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An examination of the effects of school choice on the financial integrity and demographic mix of traditional public schools

Jacqueline Abbey Johnston

AN EXAMINATION OF THE EFFECTS OF SCHOOL CHOICE ON THE FINANCIAL INTEGRITY AND DEMOGRAPHIC MIX OF TRADITIONAL PUBLIC SCHOOLS

by

Jacqueline Johnston

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Dissertation Committee:

William Price, Ph.D., Chair

Barbara Bleyaert, Ed.D.

Theresa Saunders, Ed.D.

Derrick Fries, Ph.D.

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Abstract

The purpose of this research was to study how the controversial yet expanding use of school choice affects traditional public schools' finances and socioeconomic and racial/ethnic student demographics. This mixed-methods study analyzed traditional public school districts in two Michigan counties in 2009/10 and 2013/14, answering three research questions: 1) Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity? 2) Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations? and 3) What are superintendents' perceptions of the impact of choice on the changing student demographics within the districts?

Research Question One grouped districts by levels of net choice impact, student poverty, and student diversity, comparing these independent variables with eight financial dependent variables. The null hypothesis was rejected if the majority of the eight financial variables were significant. Question One found that finances of a district were statistically significant only when compared to levels of student poverty and diversity and only in 2009/10. However, when examined through the lens of supporting the most vulnerable student populations and when looking at the two most arguably important financial variables—per-pupil total revenues and fund balance as a percentage of total revenues—other relevant findings emerged. There were no findings of significance between per-pupil total revenues and levels of high negative net choice and high-poverty districts, despite the increased needs of these populations. These two populations also

experienced statistically lower fund balances as a percentage of total revenues, indicating greater levels of fiscal distress.

Research Question Two compared net choice impact against levels of student poverty and diversity. Question Two found significantly greater negative net choice impact for high-poverty districts in both 2009/10 and 2013/14 and high-diversity districts in 2013/14. Research Question Three was addressed by interviewing seven superintendents. Interviews included feedback indicating that student demographics changed quickly and significantly and revealed concerns about the ability to meet student needs and maintain community support. When combined, these findings indicate that districts with vulnerable populations are experiencing significant challenges.

Table of Contents

List of Tables

Chapter One: Introduction

The purpose of this study was to examine the changes in traditional public schools' financial positions and demographic mix of students during a period of expanding educational choice options for families in Michigan. This mixed-methods study collected district financial, student demographic, and perception data to provide additional insight into whether and how choice creates winners and losers in traditional public schools and, by extension, the children they serve. For the purpose of this study, choice was limited to inter-district and charter schools. As Michigan continues the relatively aggressive expansion of choice options, this work contributes to the academic research available to policymakers as they debate and enact policy.

The National Debate

There is little argument that K-12 public education has failed some students despite the scholarly work of academia and the best efforts of practitioners. Credited as one of the first efforts to increase student achievement through choice, alternative-school reform models expanded widely in the 1960s to address the unique needs of all students and provide a laboratory for pedagogical experimentation. Choice evolved in the 1970s and 1980s to include magnet schools as a way to create greater racial balance within the schools while attempting to minimize the loss of primarily White resident students. In the 1990s, choice options such as open enrollment emerged, shifting the power within the relationship from schools to parents (Schneider, Teske, & Marschall, 2002). This evolution created conversations about the role of parental choice in increasing opportunity and achievement for all students.

The debate about parental choice for public education has been polarizing. Proponents of choice argue that using a market sector approach provides better options for those students whose parents use choice to find the best educational match for their children. Proponents also

assert that choice benefits those students who remain in their local schools, as the schools are driven towards reallocation of resources to improve quality to remain competitive in the new market economy in which they now compete (Arsen & Ni, 2008; Holme & Richards, 2009; Price & Jankens, 2013). Opponents point to research that shows choice options further segregate students by race, socioeconomic status, and academic achievement levels, creating winners and losers (Arsen & Ni, 2008; Bifulco, Ladd, & Ross, 2009; Holme & Richards, 2009; Ni, 2010).

Parental choice in public education was manifested first by parents choosing to reside within the boundaries of the public school district they selected for their children to attend. Alternately, those with a desire and the financial means were able to select a private educational venue for their children. Today choice has expanded to include homeschooling, intra-district choice, inter-district choice, vouchers, charter schools, and cyber charter schools. Privately funded private schools and homeschooling are popular, with approximately 12% of families selecting private schools and 2.9% of families homeschooling their children in 2007 (U.S. Department of Education, National Center for Education Statistics, 2010); however, these educational options receive no public subsidies and therefore remain in the shadows of the current reform debate. To some extent, intra-district choice and inter-district choice experience very limited controversy within the public, as these programs only shift taxpayer dollars from one traditional public school to another. Vouchers, charter schools, and cyber charter schools create far more controversy due to their use of public dollars. While these choice options are purported to be reforms to support all students, English (2014) perhaps summarizes opponents' views best, saying, "The real agenda is not to improve public education, but to sell it to the highest bidder in the form of vouchers and charter schools and to create markets for EMOs to penetrate, profitize and proliferate" (p. 58).

The ideals that began the voucher movement are credited to the work of Milton Friedman in the 1960s with microeconomic theory (English, 2014; Schneider et al., 2003). Used primarily to target students with specific and often greater needs (Miron & Welner, 2012), vouchers as well as tuition tax credits remain hotly debated in their use of public dollars to fund private secular and non-secular educational options. Public vouchers today are found primarily in Cleveland, Milwaukee, Washington, D.C., Ohio, and Florida (Buddin, 2012; Miron & Welner, 2012), and voucher programs are being implemented in Indiana and Louisiana (Miron & Welner, 2012). Tuition tax-credit programs are most prominent in Arizona, Florida, Iowa, and Pennsylvania (Buddin, 2012), with nine other states also using tuition tax-credit programs (Miron & Welner, 2012). In Michigan, the site of this study, vouchers and tax credits are prohibited by the state constitution.

Perhaps the most contentious debate about choice currently is around charter schools. Forty-two states and the District of Columbia have authorized the use of charter schools, a relatively new type of public school that competes with traditional public schools for students and dollars. From an educational perspective, Lubienski (2002) noted that the anticipated advantages of charter schools over traditional public schools were in the expected deliverables and accountability of school personnel. Traditional public schools use state and district level policymakers to guide curriculum, teaching strategies, and other decisions important to student success, leaving school personnel responsible for successful implementation of the process of education, not the outcomes of student achievement. Charter schools, he noted, were designed to empower teachers and principals to develop their own inputs and processes, shifting accountability of school personnel to the output, which is presumed to be enhanced student achievement.

From a financial standpoint, charter schools, through the use of private educational management organizations (EMO), created an opportunity to shift public dollars to private entities; however, this occurred with no guarantee that charter costs would be less than or even equal to the costs of traditional public schools or that the education would be superior. The cost to educate charter school students versus traditional public school students instead varies widely. Baker, Libby, and Wiley (2012), in their research for the National Education Policy Center, using data from 2008 through 2010 in New York City, Ohio, and Texas, found that New York City charters spend more than traditional public schools, Ohio appears to be spending less, and in Texas the difference in spending varies. The authors did, however, express concern as to whether their analysis uncovered all charter school expenditures. They also found that charter schools with a no-excuses philosophy have a significant marginal cost increase over traditional public schools. Their estimate to fund all New York City middle school students at the rate of a no-excuse philosophy school such as KIPP would require an additional $688 million. Bankston III, Bonastia, Petrilli, Ravitch, Renzulli, and Paino (2013) express concern about using a free-market process to provide a service that is a public responsibility, noting, "Turning schooling over to the market economy holds high risks, not just for the survival of public education, but for democracy itself" (p. 21). Despite the debate around charter schools, they continue to remain very popular in some segments and are heavily supported at the national level, with $940 million provided by the U. S. Department of Education in 2007-2011 (Price & Jankens, 2013), and another $39.7 million in grants recently awarded to expand existing and open new charter schools (U.S. Department of Education, 2014).

Inter-district choice was first considered as a way to provide low-income families an opportunity to access schools they were unable to access through residency requirements. The

first inter-district laws were passed in Minnesota in 1988 and were soon followed by Arkansas, Iowa, Nebraska, Ohio, Idaho, Utah, and Washington. As of 2013, 21 states have mandatory inter-district laws, and 22 states have mandatory intra-district laws (Mikulecky, 2013).

Relatively new on the horizon is the authorization of cyber schools. The National Education Policy Center (Miron, Gulosino, & Horvitz, 2014) noted that full-time cyber schools are currently allowed in 30 states plus the District of Columbia, with 2012/13 total enrollment in excess of 243,000 students. Forty-four percent of these schools, representing 72% of the total cyber school enrollment, are run by private EMOs. While generating skepticism by some about their educational validity and use of taxpayer dollars, cyber schools are receiving attention at the state level, with 25 states enacting 29 bills in 2013 and many more still under consideration (Huerta, Rice, & Shafer, 2014).

The Debate in Michigan

In Michigan, the choice debate found an able champion in former Governor John Engler, who characterized the state educational system as a "monopoly of mediocrity" (Mackinac Center for Public Policy, 2002). A series of legislative actions during his tenure as governor from 1991-2002 began the trajectory towards Michigan's long history of public school choice offerings. With Minnesota as ground zero of the Charter School movement in 1992 (Lubienski, 2002), Michigan quickly followed, passing Public Act 362, the 1993 Charter School law, which amended the Revised School Code of Michigan, Public Act 451 of 1976 (Price & Jankens, 2013). Employee Unions and the American Civil Liberties Union, noting the limited regulatory rights the state held over these newly created charter schools, filed a lawsuit claiming these schools were private and the law unconstitutional. After initially prevailing, Michigan Public Act 416 of 1994 was passed, making official the authority of the state over these schools and paving

the way for charter schools to open (Godshall & Hill, 1995). However, while authorizing the creation of public charter schools, this legislation did not provide charters the ability to receive public funding in a manner similar to traditional public schools, who held the authority to levy local property taxes, or by any other means. Passage of Proposal A in 1994 addressed this financial gap by creating a new, primarily state-funded enrollment-based funding formula for traditional public and charter schools. With public funding now based on enrollment and choice gaining in popularity, further choice options quickly followed with the passage of inter-district schools of choice, Public Act 300 of 1996, amending Public Act 94 of 1979 and expanded in 1999 with Public Act 119 (Spalding, 2013). Michigan was also introduced to an online educational choice option with Governor Engler's promotion of Michigan Virtual High School. However, despite the apparent interest for choice in Michigan, vouchers continue to be unpopular, soundly defeated most recently by Michigan voters in 2000.

Similar to the national level, Michigan is embroiled in controversy over the perceived level of success of choice policies in delivering the promise of effective educational models and efficient use of taxpayer dollars. Nearly $1 billion a year is spent on charter schools in Michigan (Dixon, 2014b), creating a redundant educational system at taxpayer expense. Izraeli and Murphy (2012), in their analysis of all traditional public and charter schools in Michigan for the years 1995/1996 through 2005/2006, found that charter schools cost the state an estimated incremental increase of $180 million over this period due to added cost per pupil, coupled with the migration of students from non-public schools to public schools. They found, overall, that Michigan charter schools were underfunded compared to traditional public schools by $230 per pupil, a portion of which was suspected to be the impact of differences in costs for special education students in traditional public schools compared to charter schools. However,

Michigan's portion of the total charter revenue was overfunded by $338 per pupil, due primarily to local tax revenues received by traditional public schools. The spending priorities were different as well, with charters spending $562 less per pupil on basic programs, $910 less per pupil on total instruction, and $580 more per pupil on business and administration expenditures. These variances occur in both the amount of revenues received and in where these monies were spent and may explain the mixed results found in Michigan charter schools in an eight-day *Detroit Free Press* series entitled "The State of Charter Schools." For example, the *Detroit Free Press* identified concerns with student achievement in charter schools, noting that 38% of charter schools fell below the 25th percentile in 2012/13, compared to 23% of traditional public schools. They also noted gaps in reading proficiency for similarly impoverished student compositions, with 47% proficient in traditional public schools, compared to 42% in charter schools (Higgins & Tanner, 2014). However, these results are in contrast to a report from the Center for Research on Education Outcomes (2013) at Stanford, which noted that students in Michigan charter schools gained nearly two months of additional learning, compared to students in traditional public schools, in both reading and math. The *Detroit Free Press* also reported loose oversight and lack of transparency of public dollars in charter schools. They noted that the State of Michigan has the greatest percentage of charter schools run by for-profit EMOs in the country (Dixon, 2014b), enjoying the benefits of public funding while converting public tax dollars into private profits and arguing that EMOs are not subject to transparency laws (Jesse, 2014).

While Michigan's inter-district choice laws avoid much of the public controversy around choice through a design that keeps public dollars in traditional public schools, within the school community the controversy is far greater as districts attempt to attract students away from neighboring districts in an effort to generate additional revenue. The use of inter-district choice

has increased significantly since inception, with 75% of traditional public schools enrolling at least one student through inter-district choice in 2011/12 (Spalding, 2013). For some districts, this creates much needed revenue; however, Spalding also noted that a total of 38 districts throughout Michigan lost in excess of 20% of their enrollment through inter-district choice.

Passage of legislation in 2009 paved the way for the creation of full-time, publically funded charter cyber schools in Michigan. Two schools opened in 2010/11, both run by EMOs: Michigan Connections Academy, chartered by Ferris State University and run by Connections Academy, and the Michigan Virtual Charter Academy, chartered by Grand Valley State University and managed by K12 Inc. (Van Beek, 2011). The opportunity for a cyber-education expanded in Michigan in 2012 with Public Act 129, which provided a phased-in increase in the number of cyber charter schools: up to 5 through 2013, 10 through 2014, and 15 beginning January 1, 2015 (State of Michigan, 2012). This legislation spurred a growth in cyber charter schools from two schools, educating 733 students in 2010, to eight schools, educating 6,863 students in 2013 (Mao & Landauer-Menchik, 2014). Growth in the number of cyber schools and the number of students enrolled in cyber schools is expected to continue under the new 2015 cap.

While controversial, choice appears to support a desire by many parents to have additional educational options for their children, as evidenced by almost 100,000 Michigan students attending a district outside their district of residence in 2011/12 (Spalding, 2013) and also by private entities eager to access a share of the public education budget, as evidenced by the proliferation of 277 Charter Schools in Michigan as of 2012 (Price & Jankens, 2013). However, under Proposal A, parents who use choice educational options other than their local traditional public school now have a direct impact on the district's budget, with the loss of the student per-pupil foundation allowance.

