portable classrooms. “Modular prefabricated buildings school districts install to add enrollment capacity at schools” (Colome & Shendell, 2014, p. 154).

Space utilization. A method of measuring the size of a school facility and incorporating occupancy data to understand movement throughout the school, the frequency with which certain spaces are used, and the results that the existing layout yields. Space utilization considers specialized programs (Stevenson, 2007).

Title I school. The U.S. Department of Education (USDoE) (2018) defined Title I by stating:

Title I, Part A (Title I) of the *Elementary and Secondary Education Act* (ESEA) (1965), as amended by the *Every Student Succeeds Act* (ESEA) (2015) provides financial assistance to the local educational agencies (school districts) and schools with a high percentage of children from low-income families to help ensure that all children meet state academic standards. (para. 1)

Acronyms Used

ADE: Arizona Department of Education

ADM: Average Daily Membership

ASA: Arizona School Administrators

CRV: Current Replacement Value

CTED: Career and Technical Education District

CUSD: Chandler Unified School District

DAA: District Additional Assistance

ELL: English Language Learner

EMC: Enrollment Management Committee

ESSER: Elementary and Secondary School Emergency Relief

GESD: Glendale Elementary School District

GIS: Geographic Information Systems

GPS: Gilbert Public Schools

M&O: Maintenance and Operations

MCPC: Master Capital Planning Committee

NCES: National Center for Education Statistics

NCSF: National Council on School Facilities

PTSO: Parent, Teacher, Student Organization

QCUSD: Queen Creek Unified School District

SAGE: Student Achievement Guarantee in Education

SFB: School Facilities Board

STEM: Science, Technology, Engineering, and Mathematics

USDoE: United States Department of Education

Assumptions

1. The sample of participants who respond to the survey and interviews will be representative of Arizona.
2. Participants are familiar with their school district and the various components of enrollment management their school district uses.

Limitations

Limitations are factors that are out of the researcher's control. These limitations may or may not affect the outcome of the study.

1. Each Arizona superintendent of a public school district will be provided with an email invitation (Appendix A) and not all requests to participate may reach individuals due to server filters and incorrect or outdated email addresses.

2. Superintendents can choose to have a designee within their school district complete the survey.
3. The participants are volunteers.
4. Data will be collected during a limited amount of time during the 2022 – 2023 school year.

Delimitations

Delimitations are factors that are under the researcher's control. The following delimitations may or may not affect the outcome of the study.

1. The sample size for this study could be small. Superintendents and their designees are busy administrators and might not find the time to complete the survey.
2. Survey participants may rush through the survey or not fully understand all concepts; and, therefore, results may not accurately reflect true thoughts or opinions.

Summary

This study will examine the enrollment challenges faced by various school districts, the enrollment management processes that those school districts use, and how the school district uses such processes to meet the unique needs within their school district. Through the study, participating representatives of school districts will be asked to examine their individual enrollment management needs and practices, and the role of trust in effectively managing student enrollment.

Public school districts in Arizona face immense pressures to ensure students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders in the community is an essential component when

superintendents and district leaders make enrollment management decisions which can affect the various community stakeholders in different ways.

Organization of Study

This study includes four additional chapters. Chapter 2 begins with looking at how the role of trust by superintendents and district leaders can affect positively or negatively how enrollment management decisions are perceived by stakeholders. Chapter 2 continues with an in-depth review of the literature as it relates to the various components of enrollment management including sections on the funding of facilities, quality of facilities, enrollment trends, fiscal considerations, space utilization, and school boundaries. There are several trends affecting enrollment management which are reviewed including school choice, the growth of school programs or choice schools within districts, class size, special education, early childhood programs, technology needs and how demographers and other external services can be used by school districts. Chapter 3 contains a restatement of the research questions and problem statement, and a detailed description of the methodology used for this study. It will also include a description of the population and sample used for this study. Since this study will be a mixed-methods study, a detailed description will be provided for the survey instrument and the interviews. Data analysis procedures will also be discussed. In Chapter 4 the research findings and results will be discussed. Chapter 5 will present a summary of the study and findings, conclusions, implications and recommendations for practical application, and recommendations for future study.

CHAPTER TWO: REVIEW OF THE LITERATURE

This chapter provides an overview of enrollment management in relation to preschool through grade 12 traditional public school districts. There are many components found within enrollment management which taken together systematically can assist traditional public school districts in ensuring students and staff have access to equitable and up-to-date facilities while also ensuring school districts use them judiciously with changing enrollment and needs of the district. The Filardo (2016), *State of Our Schools: America's K-12 Facilities*, “Every school day, nearly 50 million students and 6 million adults are in close to 100,000 buildings, encompassing an estimated 7.5 billion gross square feet and 2 million acres of land” (p. 3). The majority of school buildings in the United States are over 40 years old which means there is a continual need for renovations and upgrades in order to keep the buildings up to standards (Buckley et al., 2004).

All aspects of enrollment management return to fiscal responsibility including whether or not school districts use their facilities efficiently in terms of their district's needs now and, in the future (Filardo, 2016). The components of enrollment management include: funding of facilities, quality of facilities, enrollment trends, fiscal considerations, space utilization, and boundaries. There are several trends affecting enrollment management including school choice, the growth of school programs or choice schools within districts, class sizes, special education, early childhood programs, and technology needs. When school districts look at all of these enrollment management needs holistically and systematically with the support of demographers and other external services, districts can help ensure both short-term and long-term needs are being met for the students, staff, and community. Superintendents and district leaders must build a climate of trust by having ongoing communication about the needs of the school district and why decisions

are being made. Trust with various stakeholders is essential in getting the work of enrollment management completed.

The Role of Trust

Enrollment management is a complex system with many components as well as making major decisions for a school district including space utilization, choice programs, school boundary changes, building new facilities, and even school closures, which are never easy to do. School districts who systematically manage these components can help ensure their students and staff have equitable and up to date facilities while also planning for the future in terms of student enrollment and the number and types of facilities they will need. School districts who do not manage these components could find themselves with financial hardships. Implementing change is not easy, but if one systematically plans for it, they will come out stronger in the longer run. In *Leading Change*, Kotter (2012) pointed out implementing change means school districts must have several built-in principles that must be understood to effectively navigate the process, one of which includes trust.

Teamwork on a guiding change coalition can be created in many different ways. But regardless of the process used, one component is necessary: trust. When trust is present, you will usually be able to create teamwork. When it is missing, you won't. (Kotter, 2012, p. 63)

School districts are an integral part of communities but increasingly are found like many institutions in the United States to be facing an uphill battle in regards to trust (Davidson & Hughes, 2019). Strier and Katz (2016) found, "There is general agreement among researchers that public trust in schools has decreased significantly in the last decades" (p. 367). Without trust, school districts will face many challenges. "Chief among these is often a resistance to

change initiatives, which can be seen in visible manifestations of suspicions of a leader's motives" (Davidson, & Hughes, 2019, p. 53). Within a school district, enrollment management decisions which are proposed by the superintendent will require trust from many stakeholder groups including the school board, administrators, teachers, support staff, parents, students, as well as community members. Each of these stakeholder groups has unique needs and perspectives. Superintendents have to be savvy enough to read their stakeholder groups when looking at various enrollment management decisions. Change is never easy, but many times must be done incrementally so as not to alienate too many stakeholders. Superintendents must keep school boards apprised and engaged in proposed enrollment management decisions. The community's perceptions of the relationship between the superintendent and school board affects other stakeholder groups' perceptions of trust of the district. When decisions such as school boundaries, changing the focus of a school, or even closing a school are being considered, a superintendent must rely on the trust they have carefully cultivated to get through what can be politically volatile decisions. Davidson and Hughes (2020) summed up the trust of superintendents, "was less about the things they did, and more about the way they did them" (p. 66).

When enrollment management decisions are made, superintendents can't build trust alone. In order to build trust and get potentially contentious decisions made, having various stakeholders involved in the process can help superintendents in the complex enrollment management process. Having a standing committee can build the capacity for changes to be made within a school district. The name of the committee can be different including strategic planning committee, enrollment management committee (EMC), master capital planning committee (MCPC), facility review committee. Whatever the committee is called, it is

imperative the superintendent gets the right mix of members from various stakeholders on the committee in order to build trust when changes are proposed. This allows for the various components of enrollment management to be studied on a continuing basis, which can potentially alleviate any short-term or long-term surprises as well as show the community this is an important ongoing topic. This follows Kotter's (2012) advice that the team must consist of the right members with key characteristics including position of power, expertise, credibility, and leadership. Having the right mix of leaders and managers is key to getting the work done. In school districts, having cabinet members, district staff from operations and marketing, principals, teachers, and parents is essential. Additionally, having a demographer or facility planning firm can help guide the committee with expertise and key data collection. Having professional experts with historical as well as forecasted data can facilitate trust when a superintendent and district committee are ready to make recommendations to the school board and other stakeholders in the community (LGDR, n.d.).

The ongoing enrollment management committee will need to meet, at a minimum, once a year to review new data and needs (Frantzen, 2018). Sometimes when changes are proposed, the committee might have to meet more frequently and include other members on the committee based on the topic or focus. Communicating regularly to the community will be important in building trust. Having both a long-term vision as well as short-term goals will be important and reflect several stages from Kotter's (2012) *Leading Change* book. Kotter's (2012) eight step process is a strong example of how a district's enrollment management committee will want to go through the process of understanding how effective change could look over time if done with intentionality. Understanding these key characteristics is important to the success of the

committee and ultimately the superintendent in building trust to make effective enrollment management decisions which are best for the school district (Kotter, 2012).

Funding of Facilities

The funding of school facilities is complex and varies greatly from state to state and even within a state, different district budgets can vary widely. Due to local control, school districts range greatly in size with some having less than 100 students, to huge districts with more than 1 million students (Filardo, 2016, p. 18). These large variances in themselves create wide ranges of what individual school districts' budgets look like including how much is spent on facilities.

“The structure of K-12 school facilities funding in the U.S. is inherently and persistently inequitable” (Filardo, 2016, p. 3). Nationally, K-12 school capital expenditures account for approximately 24% (Filardo, 2016, p. 5). The only other public sector to get more capital money is highways with 32% (Filardo, 2016, p. 5). As school buildings reach 50 years old, sometimes considering the replacement of the school is more financially prudent than continual regular maintenance on an aging school building, however finding the money to replace a building can hinder school districts from doing so (Zdanowicz & Yan, 2022).

“A 2015 study of California school districts found that low-wealth districts spent a higher proportion of their total education spending on the daily upkeep, operation, and repair of their school facilities than high wealth districts” (Filardo, 2016, p. 7). Due to these expenditures, low-wealth districts then also spent much less on capital expenditures for routine building renewals and upgrades including roof and mechanical system replacements and building modernizations. This is due to low-wealth districts having a more difficult time borrowing the necessary capital to make these improvements. Low-wealth districts end up getting caught in a financially vicious cycle of not spending enough on routine and preventative maintenance which in the long-term

leads to more emergency repairs and expenditures resulting in higher building costs (Filardo, 2016).

Within school districts, there are two main sources of funding school facilities including maintenance and operations (M&O) and capital. The majority of M&O budgets typically go toward salaries and benefits for the employees, which is important in securing the best teachers, administrators, and support staff for students. Competing however, within the M&O budget are other ongoing facility expenditures such as utilities including electricity, water, telecommunications, refuse, and recycling services. Additionally, services for building security, custodial, grounds keeping, and other maintenance all typically come from M&O budgets.

Across the United States, local and state funding sources combined account for approximately 90% of school district M&O budgets with the remaining 10% coming from federal funds (Filardo, 2016, p. 18). Capital funds are overwhelmingly supported by local sources with 82% and with state sources contributing 18%. Federal funds for capital represent less than 0.2% (Filardo, 2016, p. 18). As with any fiscal expenditures, the overall economy greatly influences how much states and districts have to spend, particularly on facilities (Filardo, 2016, p. 29). The Great Recession of 2008 showed this as from 2009 to 2013 there was a significant decrease in M&O and capital spending because there was a decrease in the money many school districts received from their state (Filardo, 2016, p. 16). Appendix B shows how states varied in M&O spending in 2013 with Arizona spending an average of \$894 per student compared to the M&O national average of \$1,038. These expenses include costs of cleaning, routine maintenance, utilities, and security (Filardo, 2016).

When looking at capital expenditures, it is important to define what capital outlay means. The NCES defined total capital outlay as “all capital costs for school construction, land,

buildings, facilities improvements, and equipment” (Filardo, 2016, p. 13). Since 82% of capital costs are funded by the local taxpayers, this creates large inequities as each district has different tax bases due to the local property wealth found within each school district's boundaries (Filardo, 2016, p. 18). During the 1930s and then again after World War II, the federal government provided funding to help build schools but for the past 30 years, there has been virtually no funding to support the capital needs of school districts (Filardo, 2016).

In Arizona, capital is often referred to as District Additional Assistance (DAA) which is the budgeting term the state uses to allocate capital funding to school districts (Rau, & Cano, 2017). Arizona Revised Statute (ARS) 15-961 is the law which governs how the DAA is calculated based on student count as well as other factors (2022d). When the Great Recession hit, the state of Arizona slashed school district budgets starting in 2009. For several years, capital funding was provided at about 15% of what districts were supposed to get (Rau, 2017, p. 4). By 2017, it was estimated Arizona districts had been cut approximately \$2 billion in capital budgets (Rau, 2017, p. 2). Over the past several years, with the economy rebounding, a lawsuit was filed, and educators and the public demanded an increase for spending on public schools with such movements as Red for Ed (Rau & Cano, 2017). As a result, over the past couple of years the DAA was brought back to pre-recession spending levels taking into account inflation. This greatly helped Arizona school districts catch up on deferred school facility expenditures including building refurbishments and renewal.

Battling capital financing in Arizona isn't new. Back in 1994, several school districts sued the state saying the reliance on voter-approved bonds to cover capital needs was in violation of the state's constitution “for a general and uniform public school system” (Rau, 2017, p. 3). In other words, the secondary property tax was determined by the property wealth of a school

district (Rau, 2017). In 1998, the *Students FIRST Act* (Fair and Immediate Resources for Students Today) was signed into law due to school capital finance being ruled unconstitutional (Arizona School Facilities Board [SFB], 2009, Background section). It also established the SFB which developed Building Adequacy Guidelines (SFB, 2009, Deficiencies Correction section). At the time, these guidelines were considered forward-thinking in the United States. The SFB is charged with oversight of three capital funds including Building Renewal, Deficiencies Correction, and New School Facilities (SFB, 2009, Students FIRST section). For almost 10 years, the SFB was hamstrung due to inadequate capital funding by the state until approximately three years ago when the governor and legislature worked to restore capital funding via DAA to school districts (Rau & Cano, 2017).

There are no national standards for K-12 public school facilities conditions, spending, and investment. Instead school districts use their annual operating budgets, educational facilities master plans, voter approved bond referendums, and capital budgets to determine what they need for their facilities. Priorities are then set based on what each school district can afford. With all of these variables, and a lack of national standards, it is easy to see how school facilities from state to state and even within a state, neighboring school district facilities can be highly inequitable (Filardo, 2016).

The National Council on School Facilities (NCSF) proposed national standards (Filardo, 2016). These proposed standards are based on the Current Replacement Value (CRV) which is derived by estimating the lifespan of each school facility and the cost to build a new one. The CRV is calculated by “multiplying new construction costs per square foot by the total gross footage of the district’s facilities” (Filardo, 2016, p. 21). NCSF recommends a school district spend approximately 7% of its calculated CRV each year in four key areas (Filardo, 2026, p. 21).

Breaking down the recommended 7% CRV, a school district's annual M&O budget should include 3% of the district's total CRV (Filardo, 2016, p. 22). Costs in this area include daily cleaning, ground upkeep, routine and preventative maintenance, minor repairs, utilities, and security. Some 2% of the calculated CRV should be allocated annually for capital expenditures on replacing key components such as roofs, HVAC, flooring, doors, etc. (Filardo, 2016, p. 22). Some 1% of a district's CRV should be set aside each year for systematic reduction of deferred maintenance and finally 1% CRV for needed alterations such as programmatic changes to classrooms, upgrading technology, as well as upgrading safety and security features (Filardo, 2016, p. 22). Appendix B, from Filardo's (2016) *State of Our Schools*, shows each state's M&O gap and capital gap as well as the combined gap projection. Arizona's combined gap projected is 67% (p. 34). The SFB devotes a portion of their website to preventative maintenance which includes several tools Arizona school districts can use such as a "Planning Guide for Maintaining School Facilities" as well as a preventative maintenance plan including downloadable excel spreadsheets and a life expectancies informational sheet (SFB, n.d., Preventative Maintenance section).

In the *State of Our Schools: America's K-12 Facilities*, Filardo (2016) summed up the importance of funding school districts as:

to provide learning environments that are safe, healthy, and comfortable for students and staff, a school district must devote substantial funds to maintain and operate its facilities. Proper maintenance also extends the operational efficiency and expected lifespan of facilities and ensures that the school district obtains maximum possible return on its capital investments (p. 8).

Quality of Facilities

Students and teachers all deserve to be in a quality school building. Across the United States school buildings are aging with many school buildings over 50 years old (Zdanowicz & Yan, 2022, para. 6). In the Baltimore school district, over 85% of its schools are at least 41 years old (Zdanowicz & Yan, 2022, para. 20). The district had such a backlog of needed infrastructure repairs and renovations that had not been updated and upgraded in a consistent way. As the district holds onto school systems past their life cycle, the district describes they just keep putting “Band-Aids” on them (Zdanowicz & Yan, 2022, p. 21).

Maxwell (2016) stated, “One of the functions of schools is to promote the acquisition of knowledge and skills. Another important function of schools is to transmit societal values and ideas” (p. 206). The aesthetic look of school buildings and how they are maintained are important aspects to any community as they can represent the community's values about public buildings including schools. To an extent, this then can signal to students and staff how they are valued (Maxwell, 2016). Investing in public school facilities can boost enrollment, build trust and pride which are important aspects now that there is an era of school choice. A 2015 U.S Green Council national poll found two-thirds of Americans believe it is “very important” to improve public school buildings (Filardo, 2016).

Psychologist Urie Bronfenbrenner (1979) believed child development is defined by the places children spend most of their time including home, school, and neighborhood. His ecological systems theory looks at how the interactions between the child and their environment (in this case school) affect how they will grow and develop. School facilities are a child's microsystem which is where they make meaning for themselves and affect the rest of their lives within their macrosystem (Bronfenbrenner, 1979).

Schools consist of more than just learning. Maslow's hierarchy of needs theory is often illustrated with a pyramid divided into five tiers which shows how the environment such as temperature, security, and safety are at the base of the pyramid representing humans most basic needs. Within the context of school, the physical school building represents the stage of psychological needs in Maslow's hierarchy, as schools should be warm, clean, and offer a place for learning, eating, and developing positive peer relationships. Having clean buildings including playgrounds and athletic facilities helps students feel safe and secure (Burleson & Thoron, 2014). More recently, school safety has taken on a different meaning with district schools spending more time and money on adding more physical security measures such as secured office entry ways, student ID badges, cameras, and locked doors due to an uptick in school shootings across the United States. School resource officers and security personnel also have been added in many districts. The goal is for students and staff to feel safe and create a feeling of reduced risk. Students and staff then can concentrate on learning (Heise, & Nance, 2022).

When looking at school facility conditions, there are certain building features associated with human comfort which have shown to improve student achievement including: building age, climate control, indoor air quality, lighting, acoustical control, school design features, furniture, and overall impression of the school (Uline & Tschannen-Moran, 2008, p. 57). Additionally, the condition of the grounds, athletic facilities, parking lots, and other areas affect overall school facility conditions (Uline & Tschannen-Moran, 2008).

Over the past 25 years there has been "a growing body of research connecting the quality of school facilities to student outcomes, including both achievement and attitude, as well as teacher attitude and behavior" (Uline & Tschannen-Moran, 2008, p. 56). In 1996, Bill Moyer's television documentary, *Children in America's Schools*, highlighted the enormous differences

students across the United States experience including overcrowded school buildings and schools with inadequate heating or cooling systems. The documentary visited rural, suburban, and urban schools in Ohio which highlighted the inequities found in schools (Children in America's Schools, 1996).

In 2016, GESD, located in the Phoenix metropolitan area, temporarily closed two schools which were found to have substantial structural deficiencies. Over 1,450 students and their teachers were temporarily moved to other locations (Rau, 2017). Between 2015 and 2019, 108 schools in California also had to temporarily close due to substantial facility problems (Gao & Lafortune, 2020, p. 12). As of 2019, 38% of students in California attended schools that do not meet the minimum facility standards (Gao & Lafortune, 2020, p. 3). Deficient interiors which include such things as floors, ceilings, and walls have the highest deficiency rates followed by restroom and electrical infrastructure deficiencies (Gao & Lafortune, 2020).

More recently, at the start of the 2022 – 2023 school year, The School District of Philadelphia with more than 115,000 students, sent students home early or canceled classes at certain schools without air conditioning (Juhasz, 2022, para. 2). This was due to high temperatures combined with humidity making classrooms without air conditioning unbearable with temperatures in these classrooms reaching 90 or more degrees for students and staff (Juhasz, 2022, para. 11). Many people were surprised not all schools and individual classrooms in Philadelphia did not have air conditioning, but with most school buildings over 75 years old, the electrical systems have to be redone in order to support air conditioning in all school buildings (Juhasz, 2022, para. 9). Not all classrooms can simply have a window or wall unit installed. It is estimated there are hundreds of millions if not over a billion dollars needed to meet the capital needs to bring Philadelphia's school buildings up to modern standards including air

conditioning. With climate change causing higher temperatures in many regions of the United States, the need for air conditioning is growing in many districts (Juhasz, 2022). A Baltimore school district closes schools more frequently for heating issues as more than a third of the schools' boilers are over 20 years old with some rusty and leaking pipes dating back to 1945. Classrooms in the winter have reported being as cold as 40 degrees forcing schools to close (Zdanowicz & Yan, 2022, para. 76).