The financial impact of choice on traditional public schools varies. While inter-district schools of choice legislation creates financial winners and losers based on whether the district experiences a net gain or loss in inter-district enrollment, charter schools create only a net loss in enrollment and funding for the traditional public schools they affect. A net loss of student enrollment can have a profound financial impact on a district. Setting aside the issues of choice, many districts in Michigan were affected by declining enrollment as the state experienced a migration of families (Izraeli & Murphy, 2012). However, for many districts, the financial stress that occurs from a declining school age population within their districts is exacerbated by a loss of resident students to alternative educational options. This inequity is often compounded by a structural inequity in the state's funding of Michigan's public schools. Proposal A's per-pupil funding levels were driven by each community's pre-Proposal A tax base and their support for millages. Using these historically inequitable local funding levels to create the new, primarily state-funded per-pupil foundation allowance created discrepancies in funding for students in each public school when Proposal A was first implemented in 1995, discrepancies that remain today.

Substantial research has found that both the characteristics of students using choice and the student demographic mix within schools affects school enrollment, creating greater segregation by race and class (Bifulco et al., 2009; Hastings, Kane, & Staiger, 2005; Holme & Richards, 2009; Koedel, Betts, Rice, & Zau, 2009; Lacireno-Paquet & Brantley, 2008; Ni, 2010; Ni & Arsen, 2011; Spalding, 2013). Linkow (2011) found wide variances in the use of choice within school districts, with some districts experiencing more than half of their population using choice, while other districts had almost no students using choice. The author noted that districts with a high degree of poverty had greater relative numbers of students using choice to attend

charter, magnet, and private schools. Many districts with the greatest losses are in urban areas, 10 appearing in the top 50 list of declining enrollment districts (Spalding, 2013).

Table 1 presents the percentage of resident students that each of the 49 districts in Macomb and Oakland Counties lost to other traditional public schools through schools of choice or to charter schools over the 5-year period 2009/10 through 2013/14. For example, in the Anchor Bay School District in 2009/10, 3.9% of resident students exited the district to other traditional public schools through schools of choice or to charter schools. This analysis does not take into account students who left their resident district for an alternative educational venue other than through schools of choice or to charter schools, such as residents who choose to homeschool or attend private schools. By 2013/14, the Anchor Bay School District experienced a loss of 5.4% of their resident students to other traditional public schools through schools of choice or to charter schools. Comparing the 5 years, the Anchor Bay School District experienced an increased loss of resident students of 1.5 percentage points by 2013/14 and experienced an annual trend of additional losses in all but the first year. Reviewing all 49 school districts, we see that only two districts were able to retain more of their resident students in 2013/14 than they retained in 2009/10. The district with the highest percentage of loss of resident students in 2009/10 lost 47.1% of their resident students; however, by 2013/14 the highest percentage of loss of resident students increased to 59.2%.

Table 1

Resident Students Attending Charter Schools and/or another Traditional Public School Through Schools of Choice as a Percentage of Resident Students Attending Their Traditional Public School (Macomb and Oakland County)

School District by County	2009/10	2010/11	2011/12	2012/13	2013/14	% Change from 2009/10 to 2013/14
		Macomb				
Anchor Bay School District	3.90	3.90	4.60	5.00	5.40	1.50
Armada Area Schools	1.70	3.00	3.10	3.30	3.70	2.00
Center Line Public Schools	8.70	11.00	12.30	14.60	15.90	7.20
Chippewa Valley Schools	5.90	6.20	6.80	5.80	6.10	.20
Clintondale Community Schools	47.10	67.80	55.70	48.80	34.30	-12.80
East Detroit Public Schools	31.10	36.30	44.30	46.40	48.90	17.80
Fitzgerald Public Schools	10.90	12.80	15.00	15.90	18.50	7.60
Fraser Public Schools	6.10	6.70	6.90	7.20	8.00	1.90
L'Anse Creuse Public Schools	5.70	5.50	5.80	6.00	6.70	1.00
Lake Shore Public Schools	8.90	9.90	10.80	10.90	12.20	3.30
Lakeview Public Schools	7.90	8.10	8.70	9.40	10.00	2.10
Mount Clemens Comm. Schools	41.10	47.90	50.20	51.90	59.20	18.10
New Haven Community Schools	37.20	37.70	38.90	43.10	45.00	7.80
Richmond Community Schools	12.00	14.40	15.70	17.40	19.70	7.70
Romeo Community Schools	3.10	3.70	4.70	5.60	6.30	3.20
Roseville Community Schools	22.70	26.70	29.30	30.80	32.30	9.60
South Lake Schools	20.00	24.20	26.20	29.40	32.10	12.10
Utica Community Schools	2.10	2.70	3.00	3.30	3.70	1.60
Van Dyke Public Schools	21.10	22.10	23.20	25.10	28.30	7.20
Warren Consolidated Schools	7.60	9.80	11.70	13.20	15.20	7.60
Warren Woods Public Schools	11.30	12.00	12.60	14.60	17.20	5.90
		Oakland County				
Avondale School District	4.50	4.70	6.00	6.60	8.10	3.60
Berkley School District	1.90	1.60	2.10	1.60	1.90	.00
Birmingham Public Schools	.80	.80	.90	.70	1.00	.20
Bloomfield Hills Schools	.70	.90	1.20	1.00	1.00	.30
Brandon School District	2.20	3.20	3.90	4.90	7.10	4.90
Clarenceville School District	3.40	4.40	3.80	4.30	4.40	1.00
Clarkston Comm. School District	1.80	1.50	1.40	1.60	2.40	.60
Clawson Public Schools	6.70	7.30	7.40	6.60	6.40	-.30
Farmington Public School District	2.40	2.50	3.00	3.40	4.30	1.90
Ferndale Public Schools	14.20	15.20	16.50	16.10	19.30	5.10

School District by County	2009/10	2010/11	2011/12	2012/13	2013/14	% Change from 2009/10 to 2013/14
Hazel Park School District	6.40	7.20	8.00	8.40	11.80	5.40
Holly Area School District	16.40	19.00	22.10	23.80	25.00	8.60
Huron Valley Schools	3.90	4.40	5.10	5.10	5.30	1.40
Lake Orion Community Schools	.80	1.00	1.50	1.50	2.10	1.30
Lamphere Public Schools	4.00	3.70	4.20	4.30	5.60	1.60
Madison District Public Schools	42.70	51.80	54.60	55.70	57.10	14.40
Novi Community School District	.90	1.20	1.50	1.90	2.30	1.40
Oak Park School District	39.40	40.20	38.40	39.80	40.20	.80
Oxford Community Schools	1.60	1.70	1.60	1.60	3.50	1.90
Pontiac City School District	46.30	47.20	48.40	51.90	57.50	11.20
Rochester Comm. School District	.40	.50	.70	.90	1.40	1.00
Royal Oak Schools	6.20	7.60	8.40	8.80	9.00	2.80
South Lyon Community Schools	1.70	2.40	2.90	3.60	4.20	2.50
Southfield Public School District	16.80	19.60	22.80	24.80	28.10	11.30
Troy School District	1.10	1.50	1.70	1.50	1.50	.40
Walled Lake Consolidated Schools	1.80	1.90	1.90	2.20	2.50	.70
Waterford School District	6.00	6.90	7.70	7.90	9.70	3.70
West Bloomfield School District	2.00	2.50	2.50	3.10	3.70	1.70

Note: Does not include students being homeschooled or enrolled in private schools.
Retrieved from mischooldata.org

Districts experiencing large student losses are often unable to make expenditure reductions quickly enough to keep pace with the loss of revenue (Bifulco & Reback, 2014). This begins a cycle of program cuts to offset the lost revenue, resulting in parental dissatisfaction and increased student flight, which in turn results in further losses of revenue and further reductions in programs and services. Bifulco and Reback (2014) identified costs as either fixed or variable. Cost reductions are realized primarily through variable costs, of which instructional expenditures make up the largest portion. These required cuts might therefore affect not only parental support for the schools but also the academic achievement of their students (Jones & Slate, 2010).

Recognizing the inverse relationship between socioeconomic status of the student population and the academic achievement of students (Diaz, 2008), state and federal grants have been used to provide assistance for districts with large populations of students with greater

needs. Two longstanding grants to address students in poverty include Michigan's At Risk 31a funds to increase student proficiency, allocated towards students' meeting free-lunch criteria in lower foundation-allowance districts (State of Michigan, Department of Education – Office of Field Services, 2014) and federal Title 1, Part A, funding to help students achieve state academic standards, allocated to districts with high concentrations of children in poverty identified primarily through census data (U. S. Department of Education, 2015).

In Michigan, the stakes for traditional public schools are high. In answer to the increasing number of financially troubled schools with large populations of vulnerable, academically challenged students, Michigan passed Public Act 204 of 2009 to amend The Revised School Code, Public Act 451 of 1976. Act 204 creates a process to address what the state defines as the lowest achieving 5% by placing these districts under the supervision of a state school reform/redesign officer, seizing control of these schools if they so choose and nullifying the authority of the locally elected Board of Education, district administration, and much of the negotiated employee contracts (State of Michigan, 2009). In Bowman's (2013) case study of state public school takeovers and litigation, she noted that as early as 1989, with more than two dozen districts in deficit, the state identified a need for school takeovers with the authorization of Michigan Public Act 72. In 2011, after more than two decades as law and under significant controversy, Public Act 72 was replaced by Public Act 4, opening the door for control over much more than the finances of the district. Public Act 4 changed language to allow for the appointment of an emergency manager, a significant expansion from the previous authority to appoint an emergency financial manager. This controversy over expanded control resulted in a ballot referendum that reversed Public Act 4; however, in a surprising action during the 2012 lame-duck legislative session, Michigan Public Act 436 was passed, reinstating what was lost in

the referendum. More recently, a package of bills designed as a financial early warning system was signed into law by Governor Snyder in July 2015. House Bills 4325 through 4332 allow for increased scrutiny by the state, including empowering the State Superintendent or State Treasurer to use various data to identify a district in potential fiscal distress, requiring increased financial reporting for districts with a fund balance of less than 5%, creating an enhanced deficit elimination plan, allowing for the withholding of state funding if a deficit reduction plan or enhanced deficit reduction plan is not submitted by a district or approved by the state, specifying the State Treasurer as the financial authority (Senate Fiscal Agency, 2015b), and increasing the cap on loans to school districts (Senate Fiscal Agency, 2015a).

Statement of the Problem

Some traditional public schools are experiencing a substantial loss in enrollment, in part due to choice. These traditional public schools with declining enrollment are often districts that support populations with high rates of both poverty and diversity. While parental choice motivators suggest varying priorities for families, such as academic quality and finding the best fit for their child (Carlson, Lavery, & Witte, 2011; Hastings et al., 2005; Koedel et al., 2009; Ni, 2010; Reback, 2008; Spalding, 2013; Zeehandelaar & Northern, 2013), the impact on high-poverty and high-diversity populations is supported by research that identified parental choice motivators such as student and neighborhood race and socioeconomic status (Bell, 2009a; Bifulco et al., 2009; Carlson et al., 2011; Garcia, 2008; Hastings et al., 2005; Holme & Richards, 2009; Koedel et al., 2009; Lacireno-Paquet & Brantley, 2008; Ni, 2010; Ni & Arsen, 2011; Reback, 2008; Roda & Wells, 2013). The disproportionate impact based on race and class aligns with research that charter schools often locate in areas that are high minority and high poverty (Booker, Gilpatric, Gronberg, & Jansen, 2008; Gulosino & Lubienski, 2011; Hoxby & Murarka,

2009; Lubienski, Gulosino, & Weitzel, 2009). With funding of public schools based largely on student counts, enrollment declines may be creating a financial strain in many traditional public schools, including those serving students with the greatest need. For example, Bowman (2013) noted that the three districts under emergency financial managers in 2010/11 represented 5% of the total Michigan public school student population but 9% of those students who receive a free or reduced lunch and 23% who are African American. Izraeli and Murphy (2012), in their analysis of all Michigan traditional public and charter schools, found lower per-pupil spending on basic programs in schools within a county with higher African-American and low-income populations. These findings support concerns regarding whether districts that are experiencing significant financial stress are able to provide the level of service necessary to support the students who remain in these districts. In addition to financial stress, as schools become more segregated, the educational opportunities associated with racial, ethnic, and socioeconomically diverse schools may also be eroded (Mickelson, Bottia, & Southworth, 2012).

Purpose of the Study

This research examined Michigan's policy on choice, investigating the effects of choice on 49 traditional public school districts located in two Michigan intermediate school districts. This study focused on how choice influences the finances and student demographic mix by race/ethnicity and socioeconomic concentrations, as well as perceptions of changes in the demographic mix in the traditional public school districts within the two counties. Specifically, the research investigated three questions:

1. Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity?

2. Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations?
3. What are superintendents' perceptions of the impact of choice on the changing student demographics within the district?

Justification and Significance of the Study

Choice is gaining in popularity throughout the state and the country due to factors ranging from families' perceived quality of their local traditional public school to a desire to identify lower-cost public education, to self-interest by those able to capitalize on the privatization of public education, and to legislation designed to promote and expand choice. These factors result in greater numbers of families using choice to select an educational venue other than their local traditional public school, by charter school choice that pulls enrollment and funding away from traditional public schools, and by inter-district choice that moves enrollment and funding from one traditional public school to another. However, while choice is expanding, many families remain in their local traditional public school either by choice or due to barriers to choose such as transportation and proximity. This brings forward competing concerns about accountability: the accountability for the academic success of the individual students who choose to enroll in a school versus the accountability for the equality of opportunity to all school-aged students (Wilson, 2012). Mathis and Hinchey (2012) bring forward a similar concern, discussing the contrast between the historical purposes of education "…as the advancement of civic virtue" (p. 239) versus the market-driven process found in many choice programs today. How choice affects traditional public schools and whether the impact is disproportionate on schools that educate the most vulnerable students is therefore important to understand.

The time and attention allocated by the state to address these perceived failing districts is evidence of the states' appreciation for the importance of addressing districts in distress. It is critical for policymakers and others to understand whether choice exacerbates the issues the state is attempting to alleviate through these reforms. If choice negatively affects traditional public schools, policymakers must be made aware and are duty-bound to provide additional support for the students who remain in their district of residence. Traditional public school leaders will also benefit from understanding the impact of choice on finances and the student demographic mix of their schools as they prepare for both the opportunities and challenges that will arise as the competition from choice continues to grow.

Definition of Terms

At Risk 31a: State grant to increase student proficiency, allocated towards students meeting free-lunch criteria in lower-foundation allowance districts (State of Michigan, Department of Education – Office of Field Services, 2014).

Economically disadvantaged: Based on free and reduced-cost lunch data, which includes three components: (a) direct certification with the Michigan Department of Human Services, (b) identified students such as homeless, migrant, and foster children, and (c) students meeting federal income eligibility guidelines of 130% of poverty for free meals and 185% of poverty for reduced-price meals (Personal Communication e-mail to MISD Helpdesk, 2014; State of Michigan, Department of Education – School Nutrition Programs, 2014; U.S. Department of Agriculture, 2014).

Fixed costs: Costs that are normally unable to be adjusted based on changes in enrollment and include items such as general support functions and the principals (Bifulco & Reback, 2014). For purposes of this study, fixed costs will include Instructional Support –

School Administration, Non-Instructional Support, Community Services, Transfers, and Facility Acquisition.

Foundation allowance: Noted by Arsen and Ni (2012) as a Foundation Grant, foundation allowance is the amount received primarily from the state, on a per-pupil basis, to pay for operating expenditures. Created under Proposal A in 1994, this amount is remitted to a public school where the student is enrolled: in the traditional public school where the student resides, a traditional public school other than where the student resides, or a charter school.

Fund balance: The amount of money available for future needs in a given fund, calculated as assets in excess of liabilities (State of Michigan, Department of Education, 2014a).

Instruction: Classroom instructional costs for pre-kindergarten, elementary, middle and high schools, special, compensatory, career/technical education, and adult and continuing education (State of Michigan, Department of Education, 2014a).

Instructional-support expenditures: Includes services to support pupils, such as truancy, guidance, and social work; services to support instructional staff in their teaching and student learning such as professional development, curriculum development, and media services; and services to support the office of the principal (State of Michigan, Department of Education, 2014a).

Inter-district choice: Enrollment of students in a traditional public school district that is not the district of residence as authorized by Public Act 300 of 1996, amending Public Act 94 of 1979 and expanded in 1999 with Public Act 119. Under this law, the per-pupil foundation allowance is remitted to the district where the student is enrolled and deducted from the student's previous district (Spalding, 3013).

Intra-district choice: Student attends a school within the district where he or she resides, but not the home school as identified by district school boundaries.

Non-instructional support expenditures: The costs associated with areas not directly related to classroom instruction such as general and business administration, operations and maintenance, pupil transportation, personnel, communications, non-instructional technology, and pupil accounting (State of Michigan, Department of Education, 2014a).

Title 1, Part A: Federal grant targeted to help students achieve state academic standards, allocated to districts with high concentrations of children in poverty, identified primarily through census data (U. S. Department of Education, 2015).

Traditional public school: Term used to describe the established public schools representing specific and exclusive geographic areas and to differentiate these from public charter schools and private schools.

Variable costs: Costs that are normally able to be adjusted based on changes in enrollment and include items such as teachers and pupil services (Bifulco & Reback, 2014). For purposes of this study, variable costs will include Instruction, Instructional Support – Pupil and Instructional Support – Instructional Staff.

Organization of the Document

This research attempts to add to the understanding of changes in traditional public schools' financial integrity and student demographic mix during a period of expanding educational-choice options. With the conclusion of the introduction provided in Chapter One, Chapter Two presents a review of the literature. This review is sorted into three major themes noted in the literature: (a) What motivates families to opt in or opt out of their school district of residence as it relates to the significant choice debate aspects of enhanced academic

opportunities, district finances, and the integration or segregation of students by race and class? (b) Are the intended goals of choice as they relate to traditional public schools and the students they serve being achieved? and (c) How do state policies on choice influence public schools, and what changes to policies are being recommended? Chapter Three discusses the research methods. This study is a mixed-methods research study. Discussions within this section include the study setting, study participants, data selected for analysis, the data collection process, and the data analyses procedures. Chapter Four discusses the research results and analysis. This section includes descriptive information and presentation of the study findings, including appropriate tables. Chapter Five presents the conclusions and recommendations based on the study findings and review of related literature.

Limitations of the Study

A limitation of the study is that the superintendent interviews were conducted with superintendents in seven districts selected based on a review of the data and the researcher's perspective on areas of interest for follow-up. Selection of different superintendents may yield different results. Additionally, as the lead advocates for their school districts, superintendents may not be fully candid in all responses.

Delimitations of the Study

A delimitation of the study is that the study is limited to the 49 traditional public school districts in Macomb County (Macomb) and Oakland County (Oakland), Michigan. Only two urban school districts are represented, one in each of the two counties. Held to equal state policies as other traditional public schools in Michigan, results may be useful to other school districts across Michigan. These results may not be generalizable to school districts outside of Macomb and Oakland or to schools that are not traditional public schools.

Chapter Two: Review of Research and Literature

This literature review is organized around several questions or themes that have heavy emphasis in prior research: a) What motivates families to opt in or opt out of their school districts of residence as it relates to the significant choice debate aspects of enhanced academic opportunities, district finances, and the integration or segregation of students by race and class? b) Are the intended goals of choice as they relate to traditional public schools and the students they serve being achieved? and c) How do state policies on choice affect public schools, and what changes to policies are being recommended?

What Motivates Families to Opt in or Opt out of Their School District of Residence?

Theory of asymmetric information. Proponents of choice contend that families will select the educational venue that provides the best educational opportunities for their children based on their children's needs, skills, and interests. They believe choice will also benefit the students who choose to remain in a school, as schools will either improve to position themselves positively in the new competitive environment or go out of business. However, an important premise to this belief is that parents have the necessary information to know what educational venues are the best matches for their children. Alexander (2012) instead applied Stiglitz's theory of asymmetric information to school choice. This theory argues that "markets are neither rational nor moral and are, in their freestanding state, economic manifestations of the selfish gene, exhibit a Hobbesian self-interest, and are in the end, engines of predatory selection" (p. 172). Alexander suggests that parents do not have adequate information or expertise to properly judge the best educational environment for their children and, instead, make educational choices based on biased, non-educational criteria such as race, ethnicity, religion, and socioeconomics of the student population.

Literature review on family selection motivation. Acknowledging that proponents argue choice will provide higher-quality schools for both the students who use choice and those who do not, one might expect to find evidence that academic achievement is of primary importance in family-choice decisions. In fact, a review of the literature uncovers research with these findings. In an online survey of 2,007 families of students in the United States in August 2012, the Thomas B. Fordham Institute found that the highest-ranking school characteristic was a strong core curriculum in reading and mathematics followed by an emphasis on science, technology, and math education (Zeehandelaar & Northern, 2013). A diverse student body was ranked higher by African-American parents than White parents and families with household incomes less than $34,999, but for all groups, diversity considerations were low compared to academic considerations. Spalding (2013) completed an analysis on choice data through 2011/12 on behalf of the Mackinac Center for Public Policy, noting that families used schools of choice in 2011/12 to gain access to districts with higher average Michigan Educational Assessment Program scores (measured for seventh graders) and higher graduation rates. Carlson et al. (2011) studied Colorado and Minnesota district-level open enrollment activity at an aggregate and transactional level to understand what characteristics were prevalent in open enrollment decisions. Test score data were based on third-, fifth-, and eighth-grade mean scale scores for math and reading in Minnesota, whereas Colorado's data were based on the percentage of students proficient or advanced in fifth, seventh, and tenth grades. They found academics were of greatest significance in families' selection criteria, with race and diversity as secondary considerations. Students were leaving high-achieving districts to attend even higher-achieving districts. The researchers concluded that the inter-district choice programs are a form of vouchers for middle- and upper-middle class families. Ni (2010) analyzed 2002/03 and 2003/04 data for

students who met selected criteria, including being enrolled in an urban elementary or middle school and still attending Michigan public schools in 2003/04, finding that student selection of charter schools declined in districts where school effectiveness was higher. Koedel et al. (2009) were interested in determining levels of segregation based on race and also on test scores, parental-education levels, and English-language levels. Based on applications with adequate information in 2001 for three choice programs in San Diego Unified School District, a dataset was developed of student-level information such as test scores from the Stanford 9 exam and student usage of choice programs, as well as the student make-up for each school in the districts included in the study. They found that both high- and low-achieving students used choice to attend schools with higher levels of performance. Reback (2008) studied 331of the 345 Minnesota districts in existence in 1999/2000 to understand the characteristics of students who use inter-district choice and the decisions made by districts that reject choice applicants. Information included data such as test scores for third, fifth, and eighth grade; characteristics of residents; school expenditures; total enrollment by grade; enrollment by race; open enrollment transfer rates; and open enrollment application-rejection rates. In districts with low populations, test scores were the best predictor of choice, whereas districts with high populations found test scores, household income, and home values all similarly able to predict choice. Districts with fewer dropouts and districts where neighbors have fewer college-educated residents also see greater transfer demand, but this relationship is low. Hastings et al. (2005) used data of more than 36,000 students entering fourth-through-eighth grades from the Charlotte-Mecklenburg School District in the first year of an intra-district school-choice program to study parental preferences and competition. They noted that families place different values on academics in the choice decision. Families of students who are not eligible for lunch subsidies value school scores

more than those families whose students are eligible for lunch subsidies. Of the lunch-subsidy families, there was a somewhat stronger test-score preference for non-Whites than Whites. They also found that families of students with higher scores or who lived in more affluent neighborhoods showed greater preference for school test scores.

Not all research supports the importance of academics in choice decisions. For example, Powers, Topper, and Silver (2012) studied what they termed *stayers* and *movers* and the racial demographics of each group of elementary students in the 27 metropolitan Phoenix school districts at the end of 2008/2009 and the beginning of 2009/10, using district-level data. Reviewing the state math standards for grades three through eight, they found no evidence that student achievement was different in high-receiving districts than in high-sending districts. Ni and Arsen (2011), in their models testing the influence of math and reading performance on charter school participation and academic performance on inter-district choice participation, found that choice was not affected by district academic achievement but by factors including the student characteristics in the resident school, such as concentrations of poverty. They therefore concluded, "In short, our results indicate that in Michigan, a state with relatively high levels of participation in two long-established school choice policies, the market signals these policies provide to school personnel have very little to do with the student academic outcomes they strive to improve" (p. 21). Using the Stanford Achievement Test, ninth edition, and the Aprenda2 state mandated tests, Garcia (2008) studied nearly the entire Arizona second-through-ninth-grade public school student population from 1997 through 2000 to understand parents' choice decisions. He found that parents selected schools with a similar academic make-up as their resident school. Parents left schools where the top quartile of students was integrated with 15% of students in the bottom quartile to attend charter schools with 17% of students in the bottom

quartile. In the high schools, top quartile students were exposed to even more bottom quartile students; however, the researcher suspected this was due to the number of specialty-charter high schools developed to support struggling students.

Research also points to other areas driving choice decisions. Carlson et al. (2011) found that distance played a significant role in choice decisions, where transfer rates declined as the distance between the district of residence and the transfer opportunity grew. Bell (2009b), in her study of 48 families in Detroit and the metro area who were considering schools for their sixth- or ninth-graders, looked at what she called *space and place* in parental preferences. Describing these two concepts, she noted, "Geography as space is operationalized through variables such as distance, commute time and the availability of transportation," and "Place refers to the social, economic, and political meanings people assign to particular spatial locations" (p. 495). This research concluded that while parents preferred convenient schools, parents were also interested in other factors that varied in importance over time. Bifulco et al. (2009) examined 2002/03 data on Durham, North Carolina, students in grades three through eight. Schools range in program offerings from traditional to magnet to alternative calendar, with students assigned to a school by zone. The authors noted that decisions to apply for transfer were influenced by distance from their assigned school for elementary students but were not an influence for students at the middle school level. The authors cautioned that this difference could be the result of smaller and therefore more homogeneous attendance areas of elementary schools than middle schools. Hastings et al. (2005) found that for every mile increase in distance to a prospective school, the likelihood of selection decreases for an average White and non-White student by approximately 35% and 27%, respectively. While much of the research found that distance plays an important

role in choice decisions for many families, Zeehandelaar and Northern (2013) found that a convenient location was of below average importance.

Perhaps surprising from a financial perspective, Ni and Arsen (2011), using data on Michigan schools and student characteristics from 1995 through 2005, found that lower per-pupil spending districts gained more students through inter-district choice and that participation in charters occurred more frequently in districts with higher per-pupil spending. Carlson et al. (2011) found that students leave low-spending districts at greater rates than high-spending districts but transfer to districts that spend less. Reback (2008), when looking at all district revenues, found that spending per pupil had no statistically significant effect. The researcher theorized that some of the revenue generators might be associated with negative characteristics for a district, such as poverty rates. He did find, however, that districts spending more on vocational programs than neighboring districts experience greater demand.

There is also significant research that points to race and socioeconomic status in choice decisions. Spalding (2013) noted that students use choice to move to districts with lower percentages of racial diversity and low-income students; however, the author noted that these preferences may really be the result of the students' desire to move into districts that are higher-achieving. Ni and Arsen's (2011) analysis of a set of student characteristics found that "Statewide in 2005, inter-district choice students transferred on average to districts where the share of low-income students was 7.7% lower than in their home district…Statewide, inter-district-choice students are also moving to districts where the share of African-American students is 9.5% lower than in the districts where they live" (p. 17). Movement to districts with lower special-education rates was also noted, but with far less discrepancy between the resident district and the district selected through choice. Related to charter school options, they noted that

a district's socio-economic status significantly affected selection of a charter school; however, the district's racial mix did not. In Colorado, Carlson et al. (2011) found that students leave districts with a wealthier student population at a greater rate than they leave districts with a poorer student population. Within districts with higher rates of poor students, students leave the poorest districts more than the less-poor districts and transfer to districts with less poverty. Colorado students also move to districts with a slightly lower White population. In Minnesota, students move to districts poorer than their district of residence; however, race has no impact. Koedel et al. (2009), in their study of how choice affects integration and segregation within a district, found that students' families attempted to move students into peer groups up the socioeconomic ladder, which included schools with more White students, higher-achieving students, students of a higher socioeconomic level, higher parental-education levels, and lower levels of English-language learners.