In a 2005 NCES survey, approximately 10% or 8,100 of the traditional public school districts across the United States who participated in the survey reported the physical condition of their facilities interfered with instruction to a moderate or major extent (Maxwell, 2016, p. 214). The condition of school buildings is even more critical for schools with more than 50% of the student population eligible for free and reduced meals; 27% of these schools reported moderate or major school physical condition problems that interfered with instruction (Alexander & Lewis, 2014, p. 3). Schools which have a higher percentage student population who qualify for free and reduced meals more often have lower standardized test scores than schools with a lower free and reduced student population. Higher free and reduced meal schools also tend to have a higher percentage of minority students who are disproportionately affected by poor school building conditions (Maxwell, 2016). The Office of Civil Rights at the U.S.

Department of Education (USDoE) stated in a 2014, *Dear Colleague* letter that:

Structurally sound and well-maintained schools can help students feel supported and valued. Students are generally better able to do their jobs in well-maintained classrooms that are well-lit, clean, spacious, and heated and air-conditioned as needed.

In contrast, when classrooms are too hot too cold, overcrowded, dust filled, or poorly ventilated, students and teachers suffer. The quality of a school facility affects several aspects including

student achievement, student behavior, student perception of themselves, and the school's social environment (Duyar, 2010; Maxwell, 2016).

While teacher pay as well as parent and community involvement affect teacher retention, research has also found school facility quality can also be a factor in retaining teachers.

A survey of District of Columbia teachers found that when teachers considered their school to be in poor physical condition, they are far more likely to report they planned to leave their school or to leave teaching altogether than are teachers in facilities they considered to be in good or excellent condition. (Filardo et al., 2019, Teacher Performance and Satisfaction section)

Enrollment Trends

Between 1994 – 2013, K-12 public school enrollment grew by 4.8 million students, but not every state or district experienced growth (Filardo, 2016, p. 8). During this time period, 15 states experienced declining enrollment (Filardo, 2016, p. 8). Some states have school districts experiencing growth while other districts in the same state can be declining in student population. Just as growth can present facility challenges, declining enrollment can also create facility challenges for states and school districts (Filardo, 2016). California, for example, has historically experienced growth. In the 1990s statewide enrollment increased over 2% annually peaking at a statewide enrollment of nearly 6.3 million K-12 students (Warren & Lafortune, 2020, p. 5). However, for more than the past decade, nearly half of the school districts in California have been experiencing declining enrollment. Projections by the California Department of Finance indicate statewide enrollment will continue to decrease and some of the state's most populous counties will see enrollment declines accelerate to the point that by 2029 there will be less than 5.8 million K-12 students in California (Warren & Lafortune, 2020, p. 7).

While Arizona is a growing state, there are many school districts that have been declining in growth for the past two decades while other school districts have experienced growth during this same time period. Growth can put stress on a school district, such as ensuring there are enough classrooms and schools in the right places, but the district's overall revenue is increasing, allowing for more opportunities to expand to meet these additional student needs. With Arizona being on current year funding, districts with growth see this as a positive as their budget more closely aligns to the number of students versus districts with declining growth and suddenly losing funding in the middle of a school year if these declines were not forecasted and budgeted for (Cano, 2016).

Declining student enrollment forces school districts to look at all aspects of their district from a fiscal perspective. For example, if a district's average daily membership (ADM) falls by 100 students, simply eliminating four teaching positions, which is tied to 100 students or an average of 25 students per teacher, doesn't produce nearly the savings resulting from the revenue loss (Warren & Lafortune, 2020, p. 11). This example with an enrollment decline is oversimplified as typically the 100-student loss can be spread out at more than one school or even if it is one school, the decline happens across several grade levels and classrooms making it difficult to reduce the number of classrooms in direct proportion to the loss in the number of students. This causes districts to look at other ways to deal with the loss of funds, such as the number of diverse class offerings or a reduction in staff such as counselors, social workers, nurses, or paraprofessionals as well as district office staffing, including district staff from various departments including maintenance and operations. Some districts will divert capital funding to their M&O budgets which reduces the need to cut staff, but can have serious implications on keeping facilities up to date (Warren & Lafortune, 2020).

In 2008, GESD had over 13,000 students (GESD, 2021, p. 11). In the 2019 school year, prior to the pandemic, there were 11,449 students and projections showed enrollment in 2028 forecasted at 9,542 students (GESD, 2021, p. 19). Several reasons were cited for declining enrollment including changing demographics, the growth of charter schools in the area as well as birth rates in Arizona fell by 19% during the 2008 - 2009 Great Recession (GESD, 2021, p. 5). The SFB had listed GESD in the “Top 10” school districts that have lost student enrollment from one year to the next for four years, between 2017 and 2020 (GESD, 2021, p. 12). These trends caused GESD to look at various enrollment management strategies within the framework of their district’s Strategic Operating Plan. The Strategic Goal, initiated in 2019 and tied to enrollment management, stated “GESD will ensure financial solvency by providing the community a multi-year process of reorganizing boundaries and repurposing schools by June 2021” (GESD, 2021, p. 24).

Components reviewed by GESD included analysis of all facilities including renovation needs as well as requests to the SFB to replace schools or portions of schools. In conjunction with this, the district also studied the potential sale or lease of land and facilities. Additionally, GESD studied potential boundary changes for both general education students as well as special education program services. Between 2021 - 2023 the district proposed closing five schools as well as boundary changes for nearly all remaining schools to include the boundaries of the five closed schools. Additionally, several schools would be reconfigured to a K-8 model instead of separate elementary schools and middle schools. One GESD school would be repurposed to become a centralized facility for the district’s tuition preschool program and another school would be repurposed to become a System of Care Center which would offer a wide variety of community-based services for students and families. Services would include a medical clinic to

support student medical and mental health services. Community agencies would have access to the facility and the vision would be to provide one place for a variety of services designed to increase family engagement (GESD, 2021).

The GESD plan to repurpose two schools, one into a preschool center and one as a System of Care Center has been identified by the USDoE as an important component of school districts looking for alternative uses of K-12 school buildings as well as ensuring there are strong partnerships with groups and organizations which traditionally are considered separate from the school education community (Lyons, 2000, p. 3). Other uses of former school facilities for the community's benefit could include a senior citizen center, job development center, adult education center, food bank/neediest hot meal center, garden center, or a center for leisure/cultural activities (Lyons, 2000).

The GESD trend of declining enrollment, not only in the past, but forecasted over the next 10 years, shows the enormous changes students, families, staff, and the entire community can experience when a district is faced with declining enrollment and aging facilities. It also can be an opportunity to "right size" facilities, potentially increase diverse program offerings, and ensure facility utilization is being maximized. By looking at trends and coming up with a plan of action, all of these enrollment management components tie back to ensuring a district is being fiscally responsible with taxpayer money while also balancing the needs of the students and community.

Gilbert Unified School District, which calls itself Gilbert Public Schools (GPS) is another district located in the Phoenix metropolitan area. While GESD has had enrollment declines and small increases over the past 20 years, a decline in overall GPS enrollment is relatively new (Applied Economics, 2021). For over 20 years, from the early 1980s to early 2000s, GPS was a

rapidly growing school district (Applied Economics, 2021). In 1983 the district had four elementary schools, one junior high, and one high school (Applied Economics, 2021, p. ii). By 2007 the district had 27 elementary schools, six junior highs, five high schools, and one alternative secondary school (Applied Economics, 2021, p. ii). Although growth presented GPS with many challenges, such as building new facilities and frequently changing boundaries, welcoming new families was much easier than dealing with declining enrollment. The peak enrollment year for GPS was during 2009-2010, with close to 38,000 students (Applied Economics, 2021, p. 3). Since that time enrollment decreased to just over 33,000 students in 2021 for a number of reasons including an aging population and the continued growth of charter schools in and near GPS boundaries (Applied Economics, 2021, p. i). While certain areas of GPS continued to hold steady or even have small enrollment increases, the aging western portion of the school district has continued to see an enrollment decline for the past 15 years (Applied Economics, 2021). This has caused GPS, a once fast-growing district, to switch gears over the past five years to manage declining enrollment.

Enrollment management is an important part of the district's Strategic Operating Plan. Enrollment management components have included the closing and repurposing of one junior high into a grade 7-12 Gilbert Classical Academy, the closing of one elementary school and sale of the school site, and changes in some K-12 boundaries with the mindset additional boundary changes might be needed in future years (GPS, 2021b, p. 2). All of these changes are looked at within the goal of improving educational accessibility for students, the maximizations of space utilization, and to be fiscally responsible (GPS, 2021b).

Chandler Unified School District (CUSD) is a district with differing enrollment trends depending on the area of the school district. CUSD has had declining enrollment in the older

section of the school district including downtown Chandler and surrounding areas while new homes have recently been built in the southern and southeastern portion of the school district, with much of this area lying in the Town of Gilbert and Town of Queen Creek. Space utilization is a core component of CUSD's strategic plan called Journey 2025 (CUSD, 2022, p. 2). Chandler has had a history of repurposing schools with declining enrollment in order to meet the current and future needs of their district as well as to stay competitive with charter school offerings in the area. Repurposing has included adding certain curriculum or areas of focus including traditional, a grade 7-12 college prep school, dual language, gifted, grade 4 -8 performance academy, and both elementary and high school international baccalaureate (IB) programs (CUSD, 2022). In the fall of 2022, CUSD identified eight declining elementary schools primarily in the older portion of Chandler to study and explore the possible repurposing of these schools while possibly expanding CUSD's choice programs (CUSD, 2022). CUSD continues to use space utilization to ensure the district is being financially responsible with its limited resources (CUSD, 2022).

More recently, during the COVID-19 pandemic:

Many parents became educated consumers as their children took part in remote learning.

They were able to see with their own eyes the perceived quality of their child's education, allowing them to decide whether they should make a switch to private or charter schooling. (Ward, 2022, para. 2)

Since the pandemic, public school enrollment in the United States has dropped 9%, but some traditional public school districts have portions of their district overcrowded while other schools in the same district are underutilized (Ward, 2022, para. 3). This has caused districts to look at their space utilization with possible school boundary changes, repurposing of schools, and even

school closures. Parents still worn out from remote learning are now facing the prospect of their children having to move schools which can affect the level of trust they have with their school district (Ward, 2022).

School Choice

The growth of charter schools has been occurring across the United States since the 1990s. Charter schools grew in states in the 1980s, allowing parents to choose a school outside their assigned attendance area, often called open enrollment (Archbald et al., 2018). In June of 1994, Arizona's then Governor Fife Symington called for a special legislative session after campaigning for governor several years prior with the intent to shake up the Arizona K-12 education system. Symington and other key proponents had never visited a charter school, but liked the idea of parents having more choice besides only their neighborhood school. Initially vouchers were part of the large education reform bill. In order to get enough votes, school vouchers were removed allowing for enough democrats from low socioeconomic areas with low performing schools to vote for the allowance of charter schools (Ryman et al., 2018). As of 2017, 42 states allowed charter schools which accounted for approximately 5% of public school students (Archbald et al., 2018, p. 6). As of 2019, in six of California's largest urban school districts, there were over 300,000 students enrolled in charter schools within these districts compared to 2000, when there were less than 70,000 charter school students in these same school districts (Spurrier, 2019, p. 3).

Arizona has approximately 200,000 students attending one of over 500 charter schools. This accounts for 18% of students in Arizona attending a charter school, making it the state with the highest percentage of charter school students (Harris, 2019, para. 9). Charter school growth enrollment in GPS boundaries and in the surrounding areas has grown tremendously since GPS's

peak enrollment in 2010. As of 2020, there were 15 charter schools operating within GPS boundaries with an additional 25 charter schools within one mile of the district's boundaries (Applied Economics, 2021, p. i). These 40 charter schools serve nearly 20,000 students (Applied Economics, 2021, p. i).

Charter schools in most states are funded by state and federal dollars. Arizona does not give charter schools access/ability to ask voters to pass bonds and overrides by taxing local property taxes like some public school districts have in place. In lieu of that the Arizona legislature provides approximately \$1,200 more in per pupil funding than traditional public school districts receive (Harris, 2019, para. 12).

With charter schools continuing to grow across the United States including in Arizona, traditional public school districts are increasingly having more students attend charter schools instead of traditional public schools. This then affects enrollment negatively at traditional public schools as there is only a finite number of students and now these students are being spread out over more schools. This reduces the amount of funding public school districts receive. For districts with flat or declining enrollment this can only exacerbate financial problems for the district including having schools under capacity with empty classrooms which in turn means less teachers and support staff. Within a school district, if more students are attending charter schools their families might be less apt to vote for school district bonds and overrides since their students do not utilize the public schools.

Space Utilization

In recent years, the COVID-19 pandemic showed how school facilities may feel compelled to quickly adapt not only for the short-term, but also the long-term, all of which could affect a school district's capital needs. For example, certain mitigation strategies called for smaller class sizes. For some underutilized schools, space wouldn't be a problem, but many schools would need additional classroom space. Enhanced ventilation systems require upgrades, repairs, and renovations. With enhanced cleaning procedures, additional cleaning supplies and custodial staff had to be factored into capital budgets (Blagg et al., 2021). COVID-19 showed how quickly the need for new or modified space in schools can occur (Gao & Lafortune, 2020).

Special education programs continue to grow throughout the United States. From 2011 to 2021, the percentage of students identified with a disability grew from 13% to 14.5% (Riser-Kositsky, 2019, para. 4). This is an increase of over 800,000 students (Riser-Kositsky, 2019, para. 4). The average number of special education students per teacher is 17.1 (Riser-Kositsky, 2019, para. 17). These programs require space in schools, which often includes the use of full size classrooms for self-contained programs being used for less than 15 special education students (Stevenson, 2007). Even special education teachers who teach students with mild disabilities need a classroom to pull students to for certain portions of the school day. In 2022, the average number of special education classrooms per elementary school in Gilbert Public Schools was six classrooms (GPS, 2021a, p. 1).

Early childhood preschool programs also continue to grow. Some of these programs are for students identified for a special education disability while others are tuition based for families to have their three and four-year-old child attend a public school often with siblings rather than attend a private preschool (Stevenson, 2007). STEM labs and other specialty programs also

continue to grow to not only meet the needs of students, but also to compete with surrounding school districts, charter schools, and private schools due to increased school choice offerings (Stevenson, 2007). Schools with changing demographics might be identified as a Title I school in which they receive additional federal funds to support their students (Graue et al., 2007). Often this includes adding additional reading or math specialists or reducing class sizes at certain grade levels (Stevenson, 2007). All of these programs take up space and must be factored into a school's space utilization.

With charter schools and vouchers increasing school choice over the past three decades, school districts are increasingly looking at their own schools as opportunities for giving families options in order to prevent so many families from fleeing their traditional public school district (Stevenson, 2007). Districts sometimes refer to their campuses as a portfolio of schools designed to meet the needs of different students. In the past, a school district's facilities plan most likely would focus on fairness and equality; for example, if school A had three music rooms and two pieces of playground equipment, then school B also had three music rooms and two pieces of playground equipment. With choice school programs focused on areas such as STEM, the arts, or dual-language, facilities have to be looked at individually to ensure the facility is supporting that school's focus or mission. Sometimes extra classrooms have to be allotted to support that school's particular needs which then can change the overall capacity of the school (Stevenson, 2007).

Class size continues to be a debated topic in education (Graue et al., 2007). Schools continually are asked by prospective parents about what their class sizes are. In states with a plethora of school choice, school districts, charter schools, and private schools at times use their class sizes to attract potential families (Stevenson, 2007). A great deal of research has been

published on whether or not reducing class size truly makes a difference in student achievement. The Hattie et al. (2015) analysis of reducing class sizes reported an effect size of 0.21, below the average of 0.4 or what they call the “hinge point” (p. 73). Through extensive meta studies, Hattie et al. has found effect sizes less than 0.4 have negative or negligible effects on student achievement while effect sizes greater than 0.4 can potentially have positive effects on student achievement (Hattie et al., 2015, p. 91).

Some states such as Wisconsin mandated smaller class sizes (Graue et al., 2007). In 2004, Wisconsin embarked on educational reform called Student Achievement Guarantee in Education (SAGE) (Graue et al., 2007). One of the four strands found in SAGE included reducing class sizes in kindergarten through third grade to 15 students per teacher as a means to boost student achievement (Graue et al., 2007, p. 675). Graue et al. (2007) found there was a huge need for additional classrooms to meet this new student to teacher ratios. In one school the number of K-3 classrooms jumped from eight to 12 classrooms (p. 681). This school was already utilizing all of its classrooms. Specials classes such as art and music lost their classrooms and serviced students by traveling with a cart to each classroom. The level of services these special area teachers provided decreased as there was no way to haul all of their equipment and environmental posters from class to class. Other schools took a classroom and divided it into two smaller classrooms with the use of file cabinets, bookcases or dividers (Graue et al., 2007). This caused teachers to be in small spaces with their 15 students (Graue et al., 2007, p. 683). Teachers sharing a classroom had to be careful with noise and things, such as the classroom phone or sink that were usually on only one side of the classroom causing disruptions. Teachers and students didn’t always see the positives of reduced class sizes as physically there were not enough classrooms (Graue et al., 2007). Teachers remarked many times the playgrounds had plenty of space for new

buildings but that was seldom done in Wisconsin as many school districts didn't have the capital funds to build additional classrooms (Graue et al., 2007).

In 2011, there were nearly 600,000 portable classrooms used across the United States (Filardo, 2016, p. 24). Many of these portable classrooms are well past their typical life span of 20-25 years. Portables can be used to increase the capacity of a school due to growth in enrollment or if a policy or initiative by state or local district is implemented to reduce class sizes (Filardo, 2016). In California, nearly one in three students learns inside a portable classroom (Colome & Shendell, 2014). Portables are quite common in Arizona public school districts (Sanders, 2019). Some districts have no portables and others have many. GPS currently has 76 portables in use (GPS, 2021a, p. 1). Typically, each portable supports two classrooms. Traditionally GPS used portables at schools with high growth but over the past ten years as growth has slowed, for the most part, portables have remained at their current campus for decades supporting students and, in reality, becoming a semi-permanent part of those schools and their enrollment capacities (GPS, 2021a, p. 1).

QCUSD has been experiencing hyper growth; however, the district currently has no bonding authority due to voters turning down a bond override in November, 2021 (Stouard & Lamb, 2022). The bond authorization is back for potential voter approval in November, 2022, but even if the bond were to pass, it would take almost two years for additional classrooms and schools to be built. In order to be ready for the influx of new students for the 2023 – 2024 school year, QCUSD is adding 19 portables on five campuses. This will add 38 total classrooms as each portable has two classrooms (Stouard & Lamb, 2022, p. 10). Even if the bond were to pass in November 2022, QCUSD is looking to use these portable classrooms long-term at certain

campuses in order to maintain reasonable class sizes, not have to remove special programs, and not have to adjust boundaries (Stouard & Lamb, 2022).

School Boundaries and District Needs

All of these programs, such as special education, early childhood, Title I, and choice programs require space and must be factored into a school's space utilization (Filardo, 2016). From year to year, enrollment capacities of schools fluctuate not only with changing program offerings but also with the overall number of students in their boundaries. In school districts, this can have domino effects across the district (Maxwell, 2016). State agencies such as SFB may not factor all of these special programs in the calculation of a school's capacity (Filardo, 2016). Although these programs are found in most school districts, the number of programs a district has can vary greatly compared to a nearby district. Additionally, within a school district, two schools with the same floor plan and number of classrooms could have a different capacity based on the number of programs at each campus (Gao & Lafortune, 2020). From one year to the next, the number of programs needed in a school district and even at a particular school change making it important to stay up to date with enrollment management which also can involve looking at school boundaries within a district.

Over time school districts face the complex task of looking at school boundaries due to changes in enrollment patterns, the addition of school choice programs, changes in special education needs, changes in Title I status as well as district initiatives such as reducing class sizes. Moving school boundaries can potentially help school districts maximize the utilization of current space within its schools. Making those changes can be difficult as it involves moving neighborhoods of students from one school to another. Families and neighborhoods can have strong reactions to school boundary changes as often they have grown to love their current

school. With school boards being elected by the community, too much unrest with school boundaries could result in school board members loss of office. Superintendents are not immune to the impact of boundary changes as well. School boards and superintendents have an incentive to make thoughtful boundary and programmatic decisions which will provide the desired result for as long as possible (Lemberg & Church, 2000).

Neighborhoods and communities once full of students can go through cycles over several decades. The term aging out is often used to describe neighborhoods in which the K-12 student population graduates from high school, yet parents stay in the house with no school aged children. Over the years this can have big effects on school enrollment. When several schools in a district face declining enrollment, simply moving school boundaries alone may not solve the problem (Applied Economics, 2022). School districts then have to look at not only making school boundary changes, but need to examine if a school building should be repurposed. Repurposing could include making it a specialty magnet school in hopes of increasing enrollment, but this can have detrimental effects to the surrounding schools as there are only so many school age students in a certain area. Other repurposing ideas could include making it an early childhood center or, if the district is needing more space for district offices and programs, a school could be used as an administrative center. When schools are repurposed, the district is still having to financially maintain the building. If a school is in an area of low enrollment, and after analysis, the district is not needing a school building, closing a building can not only make financial sense, but also helps to ensure surrounding schools can maintain adequate enrollment based on projections (Lyons, 2000).

Ensuring schools have adequate enrollment helps to guarantee educational equity for students. When schools become so small, providing needed services to students, such as special

education, English language learner (ELL), art, music, and physical education can become harder to provide as there are not enough students to support these teachers being full time at the school (Applied Economics, 2022; Stevenson 2007). Additionally, class sizes at small schools are at times large due to the mathematics and financial impact of splitting a classroom. An example is 54 third grade students in two classrooms of 27 students each. If a district broke this third grade into three classrooms, there would be 18 students in each classroom which might not be financially possible for a school district to do. Making the decision to change school boundaries as well as repurposing or closing a school can be very political. Ensuring a district has accurate data is important when making such monumental decisions which will not please everyone in a school community.