Holme and Richards (2009) looked at 2006/07 data from the Colorado Department of Education for the top three sender and top three receiver districts under the state choice plan. The highest sending district, which was also the highest receiving district, was predominantly minority and low income. Students transferring out of this district were often higher income and whiter than the overall school population, transferring into districts that were higher income with less diversity. Students transferring into this district were primarily low income, non-White students from low-poverty White districts or the slightly more advantaged students from a high-poverty, non-White district. The second-highest sending district, which was also the third-highest receiving district, had a high percentage of White and more affluent students. This district experienced inter-district transfers out at two levels, "losing its lower income students and students of color to districts with larger proportions of lower income students of color, and losing

higher income White students to districts with even higher concentrations of White and affluent students" (p. 166). Students transferring into this district were more likely to be White and higher income than the population of students in their home districts. The third-highest sending district, which was also the second-highest receiving district, experienced a similar pattern to the second-highest sender. Bifulco et al. (2009) found that advantaged and higher-achieving students used choice to leave disadvantaged schools for higher-achieving schools at a greater rate than their disadvantaged and low-achieving peers. They also determined that college-educated parents were more likely to use choice than non-college-educated parents based on the proportion of low socio-economic students in their district of residence.

Bell (2009a) attempted to understand how families construct choice sets by interviewing a sample of 48 families, with students entering sixth or ninth grade, multiple times over an eleven-month period during their choice process. A sample of schools were selected that included one failing and one non-failing school for each of the six school types—traditional public, magnet, charter, private secular, private non-secular, and homeschools—from all elementary and middle schools within 5 miles of the city border. Failing status was based on state adequate yearly progress status or, where not applicable, on accreditation status of other accreditation agencies. Thirty-three of the 48 parents in the sample completed a search, identifying factors in their final selection process including 69% for holistic reasons, 58% for academics, 33% social, 27% logistics, 25% administrative, and 1% other. Race played a role in this process. While many parents indicated a desire for diverse schools, their choice sets reflected otherwise, with city families who were primarily of minority status including in their choice sets mostly schools that were of primarily minority enrollment, whereas suburban, primarily White families included majority White schools in their choice sets. Socioeconomic status also played a

role in the choice sets. Middle-class families included a higher percentage of non-failing and selective schools in their choice sets than did poor and working-class families. While middle-class, working-class, and poor families noted similar priorities and used similar processes in developing their choice sets, the resulting choice sets were different based on family socioeconomic status and race. The researcher found that families identified their schools based on social networks, traditional enrollment patterns, and the students' academic abilities, and that middle-class families, through their social networks and traditional enrollment patterns, had more contact with non-failing schools. The culmination of these factors resulted in poor and working-class families selecting schools from a choice set primarily of failing and nonselective schools compared to their middle-class counterparts, whose choice set included primarily non-failing and selective schools.

Reback (2008), in his analysis of 331 Minnesota districts, determined that low-income students, special-education students, and White students were slightly more likely to use inter-district choice, and that demands to move into districts through inter-district choice increased for districts with higher socioeconomic characteristics and higher average test scores. Hastings et al. (2005) found that race was a factor for both Whites and non-Whites. The researchers noted that each race preferred a school where 70-80% of the population was of the same race.

There appears to be some disagreement in findings related to the impact of race and socioeconomic status in choice decisions, perhaps for a couple of reasons. First, Garcia (2007) found both white flight and minority isolation in existence when using the same data set of second- through ninth-grade students in Arizona from 1997 through 1999, as noted in Garcia 2008. White students moved to charter elementary schools with a 10% greater White population; however, at the high school level, White students selected schools much more similar to the

schools they were leaving. African-American elementary students selected charter schools with a 29% greater African-American population than the district they left; however, like their White high school counterparts, in high school they chose charter schools with a racial make-up similar to the schools they were leaving. Native Americans also self-segregated at both the elementary and high school levels. Hispanic elementary students were the only group that did not select a charter elementary school with greater concentrations of the same race. Overall, students left districts where White students had a 30% exposure to minority students to attend charter schools with an 18% exposure rate. Drilling down by level, the segregation was greater at the elementary level. These findings caution us that to understand how parents use choice, we must look at each student transfer individually to identify the characteristics of the student, as well as the characteristics of the district where the student resides, and the characteristics of the district where the student chooses to attend. This is confirmed by Ni (2010), who surmised from his research that the characteristics of both the students and the school where they reside influenced transfer decisions. He found that both White and non-poor minority students were more likely than poor, minority students to transfer to charter schools. More disturbingly, the likelihood of White and non-poor minority students to transfer was even higher when compared to poor minority students who attend low-performing schools with a high concentration of low-income, minority students. A second reason for the diverse findings for the impact of race and socioeconomic status on parental choice decisions is the misalignment that sometimes occurs between the stated criteria parents use in their choice decisions and their behaviors. Lacireno-Paquet and Brantley (2008) reviewed empirical research to learn more about the characteristics and motivations of families that use choice options. They noted, “Parents overwhelmingly say they are looking for a better education but much, though not all, of the research examined

suggests that parents are paying more attention to the social and racial demographics of potential choice schools than they are to measures of academic quality" (p. 20). Supporting these findings, Roda and Wells (2013) selected 39 advantaged New York City parents for study, attempting to understand the seemingly contradictory articulated support by parents for integrated schools and the subsequent behavior of selecting predominantly White schools for their children. They noted that parents felt tremendous pressure to have their children accepted into the best schools, and while they valued diversity, interviews showed that White parents want their children to attend schools with what the researchers call a critical mass of other White children, and that race is important as parents constructed their perceptions of school quality.

However, not all research that looked for evidence of race and socioeconomic factors in the parental decision-making process found it. Zimmer, Gill, Booker, Lavertu, Sass, and Witte (2009) studied districtwide data in Chicago, Denver, Milwaukee, Philadelphia, and San Diego and statewide data in Florida, Ohio, and Texas over varying, multi-year periods ranging from 1994/1995 through 2007/2008, seeking answers to questions including which students select charter schools and how charter schools affect the test scores of traditional public schools in the area. Florida data were not included in some of the analyses, resulting in some findings for only seven locations. Data included students' grade level, race/ethnicity, and math and reading test scores. Reviewing the characteristics of students who select charter schools from the perspective of race and segregation, the researchers concluded that students who transfer to charter schools are selecting ones that are not dramatically different from their traditional public schools; however, African-American students were found to be slightly more likely to move to charter schools with greater representations of their own race than White or Hispanic students were.

Are the Intended Goals of Choice as They Relate to Traditional Public Schools, and the Students They Serve, Being Achieved?

Proponents of choice often argue that all students benefit from choice policies. Students may use choice to find a district that provides an education that better fits their individual needs. Students who remain in their districts of residence also benefit as districts are forced through choice competition to improve or cease to exist, replaced by an educational entity with sufficient quality to adequately compete in the educational marketplace. Choice may also allow a new educational venue to emerge where no suitable system exists. Research suggesting that the goals of choice for traditional public schools are falling short of expectations often points to three issues: a) the segregation of students by race/ethnicity, socioeconomic status, and ability; b) the financial stress to traditional public schools affected by choice; and c) the limited improvements made by traditional public schools based on choice pressures. There is wide variation in research on these views.

Segregation of traditional public schools. Segregation occurs in many forms, including by socioeconomic status, race/ethnicity, student achievement, parent-education levels, English language learners, and special-education levels. Families vary in their propensity for school choice; how each group of students uses choice will affect the segregating and desegregating results of choice programs. For example, Koedel et al. (2009) found a commonality among all choice applicants to move to schools with larger concentrations of higher socioeconomic students; therefore, he noted, low-income students who use choice help to integrate students by socioeconomic status, and high socioeconomic students who use choice segregate students by socioeconomic status.

Gulosino and Lubienski (2011) used geo-spatial methods with longitudinal-school level data for the Detroit tri-county area for the 10-year period following the passage of Michigan's Charter School law in 1993, and community level 2000 U. S. Census data to understand how choice affects the behaviors of educational organizations in providing education to disadvantaged students. Recognizing an important distinction between profit-oriented and mission-oriented charter schools, they noted "a high level of market acumen among charter schools" (p. 20), with charter schools often placing schools in areas that have more favorable demographics. Creating what they called "ring areas" (Lubienski et al., 2009, p. 640) around but not within areas with high levels of students in need, charter schools were able to serve advantaged students and students from disadvantaged areas who had the ability to overcome the barriers associated with the distance between their residence and the charter-school location, while locking out students of need without these resources. The work of Carlson et al. (2011) in both Colorado, where race and socioeconomic status were found to influence transfers, and in Minnesota, where socioeconomic status but not race was found to influence transfers, concluded that open enrollment may have a segregating effect by race and class in Colorado, but the results are inconclusive in Minnesota. In Ni's (2010) research, which determined that both student and school characteristics affected the propensity for choice, he noted that in urban districts where charter schools are often located, charter schools further segregate students by race and poverty levels, resulting in even more issues around the quality of education for students in these urban schools.

In a national study of schools operated by Education Management Organizations (EMO), Miron, Urschel, Mathis, and Tornquist (2010) collected data on 89% of the schools operated by EMOs in 2006/07, a total of 968 schools. Their study compared characteristics of the EMO

schools to the students' resident traditional public schools. Creating a 5-category scale, they found that segregation took place by race, socioeconomic status, special education, and English Language Learners (ELL). For example, 20.7% of for-profit and 23.4% of nonprofit EMOs in 2006/2007 were very segregated, with greater White enrollment, while 34.4% of for-profit and 17.9% of nonprofit EMOs were very segregated, with greater minority enrollment. The authors noted that minority flight was more significant than white flight in the traditional public schools. By socioeconomic status, they noted that 30.4% of for-profit and 24.4% of nonprofit EMOs were very segregated, with greater high-income enrollment, while 42.3% of for-profit and 45.0% of nonprofit EMOs were very segregated, with greater low-income enrollment. As it relates to special education and ELL, there is greater weight to one side of the curve, with 44.6% and 35.1% of for-profit and nonprofit EMOs, respectively, very segregated with low special-education enrollment, while only 5.6% and 12.6% of for-profit and nonprofit EMOs, respectively, are very segregated with high special-education enrollment. With ELL, 38.9% and 44.5% of for-profit and nonprofit EMOs, respectively, were very segregated with low ELL enrollment, while only 7.4% and 9.3% of for-profit and nonprofit EMOs, respectively, are very segregated with high ELL enrollment. The authors concluded that the highly segregated EMO-run schools likely left the traditional public schools where these students would otherwise attend more "stratified, fragmented, and segregated" (p. 25).

Similarly, Holme and Richards (2009) identified their most significant finding: choice increases stratification between districts by socioeconomic status as higher-income families move to higher socioeconomic schools and as White families move to schools with less diversity. Bifulco et al. (2009) completed a counterfactual analysis that compared school composition as if choice had not occurred in their Durham, North Carolina, sample and found

many neighborhood schools, under choice, had far fewer academically advantaged students, concluding, "The results of our analyses suggest that any benefits of expanded school choice that accrue to those able to take advantage of it might come at the expense of poorer learning environments for those left behind" (p. 148).

In addition to the characteristics of the students using choice and the demographic make-up of each district, the structure of an inter-district choice program may also significantly affect the integration or segregation of schools. Finnigan and Scarbrough (2013) examined the voluntary Rochester, New York, Urban-Suburban Inter-district Transfer Program (USITP) that places approximately 500 students, from kindergarten through eighth grade from the urban Rochester City School District, into surrounding suburban school districts. Their study used documents, notes, and observations from meetings and interviews with stakeholders between 2009 and 2012 to determine how the beliefs and practices of educators affected the program outcomes. While the program was initially developed to address segregation, the researchers found that through the administrative processes such as admissions and applicant interviews, the program selected students who "match" (p. 158) the students within the suburban schools. Students selected were those deemed most likely to be successful by considering criteria such as family stability and above-average achievement. In a second example of how the structure of a choice program can affect integration or segregation of schools, Reback (2008) analyzed district acceptance practices for inter-school choice applications, finding that while rejections were few, the socioeconomic differences and the gap in test scores between the district being requested for transfer and the lowest neighboring district were inversely correlated with the acceptance decision. He also found that house values, income levels, and percentage of residents with college degrees influenced the acceptance practices of a district.

Not all research that observes significant transfers finds greater levels of segregation. In an area that is highly segregated by race, economic status, and achievement, Powers et al. (2012) found that White and Asian-American students transferred to charter schools at greater rates than inter-district transfers; Hispanic and American-Indian students used inter-district transfers at a rate greater than charters; and African-American students used both charters and inter-district choice at greater rates. Overall, student movement was greater in the urban areas through inter-district transfers and in the suburban areas with charter schools. Despite the differences in transfer rates between race and ethnicity and between urban and suburban districts, the researchers found that none of these patterns resulted in a significant change in the overall racial segregation of the districts. They also found that districts that transferred out the greatest number of students also transferred in a higher number of students, significantly helping to offset enrollment losses. Zimmer et al. (2009), in their review of how charter schools affect the test scores of traditional public schools in the area, found no evidence that charters were pulling and segregating high-achieving students. Their analysis that compared seven districtwide or statewide locations found, with the exception of reading in Chicago, that all math and reading test scores for students transferring into a charter school were below the districtwide or statewide scores, although often the difference was small. When making this comparison against peer groups in the traditional public schools where the students exited, in two of the seven locations, the students who exited had slightly higher test scores, while in the five remaining locations, the scores were even with or below their peer group. Drilling down by race, five of seven sites had lower scores for African-American students transferring into charter schools than the traditional public schools they exited, four of seven locations for Hispanics, and three of seven locations for White students, with one of these locations having higher scores in one subject.