The use of various geographic information systems (GIS) over the past 60 years has transformed the way data are used by all aspects of our world. School districts can use a variety of GIS software tools to look at enrollment and demographic analysis. This can assist school districts in exploring different scenarios as well as projections a decade out. School districts don't always use GIS software as it is complex and can be expensive for a district that only has one school. Many revert back to "pin mapping" (Lemberg & Church, 2000, p. 160). In its simplest form each pin represents a current student. Districts then count the pins in an area to fit with the capacity of the school and this determines the boundaries of each school. Today with the growth of school choice including open enrollment, this method isn't nearly as effective and doesn't take into account forecasted changing enrollment several years into the future (Lemberg & Church, 2000).

Demographers and Other External Services

With the complexities of GIS as well as the financial and political implications with school boundaries and the utilization of school facilities, many districts use a demographer or strategic planner to assist in providing demographic and enrollment analyses, and facility and attendance area planning. Often, updates are provided on an annual or bi-annual basis to ensure the district's facility planning goals and initiatives are achieving the results desired. These updates are often in the form of a detailed report (Filardo, 2016). Besides school district data, these companies look at other data including charter and private schools within or near a school district, birth rates, real estate home sales, current and future new home building, and the age of a neighborhood. These data help a district forecast student enrollment, which then allows for potentially maximizing the current space of school facilities as well as determining if new school construction will be needed or if a school needs to be repurposed or even possibly closed (Lapkoff & Gobalet Demographic Research, Inc. [LGDR], n.d.).

Strategic planning companies are often utilized by school districts to help a school district identify and manage their enrollment management priorities or a portion including desired educational space quality and specifications, space utilization, and the general upkeep of facilities. This allows districts to know their forecasted capital needs. Superintendents and district staff do not always have the skills nor time to collect the large amount of data and information needed. Additionally, firms which specialize in strategic planning can help school districts understand not only what their district's needs are, but what trends are happening in other school districts and in K-12 education in general (Frantzen, 2018; LGDR, n.d.). Many of these firms offer different levels of service based on the needs of the school district and what a school district is willing to spend. Some take the lead facilitating the meetings with

superintendents and district administrators while others act in a more advisory role. They often produce a document annually or every couple of years which can be very detailed centered on topics involving enrollment management for that school district's particular needs (Frantzen, 2018).

During COVID, the Arizona Department of Education (ADE) reported 38,000 fewer students were enrolled in public schools ("Districts Considering," 2021, para 9). Some districts saw 10% to 13% of their students leave ("Districts Considering," 2021, para 5). Some school districts have hired "headhunting" firms to support school districts to recruit students. With the rise in charter, private, and now more parents choosing homeschooling, having firms provide school districts data as well as promotional strategies is paramount in ensuring their classrooms are as full as possible with students ("Districts Considering," 2021).

Summary

Managing the precious resources of a school district is extremely important for the sustainability and vitality of a school district as well as being fiscally responsible stewards of taxpayer money and ensuring educational equity for all students within a school district. The key components of effective traditional public school district K-12 enrollment management include: funding of facilities, quality of facilities, enrollment trends, school choice, space utilization, school boundaries, district needs, demographers and other external services, and finally the role of trust.

The funding of school facilities is complex and varies greatly. There are two main sources of funding for school facilities including M&O and capital. The majority of M&O budgets typically go toward salaries and benefits of employees. Competing within the M&O budget are other ongoing expenditures such as utilities and services for buildings including

security, custodial, groundskeeping, and other maintenance needs. Capital budgets are greatly influenced by the economy. Capital expenditures include costs associated with school construction, land, buildings, facilities improvements, and equipment. Since capital is largely funded by local tax payers, this creates large inequities as each school district has different tax bases due to the property wealth found within each school district's boundaries. In Arizona, capital, called DAA, was greatly reduced during the Great Recession and only in recent years has been reinstated to pre-recession levels (Rau, 2017). School districts in Arizona still face a backlog of deferred school facility expenditures from years of little to no DAA. Capital funding is essential to school districts providing safe and healthy as well as up to date learning environments for students and staff.

Students and staff deserve to be in up-to-date quality school buildings. There is growing research connecting school facilities to student achievement and attitudes as well as teacher satisfaction (Buckley et al., 2004; Duyar, 2010; Lafortune & Schonholzer, 2018; Maxwell, 2016; Uline, & Tschannen-Moran, 2008). Approximately 10% or 8,100 schools across the United States were found in 2005 to have moderate or major facility deficiencies (Maxwell, 2016, p. 214). Student enrollment plays a major factor in determining what a school district needs to do with its facilities. Some districts are growing and need to look at new school construction while other more mature school districts face declining growth and need to look at keeping aging facilities up to date as well as looking at other enrollment management components including school boundary changes, repurposing of schools, as well as possibly closing schools to ensure all students have the same access to quality schools.

With the changing needs of students, school programs, and district initiatives such as class size reduction, school districts must carefully analyze the space utilization of each of their

schools. School programs which have been expanding and need more space in schools include special education, ELL, Title I, early childhood, and choice or magnet schools (Filardo, 2016).

School choice has been growing in many states over the past three decades. Charter schools have increased competition in traditional public school districts which has caused resources to be diverted from school districts. There is only a finite number of students in a given area and by spreading the students out among different schools, many school districts have faced declining enrollment. In Arizona, there are over 500 charter schools accounting for 18% of students (Harris, 2019, para. 9).

Looking at boundaries along with space utilization and forecasted student enrollment are important components to a district's enrollment management process. Using demographers and other outside firms can help school districts collect and analyze data they have as well as forecast future trends. When looking at boundary changes, school districts also can look at repurposing a school as well as closing a school to help ensure adequate enrollment at remaining schools as well as ensuring educational accessibility for all of its students.

Making potentially numerous enrollment management decisions is not easy for superintendents as they must navigate many different stakeholders. Key to making changes without too much political backlash includes superintendents building trust with all stakeholder groups as well as having an ongoing committee looking at enrollment management topics made up of diverse stakeholders. When trust is in place, superintendents can better navigate the need to make changes. Enrollment management, when done well looking at various components comprehensively, can help ensure a school district through the years maintains educational accessibility for all of its students as well as ensuring the facilities and resources which are ultimately owned by the taxpayers are maintained and kept up to date.

CHAPTER THREE: METHODOLOGY

This chapter begins with a restatement of the problem and purpose of this research study focused on enrollment management. The research questions are also restated. The research methodology will be presented and a detailed description of the research design will be provided. A description of the research design will include the population and sample, the instrumentation, informed consent, the data collection procedures, and data analysis. A summary will conclude this chapter as well as a preview of upcoming chapters.

Restatement of the Problem

There are many components found within enrollment management for traditional public preschool through 12th grade school districts to navigate. When these components are considered systematically and effectively, school districts can help ensure students and staff have access to equitable and up to date facilities while also ensuring school districts use their facilities wisely with perpetually changing enrollment and needs of the district. All features of enrollment management return to fiscal responsibility, which includes many facets including whether or not districts use their facilities efficiently in terms of their district's needs now and into the future (Filardo, 2016).

There are several trends affecting enrollment management including school choice, the growth of school programs or choice (magnet) schools within districts, class sizes, special education, early childhood programs, and technology needs. When enrollment management decisions are made by a school district, stakeholders can have strong opinions depending upon how the changes affect them. School districts and in particular superintendents must know how to build trust as well as how to leverage it with their communities.

Restatement of the Purpose of the Study

The purpose of the study was to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This study allowed school districts to examine their own individual enrollment management needs and potential processes for moving forward in making equitable decisions for all students while also being fiscally responsible. Public school districts in Arizona have immense pressures put on them to ensure students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders is an essential component when districts make enrollment management decisions which can affect the various community stakeholders in different ways.

Restatement of the Research Questions

This study examined how school districts can effectively use various enrollment management processes to meet the unique needs within their school district. The following research questions guided this study:

1. What are the key components of effective PreK-12 enrollment management, as described by participants in this study?
2. How do district leaders use enrollment management to ensure the best use of resources?
3. How is enrollment management used to ensure educational accessibility for all students?
4. How does trust affect school districts making enrollment management decisions?

Research Methodology

This research study utilized a mixed methods approach. Mixed methods, also known as multiple methods, combines both qualitative and quantitative research approaches. This case study examined how school districts use various components to make enrollment management decisions. These decisions can affect educational accessibility for students and staff as well as ensuring fiscal responsibility given each district's unique profile. According to Crowe et al. (2011):

A case study is a research approach that is used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. It is a well-established research design that is used extensively in a wide variety of disciplines, particularly in the social sciences. (p. 4)

Although case studies traditionally have been primarily qualitative, Yin (2009) advocated for both quantitative and qualitative approaches to case study, which can involve a mixed methods approach in order to more fully develop the case study.

Case study research begins with the identification of a specific issue, problem, or concern (Creswell, 2013). In this case study, understanding the components of effective enrollment management in PreK–12 school districts was the specific issue. This collective case study involved studying multiple cases revolving around enrollment management. Different cases through qualitative and quantitative research were used to highlight how enrollment management can work for school districts with different profiles and needs (Yin, 2009). In this research study, each school district was considered a different case each with its own unique enrollment management needs based on the profile of the school district.

Research Design

In order to develop a thorough understanding of the case, a case study approach involves the collection of various sources of evidence, using a range of quantitative and more commonly qualitative techniques (Crowe et al., 2011). This collective case study utilized a survey and interviews as data collection methods. The survey included both open-ended and closed-ended questions. Open-ended questions are valuable as they provided the researcher qualitative data in the participants' own words. Open-ended questions were used to understand what components of enrollment management are used by superintendents and district administrators. Additionally, the open-ended questions allowed for superintendents and district administrators to show how these components are being used in their respective districts. Closed-ended questions were used to gather specific demographic information as well as basic information on participants' knowledge and understanding about enrollment management (Johnson & Christensen, 2007). In addition to collecting quantitative data, the survey was used to identify participants for interviews. The concluding survey question asked participants if they were willing to part take part in an interview by providing contact information for a potential interview.

Additional qualitative data were collected from the five interviews. Each scheduled interview lasted between 60 to 90 minutes and focused on collecting more data on each participant's understanding and use of enrollment management components including how the role of trust factors into decisions.

Positionality of the Researcher

As a homeowner, former teacher, former principal, and current assistant superintendent, the researcher has a unique viewpoint from all perspectives. As a homeowner in a rapidly growing suburb, the researcher has experienced the need for new public schools to be built to

keep pace with the growth to ensure adequate facilities for many new students. The researcher has also experienced when a bond fails in both school districts where the researcher is a homeowner and employee how this can negatively affect a school district from several enrollment management perspectives including not enough space for students as well as not being able to keep facilities maintained with routine maintenance.

Charter schools have grown prolifically in both school districts the researcher resides in as a homeowner and as an employee. The researcher understands how the unmanaged growth of charter schools has contributed to the lack of support for public school districts in terms of the passage of bonds by residents and taking students away from public schools which negatively impacts the amount of M&O and capital funding each district receives.

The researcher opened an elementary school as a principal. This school was built from bond dollars during a time of high growth in the researcher's school district. The researcher understands had the bond not been approved by voters, overcrowding and shifting of boundaries would have had to occur. As an executive director and now assistant superintendent, the researcher has first-hand knowledge and experience with many components of the enrollment management process and how they can fit together to systematically make decisions to ensure educational accessibility for all students and staff including up to date facilities as well as being fiscally responsible stewards.

The researcher's own experiences and feelings with enrollment management affected the interpretation and analysis of the data. The researcher's own unique experience with key components of enrollment management has driven his interest in this research study. As an assistant superintendent, the researcher can help educate others on how important the process of enrollment management can be for each school district given their unique profile and

characteristics. As an educational leader, the researcher can articulately advocate for initiatives, laws, and procedures which can equip school districts to be prepared for changing needs using components from enrollment management.

Population and Sample

The population for this case study was all 238 public school district superintendents in Arizona including elementary, union, and unified school districts. This was done knowing not all invited participants were likely respond to the survey. All 238 public school districts were emailed the survey to complete during a three-week period. Follow up emails were sent to superintendents or their designee to complete the survey if the survey had not been completed at the conclusion of the second week.

The final question on the survey asked the survey participant whether they would be willing to participate in an interview in order to more fully explore how their school districts uses different aspects of enrollment management to fit the needs of their school district including how the role of trust factors into enrollment management decisions. Additionally, a question on the survey asked if the school district is considered urban, suburban or rural. This helped to ensure the interviewees came from different types of school districts. At least four superintendents or their designee made up the sample of individuals to be interviewed.

Informed Consent

No data were collected prior to IRB approval (Appendix C) and online survey consent approval (Appendix D) as well as completion by each participant. Prior to each participant completing the survey, the participants were given an overview of why the survey information is important to this research. Participants were asked whether or not they gave informed consent to complete the survey. If a participant, marked, no, then the survey was to be terminated at that

point. Participants could have also stopped taking the survey at any time which would cause this incomplete data not to be included. Participants for the semi-structured interviews were also give informed consent prior to the interview taking place.

Survey data have been securely stored and only accessed by the researcher. Interviews were recorded and transcribed. Once the dissertation was completed, the data will be securely stored for five years per university requirement and then destroyed.

Instrumentation

The instrumentation used for this collective case study included both a survey and individual interviews. The survey was designed and developed by the researcher to get participant perceptions on the various components of enrollment management including the role of trust.

Three individuals with different backgrounds, not participating in the study, field tested the survey to ensure it was clear and easy to complete from the participant perspective. The participants' answers from the field test were analyzed by the researcher to ensure the data would provide feedback relating to the four research questions. The survey field testers also looked over the interview questions and one field tester and the researcher went through a trial run of the interview questions in a mock interview. These steps were completed to ensure reliability and validity for the survey and interviews.

The survey (Appendix E) used for this study was provided as a digital survey and was administered through Qualtrics. Participants answered both open-ended and close-ended items. Close-ended questions were used to gather demographic information and participants' understandings of the various components of enrollment management. Open-ended questions were used to gather additional detailed information in the participants' own words in regards to

enrollment management components including how trust can affect how a superintendent or district administrator moves forward with enrollment management decisions.

The survey was used to assist in the identification of five participants for individual semi-structured interviews. The final survey question asked participants if they would be willing to participate in an interview in order for the researcher to gain a more in-depth understanding of their perceptions of enrollment management including the role of trust. Participants who specified they were willing to complete an interview had also indicated in a prior survey question if their district is considered urban, suburban, or rural. This helped to ensure the five interviews came from different types of school districts. The approved Interview Consent to Participate is found in Appendix F and the interview protocol, script, and questions are found in Appendix G.

Data Collection Procedures

No data were collected prior to IRB and informed consent approval. Data were collected through a survey and five semi-structured interviews with superintendents or their designee. The survey, along with a cover letter and consent form were sent electronically to each interviewed superintendent. Arizona School Administrators (ASA) facilitated sending out the cover letter, consent form, and survey to Arizona superintendents. The survey was distributed using Qualtrics software, which also allowed for analyzation of the responses. Superintendents or their designee were asked to complete the survey within three weeks. After two weeks, a reminder email was sent to superintendents who hadn't yet completed the survey.

Once the surveys were completed, the potential interview participants were identified based on the survey responses. Interviews were scheduled in person at an agreed upon date and time at a location convenient for each participant such as their office. Each interview was

expected to take 60 to 90 minutes. The interviews were recorded and transcribed. If there were any follow up questions, participants would have been contacted via phone.

Data Analysis Procedures

The survey data were collected and analyzed using descriptive statistics. The Qualtrics software provided for some data analyzation. Both close-ended and open-ended responses were coded to identify themes. Each of the five interviews were recorded and transcribed. All transcripts from the interviews were coded and analyzed to identify themes.

Table 1 provides the summation of the research questions, aligned with their sources of information and data analysis used. Survey questions 1, 2, 3, 4, 5, 6, 7, and 8 were not included in the table as these questions asked for demographics/background information. Survey question 20 was tied to the identification of potential interview participants. Interview questions 1, 2, and 12 were not included below as these questions asked for demographics/background information which were used as appropriate for data analysis.

Table 1

Research Questions, Sources of Information, and Data Analysis Used

Research Questions	Sources of Information	Data Analysis
1. What are the key components of effective PreK-12 enrollment management, as described by participants in this study?	SQ9, SQ10, SQ11, SQ15, IQ3, IQ4, IQ5, IQ7	Descriptive
2. How do district leaders use enrollment management to ensure the best use of resources?	SQ13, SQ16, SQ17 IQ6, IQ8, IQ9	Descriptive
3. How is enrollment management used to ensure educational accessibility for all students?	SQ12, SQ14, SQ18	Descriptive

Table 1 (continued)

Research Questions	Sources of Information	Data Analysis
4. How does trust affect school districts making enrollment management decisions?	SQ19 IQ10, IQ11	Descriptive

Summary

This mixed methods study examined the components of enrollment management for school districts. This study aimed to answer the four research questions. Quantitative and qualitative data were extrapolated from surveys administered to all school districts in Arizona. Additionally, five semi-structured interviews were conducted and additional qualitative data were coded. From these codes, themes were generated. Triangulation of data were conducted to identify consistencies within the data. Chapter four includes a detailed description of the research findings.

*

CHAPTER FOUR: RESULTS

This chapter is intended to present the findings and results of this study. The purpose of this study was to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This research study predominately took a qualitative approach but used a mixed-method design. Data were collected using a survey in which participants answered both open-ended and close-ended questions. Data were collected from superintendents or their designee from school districts in Arizona. Data were also collected from five interviews with superintendents.

Survey and Interview Participant Information

A total of 38 participants completed the survey with 37 identifying as the superintendent and one participant identifying as the district's executive officer for a county alternative school. The final question on the survey asked participants if they would be willing to participate in an interview to further explore enrollment management. Some 11 participants responded they would be willing to be interviewed. The survey responses from these 11 participants were analyzed to see what, if any, enrollment management components the district has or is involved with that could add more depth to this research. From this analysis, six superintendents were identified for an interview. Each of the six superintendents were contacted to schedule an interview. One superintendent chose not to proceed with an interview, but the five remaining superintendents were interviewed between January 17 and February 1, 2023.

Table 2 shows how the survey and interview participants responded to what grade levels their school district serves. The largest number of survey participants, 19 (50%), identified their district as being unified (K-12), the smallest amount, five (13.16%), identified their district being

high school (9-12), and 14 (36.84%) reported being an elementary (K-8) district. All five (100%) of the interview participants identified their district as being unified (K-12).

Table 2

Participant District Grade Levels Served

Classification	Survey Participants		Interview Participants	
	<i>N</i>	%	<i>N</i>	%
Unified (K-12)	19	50.00	5	100.00
Elementary (K-8)	14	36.84	0	0.00
High School (9-12)	5	13.16	0	0.00

Table 3 shows how each participant classified their school district as being urban, suburban, or rural. The largest number of survey participants, 22 (57.89%), identified their district as being rural. The smallest number of participants, seven (18.42%), identified their district as being suburban, and nine (23.68%) reported their district as urban. The largest number of interview participants, three (60%), identified their district as being suburban. One (20%) interview participant identified their district being urban and one (20%) interview participant identified their district as rural.

Table 3*Participant School District Classification*

Classification	Survey Participants		Interview Participants	
	<i>N</i>	%	<i>N</i>	%
Urban	9	23.68	1	20.00
Suburban	7	18.42	3	60.00
Rural	22	57.89	1	20.00

The survey asked participants what was their current student enrollment. Of the survey participants, the smallest student enrollment was 72 and the largest student enrollment was 44,200. Table 4 shows the breakdown of student enrollment. Some 19 (50%) survey participants reported having 1,000 – 9,999 district students and 11 (28.95%) stated they had 0 – 999. There were five (13.16%) survey participants reporting they were in districts with 20,000 or more students and three (7.89%) who stated being in districts with 10,000 – 19,999 students. From the five interview participants, the smallest student enrollment was 4,400 students and the largest student enrollment was 44,200. Three (60%) interview participants reported having 20,000 or more students and two (40%) interview participants identified having 1,000 – 9,999 students.

Table 4*Participant District Student Enrollment*

Enrollment Size	Survey Participants		Interview Participants	
	<i>N</i>	%	<i>N</i>	%
0 – 999	11	28.95	0	0.00
1,000 – 9,999	19	50.00	2	40.00
10,000 – 19,999	3	7.89	0	0.00
20,000 or more	5	13.16	3	60.00

The survey asked participants what was their current number of district school sites. Of survey participants, the smallest number of school sites was one and the largest number of school sites was 45. Table 5 shows the number range of school sites. Of the survey participants, 26 (68.42%) reported having 1 – 9 school sites and seven (18.42%) stated they have seven school sites. There were five (13.16%) survey participants reporting they had 30 or more school sites and zero (0%) participants reported having 20 – 29 school sites. Of the interview participants, three (60%) reported having 30 or more school sites and two (40%) reported having 1 – 9 school sites. No interview participants reported having either 10 – 19 or 20 – 29 school sites.

Table 5*Participant Number of School Sites*

Number of School Sites	Survey Participants		Interview Participants	
	<i>N</i>	%	<i>N</i>	%
1 – 9	26	68.42	2	40.00
10 – 19	7	18.42	0	0.00
20 – 29	0	0.00	0	0.00
30 or more	5	13.16	3	60.00

The survey asked participants if their forecasted student enrollment in the upcoming five years would grow, decline, or maintain. Table 6 shows the breakdown of forecasted student enrollment. Some 18 (47.37%) survey participants reported their school district would maintain student enrollment while 13 (34.21%) responded their district would grow. There were seven (18.42%) survey participants reporting their district would decline. Of the interview participants, three (60%) reported their school district would grow student enrollment. One (20%) interview participant responded their district would decline and one (20%) indicated their district would maintain student enrollment.

Table 6*Participant Five Year Forecasted Enrollment*

Classification	Survey Participants		Interview Participants	
	<i>N</i>	%	<i>N</i>	%
Grow	13	34.21	3	60.00
Decline	7	18.42	1	20.00
Maintain	18	47.37	1	20.00

Research Question 1 (RQ1) Findings

What are the key components of effective PreK-12 enrollment management, as described by participants in this study? In order to answer RQ1, four survey questions were asked: SQ9 (Has your school district adjusted school boundaries within the past five years or planning to do so within the next two years? If yes, has the boundary adjustment[s] achieved the desired outcomes?), SQ10 (Has your school district closed one or more schools within the past five years or is considering within the next two years? If yes, what became of the former school buildings[s]?), SQ11 (Has your school district repurposed one or more schools within the past five years or is considering within the next two years? If yes, what was the reason[s] for repurposing?), and SQ15 (Within the past five years, has your school district used external services such as a demographer, strategic planner, master capital planner, etc. to work with one or more areas of enrollment management? If yes, rate your experience working with this external services provider.). As well, four interview questions were asked: IQ3 (Besides yourself, who else is part of your district's enrollment management process and share why they are part of this group?), IQ4 (Have you used any external providers such as demographers or strategic planners

to guide the process? If so, how has this helped make enrollment management decisions?), IQ5 (What enrollment management processes is your district recently or currently using? [i.e., space utilization, choice programs, boundaries, etc.], and IQ7 (How do you feel your enrollment has been impacted by any key enrollment management processes and decisions your district has gone through?)

Survey Questions

SQ9. Has your school district adjusted school boundaries within the past five years or planning to do so within the next two years? If yes, has the boundary adjustment[s] achieved the desired outcomes? While 23 participants responded there have not been any boundary changes nor are there any anticipated boundary changes in the next two years, 15 participants responded their district has or will be making boundary changes. Of those 15 participants, seven responded the boundary changes had achieved their desired boundary adjustment outcomes with six participants responding the boundary changes had not achieved the desired outcomes. Two participants responded the desired outcomes of the boundary changes were still to be determined.

SP12 stated, “The boundary changes allowed us to prepare for our high school growth.” SP15 responded yes to boundary changes being effective, “Yes, the changes took into account anticipated growth.” SP31 shared how boundary changes were not effective, “It didn’t do what we thought it would as parents still sometimes chose their old school.” SP8 stated,

The boundary changes made didn’t do what we thought it would as parents still sometimes chose their old school. This change was just over a year ago so time will tell if future families eventually move to the new school.

The school board was another factor in boundary changes as SP6 shared, “The board modified the district staff’s recommendation after a year of study and made the problems worse.”

SQ10. Has your school district closed one or more schools within the past five years or is considering within the next two years? If yes, what became of the former school buildings(s)?

Some 27 participants responded no and 11 responded yes.

What Former Buildings Became. Of the 11 respondents saying they had closed one or more schools, nine respondents indicated what the former school was being used for. Some six survey participants indicated the school had been turned into a preschool or early childhood learning center. SP15 stated, “The said school was a K-8. Now it houses our preschool, gifted education classes, and administrative offices.” Another school district looked at the needs of the community when closing a school. SP4 reported the closed school, “became a working center for community agencies.” SP11 responded through the context of looking at several schools in their district being underutilized, “We are in the middle of rebuilding, repurposing, and reimagining schools. We are focusing on a particular elementary site being repurposed into another need in our district and community.” SP10 said that in their district, which already closed a school due to low enrollment, “Looking at options for our closed school but the fear is if we were to try to sell the school, a charter school will purchase it thus impacting our enrollment even more.”

SQ11. Has your school district repurposed one or more school within the past five years or is considering within the next two years? If yes, what was the reason[s] for repurposing?

Some 27 participants responded no and 11 participants responded yes, their district had repurposed one or more schools.

Reasons for Repurposing. Of the 11 responding yes, seven participants reported repurposing was due to declining enrollment. SP10 shared they closed a school due to declining enrollment and tried to attract new enrollment at their remaining schools while also being “budget friendly.” SP23 shared they changed the grade banding of the campus from grades 7-8 to

grades 6-8 to better utilize space at an underutilized junior high which also gave the sixth graders more course options. SP11 repurposed a school, “due to specialized needs and choice programming.” SP 25 repurposed a school to be the alternative campus for their district.

SQ15. Within the past five years, has your school district used external services such as a demographer, strategic planner, master capital planner, etc. to work with one or more areas of enrollment management? If yes, rate your experience working with this external services provider. Table 7 shows the breakdown of whether or not school districts have utilized an external service provider and if they have used an external provider, a Likert scale was used to determine what their level of satisfaction has been.

Of the 38 participants, 22 responded no external services have been used while 16 responded they have utilized external services. Further breaking down responses of the 16 participants’ experience with using external services, the largest number of participants, 10, rated the “external provider was instrumental in providing services and clarity in order for their district to make enrollment management decisions” while four participants said the “external service provider gave supporting information which their district contemplated when making enrollment management decisions.” Some two participants rated their “external provider gave limited information which neither helped nor hindered making enrollment management decisions” and there were not any survey participants giving the lowest rating, “external provider didn’t provide the information in an easy to understand manner and at times complicated the enrollment management process.”

Table 7*Participant Use and Experience with External Service Providers*

Use and Experience with External Service Providers	<i>N</i>
0 = no external services have been used	22
1 = external provider was instrumental in providing services and clarity in order for our district to make enrollment management decisions	10
2 = external provider gave supporting information which our district contemplated when making enrollment management decisions	4
3 = external provider gave limited information which neither helped nor hindered making enrollment management decisions	2
4 = external provider didn't provide information in an easy to understand manner and at times complicated the enrollment management process	0

Interview Questions

IQ3. Besides yourself, who else is part of your district's enrollment management process and share why they are part of this group? Each of the five interviewed superintendents shared they were an integral part of the enrollment management process. Some discussed how they rely on various cabinet members to manage certain aspects of the enrollment management process and others also shared how they have a committee of different stakeholders involved in enrollment management whether that is from a broader viewpoint or more specific perspective focused on a certain enrollment management aspect or project. They all mentioned how important school principals are to this process as they need to truly understand their neighborhoods and what the needs of their community are. IP1 said:

I am primarily the person who looks at enrollment but we are trying to get our principals to realize an integral part of their job is to continually look at enrollment management

within their neighborhoods as they have the best relationships with the community and can potentially understand why certain families are not coming to their school.

IP2 shared they feel everyone is responsible and part of the enrollment process through the lens or position they are in.

I think I might have a different approach to enrollment management. Enrollment management has many parts to look at and is the whole system. Social media is important to getting your message out, especially the daily positive happenings in a district so you can outweigh those negative stories which will happen as potential new families are looking at these social media posts as well as current families. I also, of course, have my cabinet look at enrollment trends in our district as we have naturally growing areas which might need new changes and boundary changes while the older portions of my district we might need to look at what special programs we could offer to retain and attract students.

IP3 and IP5 each shared a more traditional viewpoint on who is involved in the enrollment management process. IP3 shared:

So, we have a small team that is our assistant superintendent of student services, chief student services officer, chief technology and operations officer as well as our director of research. These four staff work pretty closely together identifying our capacities and making sure we are communicating with our community, effectively on the capacities of our schools, as well as the amount of students in our classrooms. They report their findings to me and keep me updated. If we have enrollment declines in certain schools then of course we work with individual principals as we need their help in better understanding the data as well as what we might want to do to help maintain or increase enrollment.

In addition, IP5 shared that for many years the superintendent at the time along with the executive director for each grade band has taken the lead in engaging in the enrollment management process. When applicable this team also involves others such as the chief financial officer and marketing director to tap into their expertise. When a certain school is looked at, principals are also an integral component of the conversation, particularly when a school is declining in enrollment.

Although IP4 has only been in their district for two years they provided their opinion about the district's enrollment management process:

For many years the district has had a small standing committee which typically meets once or twice a year to look at enrollment management. Members include the superintendent, business services administrator, operations supervisor, and when specific schools are talked about the principal is included.

IQ4. Have you used any external providers such as demographers or strategic planners to guide the process? If so, how has this helped make enrollment management decisions? All five interviewed superintendents shared they have used external providers to help with the enrollment management process. Four of the five have used the same demographer. IP5 shared that this demographer specializes in schools and has been doing this type of work for over 20 years. In general, IP1, IP3, IP4, and IP5 felt that demographers typically are pretty accurate with their assessment and predictions up to three to four years out, but it starts to get less accurate five – 10 years out, particularly over the past decade. IP3 stated:

As good as demographers are, it is getting increasingly more complex for them to look at not only birthrate and realty data, but with school choice alive and well understanding capture rates and how charter schools and surrounding districts play into your enrollment

adds to their complexity. The pandemic also knocked off their predictions which is something no one could foresee.

IP3 also shared that demographers seem to be rethinking their assumptions, calculations, and formulas given how school choice and empowerment scholarships are allowing families more than ever before to not automatically attend their boundaried school. IP2 being more recent to Arizona has found that demographers data are just one small component:

Demographers can tell you if you build 28 houses how many kids there will be, but not all of those kids are going to choose the boundaried school, especially if neighbors start to go to another school such as a charter school. Word of mouth or who people associate with for social, recreational or religious reasons can play a big role in where their friends and acquaintances will attend school. And, yes, they can provide the district's capture rate which is helpful to know but I trust my principals as they have a much better understanding of the trends happening in their neighborhoods. It is important we teach principals enrollment is a big component of their job if they want their school to remain viable into the future.

IP3 came into a district with an already established facility utilization committee. The committee is made up of about 25 stakeholders. With a combination of aging schools and a continued need for new schools, the committee recently used a company to look at the facilities management components including space utilization and what choice programs might need in the way of specialized spaces. The company has helped the district look at all of the many complexities of master capital planning including when items should be replaced so the district can hopefully move to a more proactive rather than reactive stance with facilities renewal. IP4, being fairly new to their district, which is maintaining or slightly decreasing in enrollment, has

found the demographic reports helpful in forecasting any big changes in the next few years. IP4 believes for their district getting a demographic report every three years is sufficient to help the district team with the enrollment management process.

IQ5. What enrollment management processes is your district recently or currently using? This question elicited various responses based on how the superintendent interpreted the question through the unique needs of each of their districts. IP1 foresees, with new subdivision growth on the horizon, boundaries will have to be looked at as some schools are at a higher capacity than others. Some of this is due to geography and how certain one-mile roads haven't yet been built making it more complex historically to change boundaries simply based on the number of students. Now, with more roads being built, this will allow for boundaries to potentially be more easily changed and have families actually follow the boundaries with more ease of access. IP1 feels even though boundary changes are not always popular, this will have to be done before the School Facilities Board (SFB) will look at building a new school. IP2 also feels boundaries will have to continue to be looked at but has some reservations about continuing to change boundaries:

Changing boundaries is not always popular. I have found in growing areas with a new school splitting off boundary changes are more accepted rather than in older portions of the district where a school repurpose or closure forces boundary changes. Even though these families might not have a choice, when a school is closed or repurposed families can choose to go to a nearby charter school instead of being bused to the new school two miles away.

IP2 also talked about how the district might form a committee to look at proposed boundary changes and study the boundary changes for up to a year before presenting their proposed changes to the governing board.

The negative of this process is we spend a whole year on it with a committee, surveys and maps and based on all of this information come up with a proposed option, then a particular HOA gets ahold of it in the 11th hour with like six people emailing and showing up at board meetings making some big noise and the board does something totally opposite. The committee feels defeated and I then still have the same problem. Boundaries from my experience are highly political.

IP3 and IP5 both shared how they have slowed down how often they make boundary changes as they do not always produce the desired effect and, in some instances, feel it drives affected families away from attending a school in their district and instead families go to a charter school. IP5 shared, “You have to balance out is it better to make smaller more localized and incremental boundary changes or do you look broadly at the entire district and make larger more systemic boundary changes less often.” IP5 also talked about how important it is to understand your district stakeholders including your current board members and their viewpoints on boundary changes before throwing yourself and a committee at lots of work which could all be for nothing. IP3 shared how transportation is a factor in boundary changes:

For now, we have stopped doing boundary changes in declining areas and are okay with some smaller and larger schools next to each other. Several years ago, we would try to move say a half square mile from one school to a neighboring school to balance out enrollment but families even three years after boundary changes were not making the move. We have found transportation in our older schools plays a big factor. In a couple

instances of boundary changes, the original school families were zoned for didn't require their child to ride a bus whereas the new boundaried school required them to ride a bus as the school was either further away or required students to cross a major street which would kick in bus service.

IP4 doesn't foresee making any boundary changes and instead continues to focus on what programs can be offered to keep families at a district school as well as possibly attract families from within the district who do not currently attend a district school. IP4 shared some ideas:

When looking at magnet or specialized programs, you have to be careful as the program can potentially cost more than the enrollment actually brings in and then you are saying to your community this specialized program gets more money while your child's typical school gets less and suffers. You must be very strategic and monitor the costs associated with your specialized school and do they really help you maintain or increase enrollment or not.

IP5's district has for over 20 years repurposed and provided specialized programs at certain schools as a part of their enrollment management process. "Several schools with a lower enrollment have been moved towards a traditional academy giving families a sense their child is attending a special school." Additionally, the district has repurposed several schools into gifted academies and college prep schools at all levels K-12. As the district's growth has slowed, about eight elementary schools in the district are currently being studied at what could they become to not only attract more enrollment, but ensure students at these predominately lower

socioeconomic schools continue to receive a viable program. IP5 shared more on this enrollment management initiative:

We are looking at the new 3 Rs: Rebuilding, Repurposing, and Reimagining. This initiative right now is centered on our older neighborhoods with lower enrollment. We want to show them our district is committed to keeping schools in the community, but also showing them their child can attend a state-of-the-art school with innovative programs and school buildings. If we don't reinvest in the community, then we could lose these families who are becoming more open to other options. We also are grappling with if smaller schools might be okay but how do we service these students in a financially feasible way so they get the academic and support services they need without spending too much more per student at a smaller school compared to a larger school. We have to rethink teaching structures and systems and how it might not look the same from one school to the next.

All five superintendents shared how incredibly complex boundaries and specialized programs can be as these are at the heart of enrollment management. They all shared how important it is to not stay stagnant but also realize what can realistically be done in their own district given the financial, demographic, and political realities. IP4 talked about how you have to be careful with specialized programs/

You have to be able to afford specialized programs such as traditional or dual language. If families choose to enroll in these programs and fill them up then it makes sense but I have a hard time when these programs can produce small class sizes while the rest of the district has larger class sizes in typical classes.

IQ7. How do you feel your enrollment has been impacted by any key enrollment management processes and decisions your district has gone through? This question proved to be individualized for each superintendent to respond to based on the needs of their own school district. Since IP1 has been superintendent, there haven't been many big enrollment management decisions, but now with new growth they are focused on upcoming boundary changes. IP1 shared, "Our traditional elementary academy has actually lost enrollment over the past three years." IP1 felt this is due to the pandemic and the demographics of the traditional school:

The pandemic particularly at this school had parents being more cautious about their child attending school in person and then as the pandemic subsided two beautiful new charter schools also emphasizing the traditional academy approach have opened up nearby keeping enrollment depleted at our district's traditional school.

IP2 shared the importance of building new schools in new neighborhoods:

If we stretch ourselves financially and build a new school right then the first homes go in we find our capture rate is higher. A few years ago, right before I got here the district took a more reserved approach to building new schools but we found if a charter school goes into the area before our district school, then our capture rate is lower as families and word of mouth talked about the charter school and by the time we built families didn't always enroll at our district school.

IP4 shared that with a stagnant and even declining district without any bonds or overrides in place they are focusing on keeping the current school buildings open.

We already closed one school and use a small portion of the closed school for administrative purposes. There are not forecasted to be much new home building in the district's boundaries so their focus is on maintaining the students and buildings they have.

When discussing how their district has a long history of repurposing schools and shifting boundaries when needed, IP5 shared.

The past 20 years with repurposing and changing boundaries, it has helped us keep a fairly high capture rate all while over 20 charter schools were built within or near the district's boundaries. Now are moving to another phase where we are trying more than anything to get students who live within our district's boundaries to possibly attend our schools but we also are realistic in that we will not capture all students. We now are moving into a new phase where we have to be careful, we don't specialize too many schools as there just are not the students there or we are stealing kids from one of our schools for another which does nothing from the district perspective.

IP3 discussed how they continue to look at older portions of the district with schools with lower enrollment and feels smaller schools in general are okay and with newer larger and schools in the north portion everything balances out giving some semblance of equity for families. "We have concentrated on allowing all high school students attend one of their high schools which has some innovative programs for part of their day while still attending their home school for the other portion of the day." IP3 went on to share, "This is a win-win for our high school students who still want to be part of their home school." From a district perspective, this allows for the concentration of certain specialized programs which can function at a higher level both financially and for the student experience instead of trying to offer these same programs at each high school campus and water down the experience making no program unique or particularly high performing.

RQ1 Summary

Effective enrollment management has many components based on the unique needs of each district. This can include many things but most often is space utilization, magnet or specialized programs, and boundaries. Enrollment increases and decreases drive the need to look at possible changes. Altering boundaries may or may not produce the desired effect, especially if one is measuring the effectiveness in year one or year five of the changes. When school buildings are closed by a school district, they can be used for a multitude of purposes with the most common response in this study being an early child or preschool center. Participants shared how repurposing a school in their district is most often due to declining and low enrollment.

Superintendents tend to use a small group of district office staff to monitor and manage enrollment management. Principals are usually included as they truly understand the needs and dynamics of their neighborhoods. External service providers are frequently used by school districts to help support their enrollment management process. One particular demographer is used by many school districts due to their expertise as accurately forecasting enrollment is complex with school choice in Arizona. School districts which use an external provider report most often they feel the external service provider was instrumental in providing services and clarity in order for their school district to make enrollment management decisions. Bonds and overrides are important for school districts to have in place because without them building maintenance is often deferred, class sizes can increase, and the overall ability for a district to maintain or grow enrollment can be much more difficult.

Research Question 2 (RQ2) Findings

How do district leaders use enrollment management to ensure the best use of resources? In order to answer RQ2, participants answered three survey questions: SQ13 (Space utilization

including overall enrollment as well as specialized programs can be an integral component of enrollment management. How does your district monitor space utilization at each school?), SQ16 (Does your school district currently have any of the following in place? Maintenance and Operation Override, District Additional Assistance Override, or Bond?), and SQ17 (How do the fiscal realities in your school district affect any of the various components of enrollment management?). As well, three interview questions were asked: IQ6 (When you make decisions to move forward with a certain enrollment management initiative, what is the process used to communicate this out including gaining input from the various stakeholders?), IQ8 (How do you see enrollment management tied to your district's fiscal reality?), and IQ9 (If you have gone out for bonds and overrides, how has enrollment management played a role in determining the amounts to ask voters and if so, how?).

Survey Questions

SQ13. Space utilization including overall enrollment as well as specialized programs can be an integral component of enrollment management. How does your district monitor space utilization at each school? This question elicited a variety of short answers. Several participant responses revolved around simply whether or not their district had enough space or not. For example, SP6, SP10, SP15, SP26, SP29, and SP32 all indicated they have enough space for their current enrollment. Several participants including SP7, SP13, and SP21 simply said they were overcrowded with no further explanation. SP9 responded on how they monitor space utilization, "Primarily in the spring semester we evaluate current enrollment and project future enrollment.

We consider available classroom space as well as alternate uses for classroom space, such as for administrative purposes.” Similarly, SP13 talked about looking at space utilization annually.

We do a space utilization study each year. We monitor where we have space and compare to the demographer’s reports. We either fill the space with specialized programs or work with our schools in the reimagining process to increase market share.

SP33 and SP35 both shared how their principals are involved with space utilization. SP33 specifically shared “Every year we ask principals to show a map of their school and how each room is used. We then review it knowing special programs can affect space.” SP34 shared how they are part of the process, “As superintendent, I maintain a spreadsheet that includes current enrollment in each classroom, the number of classes per grade level, and the building capacity using standardized assumptions.” SP21 is from a small district and stated, “We are a small single site district. We have one classroom per grade plus a couple of shared use spaces. We do not require monitoring of space.”

SP29 shared how their district will share extra space with their local Career and Technical Education District (CTED) school, “Because of our low numbers right now, we have extra space available and will likely partner with our local CTED to provide them with space they need for a new program they are going to open.” SP14 summed up space utilization as, “Enrollment drives space utilization; they are inextricably linked.”

SQ16. Does your school district currently have any of the following in place? Maintenance and Operation Override, District Additional Assistance Override, or Bond? As shown in Table 8, 23 participants reported they currently have additional funding sources in place. Some five (13.16%) participants indicated their district had only a Maintenance and Operations Override in place and two (5.26%) districts reported they had only a Bond in place.

No one stated they only had a District Additional Assistance Override in place. There were 10 (26.32%) participants who indicated they had both a Maintenance and Operations Override and Bond in place, and all three funding sources: Maintenance and Operations Override, District Additional Assistance Override and Bond were reported in place by six (15.79%) participants. Some 15 (39.47%) participants reported they had none in place.

Table 8

Additional Funding Sources

Additional Funding Sources	<i>N</i>	%
Maintenance and Operation Override	5	13.16
District Additional Assistance Override	0	0.00
Bond	2	5.26
Maintenance and Operation Override and Bond	10	26.32
All Three (Maintenance and Operation Override, District Additional Assistance Override, and Bond)	6	15.79
None	15	39.47

SQ17. How do the fiscal realities in your school district affect any of the various components of enrollment management? This short answer question garnered many various responses unique to each participant's current reality in their school district. Maintenance and operations overrides and bonds were mentioned quite extensively in responses, but in different ways. For example, SP33 commented:

It has been extremely challenging for our school district to pass any type of override or bond initiative to allow the school district to have additional resources. Our

declining/maintaining enrollment is a constant worry and our low capture rate shows how we can't keep our own families.