Financial impact on traditional public schools. The Pennsylvania School Boards Association (2014) examined the costs of brick-and-mortar and cyber charter schools to identify the financial impact of these schools on traditional public schools. Pennsylvania funds charter schools through a funding mechanism where traditional public schools pay charter schools for each resident student who attends. The payment is calculated by the district on a per-pupil basis based on the prior year's total expenditures, less a few expenditure classifications exempted from the calculation. They noted that in general, districts lose fewer than 30 students from each building, too small a loss to create the opportunity for the traditional public school to reduce staff or overhead costs. This results in a district loss of substantial revenue without a corresponding loss in expenditures. In Bifluco and Reback's (2014) study to explain the fiscal impact charter schools have on traditional public schools, the researchers examined enrollment data in Buffalo and Albany, New York, and studied how changes in enrollment affected revenues, fixed and variable expenditures, and the net fiscal impact to traditional public schools. They found that competition from charter schools can result in a negative financial impact to traditional public schools by operating redundant educational systems within a geographic area and depending on the state financing system, by filtering dollars away from public schools through the loss of revenue based on enrollment. Their findings showed that the Albany City School District lost approximately 11.4% to 12.5% of revenues, and Buffalo Public Schools lost approximately 7.5% to 9.9% of revenues in 2009/10 due to competition from charter schools. Redundant systems in Albany also resulted in a net increase in the number of schools serving the student population, with an increase of seven schools from 1999 to 2010, yet enrollment increased by fewer than 200 students. Arsen and Ni (2012), using choice enrollment and financial and student demographic data for Michigan School districts in 1994 through 2006, found that the traditional public school

districts subjected to the greatest levels of competition were experiencing significant decreases in fund balance. They found that districts with higher concentrations of minority students and students living in poverty were disproportionally affected by greater enrollment losses to charter schools. Carlson et al. (2011) found that low-performing schools were particularly vulnerable to student loss through choice. They estimated a loss of 6,359 students through inter-district choice in Minneapolis in 2003/2004, with a corresponding revenue loss of approximately $28 million for the school year. This significant loss in revenue, they suggested, could lead the already poorly performing district into a downward spiral. While choice provided an opportunity to students who were choosers, it might have a negative impact on the students who remain in the struggling district. Ni (2009) studied a Michigan statewide data set for the period 1994 through 2004 for information on school choice, demographics, finances, and other data, as well as charter competition data. Fourth- and seventh-grade Michigan Educational Assessment Program reading and math scores were analyzed through the lens of both the duration and magnitude of charter competition. Ni found that 30,000 Detroit students attended charter schools and another 5,000 students used schools of choice to attend other districts in 2004, resulting in an estimated loss in revenue to Detroit Public Schools of approximately $260 million annually. He noted that similar proportional losses occur in other Michigan urban districts such as Lansing, Flint, Pontiac, and Benton Harbor, while suburban and rural districts face far less charter competition.

There is, of course, a limit to the amount of taxpayer funds available to fund public education, particularly recognizing the current attention to efficiency in the use of taxpayer dollars. Izraeli and Murphy (2012) noted that with the expansion of charter schools, some students were migrating there from homeschools and private schools, which were no cost to the state, resulting in an overall increase in the state's cost of education. The Pennsylvania School

Board Association (2014), noting a similar occurrence, voiced the concern that this created an entirely new cost for school districts. Buddin's (2012) study of the impact of charter schools on traditional public schools and private school enrollments, using data from the school years 1999/2000 through 2007/2008, helped to quantify the impact on public education funding. He estimated that for 2011, approximately three percent of the 54 million students in K-12 education were enrolled in charter schools, 10% or 183,000 of whom were previously in private schools in 2011. This trend appears relatively consistent with the work of Linkow (2011), when comparing 1995/1996 to 2002/2003 data in 119 urban school districts throughout the United States. The researcher found that public school choice options expanded while both the number of private schools and their enrollment decreased. The author noted, however, that private schools appeared to be rebounding somewhat in 2002/2003. Shifting the funding of some students from private sources to a public responsibility requires an increase in the taxpayers' cost for education or the spreading of the same dollars over an expanded group of students.

Improvements to traditional public schools. Research continues to respond with diverse findings when studying the impact of choice on traditional public schools. For example, some research concluded that there was no significant positive or negative impact. Park (2012) used a 2004/2005 through 2008/2009 statewide dataset, capturing student, school, and district characteristics of Florida's K-12 schools to understand the effects of school choice on reading and math proficiency. Analyzing all schools, and by level—elementary, middle, and high school—for a total of 24 results, only three showed a positive influence. The remaining results showed some negative and primarily insignificant results, leading the researcher to conclude that school choice overall did not have a positive or negative impact on the performance of traditional public schools. Zimmer et al. (2009) looked at charter school competition, using distance to the

nearest charter school and the impact of the number of charter schools within a two-and-a-half mile radius of a traditional public school as proxy for competitive pressure. The researchers found that small, positive competitive effects were noted in only one of seven locations, leading to their conclusion that competitive pressure resulted in little evidence of positive or negative achievement impact to traditional public schools.

Other research did find potential impacts from competition on traditional public schools, and those findings varied, based on financial and academic characteristics. From an academic perspective, Imberman (2011) studied the impact of charter schools on traditional public schools' student achievement and behavior in a large urban school district in the southwest over the period 1993/1994 through 2004/2005, using data gathered on discipline, attendance, Stanford Achievement Test scores, and student characteristics. Penetration of charter schools was defined by the number of students within 1.5 miles and within the grades covered in the study. Two test samples were developed; the behavior sample included students in second-through-twelfth grades who were enrolled two consecutive years. The test sample included all students in the behavior sample from 1999/2000 through 2004/2005 who had Stanford test scores available. The researcher found that charter schools negatively affected math and language arts scores at the elementary level. No statistically significant effect was found for reading scores at the elementary level or math, language arts, or reading scores at the secondary level. A reduction in disciplinary actions at the secondary level was statistically significant; however, the author noted uncertainty as to whether the reduction was due to changes in enforcement or improved behavior. Ni's (2009) study of a Michigan statewide data set compiled for the period 1994 through 2004, which looked at fourth- and seventh-grade Michigan Educational Assessment Program reading and math scores, found that while charter competition had only a small negative

impact on student achievement in traditional public schools in the short run, where medium and long run data were available, the negative impact became more substantial. These findings differ from Booker, Gilpatric, Gronberg, and Jansen (2008), who studied a sample of approximately 1.3 million Texas student-years of data, for students in third-through-eighth grades for 1993/94 through 2003/04, to determine the impact of charter penetration on academic achievement in traditional public schools. The data included characteristics related to the students, the families, and the programs, as well as student test score data in reading and math. Charter penetration was measured on a district and campus level, and competition was determined using measures of charter schools within zero-to-five miles and within six-to-10 miles and based on the number of students enrolled in charter schools. They found charter penetration had a significant positive impact in math and reading at both the district and campus levels, which varied based on ethnicity and on the campus initial performance quartile. African-American students in the lowest two quartiles, and Hispanic and other students in the lowest quartile, experienced the greatest impact. The researchers noted that the greater impact to minority populations might be due to the disproportionate number of minorities attending charter schools.

From a financial perspective, Arsen and Ni (2012) found that competition from charter schools did not significantly affect traditional public school allocations of resources to better position themselves in the competitive marketplace, with no change in allocations for basic instruction, added needs, support services, average teacher salaries, or average class sizes. Inter-district choice did, however, result in a reallocation of resources toward basic instruction. Linkow, Streich, and Jacob (2011) studied the impact of charter and inter-district schools of choice on the spending of the 525 Michigan traditional public school districts with enrollment in excess of 100 in 1994 through 2008. Their work looked at six expenditure categories:

instructional expenditures, student support services, instructional support services, capital improvements, athletic programs, and advertising. They noted that the average district lost an estimated 13% of its resident students to public choice options in 2008; however, these amounts varied widely by district and by choice. When the data were disaggregated between charter schools and inter-district schools of choice, charter competition had a statistically significant positive impact on traditional public school spending on student support services, instructional support services, and capital outlays. Inter-district schools of choice competition increased traditional public school spending on total instructional expenditures. Advertising expenditures, from the limited years available of 2004 through 2008, decreased for both charter and inter-district schools of choice. Finally, when disaggregating the charter impact based on urban versus non-urban districts, they found that the impact to student support services, instructional support services, and athletics was statistically significant for urban traditional public school districts only.

Surveys of school principals provide insight into their perceptions of competition. To determine the perceived level of charter competition and the potential improvement of academic performance, Zimmer and Buddin (2009) collected surveys from principals at all charter schools in California, as well as a matched sample of traditional public schools in 2002, and collected Standford 9 reading and math scores for 1997/1998 through 2001/2002 from six districts with a high number of students selecting charter schools. A review of the survey responses for the state and for the subgroup of six districts found limited concern for charters. Related to most questions, for both the statewide and six-district subgroup, more than 80% thought that charters had no effect. Only questions on financial security and attracting and retaining students received greater than a 10% response that charters exceeded a no-effect impact. The only substantial

differences between the statewide group and the six-district subgroup were higher responses from the six-district subgroup of negative or very negative impact on teacher recruitment and retention. A review of the academic data showed inconsistent results across levels, resulting in the researchers' conclusion that charter schools do not affect the performance of traditional public schools. In 2010, Loeb, Valant, and Kasman (2011) surveyed 156 principals in Milwaukee Public Schools, a district with a long history of choice. When asked if their school competed for students, using a scale with choice of not at all, a little, some, and a lot, 45% of the principals who responded indicated they competed a lot, and 30% responded they competed some. Yet when asked about the level of changes made to curriculum and instruction to compete for students, only 13% indicated "a lot," just over 40% indicated "some," just over 15% indicated "a little," and 30% responded "not at all." A similar question related to the use of outreach and advertising found almost 25% responded "a lot," fewer than 40% indicated "some," just over 20% indicated "a little," and 15% responded "not at all." When considering competition and race, they found that schools compete most with other districts of similar make-up and districts with a greater population of White students. When considering competition and socioeconomic status, they found that schools compete most with other districts of similar makeup and districts with lower concentrations of students receiving free- and reduced-lunch subsidies.

How Do State Policies on Choice Affect Public Schools, and What Changes to Policies are Being Recommended*?*

Michigan's choice policies, by design, create a significant financial impact on districts experiencing large enrollment losses by a funding mechanism where 100% of the per-pupil revenue moves with the student and by the inability for traditional public school districts to

enhance revenues or offset enrollment losses through local operating millages (Ni & Arsen, 2011). These and numerous other characteristics are significant in determining the success of choice programs and the impact these programs have on the educational opportunities for all students and on local public school districts where the vast majority of students are enrolled. Arsen and Ni (2008) attempted to categorize the characteristics of choice programs that create the wide variance in choice impacts. The design of the policies and how they are situated in a local context are what they termed *conditioning factors*. These categories provide opportunities for policymakers to improve choice policies and outcomes. The categories include financial arrangements, including how traditional public schools are financially affected by the loss of students; regulations including policies around admissions and programming; policy implementation including adequate information for parents in making choice decisions; sharing by schools of successful instructional strategies; and phasing, support, and oversight of choice options and local settings, including each district's student-enrollment trends and racial and socioeconomic make-up.

Many believe that parental choice is an important mechanism toward influencing the quality of public education; however, there are still numerous recommendations for improvement. From a macro perspective, Wilson (2012) recommends that policymakers "employ philosophical frameworks, especially those of liberty, equity, justice, pluralism and democracy, to help interpret how various school choice policies affect what is considered desirable in and for schools" (p. 34). Mathis and Hinchey (2012) provided considerations for drafting choice rules based on what could be viewed as an opportunity or a warning, suggesting that choice rules could be written to reduce or expand segregation, increase innovation or exclusivity, and enhance or avoid accountability. Park (2012) offered several suggestions including the need to

make policymakers aware of the limited impact school choice programs have on the performance of traditional public schools.

Specific recommendations for choice policy are both numerous and diverse. An eight-day *Free Press* series entitled "The State of Charter Schools" brought forward concerns over charter-school laws to address transparency, quality, accountability, and conflicts of interest, suggesting that Michigan look to states such as Massachusetts, Minnesota, Indiana, Texas, Washington, and Arizona for policy guidance (Dixon, 2014a). This series, in part, resulted in the State Superintendent placing 11 charter authorizers on notice of suspension (State of Michigan Department of Education, 2014b) and the State Board of Education voting to compel the legislature to enact laws to address concerns including the relationship of management companies as landlords, the establishment of rules on who can open charter schools, greater academic accountability for authorizers, and increased transparency (Higgins, 2014).

Bifulco and Reback (2014), recognizing that charter school competition could have a negative financial impact on traditional public schools, recommended that policymakers promote two objectives: attempt to reduce excess costs of a redundant system and divide these costs in a reasonable manner. They indicated that the first objective of reducing excess costs could be addressed through three avenues: creating timelines for charter-school enrollments that provide the planning time necessary to reduce costs, encouraging sharing of facilities between traditional public schools and charter schools, and maximizing staffing within traditional public schools with intra-district choice. To promote reasonable sharing of costs, they recommended basing the reduction in revenue for districts experiencing enrollment losses on the variable per-pupil costs and phasing in, over time, the reduction of revenues for districts losing significant enrollment to charter schools. Spalding (2013) suggested policies to expand inter-district choice, including

mandatory district participation, allowing districts to open schools outside of their local community, allowing proportional funding so that students can attend multiple locations, and limiting a district's ability to discriminate against students by reducing district options to decline specific students.

The literature review also suggests concern by some that choice has the potential to expand the insidious segregation practices of the past. Roda and Wells (2013) cautioned that policies designed to be colorblind could have a contrary impact, "because unregulated school choice leads to de facto segregation by race, ethnicity, SES and at times by achievement or ability…" (p. 190). Mickelson et al. (2012) noted that controls in admissions processes must be established to offset the potential for segregation. They further recommended steps around diversity such as placement of magnet schools in integrated communities, encouraging suburban districts to utilize inter-district magnet plans, allowing use of vouchers only in diverse schools, disallowing segregated private schools from becoming charter schools, and recommending that choice options provide transportation to students and information to parents and enhanced accountability for choice schools. Gulosino and Lubienski (2011), in their mapping of charter schools in conjunction with aspects of each neighborhood, concluded that charter schools would be opened in locations with perceived better student demographic characteristics, resulting in their caution: "For those concerned about equity, our findings suggest a need for close monitoring of the distributive patterns of enrollment, racial/ethnic and income groups, and the net effect of charter school location on neighborhood characteristics" (p. 21).

The large variances in integrating and segregating effects of three choice programs included in their research led Koedel et al. (2009) to suggest that choice policymakers consider both transportation options and geographic preferences when developing policy. They provided

additional cautions that segregation comes in many forms in addition to race/ethnicity and socio-economic status, including language and performance. Garcia (2007), having identified self-isolationism by minorities more pervasive than white flight, suggested a need for policymakers to expand integration efforts from the historical practices of attracting White students to more integrated schools to addressing minority self-isolation practices. Lacireno-Paquet and Brantley (2008) provided similar recommendations, including the need for careful design of choice programs to avoid segregating effects by race/ethnicity and income and by eliminating barriers to choice for low-income families with provisions for transportation, adequate information about schools, and expanded options for those in poor-quality schools.

Some recommendations encourage fidelity to choice acceptance policies. Finningan and Scarbrough (2013) noted a potential conflict between policies that increase educator accountability and the elimination of practices by administrators of hand-selecting only the urban students who were expected to be the best fit for the suburban districts. Reback (2008), noting that inter-district choice acceptance policies allowing for rejection of students due only to capacity issues were not being followed, recommended creating clear capacity definitions or providing inducements for acceptance of students who are more costly to educate.

Summary

The characteristics of families, the characteristics of the schools where students reside, and the characteristics of choice school options have an impact on families' choice decisions. Academics, as expected, were found to be an important driver for some students, with students less likely to leave a high-achieving district. Higher income and higher-achieving students are more influenced by scores than low-income and low-achieving students are. Proximity to options is also important in the choice decision, with the distance inversely affecting the interest in

choice. District funding levels were also a consideration in family choice decisions; however, the findings varied. Surprisingly, some research indicated that lower-funded districts experienced greater enrollment of choice students and were less likely to lose students to charter schools than their more affluent counterparts. Most significant in the literature related to parental choice motivation was the impact that both socioeconomic status and race played in choice decisions based on the characteristics of the families making this decision and in the composition of the school population where a student was scheduled to attend. Families were more likely to use choice to move to schools where the population was more affluent and less diverse. In addition to the anticipated findings of white flight, minority isolation practices were also identified.

Achievement of the goals of competition appears mixed with winners and losers among both districts and students. Much of the research appears to support the conclusion that choice is creating greater segregation by race and socioeconomic status. From a financial perspective, some of the research shows a change in how districts allocate their dollars; however, research is also exposing the financial distress that many districts are experiencing due to choice, with greater impact on districts with higher levels of competition and on districts with greater populations of minority students and students in poverty. Perhaps due to the financial distress and the segregation of students, the research on choice improving the academics in traditional public schools is also mixed. Some research indicates that choice encourages traditional public school improvement; however, contrary research notes that choice created little or negative changes in the academic success in traditional public schools.

Although it could be argued that choice is not the panacea anticipated, in light of the moral concerns of increasing segregation and the financial challenges imposed on traditional public schools, there appears to be very limited interest in suspending choice. Instead there

emerges a plethora of recommendations to expand choice, address financial and academic issues through accountability requirements, and curtail segregation through transportation and communication requirements. What appeared nearly absent in the discussions are recommendations to address the needs of the schools that find themselves on the low end of the winners' and losers' spectrum, those districts with large concentrations of poverty and diversity and experiencing significant competition and financial distress.

Chapter Three: Research Methods

This chapter presents the research methods used to collect and analyze the data needed to address the research questions. The topics included in this chapter are the research design, setting for the study, population and sample, data collection process, and data analysis. Each of these topics is presented separately.

Research Design

A mixed-methods research design was used to study how choice influences the finances and student demographic mix by race/ethnicity and socioeconomic concentrations, as well as perceptions of changes in the demographic mix in the 49 traditional public school districts within Macomb County and Oakland County, Michigan. Vogt and Johnson (2011) defined mixed-methods research as "inquiry that combines or mixes quantitative and qualitative research approaches, logics, philosophies, or methods. Mixed methods research is often considered important for avoiding method variance" (p. 233). Johnson and Onwuegbuzie (2004) noted two important benefits from a mixed-method research approach: the use of mixed methods maximizes the benefits of both the qualitative and quantitative research methods and helps to eliminate bias for a particular research method, allowing the research questions to drive the method used.

Financial, racial/ethnic, and socioeconomic data for the five-year period from fiscal years 2009/10 through 2013/14 were obtained from state websites for each district for analysis. Interviews with seven of the districts' superintendents were used to gather and analyze perception data related to changes in student demographic mix.

Study Setting

Macomb and Oakland are unique settings for this analysis based on the wide variance in demographics and geography of the 49 traditional public school districts located within the two counties. Macomb and Oakland are both situated in southeastern Michigan and span from southern districts contiguous to the city of Detroit to northern ones in rural communities. Macomb and Oakland are both home to a high-poverty, high-diversity urban district; several relatively affluent, primarily White suburban districts; several lower-income, moderate- to high-diversity suburban districts; and a few relatively rural districts. Macomb and Oakland traditional public school districts have, to varying degrees, experienced the gain and loss of families through state schools-of-choice policies. Additionally, with the opening of charter schools in and around these two counties, each of the districts has experienced competition from charter schools.

Participants

The primary sources of financial and demographic data for the 49 school districts were the Michigan Department of Education (MDE) databases. Participants of this study were limited to a sample of superintendents of traditional public school districts in Macomb and Oakland Counties who were asked to participate in semi-structured interviews. Because the study required knowledge from prior years, superintendents who had been in their school districts for more than one year were included in the sample. The researcher, who also is a superintendent in one of the school districts, was excluded from the study. Superintendents of districts were selected after a preliminary analysis of the data. If a superintendent declined to be interviewed, a new district was selected.

Measures

Financial and demographic data (race/ethnicity and socioeconomic status) were collected for analysis from the Michigan Department of Education State Aid and School Finance, MI School Data, Michigan Center for Educational Performance and Information, and Standard and Poor's websites.

Financial data. Financial data included total enrollment, net enrollment gain or loss through schools of choice, enrollment loss through charter schools (State of Michigan, Department of Education – Center for Educational Performance and Information, 2015), Standard and Poor's credit ratings, Standard and Poor's change in credit outlook (Standard & Poor's, 2012), General Fund – fund balance as a percentage of General Fund – total revenues, per-pupil data (General Fund total revenues; foundation allowance; At-Risk 31a funding; Title 1, Part A, funding; General Fund total expenditures; General Fund total fixed expenditures [includes Instructional Support - School Administration Office of the Principal, Non-Instructional Support, Community Services, Transfers and Facilities Acquisitions (State of Michigan, Department of Education – Center for Educational Performance and Information, 2015) and does not include variable expenditures of Instruction and Instructional Support with the exception of School Administration Office of the Principal]).

These data points were selected after a review of the literature. Arsen and Ni (2012) used fund balances to determine whether choice created the pressure to reallocate dollars to more productive activities. Their analysis also considered local and state revenue; however, this analysis used total revenue, which includes federal revenue as both state and federal grants may affect the finances of districts with higher concentrations of poverty. Bifulco and Reback (2014) separated fixed and variable costs to understand the financial impact from enrollment loss to

charter schools on traditional public schools. They included as fixed costs: general support, principals, capital investments, and community services. Variable expenditures included instructional costs, such as teachers, professional development, and pupil services. The Michigan legislature enacted and the governor signed legislation into law in 2015 to provide an early warning system to identify districts that may be in financial distress, using various unspecified data points as well as General Fund – fund balance as a percentage of General Fund – total revenues (Senate Fiscal Agency, 2015b). Standard and Poor's (2012) is used worldwide to provide credit ratings based on their analysis of credit risks. The foundation allowance was selected for use in these analyses, as it is the single largest revenue source for Michigan school districts. The foundation allowance varies by district within a predetermined range created by the state; however, approximately 50 districts are authorized to levy a hold-harmless millage to attain a foundation allowance greater than the predetermined range. Macomb and Oakland have a disproportionate number of hold-harmless districts. Title 1, Part A, and At Risk 31a was selected for use in these analyses, as they are state and federal grants specifically created to support districts with high needs populations. Enrollment numbers are reported by the state based on a full time equivalence (FTE) where districts count a pro rata share of time for students they educate less than fulltime, as well as by headcount, where the district that educates the student the majority of the day receives the full count for that student. Due to the greater availability of detailed information, this research used headcount for all enrollment numbers.

Demographic data. Race/ethnicity data were collected from state websites for the percentage of White and minority students enrolled. Minority included the state-delineated categories of African American, Hispanic of any race, two or more races, Asian or Pacific Islander, American Indian, and Native Hawaiian. Socioeconomic status was identified by the

state as the percentage of economically disadvantaged students with the remainder population assumed to be not economically disadvantaged (State of Michigan, Department of Education – Center for Educational Performance and Information, 2015).

Superintendent interviews. Semi-structured interviews were used to obtain perceptions of seven Macomb and Oakland traditional public school district superintendents regarding the changes in student demographics over the last five years. The six questions were used to corroborate the quantitative data obtained from the MDE databases by having superintendents discuss the changing student populations in their school districts. See Appendix A for a list of interview questions.

Variables in the Study

The variables that will be included in the study are:

Type of Variable	Variable	Explanation
Independent variables	Poverty (in groups)	Percentage of students in district who qualify for free- or reduced-lunch programs
	Diversity (in groups)	Racial breakdown as a percentage of total students
	Net enrollment gain or loss through schools of choice	The number of students who have entered or left the school district because of schools of choice
	Enrollment loss through charter schools	The number of students who have left the traditional public school to attend a charter school
Dependent Variables	Standards and Poors credit ratings	An estimate of the credit worthiness and credit quality of a school district
	Standard and Poor's credit outlook	An estimate of the possible change in credit rating within the next 6-24 months

General Fund – fund balance	General Fund – total assets less total liabilities, presented as a percentage of General Fund – total revenues
General Fund total revenues	Total revenues of a school district on a per-pupil basis
Foundation allowance	Funding determined by the state that is received from the state and local taxes on a per-pupil basis
At Risk 31a funding	State funding to increase proficiency for low income students in low foundation allowance districts on a per-pupil basis
Title 1, Part A, funding	Federal funding to achieve academic standards for districts with high concentrations of poverty identified by census on a per-pupil basis
General Fund total expenditures	Total amount spent for day-to-day operations in the school district on a per-pupil basis
General Fund fixed expenditures	Costs that generally do not vary based on enrollment on a per-pupil basis

Each variable was collected for 2009/2010 and 2013/2014.

Data Collection

Approval with the Institutional Review Board (IRB) was obtained prior to collecting any data. Data were extracted from the state and rating agencies' websites into Excel® spreadsheets and, where necessary, obtained from specialized websites or hard-copy reports and entered manually. The Excel® spreadsheets contain the above noted data for the 49 traditional public

school districts in Macomb and Oakland for the five-year period from fiscal years 2009/10 through 2013/14.

Semi-structured, face-to-face interviews were conducted to obtain superintendents' perspectives on perceptions of changes in school demographics resulting from choice; however, additional probes were used based on the responses of each superintendent. The researcher, after selecting the potential superintendents to be interviewed, contacted each one by e-mail and telephone. The e-mail described the study and requested their participation by taking part in face-to-face interviews. After agreeing to participate, the researcher established a mutually agreeable time and place to meet for the interview. Prior to beginning the interview, the researcher had the superintendent review the informed consent form. After allowing for any questions the superintendent had about his/her participation, the informed consent form was signed by the superintendent and witnessed by the researcher.

The interviews each lasted from 11 minutes to 43 minutes. Interviews were audio-recorded with the approval of each superintendent. After having the audiotaped interviews transcribed and checked for accuracy, the researcher sent the transcription to each superintendent for member checking. The superintendents were asked to review the transcript and make any changes, additions, or deletions to the transcript to improve its accuracy and return it to the researcher within two weeks. If the transcript was not returned within a two-week period, it was considered correct.

To assure confidentiality, the researcher created pseudonyms for the superintendents who were interviewed. The pseudonyms and list of participants, along with the informed consent forms and interview notes, were locked in separate locations. All data will be retained for five years, after which it will be shredded to ensure confidentiality.

Data Analysis

The data were transferred from the Excel® spreadsheets to IBM –SPSS ver. 23 for analysis. Prior to starting the data analysis, some of the variables were transformed from district totals to per-pupil values or percentages to minimize differences among the districts due to size. After completing all of the transformations, descriptive statistics were used to provide summarized information for the financial and demographic variables for both years of the study. The research questions were examined using a combination of inferential statistical analyses including separate one-way multivariate analysis of variance, one-way analysis of variance, and chi-square tests for independence. All decisions on the statistical significance of the findings were made using the criteria alpha level of .05. The data analysis of the interviews involved content analysis to determine themes and patterns in the data. Table 2 includes the statistical analysis that was used to address each research question.

Table 2

Statistical Analysis

Research Questions/Hypotheses	Variables	Statistical Analysis

1. Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity?
H_{01}: There will be no difference in finances between districts that experience a greater negative choice impact and districts that experience a lesser negative choice impact.
H_{02}: There will be no difference in finances between districts with greater concentrations of student poverty and districts with lesser concentrations of student poverty.
	<u>Dependent Variables</u>
	• Standards and Poor's credit ratings
	• Standard and Poor's credit outlook
	• Fund balance as a percentage of revenue
	• Per-pupil data
	  • General Fund total revenues
	  • Foundation allowance
	  • At-Risk 31a funding
	  • Title 1, Part A, funding
	  • General Fund total expenditures
	  • General Fund total fixed expenditures (includes Instructional Support
		Separate one-way multivariate analysis of variance (MANOVA), one-way analysis of variance (ANOVA), and chi-square tests for independence were used to determine if there are differences in the dependent variables by the level of choice, poverty, or diversity within a district.

Research Questions/Hypotheses	Variables	Statistical Analysis
H_{03}: There will be no difference in finances between districts with greater concentrations of student diversity and districts with lesser concentrations of student diversity. .	School Administration Office of the Principal, Non-Instructional Support, Community Services, Transfers and Facilities Acquisition) <u>Independent Variables</u> • Percentage of gain or loss due to net schools of choice and loss to charter schools • Percentage of economically disadvantaged students • Percentage of minority students	
2. Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations? H_{01}: There is no relationship between choice impact and the socioeconomic concentration of student populations. H_{02}: There is no relationship between choice impact and the racial/ethnic concentration of student populations.	<u>Dependent Variables</u> • Percentage of economically disadvantaged students • Percentage of minority students <u>Independent Variables</u> • Percentage of gain or loss due to net schools of choice and loss to charter schools	One-way analysis of variance (ANOVA) was used to determine if socioeconomic and racial/ethnic concentration had been influenced by choice.
3. What are superintendents' perceptions of the impact of choice on the changing student demographics within the district?	Interview responses	Content analysis of interview responses will be used to address this research question.

Chapter Four: Results of Data Analysis

Chapter Four presents the results of the data analyses that were used to describe the demographics of the school districts in the two counties included in the study and address the research questions posed in the study. The chapter is divided into two sections. The first section provides a description of the school-district demographics for the two counties. The second section discusses the research questions and hypotheses. Section Two is further subdivided to present the inferential statistical analyses that were used to address Research Questions One and Two and the content analyses of the interviews of selected superintendents that were used to address Research Question Three.