Another participant, SP9, shared, "With the bond and override not passing we will have tough decisions to make which will hamper our ability to grow enrollment." SP19 discussed how their district also didn't pass a maintenance and override after two consecutive attempts:

We were in the red in M&O for six years due to our M&O override not renewing. We ultimately had to make class sizes bigger to balance the budget which hurt our ability to grow enrollment when surrounding districts had smaller class sizes.

SP6, a participant from a growing district with an override and bond no longer in place, shared the fiscal realities and enrollment are closely linked by stating, "We transfer M&O into capital to pay for portable/temporary classrooms. This then takes away money for salaries and benefits to attract top quality teachers and staff." Another participant, SP28, who is in a district maintaining enrollment said, "If our bond fails next year we will be in a world of hurt. Our facilities are aging and need continual renewal and upgrades." The passage of an override was mentioned by SP18.

We just renewed our override which will help us keep class sizes down and to allow us to continue to grow for the next five years. Without this passing we would be rethinking class sizes as well as other support services.

A couple participants talked directly about funding. SP26 shared, "Inconsistent funding from the state provides hurdles to future planning." SP25 said, "The lack of capital funding with an old deteriorating school is a reality." SP12 discussed how open enrollment impacts their enrollment management. "Our open enrollment numbers make it possible to maximize the

efficient use of our facilities, thereby benefiting all students with a wide range of program offerings. Open enrollment kids benefit our district.”

SP8 commented on inflation, the rising costs of items due to the change in the economy, as well as the use of their Elementary and Secondary School Emergency Relief (ESSER) funds. ESSER funds are one time federal monies administered by ADE to give school districts assistance during the COVID-19 pandemic. ESSER funds have to be spent by September 2024.

Our projections for capital costs associated with our bond that passed in 2018 did not anticipate the significant inflationary pressures from the pandemic/post-pandemic. We have used ESSER funding to help offset these impacts. Because we are a smaller district with no significant land available for new housing growth, we anticipate no growth and build our budgets and planning processes accordingly. Our use of bond, ESSER, DAA funds focuses on maintaining and refreshing our facilities rather than building new school sites.

Several participants commented on how money is tied to their everyday work. SP17 commented, “It’s the other way; enrollment management drives fiscal decisions.” And, SP7 said, “The two are inextricably linked/correlated to one another in the planning and execution of our work.” Finally, SP36 shared, “Money is everything but as a leader I focus on what’s within my control.”

Interview Questions

IQ6. When you make decisions to move forward with a certain enrollment management initiative, what is the process used to communicate this out including gaining input from the various stakeholders? All five superintendents talked about the different methods of communication used when there is a potentially big enrollment management initiative such as

boundary changes, repurposing of a school, or closing a school. IP2 shared how over the years they have attempted to make several boundary changes to keep school enrollment balanced and to maximize their current space.

It is important to have the principal, staff, and parents from the potentially affected schools on a committee so they understand the thought process behind this. Boundary changes are very emotional for affected families. Getting key parents from say the PTO or Booster are important as people in the community tend to listen to them. If we can convince them this is good for all students, then we have a fighting chance as they can help explain why.

IP4 is still pretty new to their district but has past experience as an assistant superintendent with changing boundaries due to being in a growing district at the time.

We were building a new elementary every year and so boundaries were constantly being looked at. During the time I was there, we had a standing enrollment management committee which had several district administrators including one board member. We felt it was important to have a board member on the district committee as then they also could explain to the other board members the why behind the proposed decisions of the committee. We also made sure there was one staff member and one parent from each school on the boundary committee so it grew as the number of schools grew.

IP4 talked about how everyone on the committee felt like their school had a voice and could communicate proposed changes. Even if a school wasn't changing boundaries that year they either had changed boundaries recently or most likely would be having boundaries change in an upcoming year with all the new neighborhoods being built in this district.

IP5's experience with enrollment management has primarily focused on repurposing schools as well as boundary changes to accommodate for new growth. "We have about a 15-year history of changing declining schools to something new and exciting such as a traditional or dual language school." IP5 shared how important communication is when a school is undergoing a possible repurposing once district leadership sees something needs to be done to keep enrollment up at a particular school.

I remember when we first started changing a school to a traditional academy the neighborhood thought they were maybe not good enough to attend the school as we talked about how fast the curriculum was and how we would have school uniforms. Here we are thinking we are doing the neighborhood a favor when they thought we didn't want their kids. We quickly learned from that first experience how we needed to get the PTSO and parents who volunteered to understand much sooner the why. We also learned proactive and frequent communication from the district and school was important when repurposing was going to happen. This helped so much with getting buy in and the neighborhood seeing this is a good thing.

IP3 shared some insights from communicating various enrollment management initiatives. "Be prepared to communicate more often when a school is being closed or repurposed and have a committee with affected stakeholders. Sometimes generations of families have gone to a particular school." IP3 went on to share when boundaries are being changed due to growth communication tends to be easier as from their experience parents are happy for a new school to be built so that neither school is overcrowded. Now that most districts have a marketing and communications person or even team, it is imperative from IP3's perspective they are involved in the communication process of such potentially volatile information. "Communication staff are

so important as they are the experts in this field. They can help districts through enrollment management initiatives by keeping communication streamlined and clear for everyone.”

IP1, who has been a superintendent in four Arizona districts, shared how a communications staff person is important in the sharing of information with the community, especially those potentially impacted by proposed enrollment management changes. “Know your stakeholders, not just the parents but get to know the churches in your area as well as the retirement communities. They have more sway on potential changes than you think.”

IQ8. How do you see enrollment management tied to your district’s fiscal reality? IP1 shared how the elementary schools in their district are relatively small in terms of student enrollment.

Right now, we generally have two or three classes per grade level. This means we may have some small classes or very large classes at certain grade levels because say with two teachers it is not financially practical to decrease a teacher as the classes at that grade level would be too big or if we add a teacher then the classes would be too small. It creates a yo-yo for us with class sizes since we do not have any M&O override funds.

IP2 talked about how their district has both a current Maintenance and Operations Override and Bond currently in place.

Our M&O and Bond overrides have allowed us to keep class sizes manageable and keep somewhat up with building renewal but we soon are going to have to renew these and based on some surrounding district’s fate with these overrides I am not sure ours will pass. Once these overrides lose and go away it’s hard to break that cycle.

IP3 is in a district that still will have growth in the coming years but also has older neighborhoods with some sections of large retirement communities.

Although I am happy, we are growing overall, it still is hard. Over the last 10 years or so, we have struggled to garner support from our community when passing a bond. Our M&O overrides have a tendency to be a little bit more successful.

Being a growing district with the need to build more schools, not having a bond in place really hurts IP3's district. This forces the district to look at shifting M&O funds over to capital which then hurts the district with salaries and benefits for its employees.

IP4 is in a property rich district but the voters haven't passed a maintenance and operations override nor a bond in over 14 years. Although the district doesn't need to build new schools, with the absence of these overrides it hurts the district in other ways. IP4 shared, "I feel like with our buildings we live paycheck to paycheck. Like if our chiller goes out at the high school, we have no contingency funds. Our donors and PTSO's pay for things which they shouldn't have to." This district uses capital money to cover M&O costs such as teacher salaries. IP4 also stated how these parents expect a "Cadillac" education and yet without bonds and overrides in place they lose enrollment to surrounding districts.

IP5's district has a long history of passing maintenance and operations overrides and bonds in place. This has been important in this district being able to stay up with growth as well as be able to repurpose schools and have specialized programs. IP5 shared:

We are moving into a new phase for our district of little to no growth and maybe even declining. As some schools lower in enrollment we will need less teachers and other staff. We can deal with this through attrition but I also have to watch when a school gets so small. Do we truly need a full-time music teacher and as much office staff? Yet the work

to maintain the building is still there. Looking at the cost to run a small school versus a larger school is something we will have to look at. We also have a few specialized programs which are down in enrollment and we will have to begin to look at do we need so many specialized programs if the enrollment isn't there as some of these specialized programs can cost more than a typical classroom or school.

IQ9. If you have gone out for bonds and overrides, how has enrollment management played a role in determining the amounts to ask voters and if so, how? IP4's district has tried unsuccessfully several times to go out for bonds and overrides over the past 14 years. The latest was just this past November when over 60% of the voters rejected both the bond and override. IP4 shared:

Having been from districts in which the voters have historically passed these bonds and overrides, this was new for me. Knowing we hadn't passed one, we cut down on the amount to ask voters and did presentations showing how our schools are falling apart. It still didn't work.

IP5 is more nervous about the potential for losing their district's overrides as surrounding districts recently have failed. As schools in the district are aging and some with low enrollment might need to have a specialized program or be repurposed, this district is looking at how each school might get a little something with the potential passage of an override and bond. IP5 shared:

Now more than ever I think we have to show every school community their school will get something out of the passage of a bond and override. It might not be right away but showing a strategy might help people stomach the amounts we probably will ask for as

they can hopefully see it is going to help so many school sites. This is part of our Rebuilding, Repurposing, and Reimagining schools' initiative.

IP3 shared how the last two voting cycles their bond has failed. "I wasn't in the district when the first bond failed but when we went back the second time we asked for less money even though we actually needed more." IP3's district thought the amount asked for the first time was the sticking point but now that the bond has failed again they are contemplating whether or not to try again this coming year or wait for a few years.

Waiting to go out for a bond for another two or three years is really going to hurt us but I am not sure our community will all of a sudden pass a bond after two consecutive failures. They might even get more anti-bond if we bring it to them again for a third consecutive year.

IP2 shared how fortunately right now they have a bond and override in place both of which have historically passed but they see the tide possibly changing.

We will need to go out in two years to continue our override and bond. Right now, I would say with the economy and how surrounding districts are failing, we would be very conservative on what we would ask for.

IP2 further shared though they will continue to need to build a new school every two to three years for the next decade or so as well as keep up their older, aging schools.

We will probably try to show our community we need this much money but we are only asking for about 60% of that amount. This involves lots of communication and showing the community what will happen if these bonds and overrides are not passed.

IP1, also is in a district with a history of not passing bonds and overrides, said, "I am unsure if we will pass either in the foreseeable future but maybe once our current schools get filled

up to beyond capacity voters will see we really need these monies and it isn't just for extras.”

This could also hurt them though because if the schools become overcrowded more families may choose to send their kids to charter schools or surrounding districts causing families to possibly not support the bonds and overrides in their district. Most of their schools have been relatively new so there hasn't been a huge need for renovations, but now IP1 is seeing how the need for capital funding is going to increase in the coming years for facility renewal as well as to keep the aesthetics of the school up to date.

RQ2 Summary

Enrollment management and the resources needed go hand in hand for each district. Understanding the space utilization in each district is important in determining possible enrollment management steps. Funding sources such as maintenance and operations overrides, district additional assistance overrides, and bonds can be vital to a district determining what they realistically can or can't do in regards to keeping schools updated, renovated, and if in a growing district even building new schools. They also help to determine class sizes and what special programs might be offered. The fiscal reality of a school district is directly tied to its enrollment management. This can either be a positive or negative. Communication is paramount when districts are looking at certain enrollment management initiatives such as boundary changes, repurposing, or closing schools. Understanding how the impending enrollment initiative might be perceived by certain stakeholders in a district is important as well as ensuring certain key stakeholders can help a district communicate their plan within the communities they are part of. Having a district communications person or even department is now essential in this age of 24/7 digital media. Communications staff can also ensure the message is succinct; understanding how

the resources of the district are important in knowing what they might be able to accomplish in the area of enrollment management.

Research Question 3 (RQ3) Findings

How is enrollment management used to ensure educational accessibility for all students? In order to answer RQ3, SQ12 (School choice refers to families having many school options to choose from to send their child to including charter schools, private schools, and other public school districts. How has open enrollment/school choice affected enrollment management decisions in your district?), SQ14 (What programs or initiatives have affected space utilization?), and SQ18 (Educational accessibility for all students plays a key role in your district's actions with enrollment management decisions?) were asked.

Survey Questions

SQ12. School choice refers to families having many school options to choose from to send their child to including charter schools, private schools, and other public school districts. How has open enrollment/school choice affected enrollment management decisions in your district? There were 36 participants who responded to this question and answers ranged anywhere from one word to several sentences. SP36 responded, "Open enrollment allows kids to go anywhere which makes it hard for us to track students. The state doesn't provide data we could use to track where students in our boundaries are choosing to go." Open enrollment and school choice affects each district in different ways. Similarly, SP37 said, "This has become much more complicated, since with open enrollment we have less certainty about how many students will enroll."

SP5, SP11, SP21, SP30, SP34, and SP38 shared how open enrollment has negatively impacted their particular school districts. Some of these survey participants elaborated on how

open enrollment has negatively impacted their school district. SP21 in particular shared, “Open enrollment has a tremendous impact on our district as our current capture rate is 44%. The rest of students in our attendance area attend other schools.” Capture rate refers to the number of students who reside in a particular school district’s boundary who actually go to a school within that district. SP34 commented:

Most families drive away from us each morning to go to work. This unfortunately makes it much easier for families to choose to drop their children off at other schools where they have been able to enroll based on the open enrollment choices.

SP11 similarly shared the negative aspects of open enrollment in their district “has had dire consequences. Being an affluent area in the state, school choice punishes us through private and charter school enrollment. Now empowerment scholarships are here which become a coupon for rich families in our district.”

Several survey participants including SP3, SP6, SP7, SP8, SP12, SP14, SP19, and SP35 shared how open enrollment positively impacts their school district’s student enrollment. SP3 stated, “Yes, we are over 50% open enrollment in our district. Each school has a signature program meant to attract students.” SP6 commented, “Our district enrollment includes over 40% of our students who come from outside our district” while SP7 similarly said, “We gain 3000+ students from out of district on open enrollment.” SP14 also captures almost 50% of their student enrollment from outside the school district’s boundaries. SP19 said, “We benefit from open enrollment and retain 70% of our own students” and SP35 shared, “We have grown enrollment and as a result have served all youth wanting to attend our schools.”

Several participants from rural, isolated districts shared how open enrollment doesn't affect them much. SP28 shared:

There is only one school in our district. The only other choice would be for students to go to the district in the next nearest town which is 30 miles away. We probably have over 100 students leave our district. Our county only has two school districts and no charter schools so our biggest competitor is the other town.

SP15 commented, "It has not as there are no other choices in our 600 square mile boundary area."

Several participants including SP2, SP9, SP13, and SP23 also shared how open enrollment has created opportunities. SP2 said, "It created the opportunities to develop district-wide signature programs and initiatives to market our programs and schools with positive results." SP9 reported, "We have improved our marketing, particularly through social media. We also have established internal procedures to manage enrollment of new students to try to roughly balance class sizes between our elementary schools." SP23 shared:

Our district is one of the most choice districts in the state. We have 40 schools and there are an additional 40 charter/private choices in my zone. The ESA law although catered to the wealthy, we may see an expansion of more charters/privates in our zone.

SP13 talked about offering school choice for many years:

We have been offering a variety of school choice options for our community for the past 20 years. We have surveyed parents as to what they would like see their children involved in and created schools within a school or complete repurposing for gifted, academies, and traditional programs.

SQ14. What programs or initiatives have affected space utilization? Table 9 shows how the 38 participants responded to this question and because they could choose any relevant items, there were 106 responses. The program which affected space utilization the most was special education with 29 responses. The next highest response, 22, was for early childhood/preschool programs. Career Technology Education (CTE) programs affected space utilization with 17 responses and specialized programs, a broad category, received 11 responses. Some 10 responses were for decreasing class size and eight were for Title I programs. Community partnership programs and services accounted for seven responses and two responses were for ELL programs.

Table 9

Programs or Initiatives Affecting Space Utilization

Programs or Initiatives	<i>N</i>
Special Education	29
Title I	8
English Language Learner (ELL)	2
Early Childhood/Preschool Programs	22
Career and Technology Education (CTE)	17
Specialized Programs such as: Science Technology, Engineering, and Mathematic (STEM), Arts, Gifted, International Baccalaureate (IB), etc. at particular schools	11
Community Partnership Programs and Services	7
Decrease Class Size	10

SQ18. Educational accessibility for all students plays a key role in your district's actions with enrollment management decisions? This Likert-scaled question asked each participant to

rate how they feel educational accessibility for all students plays a key role in their district's actions with enrollment management decisions. Table 10 shows the breakdown of responses. The most responses, 20 (52.63%), were Strongly Agree. There were seven (18.42%) responses for Agree, and four (10.53%) responses were Neutral. And, finally six (15.79%) responses were for Strongly Disagree and the smallest response with one (2.63%) was Disagree.

Table 10

How Participants Feel Educational Accessibility Plays a Key Role in District's Actions with Enrollment Management Decisions

Options	<i>N</i>	%
1 = Strongly Disagree	6	15.79
2 = Disagree	1	2.63
3 = Neutral	4	10.53
4 = Agree	7	18.42
5 = Strongly Agree	20	52.63

RQ3 Summary

Educational accessibility for all students is affected by enrollment management. School choice including open enrollment is prevalent in Arizona. Each district is affected by school choice. Some districts, particularly those located in suburban areas have many charter and private schools potentially taking away student enrollment while rural districts often are not negatively impacted too much from charter and private schools. Open enrollment creates winners and losers for public school districts. For some school districts, open enrollment positively

effects their student enrollment while for other districts, they lose student enrollment to neighboring districts.

Within a school district, space utilization is affected by a number of different programs and initiatives depending upon the needs of the district. Educational accessibility for all students is an important component of enrollment management decisions in many districts while a smaller number of districts indicated educational accessibility didn't factor into enrollment management decisions.

Research Question 4 (RQ4) Findings

How does trust affect school districts making enrollment management decisions? In order to answer RQ4, SQ19 (When your district has made enrollment management decisions, how has the role of trust between district leadership and the various stakeholders [staff, parents, neighborhoods] in the community affected decisions either positively or negatively?), IQ10 (How do you feel the trust you have with the various stakeholders plays a role in making enrollment management decisions?), and IQ11 (How have you worked to gain trust with the stakeholders in your community?) were asked.

Survey Questions

SQ19. When your district has made enrollment management decisions, how has the role of trust between district leadership and the various stakeholders (staff, parents, neighborhoods) in the community affected decisions either positively or negatively? Table 11 shows the 30 responses to a Likert-scaled question of their views on the role of trust plays with stakeholders when making enrollment management decisions. Some 11 (36.37%) participants responded they Agree the role of trust plays a role with enrollment management decisions and 11 (36.37%) participants responded they Strongly Agree. Three (10%) respondents responded Neutral. Some

four (13.33%) participants responded Strongly Disagree while one (3.33%) respondent selected Disagree.

Table 11

The Role of Trust Plays with Stakeholders When Making Enrollment Management Decisions

Options	<i>N</i>	%
1 = Strongly Disagree	4	13.33
2 = Disagree	1	3.33
3 = Neutral	3	10.00
4 = Agree	11	36.67
5 = Strongly Agree	11	36.67

Interview Questions

IQ10. How do you feel the trust you have with the various stakeholders plays a role in making enrollment management decisions? IP3 shared the importance of communication when building trust regarding enrollment management by stating, “It is so important everyone has the appropriate information.” Since IP3’s district has had to frequently change boundaries, it has created a degree of uncertainty in some of those school communities. “We have worked really hard to be as honest as we can with affected stakeholders. A big part of gaining trust is being transparent and also listen and then listen more.” IP4 shared how society’s lack of trust with federal and state governments has trickled down to local school districts. “Right now, the level of trust between myself and a couple of board members isn’t good. This only creates a greater sense of mistrust in our community which further keeps us from being successful with passing

overrides and bonds.” IP2 discussed how they feel trust has been established since coming into the district from another state.

The number one thing is consistency. Say what you are going to do and then do it. I for many years have delivered a State of the District speech which talks openly what we have done and where we are going.

IP2 shared if you don’t gain trust then you are not going to be very successful at delivering on enrollment management initiatives.

IP1 stated, “Building a positive working relationship with the board is vital to getting other stakeholders to potentially trust you with potentially volatile enrollment management decisions.” IP1 discussed how they spend a lot of time getting to know new board members and building a positive working relationship with each board member understanding not all board members will always agree with their decisions but being as transparent as possible is always best. Being a fairly small district, IP1 talked about how getting to know PTSO and Booster members is important so when enrollment management decisions such as boundaries comes up they inherently trust you. IP5 shared how the pandemic seemed to reduce the level of trust with some constituencies.

For a long time, we had taken trust for granted but the pandemic split that wide open. All of a sudden, we had naysayers showing up to board meetings. It felt like we were pleasing no one when the majority stayed silent while the two opposing sides took us to task. We were in a reactive mode. Over the past year we have retooled our communications and marketing department to be much more proactive and share positive news. I am reaching out to more organizations and getting key business and city officials

to work together with us. The more we talk and listen the better off we will be when we have to soon repurpose and change boundaries.

IP5 also talked about building trust with the board. “I have two new board members who are at politically opposite ends. I am working hard to show them how all our decisions should be grounded on what is best for students and families.”

IQ11. How have you worked to gain trust with the stakeholders in your community? IP5 discussed being proactive with all groups. “You have to do a lot of listening. People want to be heard and showing them you will listen with intent can gain much trust.” IP3 talked about working to gain trust with the business community and chamber of commerce. IP3 feels they are the movers and shakers in the community and can potentially help get people in their circles to support various enrollment initiatives. IP2 feels he can access many members of the community in a variety of ways.

We have a number of retirement communities who read the newspaper and are old school. I regularly write a district update in two of our local newspapers as well as I am willing to go out to any retirement community to have listening tours. I am able to push back on false media and rumors.

IP4 shared how hard it has been to get to know the community since the vast majority of residents do not have school age children and there are not many businesses in the community. Nonetheless the district started a quarterly breakfast with business leaders. “The hard part is I am constantly fighting false rumors that people spread which is not good for the school district.” This hurts the level of trust in IP4’s district. IP5 has found his many years in the community have helped build trust quickly once he became superintendent with a fairly large group of

stakeholders. This has also allowed him to focus his time on those who do not know him so that hopefully he can win them over.