The purpose of this research was to examine how Michigan's policies on choice influenced traditional public school districts' finances and student demographic mix by socioeconomic and racial/ethnic concentrations. This analysis was confined to the traditional public school districts located in two Michigan counties: Macomb County, which includes 21 traditional public school districts, and Oakland County, which includes 28 traditional public school districts.

School District Demographics

The descriptive statistics for the school districts' total enrollment are presented in Table 3.

Table 3

Descriptive Statistics – Total Enrollment for Macomb and Oakland Counties

					Range	
County and Year	Number	Mean	SD	Median	Minimum	Maximum
Macomb	21					
2009-2010		6,370.00	6,768.99	3,409.00	1,311	29,325
2010-2011		6,322.24	6,777.57	3,566.00	1,374	29,052
2011-2012		6,268.62	6,726.61	3,714.00	1,408	29,006
2012-2013		6,180.95	6,679.43	3,715.00	1,364	28,660
2013-2014		6,105.38	6,672.39	3,707.00	1,267	28,520
Oakland	28					
2009-2010		6,684.71	3,897.06	5,797.00	1,468	15,604
2010-2011		6,657.89	3,840.00	5,691.50	1,423	15,518
2011-2012		6,618.61	3,852.93	5,589.50	1,353	15,582
2012-2013		6,525.75	3,791.99	5,424.00	1,314	15,283
2013-2014		6401.96	3,774.52	5,396.00	1,550	15,140
Total	49					
2009-2010		6,549.84	5,259.17	5,153.00	1,311	29,325
2010-2011		6,514.04	5,240.45	5,059.00	1,374	29,052
2011-2012		6,468.61	5,218.62	4,917.00	1,353	29,006
2012-2013		6,377.98	5,167.93	5,133.00	1,314	28,660
2013-2014		6,274.86	5,156.19	4,691.00	1,267	28,520

Overall, the mean size of the school districts has decreased over the five-year period and is relatively similar for both Macomb and Oakland. The trends over the five-year period of the median for these two counties are opposite, with Macomb's median increasing over the five-year period while Oakland's decreased. While the spread between the minimum and maximum district size is far larger for Macomb, both Macomb and Oakland have experienced a decrease in the spread between the minimum and maximum enrollment of the districts over the five-year period.

The descriptive statistics for the percentage of net change in school enrollment due to schools of choice and loss to charter schools is presented in Table 4.

Table 4

Descriptive Statistics – Percentage of Net Change from Schools of Choice and Loss to Charter Schools

					Range	
County and Year	Number	Mean	SD	Median	Minimum	Maximum
Macomb	21					
2009-2010		-3.97	23.40	-1.24	-59.34	43.49
2010-2011		-5.11	28.09	-3.08	-60.41	55.55
2011-2012		-7.33	31.44	-2.71	-78.54	45.20
2012-2013		-9.17	32.28	-4.27	-82.56	37.61
2013-2014		-14.40	38.03	-7.33	-124.78	39.58
Oakland	28					
2009-2010		-1.43	19.01	-.70	-85.61	23.68
2010-2011		-2.30	20.56	-.40	-89.08	25.41
2011-2012		-1.86	22.11	-.78	-93.54	25.30
2012-2013		-2.24	25.07	-.79	-107.69	24.30
2013-2014		-2.96	29.39	-1.00	-135.27	24.12
Total	49					
2009-2010		-2.52	20.81	-.79	-85.61	43.49
2010-2011		-3.50	23.84	-.90	-89.08	55.55
2011-2012		-4.20	26.35	-1.17	-93.54	45.20
2012-2013		-5.21	28.28	-1.00	-107.69	37.61
2013-2014		-7.87	33.48	-1.33	-135.27	39.58

Macomb and Oakland have both experienced an increased net loss from schools of choice and charter schools in both the mean and median over the five-year period. The spread between the minimum and maximum has also increased by a large amount for both Macomb and Oakland primarily due to greater losses in the minimums over the past five years while maximums remained relatively stable.

The descriptive statistics for the school districts' percentages of economically disadvantaged enrollment are presented in Table 5.

Table 5

Descriptive Statistics – Percentage of Economically Disadvantaged Enrollment for Macomb and Oakland Counties

					Range	
County and Year	Number	Mean	SD	Median	Minimum	Maximum
Macomb	21					
2009-2010		45.34	20.11	42.93	18.87	83.16
2010-2011		46.86	19.48	48.93	19.72	85.32
2011-2012		51.96	21.04	51.70	18.59	84.71
2012-2013		51.02	20.71	51.12	22.00	93.23
2013-2014		51.55	22.10	48.71	21.42	88.48
Oakland	28					
2009-2010		31.89	21.76	24.79	.47	83.87
2010-2011		34.29	20.34	26.69	7.88	76.53
2011-2012		36.58	21.22	28.79	8.78	77.31
2012-2013		36.45	22.12	28.30	8.14	79.15
2013-2014		36.04	21.42	28.38	7.18	76.02
Total	49					
2009-2010		37.65	21.91	34.13	.47	83.87
2010-2011		39.68	20.74	36.48	7.88	85.32
2011-2012		43.17	22.29	39.05	8.78	84.71
2012-2013		42.69	22.52	37.54	8.14	93.23
2013-2014		42.68	22.84	38.19	7.18	88.48

Macomb experiences higher rates of students in poverty than Oakland; however, both the mean and median rates in both counties have increased over the five-year period. Both counties experience wide variances in poverty in the districts within their counties. While the spread between the minimum and maximum percentage of students in poverty is relatively similar in Macomb and Oakland in 2013-14 (67.06% and 68.84%, respectively), the spread has increased over the five-year period for Macomb while decreasing for Oakland.

The descriptive statistics for the school districts' percentage of minority enrollment are presented in Table 6.

Table 6

Descriptive Statistics – Percentage of Minority Enrollment for Macomb and Oakland Counties

					Range	
County and Year	Number	Mean	SD	Median	Minimum	Maximum
Macomb	21					
2009-2010		26.53	20.93	21.23	2.16	77.35
2010-2011		29.21	22.24	23.20	3.15	78.42
2011-2012		30.81	23.03	24.57	2.97	79.46
2012-2013		32.36	23.55	25.94	3.51	74.31
2013-2014		33.55	24.24	26.43	3.28	75.75
Oakland	28					
2009-2010		31.49	26.28	22.38	6.09	95.97
2010-2011		33.52	26.05	24.23	6.99	96.34
2011-2012		34.09	25.87	25.51	7.37	96.67
2012-2013		34.79	25.80	25.83	7.87	97.03
2013-2014		35.06	25.62	26.54	8.12	96.77
Total	49					
2009-2010		29.36	24.03	21.32	2.16	95.97
2010-2011		31.68	24.34	23.82	3.15	96.34
2011-2012		32.68	24.50	24.57	2.97	96.67
2012-2013		33.75	24.64	25.94	3.51	97.03
2013-2014		34.41	24.79	26.43	3.28	96.77

Macomb and Oakland have experienced an increase in both the mean and median rates of minority enrollment over the five-year period. While Oakland experienced a larger spread between the minimum and maximum minority enrollment districts, in both counties the spread has declined slightly over the five-year period.

Research Questions and Hypotheses

Three research questions were developed for this study. The first two research questions were addressed using quantitative inferential statistical analyses, with all decisions on the statistical significance of the findings made using a criterion alpha level of .05. The third research question provides the results of the content analyses of the interviews conducted with seven superintendents of school districts included in the study.

Inferential statistical analyses. This portion of Section Two contains the quantitative inferential statistical analyses to address the first two research questions.

Research Question One. Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity?

H_{01}: There will be no difference in finances between districts that experience a greater negative choice impact than districts that experience a lesser negative choice impact.

H_{02}: There will be no difference in finances between districts with greater concentrations of student poverty than districts with lesser concentrations of student poverty.

H_{03}: There will be no difference in finances between districts with greater concentrations of student diversity than districts with lesser concentrations of student diversity.

A combination of analyses of variance (ANOVA), multivariate analyses of variance (MANOVA), and chi-square tests for independence were used to compare financial data among school districts related to the percentage of net change from schools of choice and loss to charter schools, percentage of economically disadvantaged students, and percentage of minority students. The percentage of economically disadvantaged students and percentage of minority students were each divided into three groups: 33% of the schools – low; greater than 33% to 67% of the schools – moderate; and greater than 67% to 100% of the schools – high. The percentage of net change from schools of choice and loss to charter schools were divided into the same three groups with 33% of the schools – net gain; greater than 33% to 67% of the schools – small net

gain/loss; and greater than 67% to 100% of the schools – net loss. These categories were used as the independent variables in the ANOVAs and MANOVAs. All decisions on the statistical significance of the findings were made using the criteria alpha level of .05.

Per-pupil total revenues and total expenditures. The per-pupil total revenues and total expenditures were used as dependent variables in a one-way MANOVA. The independent variable in this analysis was the percentage of net change from schools of choice and loss to charter schools, which was divided into net gain, small net gain/loss, and net loss. The results of these analyses for 2009/10 and 2013/14 are presented in Table 7.

Table 7

Multivariate Analysis of Variance – Per-Pupil Total Revenues and Total Expenditures by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.27	3.01	4, 88	.022	.12
2013/14	.05	.58	4, 88	.681	.03

The comparison of total revenues and total expenditures for the 2009/10 fiscal year by percentage of net change from schools of choice and loss to charter schools was statistically significant, F (4, 88) = 3.01, p = .022, η^2 = .12. The effect size of .12 provided support that the practical significance of the findings was moderate. When the total revenues and total expenditures for the 2013/14 fiscal year were compared by percentage of net change from schools of choice and loss to charter schools, the result was not statistically significant, F (4, 88) = .58, p = .681, η^2 = .03. To further examine these results, between-subjects effects and Scheffé post hoc tests were used to determine which of the three categories measuring percentage of net change from schools of choice and loss to charter schools were contributing to the statistically

significant result in the 2009/10 fiscal year. Descriptive statistics were obtained for both comparisons. Table 8 presents results of these analyses.

Table 8

Between-Subjects Effects – Per-Pupil Total Revenues and Total Expenditures by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Total Revenues						
Net gain	9,807.52	1,072.75	2, 46	1.12	.336	.05
Small net gain/loss	10,396.61	1,685.91				
Net loss	10,622.16	1,901.26				
Total Expenditures						
Net gain	9,839.88	1,059.56	2, 46	2.12	.132	.08
Small net gain/loss	10,712.90	1,671.94				
Net loss	11,026.65	2,165.34				
2013/14						
Total Revenues						
Net gain	10,127.76	905.48	2, 46	.58	.562	.03
Small net gain/loss	10,360.77	1,876.79				
Net loss	10,761.51	2,111.06				
Total Expenditures						
Net gain	10,101.89	1,018.96	2, 46	.42	.657	.02
Small net gain/loss	10,451.49	2,010.96				
Net loss	10,612.65	1,741.95				

Although the MANOVA provided evidence of a statistically significant difference for per-pupil total revenues and per-pupil total expenditures for the 2009/10 fiscal year among the three categories of percentage of net change from schools of choice and loss to charter schools, the findings of the between-subjects effects comparing per-pupil total revenues and total expenditures by the three categories of net change from choice were not statistically significant.

No statistically significant differences were noted for the 2013/14 fiscal year comparing per-pupil total revenues and total expenditures among the three categories of percentage of net change from schools of choice and loss to charter schools, indicating that per-pupil total

revenues and total expenditures did not differ among school districts based on the level of choice impact. The finding of no statistical significance by choice level for both 2009/10 and 2013/14 is unexpected given that the majority of traditional public schools' revenues are received from the state based on a funding formula driven almost exclusively by enrollment. These findings may therefore be the result of comparing choice levels by per-pupil revenue versus total revenues.

A one-way MANOVA was used to compare per-pupil total revenues and total expenditures by the percentage of economically disadvantaged students. The percentage of economically disadvantaged students was divided into three categories for use as the independent variable in analysis. Table 9 presents the results of the MANOVA.

Table 9

Multivariate Analysis of Variance – Per-Pupil Total Revenues and Total Expenditures by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.41	4.48	4, 88	.002	.17
2013/14	.09	1.04	4, 88	.394	.05

A statistically significant difference was found for per-pupil total revenues and per-pupil total expenditures for the 2009/10 fiscal year by percentage of economically disadvantaged students, $F(4, 88) = 4.48$, $p = .002$, $\eta^2 = .17$. The effect size of .17 was considered moderate, providing support that the results of this analysis had some practical value. The comparison of per-pupil total revenues and total expenditures by percentage of economically disadvantaged students for the 2013/14 fiscal year was not statistically significant, $F(4, 88) = 1.04$, $p = .394$, $\eta^2 = .05$. To determine which of the dependent variables were contributing to the statistically significant result and provide the results of the Scheffé post hoc tests, the between-subjects effects were obtained. Table 10 presents results of these analyses.

Table 10

Between-Subjects Effects – Per-Pupil Total Revenues and Total Expenditures by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Total Revenues						
Low poverty	10,611.82	1,979.93	2, 46	3.22	.049	.12
Moderate poverty	9,483.74	1,020.67				
High poverty	10,711.08	1,439.26				
Total Expenditures						
Low poverty	10,857.58	2,037.21	2, 46	4.78	.013	.17
Moderate poverty	$9,525.74_a$	974.27				
High poverty	$11,167.69_a$	1,635.05				
2013/14						
Total Revenues						
Low poverty	10,460.83	1,882.90	2, 46	1.53	.227	.06
Moderate poverty	9,865.49	932.30				
High poverty	10,876.90	1,959.96				
Total Expenditures						
Low poverty	10,501.70	2,040.13	2, 46	.98	.384	.04
Moderate poverty	9,933.62	987.82				
High poverty	10,693.73	1,637.13				

Note: Means in a cell sharing a subscript differ significantly.

A statistically significant difference was found for per-pupil total revenues for the 2009/10 fiscal year among the three categories of percentage of economically disadvantaged students, F (2, 46) = 3.22, p = .049, η^2 = .12. The effect size of .12 indicated that the finding had some practical value. The results of the Scheffé post hoc tests were not statistically significant, indicating that per-pupil total revenues did not differ among school districts with low, moderate, and high poverty.