IP1 shared how over the years each district he has been in he has learned there are different stakeholders but they all want face time. “When you are a new superintendent, do lots of listening and when you find people who have been in the community for a while forge relationships with these people as they can help you get entrenched into the community.” IP1 also shared “show you’re genuine and real and that you really care about the community. This might mean joining the Rotary or Kiwanis clubs.” IP1 has also invited faith-based leaders to a bi-yearly breakfast so they can talk about the needs of the district. As well, IP1 also stated,

Be honest when you make mistakes as it shows you are human and people value authenticity. People are more apt to forgive if you are upfront rather than trying to hide things. This builds a huge amount of trust and can help you really connect with various groups of people.

RQ4 Summary

Trust is vital to school districts being able to successfully move forward with enrollment management initiatives and decisions as seen from the survey and interviews of superintendents. Being transparent, humble and willing to admit mistakes will go a long way in building trust. Knowing who the movers and shakers are in your school district is also vital to building trust. This can be PTSO and booster club parents, as well as business leaders and service-oriented organizations. Faith based leaders can also help bridge the trust between the superintendent and the religious organization. Trust also starts with the school board because people watch for what type of relationship superintendents and board members have. Without trust, it is much harder to

successfully navigate enrollment management initiatives such as boundary changes, repurposing, and closing schools.

Chapter Summary

Enrollment management is complex and what components a district will embark on will be suited to the particular needs of the school district. Components can include many things but most often is space utilization, magnet or special programs, and boundaries. Additionally, enrollment management is the upkeep of buildings as well as ensuring facilities are meeting the needs of the students and the programs they are part of. Student enrollment and space utilization are huge factors when looking at possible changes. Initiatives such as boundary changes may or may not produce the desired changes. Understanding how declining schools can be repurposed or changed into a specialized program are important.

The ongoing monitoring of enrollment and how it affects schools is vital. This can be done by superintendents and other district administrators or it can also include principals, staff, parents, and other key stakeholders. Enrollment management is complex so utilizing external service providers can prove to be very beneficial due to their expertise. External service providers can also somewhat shield the district administrators from potentially volatile decisions.

Funding sources such as maintenance and operations overrides and bonds can be vital to a district determining what they realistically can or can't do in regards to enrollment management components such as keeping schools updated, renovated, or even building new schools in growing districts. Other initiatives can be class sizes and what special programs might be offered. The fiscal reality of a school district is directly tied to its enrollment management.

Communication is important when districts are looking to build trust with various stakeholders as well as when districts are looking at certain enrollment management initiatives

such as boundary changes, repurposing or closing schools. Having communications staff in this age of 24/7 digital media is important to ensuring the right message is going out in numerous modalities.

Educational accessibility for all students is affected by enrollment management. School choice including open enrollment can also affect educational accessibility. Additionally, school choice and open enrollment helps some school districts while it negatively impacts other districts. Trust is also vital to school districts being able to successfully navigate enrollment management initiatives. Being transparent, humble, and willing to listen are key components of gaining trust. Additionally, districts need to know who their key stakeholders are. Enrollment management is complex but when looked at holistically much important work on behalf of students can be done.

This chapter summarized the demographic information for the superintendents who participated in this study. The findings and results were presented for each research question based on the results of both the survey and interviews. Chapter 5 will present the summary, conclusions, implications and recommendations related to the various components of enrollment management including the role of trust.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

This chapter will provide a summary of the research study, summarize the findings and conclusions, provide implications and recommendations for application, and recommendations for future research.

Summary of the Study

Public school districts in Arizona face immense challenges related to enrollment management. The enrollment management process is made up of several different components all of which can be used by school districts to meet their unique needs within their school district. Public school districts are tasked with ensuring students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders in the community is an essential component when superintendents and district leaders make enrollment management decisions which can affect the various community stakeholders in different ways.

Through this study, Arizona school district superintendents were asked to complete an online survey to examine their individual enrollment management needs and practices, and the role of trust in effectively managing student enrollment. Additionally, several superintendents were interviewed to get more information related to how the enrollment management process works for them personally and their school district.

Summary of the Findings and Conclusions

School districts which use various enrollment management processes can find success in navigating a path toward their district's unique initiatives or goals. Understanding the stakeholders who will be affected is important in understanding who to communicate with as

well as getting the right people on some type of committee to help with buy in. Trust is essential when enrollment management processes and decisions are made.

Summary of RQ1 Findings and Conclusions

What are the key components of effective PreK-12 enrollment management, as described by participants in this study? Effective enrollment management has many components based in the unique needs of each school district. This coincides with what Cano (2016) has found in Arizona. Although the state is growing, there are many school districts which have been declining in enrollment for the past two decades while other districts have experienced growth during this same time period. Both types of districts face enrollment management pressures and the need to make changes. Enrollment management can include many things but most often is tied to space utilization, magnet or special programs, and boundaries.

Participants agreed when there is changing enrollment within a district's boundaries, boundary changes often can be one way to manage enrollment. In some cases, participants have found altering school boundaries produces the desired effect and in other instances participants found boundary changes didn't produce the anticipated changes. With school choice being a strong component in Arizona, some families choose to remain at their current school when boundary changes are made. Participants shared how geographic barriers such as the lack of roads, or canals, or railroads can affect whether or not families will move to the new boundaried school. Also, community perceptions of whether or not the current or new school will best serve their children can be a factor. Measuring the effectiveness of particular school boundary changes can fluctuate based on individual circumstances. In year one the desired changes may not be seen; however, by year five the desired effect can potentially be fulfilled or at least come closer to the desired outcome. This aligns with the Applied Economics (2022) analysis that boundary

changes do not always have an immediate effect and even long term do not always produce the desired enrollment changes.

Closing schools is never an easy decision but sometimes needed in order for a school district to be fiscally responsible as well as ensuring all students have access to high quality educational instruction and programs. When a school was closed, participants noted the closed school was used for several other purposes with the most common being a preschool or early childhood learning center. Other uses included administrative work space, allowing community agencies to use the building to support wrap around services, as well as being a location for an alternative program or school. Participants who have closed schools indicated when looking at closing a school, it is important to have a plan of what you are going to do with the closed school. These repurpose and closure findings coincided with what Lyons (2000) shared. Simply closing a school can save district money, but an unused closed school still requires upkeep and can become a negative focal point toward the district for community members living or working near the closed site. The selling of a closed school is governed by several Arizona statutes which prevents many districts from looking at this option unless another government entity is interested in the property.

When schools are repurposed, the most common reason participants noted was due to declining and low enrollment at a particular school site. Several participants shared how important it is to understand the needs of the district and what specialized programs might attract enrollment from not only existing families, but families not currently enrolled in a school within their school district in order to potentially attract new enrollment.

Participants noted most often district administrators including themselves monitored enrollment management on an annual, if not more, frequent basis. When an enrollment

management initiative is planned, most participants either formed a special committee or work group made up of stakeholders affected by the potential change. Utilizing external services such as demographers, strategic planners, and master capital planners can really help school districts navigate the complex enrollment management process. Participants reported these external providers can provide clarity as well as provide some political cover for superintendents and committees studying potentially politically volatile enrollment management initiatives. These findings align with what Frantzen (2018) and LGDR (n.d.) shared. Additionally, some of these providers can share trends they see in other school districts. Utilizing the services of the right company or person from an external provider is important as a level of trust has to be established. Having the right people on committees as well as an external service provider helps enrollment management decisions move forward.

Summary of RQ2 Findings and Conclusions

How do district leaders use enrollment management to ensure the best use of resources? Enrollment management and resources needed go hand in hand for each school district. It is important each school district first understands its space utilization in order to determine possible enrollment management steps. Participants shared a comprehensive overview of how space is used. This really helps in determining what enrollment management initiatives a district might embark on especially in a school district with multiple campuses. Participants also shared how space utilization is vital to understanding where specialized programs that are growing based on the needs of the current students, such as special education, Title I, early childhood/preschool, and ELL, can be placed within a school district. Space utilization also helps districts determine where enrollment management initiatives designed to retain and attract students can be potentially housed including CTE, gifted, and class size reductions. Participants' experiences

with space utilization mirror what Stevenson (2007) found in terms of the expanding uses of space to accommodate for various student needs as well as to attract and retain students.

Funding sources such as maintenance and operations overrides, district additional assistance overrides, and bonds are vital to a school district determining what they realistically can or can't do in regards to keeping schools updated, renovated, and if in a growing district even building more schools or additions to schools. These potential funding sources also help determine class sizes and what special programs or magnet schools might be offered.

Additionally, open enrollment students from outside its district boundaries is something most school districts welcome yet without additional funding in place a school district might not have the space or fiscal means to welcome open enrollment students.

The fiscal reality of a school district is directly tied to its enrollment management. This was evident by participants' answers to whether or not any additional voter approved funding sources are in place in their school district. If no additional funding sources are in place, then the potential for enrollment management initiatives to be implemented to retain and attract students is greatly diminished, whereas districts with these additional funding sources can potentially use enrollment management initiatives to attract and retain students. Participant findings with school funding correlate to what Filardo (2016) found, which is the funding of school facilities is complex and varies greatly from one district to the next in the same state.

Communication is paramount when districts are looking at enrollment management initiatives such as boundary changes, repurposing, or the closing of schools. Understanding how the proposed enrollment management initiative might be perceived by certain stakeholders in the community is important as well as to ensure how key stakeholders can help a district communicate within the communities they have influence with. Participants shared how

important it is to have a district communications and marketing staff member, or even a communications and marketing department in large school districts, because it is now an essential function of not only messaging enrollment management initiatives, but keeping the district messaging focused and succinct on positive news. This is due largely to social media and how constant news cycles can quickly negate positive messages and images stakeholders might see thus possibly affecting voter approved funding and whether or not they would send their own child to a school within the district.

Participants also shared that since they are the superintendents, it is important they not only continually communicate and interact with the internal stakeholders such as students, staff, and parents, but also communicate and meet with various external stakeholders. This includes business leaders, chambers of commerce, mayors and town/city staff, and colleges and universities to understand what their needs and perceptions might be of the school district as well as to garner support when enrollment management initiatives are moved forward.

Summary of RQ3 Findings and Conclusions

How is enrollment management used to ensure educational accessibility for all students? Educational accessibility for all students is affected by the various components of enrollment management. School choice, including open enrollment, is prevalent in Arizona. Each school district is affected by school choice. Some districts, particularly those located in suburban areas often have many charter and private schools potentially competing for the same students and taking away student enrollment from the traditional public school districts. Participants from rural districts often reported not being negatively impacted too much by charter and private schools as well as schools in other districts because there are very few located in close proximity.

Open enrollment creates winners and losers for public school districts. For some school districts, open enrollment positively affects their student enrollment while for other districts they lose student enrollment to neighboring school districts which impacts their financial bottom line. Each school district's reality is unique in terms of school choice and open enrollment which includes the competition each district faces with charter schools, private schools, as well as surrounding school districts. Harris (2019) similarly found how school choice in Arizona is affecting enrollment trends in many districts. All of this can affect each district's capture rate and enrollment management decisions including whether or not additional funding sources are in place. The majority of participants believe educational accessibility for all of their students plays a key role in their district's enrollment management decisions and actions. All of these factors and beliefs attribute to a district's ability to ensure educational accessibility for all of its students.

Summary of RQ4 Findings and Conclusions

How does trust affect school districts making enrollment management decisions?

Participants shared trust is vital to school districts being able to successfully move forward with enrollment management initiatives and decisions. Being transparent, humble, keeping commitments, and being willing to admit mistakes goes a long way in building trust. Participants shared a key component is listening and acknowledging people's feelings, especially when enrollment management initiatives can be personal for potentially affected stakeholders. Following through with what they say they are going to do is important for stakeholders to see. These findings mirror what Davidson and Hughes (2020) shared about superintendents and the role of trust, it "was less about the things they did, and more about the way they did them" (p. 66).

Knowing who the key movers and shakers are in your school district is also vital to not only building trust with them, but the people who follow them. These influential people can include PTA and booster parents, as well as business leaders, government staff, and those in service-oriented organizations. Faith based leaders can also help bridge the trust between the superintendent and the members of their religious organization. These influential stakeholders are important and should be part of a standing enrollment management committee as much as possible. This follows Kotter's (2012) advice that the team must consist of the right members with key characteristics including position of power, expertise, credibility, and leadership. Trust is built over time and by the interactions superintendents and district leaders have with a variety of stakeholders. When stakeholders inherently trust you, there will be less questioning about the enrollment management decisions your district is making even if they are not personally enthusiastic about the initiative.

Participants shared how trust also starts with the school board as people watch for what type of relationship superintendents and school boards have. Without trust, it's much harder if not impossible to successfully navigate potentially volatile enrollment management initiatives within a school district such as boundary changes, repurposing, closing schools, and the need to have voter approved funding sources.

Implications and Recommendations for Practice

Enrollment management is complex, but if public preschool through 12th grade school districts strategically use the various components to meet their unique district needs they can proactively manage their district's resources while being fiscally responsible and ensuring educational equity for all students within their school district.

Central to effective enrollment management is the role of trust. Superintendents must maximize the relationships they forge with a variety of stakeholders so when potentially volatile enrollment management decisions have to be made, they are not alone. Superintendents new to their position must spend considerable time forging trust and learning who the influential stakeholders in a community are. Business leaders and government staff are not the only influential stakeholders. PTA and booster parents can have just as much power, especially in this day and age with social media. Both actions and words matter and people will remember their experience, either positively or negatively for many years to come.

Understanding the current and future needs of their school district is essential for superintendents and district leaders to effectively accomplish enrollment management. Space utilization helps with many aspects of enrollment management including knowing where all programs, especially specialized programs are currently located as well as where new programs could be located if need be. If school boundaries are going to be altered or a school closure occurs, space utilization is also vital to these initiatives. Knowing how all spaces in the district are currently being used is essential to also ensuring the superintendent is being fiscally responsible with district space as well as helping to ensure there is educational accessibility for all students therein. If certain priorities are put into place, such as with class size reduction, space utilization is also of great importance for superintendents, district leaders, and the principals to ensure there is enough space for determined priorities.

Using external service providers such as demographers and strategic planners can greatly assist superintendents and school districts with the complexities of enrollment management. They can provide key data including future enrollment trends, which helps inform school districts about maximizing current spaces within school facilities, as well as if the repurposing or

the closing of a school might be needed due to enrollment declines, or if new school construction might be needed to support anticipated growth in enrollment. Their expertise can not only guide key enrollment management initiatives, but also can potentially help diffuse volatile enrollment management initiatives and make it a bit easier for superintendents to get their enrollment initiatives strategically accomplished.

It is important superintendents and district leaders understand that the fiscal realities of their school district are directly tied to enrollment management. As student enrollment increases, the need for more space grows. Understanding what funding sources are needed to accommodate for the new growth is essential for superintendents and district leaders. If a district is maintaining or has decreasing enrollment, chances are the facilities are aging and need refurbishment and remodeling in order to not only maintain safe and secure facilities, but also to compete with surrounding charter schools as well as other nearby districts.

In Arizona, bonds and overrides can be great funding sources to supplement the base amount given by the state. Getting voters to approve these additional funding sources is becoming increasingly more difficult for some districts due to their demographics. It is important superintendents and district leaders, including the marketing and communications staff, be able to explain to potential voters why their local school district needs bonds and overrides passed in order for students to not only have quality and up-to-date facilities, but also equitable educational experiences. The ability to do so takes on additional significance in Arizona where school choice is so strong.

Finally, enrollment management is not a one-time initiative or event, but rather an ongoing component of a school district remaining relevant to its community of students. Over the decades the needs of each school district will change. Superintendents and district leaders

strategically utilizing the principles of effective enrollment management will help to ensure these changing needs are met while also being fiscally responsible with taxpayer money.

Recommendations for Future Research

After reflecting on the results of this study, recommendations for future research include:

1. Replicate the research study in other states to see how the same enrollment management components are utilized, including funding sources.
2. Replicate the study but narrow the school district focus to solely urban, suburban, or rural to determine if there are unique enrollment management trends and needs in each type of district.
3. Replicate the study but narrow the school district focus to growing, maintaining, or declining to determine any unique enrollment management trends and needs in each type of district.
4. Narrow the focus of enrollment management in a future study to one or two of the components in this study in order to get a more detailed view of these components, such as school choice and what public school districts can do to stay competitive and retain students.
5. Further explore how the superintendent and the role of trust factors into how enrollment management decisions are related.
6. Conduct a study to determine how strategic planning and enrollment management are linked to one another to inform best practices.
7. Study what characteristics of external service providers, such as demographers or strategic planners, are of particular importance to superintendents successfully getting enrollment management work completed in their district.

8. Conduct a study on how the various funding sources in Arizona school finance could be revamped to give all school districts the funding needed from the state to renovate, refurbish, and build new school facilities without needing to seek local voter approved funding sources such as overrides and bonds.

Closing Remarks

Enrollment management is far more complex and comprehensive than what I first thought when embarking on this journey. I've discovered how many school districts are working with some of the various components of enrollment management either in silos without systematically bringing the work together or are doing the work at different times thereby not being able to make strategic decisions. In my own educational career, I hope to further integrate all the different enrollment management systems together to better support students in our district.

PK-12 education funding in Arizona has always been politically charged, but lacking at best. The need for an education finance overhaul is sorely needed in order for districts in Arizona to be able to adequately provide up-to-date, safe, and comfortable learning environments for their students. This also could potentially free up time superintendents and district leaders are spending to convince voters of the need to pass bonds and overrides when this money could be allocated by the state to school districts in order to adequately maintain their facilities and if needed, to build new facilities.

Trust is essential in all leadership positions but in this era of distrust and false news, superintendents and district leaders must work harder than ever before to build and maintain trust so that the important work of enrollment management can be accomplished on behalf of our future generations of students.

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APPENDIX A: INVITATION EMAIL

Dear Superintendent,

You are being invited to participate in a research study titled “Enrollment Management: Public School District Leaders’ Experiences, and the Effects of Community Trust in Leaders.” I am currently a doctoral student in the NAU Educational Leadership Program. If you are the superintendent and feel there is a district administrator in your school district better equipped to take this survey please forward this email to that person.

Your responses will be kept completely confidential. The survey should take you approximately 15 minutes to complete. Your participation in this survey is voluntary. You have the right to withdraw at any point during the study, for any reason, and without any prejudice.

By clicking the button below, you acknowledge that your participation in this study is voluntary, you are at least 18 years of age, and that you may choose to terminate your participation in the study at any time and for any reason.

Please note this survey will be best displayed on a laptop or desktop computer. Some features may be less than compatible for use on a mobile device.

Sincerely,

Jason Martin

APPENDIX B: M&O & CAPITAL OUTLAY SPENDING IN 2013

	ENROLLMENT FY 2013			SCHOOLS FY 2013		20-YEAR M&O TOTALS FY 1994-2013 (2014\$)				20-YEAR CAPITAL OUTLAY TOTALS FY 1994-2013 (2014\$)						
	Enrollment SY 1993-94	Enrollment SY 2012-13	Enrollment change	Schools	Area of district blgds in millions of GSF	Total education operating expend (\$ billions)	Total M&O expend (\$ billions)	M&O as % of total educ operating expend	Avg ann M&O expend (\$ millions)	Capital outlay (\$ billions)	School-construction cap outlay (\$ billions)	School-construction cap outlay per 2013 student	School-construction cap outlay per GSF	New construction as % of all construction starts	Total district cap outlay revenue from the state (\$ billions)	State share of total cap
Alabama	734,288	744,548	1.4%	1,637	127.7	\$122	\$11	8.9%	\$541	\$14.0	\$11.5	\$15,431	\$90	58%	\$3.06	22%
Alaska	125,948	131,091	3.9%	509	33.7	\$37	\$5	12.9%	\$240	\$5.3	\$4.0	\$30,738	\$120	39%	\$1.96	37%
Arizona	709,453	941,726	24.7%	2,267	130.7	\$141	\$17	12.1%	\$849	\$24.0	\$17.2	\$18,234	\$131	59%	\$4.94	21%
Arkansas ¹	444,271	477,716	7.0%	1,102	102.7	\$78	\$7	9.2%	\$360	\$9.8	\$5.3	\$11,116	\$52	54%	\$1.12	12%
California	5,327,231	6,208,733	14.2%	10,315	620.0	\$1,124	\$100	8.9%	\$5,007	\$166.0	\$134.0	\$21,579	\$216	47%	\$46.67	28%
Colorado	625,062	851,063	26.6%	1,825	123.6	\$134	\$13	9.6%	\$643	\$20.3	\$14.2	\$16,674	\$115	53%	\$0.69	3%
Connecticut ¹	496,298	517,812	4.2%	1,148	100.9	\$154	\$14	9.3%	\$714	\$17.8	\$15.3	\$29,459	\$151	31%	\$10.13	57%
Delaware	105,547	129,026	18.2%	224	19.7	\$29	\$3	10.0%	\$144	\$3.7	\$3.3	\$25,430	\$67	42%	\$2.11	57%
Florida	2,040,763	2,680,074	23.9%	4,269	425.4	\$431	\$47	10.9%	\$2,345	\$78.4	\$59.1	\$22,035	\$139	56%	\$11.74	15%
Georgia	1,235,304	1,682,620	26.6%	2,387	233.2	\$284	\$22	7.6%	\$1,078	\$41.4	\$32.8	\$19,502	\$141	59%	\$4.84	12%
Hawaii ^{1,2}	180,410	184,760	2.4%	286	19.0	\$39	\$3	8.1%	\$160	\$4.1	\$3.6	\$19,256	\$187	37%	\$4.99	100%
Idaho	236,770	272,070	13.0%	719	47.5	\$37	\$3	9.3%	\$172	\$3.9	\$3.1	\$11,220	\$64	70%	\$0.00	0%
Illinois	1,893,078	2,069,823	8.5%	4,266	359.5	\$434	\$43	9.8%	\$2,125	\$53.8	\$41.4	\$20,010	\$115	36%	\$2.14	4%
Indiana ¹	965,633	1,002,772	3.7%	1,925	180.1	\$196	\$22	11.0%	\$1,085	\$30.2	\$20.0	\$19,934	\$111	34%	\$0.00	0%
Iowa	498,519	499,489	0.2%	1,390	92.0	\$94	\$8	8.7%	\$408	\$12.8	\$9.4	\$18,793	\$102	35%	\$4.48	35%
Kansas ¹	457,614	488,590	6.3%	1,351	83.3	\$88	\$9	10.4%	\$460	\$13.7	\$9.0	\$18,463	\$108	44%	\$1.10	8%
Kentucky	655,265	685,009	4.3%	1,568	115.8	\$116	\$10	8.9%	\$515	\$12.4	\$8.7	\$12,751	\$75	42%	\$4.13	33%
Louisiana	800,560	671,156	-19.3%	1,407	119.8	\$131	\$12	9.3%	\$605	\$12.2	\$8.5	\$12,703	\$71	40%	\$0.00	0%
Maine ¹	216,995	184,682	-17.5%	617	36.2	\$47	\$5	10.0%	\$233	\$4.0	\$2.6	\$14,179	\$72	48%	\$1.15	28%
Maryland	772,638	859,252	10.1%	1,449	137.9	\$204	\$19	9.4%	\$957	\$21.1	\$16.2	\$18,811	\$117	40%	\$5.47	26%
Massachusetts ¹	877,726	922,848	4.9%	1,854	180.3	\$251	\$23	9.3%	\$1,165	\$22.2	\$25.5	\$27,652	\$142	45%	\$14.79	67%
Michigan	1,599,377	1,381,167	-15.8%	3,550	310.8	\$364	\$38	10.4%	\$1,885	\$41.7	\$26.6	\$19,261	\$86	33%	\$0.02	0%
Minnesota	810,233	802,454	-1.0%	2,403	167.6	\$174	\$13	7.7%	\$673	\$26.1	\$20.5	\$25,556	\$122	37%	\$5.84	22%
Mississippi	505,907	492,847	-2.6%	1,063	84.4	\$74	\$7	9.7%	\$362	\$8.6	\$5.8	\$11,730	\$69	48%	\$0.20	2%
Missouri	866,378	897,224	3.4%	2,406	158.0	\$165	\$16	9.8%	\$813	\$19.6	\$13.2	\$14,698	\$83	39%	\$0.00	0%
Montana	163,009	142,797	-14.2%	824	28.0	\$29	\$3	10.3%	\$148	\$2.1	\$1.5	\$10,215	\$52	36%	\$0.03	1%
Nebraska	285,097	303,242	6.0%	1,090	59.1	\$58	\$5	9.0%	\$259	\$7.8	\$4.2	\$13,925	\$71	35%	\$0.00	0%
Nevada	235,800	431,776	45.4%	664	48.1	\$61	\$6	10.2%	\$309	\$12.3	\$9.6	\$22,194	\$199	71%	\$0.00	0%
New Hampshire ¹	185,360	187,703	1.2%	481	33.5	\$44	\$4	8.7%	\$191	\$4.4	\$3.1	\$16,748	\$94	38%	\$0.83	19%
New Jersey	1,151,307	1,338,657	14.0%	2,598	194.3	\$435	\$45	10.3%	\$2,230	\$34.1	\$27.0	\$20,133	\$139	28%	\$10.89	32%
New Mexico	322,292	327,209	1.5%	877	61.3	\$56	\$6	10.4%	\$294	\$10.1	\$6.5	\$19,952	\$107	41%	\$2.02	20%
New York	2,733,813	2,629,805	-4.0%	4,822	433.0	\$923	\$79	8.5%	\$3,936	\$98.2	\$84.1	\$31,962	\$194	17%	\$34.95	36%
North Carolina	1,133,231	1,468,228	22.8%	2,557	228.1	\$227	\$18	8.1%	\$923	\$27.5	\$21.9	\$14,896	\$96	57%	\$2.07	8%
North Dakota	119,127	101,025	-17.9%	517	24.5	\$20	\$2	8.8%	\$87	\$2.3	\$1.4	\$13,570	\$56	50%	\$0.04	2%
Ohio	1,807,319	1,613,718	-12.0%	3,685	288.8	\$384	\$36	9.3%	\$1,779	\$46.4	\$35.0	\$21,683	\$121	60%	\$12.67	27%
Oklahoma	604,076	671,445	10.0%	1,784	113.5	\$100	\$11	11.7%	\$554	\$9.7	\$6.1	\$9,013	\$53	35%	\$0.03	0%
Oregon	516,611	564,006	8.4%	1,251	96.5	\$109	\$9	8.7%	\$470	\$11.2	\$9.3	\$16,475	\$96	45%	\$0.00	0%
Pennsylvania	1,744,082	1,623,694	-7.4%	3,127	325.7	\$436	\$43	9.9%	\$2,156	\$48.9	\$42.3	\$26,077	\$130	30%	\$7.20	15%
Rhode Island	145,676	136,401	-6.8%	304	21.6	\$39	\$3	8.2%	\$162	\$1.4	\$1.4	\$10,311	\$65	39%	\$1.12	78%
South Carolina	643,696	722,249	10.9%	1,239	111.0	\$122	\$11	9.1%	\$559	\$21.2	\$15.3	\$21,145	\$138	57%	\$1.74	8%
South Dakota	142,825	130,296	-9.6%	697	24.9	\$21	\$2	10.0%	\$107	\$3.1	\$2.2	\$16,740	\$88	41%	\$0.00	0%
Tennessee	866,557	992,461	12.7%	1,817	169.8	\$145	\$13	9.1%	\$661	\$15.7	\$10.8	\$10,834	\$63	57%	\$0.00	0%
Texas	3,608,262	4,897,523	26.3%	8,731	602.0	\$744	\$82	11.0%	\$4,093	\$131.2	\$107.8	\$22,000	\$179	57%	\$12.21	9%
Utah	471,365	562,315	16.2%	995	89.6	\$64	\$6	9.2%	\$293	\$12.8	\$6.9	\$12,349	\$78	65%	\$0.80	6%
Vermont	102,755	89,426	-14.9%	318	17.5	\$26	\$2	8.2%	\$108	\$1.6	\$1.1	\$11,896	\$61	11%	\$0.31	19%
Virginia ¹	1,045,471	1,264,880	17.3%	2,382	191.4	\$241	\$24	9.8%	\$1,182	\$33.0	\$22.0	\$17,373	\$115	52%	\$1.67	5%
Washington	915,952	1,050,901	12.8%	2,370	135.6	\$189	\$17	9.2%	\$872	\$32.3	\$25.0	\$23,800	\$185	47%	\$4.50	14%
West Virginia ¹	314,383	282,310	-11.4%	755	42.1	\$60	\$6	10.0%	\$303	\$5.2	\$3.0	\$10,687	\$72	55%	\$0.44	9%
Wisconsin	844,001	863,737	2.3%	2,238	178.4	\$195	\$18	9.3%	\$906	\$18.2	\$12.4	\$14,325	\$69	35%	\$0.00	0%
Wyoming	100,899	91,533	-10.2%	364	23.7	\$22	\$2	10.4%	\$116	\$3.8	\$2.6	\$28,323	\$109	67%	\$2.39	63%
TOTALS	43,384,238	48,265,889		98,224	7,551	\$9,699	\$925		\$46,236	\$1,261	\$973	\$20,157	\$129		\$227.46	18%

	20-YEAR ANNUAL AVERAGES FY1994-2013 (2014\$)					DEBT END OF FY2013		CURRENT REPLACEMENT VALUE, FY 2014			FY2013-15 (2014\$)	
	School- construction cap outlay (\$ millions)	School- construction cap outlay per 2013 student	School- construction cap outlay per GSF	M&O expend per 2013 student	Avg ann M&O expend per GSF	District long-term debt, end of FY 2013 (\$ billions)	District long-term debt, end of FY 2013 per 2013 student	GSF of district bldgs (millions)	Avg cost per GSF for new construction	Current replacement value of district facilities (\$ billions)	Avg ann M&O expend per 2013 student	Avg ann M&O expend per GSF
Alabama	\$574	\$772	\$4.50	\$727	\$4.24	\$5.12	\$6,872	127.7	\$171	\$21.8	\$832	\$4.85
Alaska	\$201	\$1,537	\$5.98	\$1,833	\$7.13	\$1.32	\$10,080	33.7	\$239	\$8.0	\$2,096	\$8.16
Arizona	\$859	\$912	\$6.57	\$902	\$6.50	\$4.27	\$4,534	130.7	\$276	\$36.1	\$894	\$6.44
Arkansas ¹	\$266	\$556	\$2.59	\$753	\$3.50	\$3.66	\$2,671	102.7	\$150	\$15.4	\$929	\$4.32
California	\$6,699	\$1,079	\$10.80	\$806	\$8.08	\$54.63	\$8,799	620.0	\$400	\$248.0	\$909	\$9.11
Colorado	\$710	\$834	\$5.74	\$755	\$5.20	\$7.73	\$9,087	123.6	\$273	\$33.7	\$845	\$5.82
Connecticut ¹	\$763	\$1,473	\$7.56	\$1,379	\$7.08	\$2.93	\$5,655	100.9	\$360	\$36.3	\$1,524	\$7.82
Delaware	\$164	\$1,271	\$8.33	\$1,117	\$7.32	\$0.55	\$4,601	19.7	\$338	\$6.6	\$1,443	\$8.70
Florida	\$2,953	\$1,102	\$6.94	\$875	\$5.51	\$5.43	\$5,756	425.4	\$171	\$72.9	\$909	\$5.73
Georgia	\$1,641	\$975	\$7.04	\$640	\$4.62	\$4.52	\$2,684	233.2	\$171	\$40.0	\$702	\$5.07
Hawaii ^{1,2}	\$178	\$963	\$9.36	\$865	\$8.41	\$0.00	\$0	19.0	\$350	\$6.7	\$858	\$8.34
Idaho	\$153	\$561	\$3.22	\$632	\$3.62	\$1.30	\$4,795	47.5	\$239	\$11.3	\$639	\$3.66
Illinois	\$2,071	\$1,001	\$5.76	\$1,027	\$5.91	\$20.96	\$10,128	359.5	\$204	\$73.3	\$1,056	\$6.08
Indiana ¹	\$999	\$997	\$5.55	\$1,082	\$6.02	\$11.31	\$11,280	180.1	\$211	\$37.9	\$1,073	\$5.97
Iowa	\$469	\$940	\$5.10	\$816	\$4.43	\$3.34	\$6,688	92.0	\$263	\$24.2	\$881	\$4.78
Kansas ¹	\$451	\$923	\$5.42	\$942	\$5.52	\$4.63	\$9,486	83.3	\$213	\$17.7	\$947	\$5.56
Kentucky	\$437	\$638	\$3.77	\$751	\$4.45	\$5.56	\$8,112	115.8	\$192	\$22.3	\$824	\$4.87
Louisiana	\$426	\$635	\$3.56	\$901	\$5.05	\$3.84	\$5,717	119.8	\$204	\$24.5	\$1,031	\$5.77
Maine ¹	\$131	\$709	\$3.61	\$1,262	\$6.44	\$0.85	\$4,588	36.2	\$300	\$10.9	\$1,369	\$6.98
Maryland	\$808	\$941	\$5.86	\$1,114	\$6.94	\$4.20	\$4,894	137.9	\$258	\$35.6	\$1,277	\$7.96
Massachusetts ¹	\$1,276	\$1,383	\$7.08	\$1,263	\$6.46	\$5.14	\$5,565	180.3	\$369	\$66.5	\$1,373	\$7.03
Michigan	\$1,330	\$963	\$4.28	\$1,365	\$6.07	\$17.31	\$12,533	310.8	\$211	\$65.5	\$1,046	\$4.65
Minnesota	\$1,025	\$1,278	\$6.12	\$838	\$4.01	\$10.34	\$12,889	167.6	\$275	\$46.1	\$823	\$3.94
Mississippi	\$289	\$586	\$3.43	\$734	\$4.29	\$1.71	\$3,461	84.4	\$171	\$14.5	\$855	\$4.99
Missouri	\$659	\$735	\$4.17	\$906	\$5.14	\$6.65	\$7,415	158.0	\$213	\$33.6	\$989	\$5.62
Montana	\$73	\$511	\$2.60	\$1,039	\$5.30	\$0.49	\$3,428	28.0	\$235	\$6.6	\$1,108	\$5.65
Nebraska	\$211	\$696	\$3.57	\$855	\$4.39	\$2.08	\$6,867	59.1	\$213	\$12.6	\$991	\$5.08
Nevada	\$479	\$1,110	\$9.97	\$716	\$6.43	\$4.19	\$9,711	48.1	\$276	\$13.3	\$916	\$8.23
New Hampshire ¹	\$157	\$837	\$4.70	\$1,020	\$5.72	\$0.82	\$4,348	33.5	\$360	\$12.0	\$1,205	\$6.76
New Jersey	\$1,348	\$1,007	\$6.94	\$1,666	\$11.48	\$9.30	\$6,950	194.3	\$377	\$73.3	\$1,923	\$13.25
New Mexico	\$326	\$998	\$5.33	\$899	\$4.80	\$1.95	\$5,962	61.3	\$299	\$18.3	\$906	\$5.27
New York	\$4,203	\$1,598	\$9.71	\$1,497	\$9.09	\$30.62	\$11,643	433.0	\$411	\$177.9	\$1,759	\$10.68
North Carolina	\$1,094	\$745	\$4.80	\$628	\$4.05	\$8.23	\$5,607	228.1	\$192	\$43.8	\$733	\$4.72
North Dakota	\$69	\$679	\$2.80	\$862	\$3.55	\$0.35	\$3,442	24.5	\$235	\$5.8	\$1,063	\$4.38
Ohio	\$1,750	\$1,084	\$6.06	\$1,102	\$6.16	\$9.36	\$5,803	288.8	\$211	\$60.8	\$1,088	\$6.08
Oklahoma	\$303	\$451	\$2.67	\$825	\$4.88	\$1.61	\$2,402	113.5	\$204	\$23.2	\$861	\$5.09
Oregon	\$465	\$824	\$4.82	\$834	\$4.88	\$6.49	\$11,511	96.5	\$239	\$23.0	\$822	\$4.80
Pennsylvania	\$2,117	\$1,304	\$6.50	\$1,328	\$6.62	\$25.39	\$15,638	325.7	\$271	\$88.3	\$1,376	\$6.86
Rhode Island	\$70	\$516	\$3.25	\$1,189	\$7.50	\$1.04	\$7,628	21.6	\$360	\$7.8	\$1,225	\$7.73
South Carolina	\$764	\$1,057	\$6.88	\$714	\$5.03	\$12.34	\$16,948	111.0	\$192	\$21.4	\$919	\$5.97
South Dakota	\$109	\$837	\$4.38	\$818	\$4.28	\$0.77	\$5,900	24.9	\$235	\$5.9	\$906	\$4.74
Tennessee	\$538	\$542	\$3.17	\$666	\$3.89	\$5.18	\$5,216	169.8	\$192	\$32.7	\$735	\$4.30
Texas	\$5,390	\$1,301	\$8.95	\$836	\$6.80	\$65.12	\$13,297	602.0	\$204	\$123.0	\$939	\$7.64
Utah	\$347	\$617	\$3.88	\$522	\$3.28	\$2.78	\$4,940	89.6	\$235	\$21.1	\$614	\$3.85
Vermont	\$53	\$595	\$3.04	\$1,207	\$6.18	\$0.30	\$3,333	17.5	\$360	\$6.3	\$1,439	\$7.36
Virginia ¹	\$1,099	\$869	\$5.74	\$935	\$6.18	\$8.38	\$6,624	191.4	\$271	\$51.8	\$1,052	\$6.95
Washington	\$1,251	\$1,190	\$9.23	\$829	\$6.43	\$9.54	\$9,078	135.6	\$333	\$45.2	\$893	\$6.92
West Virginia ¹	\$151	\$534	\$3.59	\$1,072	\$7.19	\$0.42	\$1,497	42.1	\$247	\$10.4	\$1,148	\$7.71
Wisconsin	\$619	\$716	\$3.47	\$1,049	\$5.08	\$4.54	\$5,260	178.4	\$204	\$36.4	\$1,071	\$5.18
Wyoming	\$130	\$1,416	\$5.47	\$1,270	\$4.91	\$0.06	\$614	23.7	\$295	\$7.0	\$1,566	\$6.05
TOTALS	\$48,644	\$1,008	\$6.44			\$409		7,551		\$1,937		

	3% standard for annual M&O spending (\$ millions)	M&O GAP PROJECTION ANALYSIS					CAPITAL CONSTRUCTION GAP PROJECTION ANALYSIS					
		M&O expend in millions FY 2011-13 (2014\$)	M&O expend as % of 3% standard	Projected M&O expend gap in millions	M&O expend gap per 2013 student	M&O gap per GSF	4% standard for cap investment in existing facilities (\$ millions)	Cap construction expend gap (\$ millions)	Cap construction as % of 4% standard	Cap construction expend gap per GSF	Cap construction expend gap per student	4% standard for cap investment in existing facilities per GSF
Alabama	\$655	\$620	95%	\$35	\$47	\$0.28	\$873	\$299	66%	\$2.34	\$401	\$6.84
Alaska	\$241	\$275	114%	-\$34	-\$259	-\$1.00	\$322	\$121	63%	\$3.58	\$919	\$9.56
Arizona	\$1,084	\$842	78%	\$242	\$257	\$1.85	\$1,446	\$587	59%	\$4.49	\$624	\$11.06
Arkansas ¹	\$462	\$444	96%	\$18	\$38	\$0.18	\$616	\$350	43%	\$3.41	\$734	\$6.00
California	\$7,440	\$5,646	76%	\$1,794	\$289	\$2.89	\$9,920	\$3,221	68%	\$5.20	\$519	\$16.00
Colorado	\$1,012	\$719	71%	\$293	\$344	\$2.37	\$1,350	\$640	53%	\$5.38	\$753	\$10.92
Connecticut ¹	\$1,089	\$789	72%	\$300	\$579	\$2.97	\$1,452	\$689	53%	\$6.83	\$1,331	\$14.39
Delaware	\$199	\$171	86%	\$28	\$217	\$1.41	\$266	\$102	62%	\$5.18	\$790	\$13.51
Florida	\$2,387	\$2,437	111%	-\$250	-\$93	-\$0.59	\$2,917	-\$36	101%	-\$0.08	-\$13	\$6.86
Georgia	\$1,199	\$1,182	99%	\$17	\$10	\$0.07	\$1,599	-\$42	103%	-\$0.18	-\$25	\$6.86
Hawaii ^{1,2}	\$200	\$159	79%	\$42	\$222	\$2.38	\$266	\$88	67%	\$4.64	\$477	\$14.00
Idaho	\$340	\$174	51%	\$166	\$610	\$3.50	\$454	\$301	34%	\$6.35	\$1,108	\$9.57
Illinois	\$2,199	\$2,186	99%	\$13	\$6	\$0.04	\$2,933	\$862	71%	\$2.40	\$417	\$8.36
Indiana ¹	\$1,138	\$1,076	95%	\$62	\$62	\$0.35	\$1,517	\$518	66%	\$2.87	\$516	\$8.42
Iowa	\$726	\$440	60%	\$286	\$573	\$3.11	\$968	\$499	48%	\$5.42	\$998	\$10.52
Kansas ¹	\$531	\$463	87%	\$68	\$139	\$0.82	\$708	\$257	64%	\$3.09	\$526	\$8.50
Kentucky	\$668	\$564	85%	\$104	\$152	\$0.90	\$890	\$453	49%	\$3.92	\$662	\$7.69
Louisiana	\$734	\$692	94%	\$42	\$63	\$0.35	\$979	\$553	44%	\$4.61	\$824	\$8.17
Maine ¹	\$326	\$253	78%	\$73	\$395	\$2.02	\$435	\$304	30%	\$8.40	\$1,646	\$12.01
Maryland	\$1,067	\$1,097	103%	-\$30	-\$35	-\$0.22	\$1,423	\$615	57%	\$4.46	\$716	\$10.32
Massachusetts ¹	\$1,996	\$1,267	63%	\$729	\$790	\$4.04	\$2,661	\$1,385	48%	\$7.68	\$1,501	\$14.76
Michigan	\$1,964	\$1,445	74%	\$519	\$376	\$1.67	\$2,618	\$1,288	51%	\$4.34	\$932	\$8.42
Minnesota	\$1,383	\$660	48%	\$723	\$901	\$4.31	\$1,843	\$818	56%	\$4.88	\$1,019	\$11.00
Mississippi	\$434	\$421	97%	\$13	\$26	\$0.15	\$578	\$289	50%	\$3.42	\$586	\$6.85
Missouri	\$1,008	\$888	88%	\$120	\$134	\$0.76	\$1,344	\$685	49%	\$4.33	\$763	\$8.51
Montana	\$198	\$158	80%	\$40	\$280	\$1.42	\$264	\$191	28%	\$6.82	\$1,338	\$9.42
Nebraska	\$377	\$300	80%	\$77	\$254	\$1.30	\$503	\$292	42%	\$4.94	\$963	\$8.51
Nevada	\$399	\$396	99%	\$3	\$7	\$0.07	\$531	\$52	90%	\$1.08	\$120	\$11.05
New Hampshire ¹	\$361	\$226	63%	\$135	\$719	\$4.03	\$481	\$324	33%	\$9.68	\$1,725	\$14.38
New Jersey	\$2,198	\$2,574	117%	-\$376	-\$281	-\$1.94	\$2,930	\$1,582	46%	\$8.34	\$1,182	\$15.08
New Mexico	\$550	\$323	59%	\$227	\$694	\$3.71	\$733	\$407	45%	\$6.64	\$1,243	\$11.96
New York	\$5,336	\$4,625	87%	\$711	\$270	\$1.64	\$7,115	\$2,912	59%	\$6.73	\$1,107	\$16.43
North Carolina	\$1,315	\$1,076	82%	\$239	\$163	\$1.05	\$1,754	\$660	62%	\$2.90	\$450	\$7.69
North Dakota	\$173	\$107	62%	\$66	\$653	\$2.68	\$231	\$162	30%	\$6.63	\$1,608	\$9.42
Ohio	\$1,825	\$1,756	96%	\$69	\$43	\$0.24	\$2,433	\$683	72%	\$2.37	\$424	\$8.42
Oklahoma	\$695	\$578	83%	\$117	\$174	\$1.03	\$927	\$624	33%	\$5.50	\$930	\$8.17
Oregon	\$691	\$464	67%	\$227	\$402	\$2.36	\$922	\$457	50%	\$4.74	\$811	\$9.56
Pennsylvania	\$2,649	\$2,234	84%	\$419	\$256	\$1.27	\$3,532	\$1,415	60%	\$4.34	\$871	\$10.85
Rhode Island	\$233	\$167	72%	\$66	\$484	\$3.05	\$311	\$241	23%	\$11.13	\$1,765	\$14.38
South Carolina	\$641	\$664	104%	-\$23	-\$32	-\$0.20	\$854	\$90	89%	\$0.81	\$125	\$7.69
South Dakota	\$176	\$118	67%	\$58	\$445	\$2.33	\$234	\$125	47%	\$5.02	\$959	\$9.40
Tennessee	\$980	\$729	74%	\$251	\$253	\$1.48	\$1,306	\$768	41%	\$4.52	\$774	\$7.69
Texas	\$3,689	\$4,598	125%	-\$909	-\$186	-\$1.51	\$4,918	-\$472	110%	-\$0.78	-\$96	\$8.17
Utah	\$632	\$345	55%	\$287	\$510	\$3.20	\$843	\$496	41%	\$5.53	\$882	\$9.41
Vermont	\$188	\$129	68%	\$59	\$660	\$3.40	\$251	\$198	21%	\$11.32	\$2,212	\$14.37
Virginia ¹	\$1,554	\$1,331	86%	\$223	\$176	\$1.17	\$2,072	\$973	53%	\$5.08	\$769	\$10.82
Washington	\$1,355	\$938	69%	\$417	\$397	\$3.08	\$1,807	\$556	69%	\$4.10	\$529	\$13.33
West Virginia ¹	\$312	\$324	104%	-\$12	-\$43	-\$0.29	\$416	\$265	36%	\$6.30	\$939	\$9.89
Wisconsin	\$1,092	\$925	85%	\$167	\$193	\$0.94	\$1,455	\$836	43%	\$4.69	\$968	\$8.16
Wyoming	\$210	\$143	68%	\$67	\$732	\$2.81	\$279	\$149	46%	\$6.31	\$1,632	\$11.78
TOTALS	\$58,111	\$50,138		\$7,973			\$77,480	\$28,836				

	COMBINED GAP PROJECTION ANALYSIS			NEW CONSTRUCTION PROJECTIONS FY 2013-2024						
	Combined share of 7% standard (\$ billions)	Total Annual Avg Facilities Spending (M&O + cap const) (\$ billions)	% of 7% standard	% Enrollment Change 2012-24	Projected enrollment change	New seats to serve 80% of projected growth	Avg cost of new construction per GSF in 2014	Avg GSF per student	GSF required to serve 80% of projected growth	Est total cost of new construction required for growth
Alabama	\$1.5	\$1,195	78%	-2.8	(20,737)			171		\$0
Alaska	\$0.6	\$476	85%	17.0	22,311	17,849	\$239	257	4,586,615	\$1,095,650,612
Arizona	\$2.5	\$1,701	67%	21.2	230,616	184,493	\$276	139	25,609,147	\$7,080,416,960
Arkansas ¹	\$1.1	\$710	66%	-0.7	(3,357)			215		\$0
California	\$17.4	\$12,345	71%	8.5	533,749	426,999	\$400	100	42,639,860	\$17,055,943,878
Colorado	\$2.4	\$1,429	61%	11.3	97,639	78,110	\$273	145	11,343,010	\$3,096,641,832
Connecticut ¹	\$2.5	\$1,552	61%	-4.8	(26,554)			195		\$0
Delaware	\$0.5	\$335	72%	7.2	9,274	7,419	\$338	153	1,132,174	\$382,108,675
Florida	\$5.1	\$5,390	106%	13.0	348,738	278,990	\$171	159	44,287,108	\$7,590,219,743
Georgia	\$2.8	\$2,823	101%	9.1	154,968	123,974	\$171	139	17,183,516	\$2,945,025,552
Hawaii ^{1,2}	\$0.5	\$337	72%	2.5	4,540	3,632	\$350	103	373,501	\$130,725,265
Idaho	\$0.8	\$327	41%	9.9	28,166	22,533	\$239	174	3,931,012	\$939,040,141
Illinois	\$5.1	\$4,257	83%	-1.7	(35,880)			174		\$0
Indiana ¹	\$2.7	\$2,075	78%	-1.1	(11,569)			180		\$0
Iowa	\$1.7	\$909	54%	1.3	6,575	5,260	\$263	184	968,830	\$254,802,328
Kansas ¹	\$1.2	\$904	74%	2.2	10,757	8,606	\$213	170	1,466,640	\$311,866,265
Kentucky	\$1.6	\$1,001	64%	0.6	4,033	3,226	\$192	169	545,287	\$104,838,615
Louisiana	\$1.7	\$1,118	65%	-0.5	(3,503)			179		\$0
Maine ¹	\$0.8	\$384	50%	-6.8	(12,639)			196		\$0
Maryland	\$2.5	\$1,905	77%	15.1	130,162	104,130	\$258	160	16,707,935	\$4,310,647,305
Massachusetts ¹	\$4.7	\$2,543	55%	-1.1	(10,773)			195		\$0
Michigan	\$4.6	\$2,775	61%	-5.2	(80,770)			225		\$0
Minnesota	\$3.2	\$1,685	52%	13.7	116,196	92,957	\$275	209	19,413,244	\$5,338,642,172
Mississippi	\$1.0	\$710	70%	-3.0	(14,750)			171		\$0
Missouri	\$2.4	\$1,547	66%	0.1	1,100	880	\$213	176	154,983	\$32,955,649
Montana	\$0.5	\$231	50%	7.8	11,192	8,954	\$235	196	1,757,033	\$413,330,404
Nebraska	\$0.9	\$511	58%	4.2	12,895	10,316	\$213	195	2,010,465	\$427,505,347
Nevada	\$0.9	\$875	94%	25.8	115,193	92,154	\$276	111	10,256,946	\$2,835,840,521
New Hampshire ¹	\$0.8	\$383	45%	-2.1	(3,974)			178		\$0
New Jersey	\$5.1	\$3,922	76%	0.1	1,997	1,598	\$377	145	231,885	\$87,420,825
New Mexico	\$1.3	\$649	51%	0.8	2,580	2,064	\$299	187	386,445	\$115,547,192
New York	\$12.5	\$8,828	71%	1.9	51,597	41,278	\$411	165	6,796,398	\$2,791,942,435
North Carolina	\$3.1	\$2,170	71%	13.1	199,435	159,548	\$192	155	24,782,220	\$4,764,712,274
North Dakota	\$0.4	\$176	44%	22.9	23,089	18,471	\$235	243	4,483,190	\$1,054,640,640
Ohio	\$4.3	\$3,506	82%	-4.5	(78,016)			179		\$0
Oklahoma	\$1.6	\$881	54%	5.6	38,017	30,414	\$204	169	5,139,698	\$1,049,766,140
Oregon	\$1.6	\$929	58%	10.6	62,336	49,869	\$239	171	8,530,851	\$2,037,849,766
Pennsylvania	\$6.2	\$4,351	70%	0.1	1,023	888	\$271	201	164,145	\$44,483,422
Rhode Island	\$0.5	\$237	44%	-3.3	(4,681)			159		\$0
South Carolina	\$1.5	\$1,428	96%	9.4	69,402	55,522	\$192	154	8,536,711	\$1,641,296,587
South Dakota	\$0.4	\$227	55%	7.8	10,129	8,103	\$235	191	1,547,926	\$364,139,215
Tennessee	\$2.3	\$1,267	55%	7.9	78,404	62,723	\$192	171	10,733,615	\$2,063,680,550
Texas	\$8.6	\$9,988	116%	13.6	688,641	550,913	\$204	123	67,715,674	\$13,830,700,760
Utah	\$1.5	\$692	47%	17.3	106,121	84,897	\$235	159	13,525,605	\$3,181,808,291
Vermont	\$0.4	\$182	41%	3.6	3,276	2,621	\$360	195	512,042	\$184,137,173
Virginia ¹	\$3.6	\$2,430	67%	9.7	122,681	98,145	\$271	151	14,854,772	\$4,020,097,381
Washington	\$3.2	\$2,189	69%	15.7	165,206	132,165	\$333	129	17,048,748	\$5,680,301,891
West Virginia ¹	\$0.7	\$475	65%	-11.4	(32,344)			149		\$0
Wisconsin	\$2.5	\$1,544	61%	2.3	19,864	15,891	\$204	207	3,282,495	\$669,432,127
Wyoming	\$0.5	\$273	56%	4.1	3,767	3,014	\$295	259	779,767	\$230,031,382
TOTALS	\$133	\$98,787			3,146,122	2,788,535		393,419,496	\$98,158,194,313	

(Filardo, 2016, p. 33-34)

APPENDIX C: NAU IRB APPROVAL



Office of Research Compliance

Institutional Review Board for the
Human Research Protection Program

525 S Beaver St
PO Box: 4062
Flagstaff AZ 86011
928-523-9551
<https://www.nau.edu/IRB>

To: Jason Martin
From: NAU IRB Office
Approval Date: November 16, 2022

Project: Enrollment Management: Public School District Leaders' Experiences, and the Effects of Community Trust In Leaders
Project Number: 1978713-1
Submission: New Project
Action: APPROVED
Project Risk Level: MINIMAL RISK
Approval Expiration Date: November 16, 2027
Next Report Date:
Review Category/ies: **The project is not federally funded or supported and has been deemed to be no more than minimal risk.**

This project has been reviewed and approved by an IRB Chair or designee.

- Northern Arizona University maintains a Federalwide Assurance with the Office for Human Research Protections (FWA #00000357).
- All research procedures should be conducted in full accordance with all applicable sections of the guidance.
- The Principal Investigator should notify the IRB immediately of any proposed changes that affect the protocol and report any unanticipated problems involving risks to participants or others. Please refer to Guidance Investigators Responsibility after IRB Approval, Reporting Local Information and Minimal Risk or Exempt Research.
- All documents referenced in this submission have been reviewed and approved. Documents are filed with the HRPP Office within IRBNet. If subjects will be consented, the approved consent(s) are available within IRBNet upon approval notification from the HRPP Office.

Important

The principal investigator for this study is responsible for obtaining all necessary approvals before commencing research. Please be sure that you have satisfied applicable external and University requirements, for example (but not limited to) data repositories, listserv permission, records request, data use agreement, [conducting University surveys](#), [data security](#), [international](#), [conflicts of interest](#), [biological safety](#), [radiation safety](#), [HIPAA](#), [FERPA](#), [FDA](#), [sponsor approval](#), [clinicaltrials.gov](#), [tribal consultation](#), or [school approval](#). IRB approval does not convey approval to commence research in the event that other requirements have not been satisfied.

APPENDIX D: ONLINE SURVEY CONSENT



Office of Research Compliance

Project Number: 1978713-1
Approval Date: November 16, 2022
This stamp must be on all
consenting documents



Online Survey Consent

You are being invited to participate in a research study titled Enrollment management: Public school district leaders' experiences, and the effects of community trust in leaders. This study is being done by Jason Martin from Northern Arizona University.

The purpose of this research study is to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This study allows school districts to examine their own individual enrollment management needs and potential processes for moving forward in make equitable decisions for all students while also being fiscally responsible. Public school districts in Arizona have immense pressures put on them to ensure students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders is an essential component when districts make enrollment management decisions which can affect the various community stakeholders in different ways.

If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about various components of enrollment management including the role of trust and it will take you approximately 15 minutes to complete.

You may not directly benefit from this research; however, we hope that your participation in the study may further help understand how enrollment management components can be effectively applied to any school district based on their unique needs. We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this study will remain confidential. We will minimize any risks by ensuring the survey data is securely stored and only accessed by the researcher. Once the research study is completed, the data will be stored for five years per university requirement and then destroyed.

Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose. If you choose not to participate it will not affect your relationship with Northern Arizona University or result in any other penalty or loss of benefits to which you are otherwise entitled.

If you have questions about this project or if you have a research-related problem, you may contact the researcher, Jason Martin at 480-239-5111. If you have any questions concerning your rights as a research subject, you may contact Northern Arizona University IRB Office at irb@nau.edu or (928) 523-9551.

By submitting this survey, I affirm that I am at least 18 years of age and agree that the information may be used in the research project described above.

APPENDIX E: SURVEY

Enrollment Management Survey

Please note this survey will be best displayed on a laptop or desktop computer. Some features may be less than compatible for use on a mobile device.

1. Survey consent:
 - a. I consent, begin the survey
 - b. I do not consent, I do not wish to participate
2. Your position in the school district (fill in)
3. School district name (fill in)
4. School district grade levels served (choose one)
 - a. Unified (K-12)
 - b. Elementary (K-8)
 - c. High School (9-12)
5. School district classification (choose one)
 - a. Urban
 - b. Suburban
 - c. Rural
6. Current student enrollment (fill in)
7. Number of current school sites in your district (fill in)
8. Your school district's student enrollment is currently (choose one)
 - a. Growing
 - b. Declining
 - c. Maintaining

9. Has your school district adjusted school boundaries within the past five years or planning to do so within the next two years?
- a. Adjusting school boundaries
 - Yes
 - If yes, has the boundary adjustment(s) achieved the desired outcomes? (short answer)
 - No
10. Has your school district closed one or more schools within the past five years or is considering within the next two years?
- Yes
 - If yes, what became of the former school building(s)? (short answer)
 - No
11. Has your school district repurposed one or more school within the past five years or is considering within the next two years?
- Yes
 - If yes, what was the reason(s) for repurposing? (declining enrollment, programming needs, overall district facility needs, other)
 - No
12. School choice refers to families having many school options to choose from to send their child to including charter schools, private schools, and other public school districts. How has open enrollment/school choice affected enrollment management decisions in your district? (short answer)
13. Space utilization including overall enrollment as well as specialized programs can be an integral component of enrollment management. How does your district monitor space utilization at each school? (short answer)
14. What programs or initiatives have affected space utilization? (check all that apply)
- a. Special education
 - b. Title I
 - c. Early childhood/preschool programs
 - d. CTE
 - e. Specialized program such as STEM, Arts, IB, etc. at a particular school(s)
 - f. Community partnership programs and services
 - g. Decrease class size
 - h. Other (please list)

15. Within the past five years, has your school district used external services such as a demographer, strategic planner, master capital planner, etc. to work with one or more areas of enrollment management?

Yes

If yes, rate your experience working with this external services provider.

1 = external provider was instrumental in providing services and clarity in order for our district to make enrollment management decisions

2 = external provider gave supporting information which our district contemplated when making enrollment management decisions

3 = external provider gave limited information which neither helped nor hindered making enrollment management decisions

4 = external provider didn't provide information in an easy to understand manner and at times complicated the enrollment management process

No

16. Does your school district currently have any of the following in place? (check all that apply)

Maintenance and Operations Override

District Additional Assistance Override

Bond

17. How do the fiscal realities in your school district affect any of the various components of enrollment management? (short answer)

18. Educational accessibility for all students plays a key role in your district's actions with enrollment management decisions?

1 = strongly disagree

2 = disagree

3 = neutral

4 = agree

5 = strongly agree

19. When your district has made enrollment management decisions, how has the role of trust between district leadership and the various stakeholders (staff, parents, neighborhoods) in the community affected decisions either positively or negatively? (short answer)

20. If your district has been working with some of the components of enrollment management would you be willing to participate in an interview to further explore this topic? If yes, provide your contact information, which will not be linked to the previous survey items.
- a. Name
 - b. Email Address
 - c. Phone number

APPENDIX F: INTERVIEW CONSENT TO PARTICIPATE



Office of Research Compliance

Project Number: 1978713-1
Approval Date: November 16, 2022
This stamp must be on all
consenting documents



Consent to Participate in Research

Study Title: Enrollment management: Public school district leaders' experiences, and the effects of community trust in leaders

Principal Investigator: Jason Martin

You are being asked to participate in a research study. Your participation in this research study is voluntary and you do not have to participate. This document contains important information about this study and what to expect if you decide to participate. Please consider the information carefully. Feel free to ask questions before making your decision whether or not to participate.

The purpose of this research study is to examine enrollment management needs and potential processes in traditional public preschool through 12th grade school districts. This study allows school districts to examine their own individual enrollment management needs and potential processes for moving forward in make equitable decisions for all students while also being fiscally responsible. Public school districts in Arizona have immense pressures put on them to ensure students and staff are in quality school facilities while also ensuring precious capital resources are spent judiciously. Trust with various stakeholders is an essential component when districts make enrollment management decisions which can affect the various community stakeholders in different ways.

When you completed the online survey, you indicated in the final question that you would be willing to participate in an interview in order to more fully explore how your school district uses different aspects of enrollment management to fit the needs of your school district. The interview will last for f 60 - 90 minutes at a date, time and location convenient for you.

There are no expected risks to you as a result of participating in this study. You will not benefit directly from participating in this study; however, we hope that your participation in the study may further help understand how enrollment management components can be effectively applied to any school district based on their unique needs. We will minimize any risks by ensuring the survey and interview data is securely stored and only accessed by the researcher. Your name will not be used in any report. Your responses will be assigned a code number. The list connecting your name to this code will be kept in an encrypted and password protected file. Only the researcher will have access to the file. When the study is completed and the data have been analyzed, the list will be destroyed. Once the research study is completed, the data will be stored for five years per university requirement and then destroyed.



Office of Research Compliance

With your permission, I would like to audiotape the interview so that I can make an accurate transcript. Once I have made the transcript, I will erase the recordings. Your name will not be in the transcript or my notes.

Due to the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so and your data will be reported in a way that will not identify you. Information collected about you will not be used or shared for future research studies.

The information that you provide in the study will be handled confidentially. However, there may be circumstances where this information must be released or shared as required by law. Northern Arizona University Institutional Review Board may review the research records for monitoring purposes.

For questions, concerns, or complaints about the study you may contact Jason Martin at 480-239-5111 or jcm35@nau.edu.

For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Research Protection Program at 928-523-9551 or online at <http://nau.edu/Research/Compliance/Human-Research/Welcome/>.



AGREEMENT TO PARTICIPATE

I have read (or someone has read to me) this form, and I am aware that I am being asked to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I affirm that I am at least 18 years of age and voluntarily agree to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Printed name of subject

Signature of subject

Date

AGREEMENT TO BE AUDIORECORDED

Subject Signature: _____ Date: _____

Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject and those of his/her parent or legal guardian have been accurately answered.

Investigator/Person Obtaining Consent: _____

Signature: _____ Date: _____

APPENDIX G: INTERVIEW PROTOCOL, SCRIPT, AND QUESTIONS

Enrollment Management Interview

Thank you for taking the time to participate in this interview and exploring enrollment management a bit further than the survey you already completed. Your responses will be kept completely confidential. Your participation in this interview is voluntary and you have the right to end the interview at any point without judgement.

(Note: Prior to each interview I will research the school district of the interviewee in order to have a deeper understanding of their district which can help with pertinent follow-up questions as this will be a semi-structured interview.)

1. Tell me about yourself including your current position in your school district?
2. Please share the current demographics of your district? (This could include socioeconomics, race/ethnicity, political leanings of the community/various stakeholders, growing/declining, etc.)
3. Besides yourself, who else is part of your district's enrollment management process and share why they are part of this group?
4. Have you used any external providers such as demographers or strategic planners to guide the process? If so, how has this helped make enrollment management decisions?
5. What enrollment management processes is your district recently or currently using? (i.e., space utilization, choice programs, boundaries, etc.)
6. When you make decisions to move forward with a certain enrollment management initiative, what is the process used to communicate this out including gaining input from the various stakeholders?
7. How do you feel your enrollment has been impacted by any key enrollment management processes and decisions your district has gone through?
8. How do you see enrollment management tied to your district's fiscal reality?
9. If you have gone out for bonds and overrides, has the enrollment management played a role in determining the amounts to ask voters and if so, how?

10. How do you feel the trust you have with the various stakeholders plays a role in making enrollment management decisions?
11. How have you worked to gain trust with the stakeholders in your community?
12. Is there anything else you would like to share related to enrollment management in your district?

BIOGRAPHICAL INFORMATION

Jason Martin was raised in Gilbert, Arizona. In 2000, Jason earned his Bachelor's Degree in Elementary Education from Arizona State University. Upon graduating, Jason spent four years teaching fourth grade at Greenfield Elementary in Gilbert Public Schools. This was the same elementary school Jason went to himself as an elementary student. While teaching, Jason earned his Master's degree in Educational Leadership from Northern Arizona University in 2003. In 2004, Jason received his first dean of students position and served in this capacity at four different elementary schools for two years. In 2006, Jason became the founding principal of Highland Park Elementary, a brand-new school in Gilbert Public Schools. He spent nine years as principal at Highland Park before moving in 2015 to the district office as the Executive Director of Elementary Education. In 2022, he transitioned to the Assistant Superintendent of Elementary Education. During this time, Jason worked on his doctorate in Educational Leadership from Northern Arizona University where he graduated in 2023.

Jason has been with his partner, Daniel since 2008. They have two dogs, Lola and Pedro, who they spoil and require daily walks. Over the past ten years, they have gained four sons by hosting each of them for an entire school year as a foreign exchange student. First, Timon from Germany and then from Denmark, Anton and a couple of years later his brother Emil. While going through the doctoral journey, Maurice was here from Switzerland. This coming year they will be hosting Santiago from Spain. Jason is looking forward to having nights and weekends back.