While the comparison of per-pupil total expenditures for the 2009/10 fiscal year differed relative to the percentage of economically disadvantaged students, F (2, 46) = 4.78, p = .013, η^2 = .17, the effect size was sufficient to provide evidence of moderate practical significance. The results of the Scheffé post hoc test showed that school districts with high poverty (M =

11,167.69, SD = 1,635.05) had significantly higher per-pupil total expenditures than districts with moderate poverty (M = 9,525.74, SD = 974.27). No statistically significant differences in per-pupil spending were found between the low-poverty group (M = 10,857.58, SD = 2,037.21) and the moderate- and high-poverty groups.

The comparison of per-pupil total revenues and total expenditures for the 2013/14 fiscal year on the between-subjects effects were not statistically significant. These results indicated that per-pupil total revenues and total expenditures did not differ among school districts with low, moderate, and high poverty.

A one-way MANOVA was used to compare per-pupil total revenues and total expenditures by percentage of minority students in the school district. The independent variable in this analysis was the percentage of minority students categorized into three groups: low diversity, moderate diversity, and high diversity. Table 11 presents results of these analyses.

Table 11

Multivariate Analysis of Variance – Per-Pupil Total Revenues and Total Expenditures by Percentage of Minority Students 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.60	6.64	4, 88	<.001	.23
2013/14	.37	4.03	4, 88	.005	.16

The comparison of per-pupil total revenues and total expenditures for the 2009/10 fiscal year by the diversity in the schools was statistically significant, F (4, 88) = 6.64, p = < .001, $\eta 2$ = .23. The effect size of .23 is moderate, indicating that the result has practical significance in addition to statistical significance. The results of the MANOVA comparing per-pupil total revenues and total expenditures for the 2013/14 fiscal year by the diversity in the school districts was statistically significant, F (4, 88) = 4.03, p = .005, $\eta 2$ = .16. The effect size of .16 provided

evidence that this result had some practical significance as well as statistical significance. The between-subjects effects for both per-pupil total revenues and total expenditures was obtained, along with the Scheffé post hoc tests used to compare all possible pairwise comparisons. The results of these analyses are presented in Table 12.

Table 12

Between-Subjects Effects – Per-Pupil Total Revenues and Total Expenditures by Percentage of Minority Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η^2
2009/10						
Total Revenues						
Low diversity	$9{,}144.87_{a,b}$	859.34	2, 46	7.84	001	.25
Moderate diversity	$10{,}689.05_{b}$	1,740.87				
High diversity	$10{,}974.09_{a}$	1,458.33				
Total Expenditures						
Low diversity	$9{,}274.17_{a,b}$	891.60	2, 46	9.12	<.001	.28
Moderate diversity	$10{,}827.90_{b}$	1,777.09				
High diversity	$11{,}470.19_{a}$	1,647.08				
2013/14						
Total Revenues						
Low diversity	$9{,}317.46_{a,b}$	788.42	2, 46	6.32	.004	.22
Moderate diversity	$10{,}765.48_{b}$	1,558.91				
High diversity	$11{,}105.97_{a}$	1,953.20				
Total Expenditures						
Low diversity	$9{,}301.24_{a,b}$	800.72	2, 46	6.57	.003	.22
Moderate diversity	$10{,}915.54_{b}$	1,646.34				
High diversity	$10{,}899.41_{a}$	1,713.57				

Note: Means in a cell sharing a subscript differ significantly.

The results of the between-subjects effects for 2009/10 provided evidence of statistically significant differences in per-pupil total revenues by percentage of minority students, F (2, 46) = 7.84, p = .001, η^2 = .25. The effect size of .25 was evidence of practical significance of the findings, in addition to the statistical significance. The results of the Scheffé post hoc tests indicated that school districts with moderate diversity (M = 10,689.05, SD = 1, 740.87) and those with high diversity (M = 10, 974.09, SD = 1,458.33) received significantly higher per-pupil total

revenues than those with low diversity (M = 9, 144.87, SD = 859.34). However, the difference in per-pupil total revenues between school districts with moderate diversity and those with high diversity was not significant.

The comparison of per-pupil total expenditures for the 2009/10 fiscal year differed significantly, relative to the extent of diversity in the school district, F (2, 46) = 9.12, p = < .001, η^2 = .28. The effect size of .28 is considered large, indicating that the results had both statistical and practical significance. When all possible pairwise comparisons were made among the levels of diversity using Scheffé post hoc tests, significantly higher per-pupil total expenditures were found for school districts with moderate diversity (M = 10,827.90, SD = 1,777.09) and high diversity (M = 11,470.19, SD = 1,647.08), compared to school districts with low diversity (M = 9,274.17, SD = 891.60). Per-pupil total expenditures in school districts with moderate diversity did not differ significantly from school districts with high diversity.

For the 2013/14 fiscal year, the results of the between-subjects effects for per-pupil total revenues were statistically significant, F (2, 46) = 6.32, p = .004, η^2 = .22. The effect size of .22 was considered moderate, supporting the theory that the findings had some practical significance as well as statistical significance. The results of the Scheffé post hoc tests indicated that moderate-diversity (M = 10,765.48, SD = 1,558.91) and high-diversity school districts (M = 11, 105.97, SD = 1,953.20) had significantly greater per-pupil total revenues than low-diversity school districts (M = 9,317.46, SD = 788.42). The differences in per-pupil total revenues between school districts with moderate and high diversity were not statistically significant.

The comparison of per-pupil total expenditures for the 2013/14 fiscal year by level of diversity was statistically significant, F (2, 46) = 6.57, p = .003, η^2 = .22. The effect size of .22 was moderate, indicating that the findings had both practical and statistical significance. The

results of the Scheffé post hoc tests that compared all possible pairwise comparisons supported the belief that moderate-diversity (M = 10,915.54, SD = 1,646.34) and high-diversity school districts (M = 10,899.41, SD = 1,713.57) expended significantly more per pupil than school districts with low diversity (M = 9,301.24, SD = 800.72). The differences in per-pupil total expenditures between school districts with moderate and high diversity were not statistically significant.

Per-pupil foundation allowance and Title 1, Part A, and At Risk 31a. The per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue were used as dependent variables in a one-way MANOVA. The percentage level of net change from charter schools and schools of choice was used as the independent variable in this analysis. Separate analyses were used for the 2009/10 and 2013/14 fiscal years. Table 13 presents the results of these analyses.

Table 13

Multivariate Analysis of Variance – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.35	3.86	4, 88	.006	.15
2013/14	.55	6.02	4, 88	<.001	.22

The results of the analysis comparing per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue for the 2009/10 fiscal year by the level of the percentage of net change from choice was statistically significant, F (4, 88) = 3.86, p = .006, η^2 = .15. The effect size of .15 was considered moderate, indicating that the result had some practical significance. The comparison of per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue for the 2013/14 fiscal year by the percentage level of net change from choice was statistically

significant, F (4, 88) = 6.02, p = < .001, η^2 = .22. The moderate effect size of .22 provided evidence that the result had some practical significance in addition to statistical significance. To determine which type of revenue—per-pupil foundation allowance or Title 1, Part A, and At Risk 31a—was contributing to the statistically significant findings for the two fiscal years, the between-subjects effects were examined. Table 14 presents results of these analyses.

Table 14

Between-Subjects Effects – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η2
2009/10						
Foundation Allowance						
Net gain	8,370.31	837.69	2, 46	.85	.436	.04
Small net gain/loss	8,762.29	1,552.22				
Net loss	8,239.88	1,089.76				
Title 1, Part A, and At Risk 31a						
Net gain	277.45_{a}	131.31	2, 46	7.70	.001	.25
Small net gain/loss	203.82_{b}	200.04				
Net loss	$675.36_{a,b}$	597.15				
2013/14						
Foundation Allowance						
Net gain	8,047.12	799.76	2, 46	.24	.790	.01
Small net gain/loss	8,206.94	1,603.91				
Net loss	7,916.44	1,064.66				
Title 1, Part A, and At Risk 31a						
Net gain	267.81_{a}	174.47	2, 46	12.18	<.001	.35
Small net gain/loss	161.08_{b}	94.10				
Net loss	$651.61_{a,b}$	477.35				

Note: Means in a cell sharing a subscript differ significantly.

The comparison of the per-pupil foundation allowance in the 2009/10 fiscal year based on the district's percentage level of net change from choice was not statistically significant, F (2, 46) = .85, p =.436, η^2 = .04; however, the results of the comparison of per pupil Title1, Part A, and At Risk 31a revenue by the percentage of net change from choice was statistically

significant, F (2, 46) = 7.70, p = .001, η^2 = .25. The large effect size of .25 indicated that the findings had both practical and statistical significance. To determine which level of the percentage of net change was contributing to the significant findings for per pupil Title 1, Part A, and At Risk 31a, Scheffé post hoc tests were used. The findings indicated that school districts with net losses from choice (M = 675.36, SD = 597.15) received significantly higher funding than both school districts with net gains (M = 277.45, SD = 131.31) and school districts with small net gains/losses (M = 203.82, SD = 200.04). The difference in per pupil Title 1, Part A, and At Risk 31a between school districts with net gains and small net gains/losses was not significant.

The comparison of the per-pupil foundation allowance in the 2013/14 fiscal year by the level of loss was not statistically significant, F (2, 46) = .24, p = .790, η^2 = .01. When per-pupil Title 1, Part A, and At Risk 31a were compared by the level of loss from choice, the result was statistically significant, F (2, 46) = 12.18, p = < .001, η^2 = .35. The large effect size of .35 provided evidence that the result had both practical and statistical significance. To determine which level of loss was contributing to the statistically significant difference on per-pupil Title 1, Part A, and At Risk 31a, Scheffé post hoc tests were used. The results indicated that school districts with net losses from choice (M = 651.61, SD = 477.35) received significantly higher funding than school districts with net gains (M = 267.81, SD = 174.47) and those with small net gains/losses (M = 161.08, SD = 94.10). The difference in per-pupil Title 1, Part A, and At Risk 31a funding between school districts with net gains and small net gains/losses was not statistically significant.

Separate one-way MANOVAs were used to compare per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue by the percentage of economically disadvantaged students in the 2009/10 and 2013/14 fiscal years. Table 15 presents results of these analyses.

Table 15

Multivariate Analysis of Variance – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.78	8.53	4, 88	<.001	.28
2013/14	.97	10.67	4, 88	<.001	.33

The comparison of per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue by the percentage of economically disadvantaged students in the 2009/10 fiscal year was statistically significant, F (4, 88) = 8.53, p = < .001, η^2 = .28. The effect size of .28 was considered large and provided evidence of practical significance in addition to statistical significance. The results of the MANOVA comparing the per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue for the 2013/14 fiscal year by the percentage of economically disadvantaged students was statistically significant, F (4, 88) = 10.67, p = < .001, η^2 = .33. The effect size of .33 supports the theory that the results of this analysis had both practical and statistical significance. To determine which of the two revenue sources was contributing to the statistically significant findings, the between-subjects effects were examined. Table 16 presents results of these analyses.

Table 16

Between-Subjects Effects – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Foundation Allowance						
Low poverty	8,842.94	1,565.89	2, 46	2.40	.102	.10
Moderate poverty	7,961.56	593.02				
High poverty	8,579.41	1,138.22				
Title 1, Part A, and At Risk 31a						
Low poverty	132.51_{a}	82.97	2, 46	13.65	< .001	.37
Moderate poverty	273.71_{b}	96.15				
High poverty	$718.26_{a,b}$	558.55				
2013/14						
Foundation Allowance						
Low poverty	8,350.06	1,589.76	2, 46	1.15	.325	.05
Moderate poverty	7,723.75	845.31				
High poverty	8,093.76	958.49				
Title 1, Part A, and At Risk 31a						
Low poverty	113.86_{a}	53.08	2, 46	18.61	< .001	.45
Moderate poverty	268.84_{b}	87.81				
High poverty	$672.51_{a,b}$	451.07				

Note: Means in a cell sharing a subscript differ significantly.

The between-subjects effects comparing per-pupil foundation allowance for the 2009/10 fiscal year did not differ significantly by the level of poverty, F (2, 46) = 2.40, p = .102, η^2 = .10. When per-pupil Title 1, Part A, and At Risk 31a were compared by level of poverty, the results were statistically significant, F (2, 46) = 13.65, p = < .001, η^2 = .37. The effect size of .37 was high, supporting the idea that the finding had both practical and statistical significance. Scheffé post hoc tests were used to compare all possible pairwise comparisons among the three levels of poverty on per-pupil Title 1, Part A, and At Risk 31a. The results showed that high-poverty school districts (M = 718.26, SD = 558.55) received significantly more funding than low-poverty school districts (M = 132.51, SD = 82.97) and moderate-poverty school districts (M = 273.71,

SD = 96.15). The difference in per-pupil Title 1, Part A, and At Risk 31a funding between low- and moderate-poverty school districts was not statistically significant.

For the 2013/14 fiscal year, the differences in per-pupil foundation allowance by the percentage of students who were economically disadvantaged were not statistically significant, F (2, 46) = 1.15, p = .325, η^2 = .05. When per-pupil Title 1, Part A, and At Risk 31a were compared by the three poverty levels, the results were statistically significant, F (2, 46) = 18.61, p = < .001, η^2 = .45. The large effect size of .45 indicated that the results of this analysis were both practically and statistically significant. The results of the Scheffé post hoc tests comparing all possible pairwise comparisons indicated that high-poverty school districts (M = 672.51, SD = 451.07) received significantly higher funding than school districts with low-poverty (M = 113.86, SD = 53.08) and moderate-poverty (M = 268.84, SD = 87.81) levels. The comparison of per-pupil Title 1, Part A, and At Risk 31a revenues between school districts with low and moderate levels of poverty was not statistically significant.

A one-way MANOVA was used to compare per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue by the percentage of minority students. Separate analyses were used for the 2009/10 and 2013/14 fiscal years. Table 17 presents results of these analyses.

Table 17

Multivariate Analysis of Variance – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Minority Students 2009/10 and 2013/14

Source	Hotelling's Trace	F Ratio	DF	p	η^2
2009/10	.74	8.15	4, 88	<.001	.27
2013/14	.75	8.20	4, 88	<.001	.27

The comparison of per-pupil foundation allowance and Title 1, Part A, and At Risk 31a revenue for the 2009/10 fiscal year by the level of diversity in the school districts was

statistically significant, F (4, 88) = 8.15, p = < .001, η^2 = .27. The effect size of .27 was evidence of practical significance of the findings, in addition to statistical significance. Similar significant results were obtained when per-pupil funding and Title 1, Part A, and At Risk 31a revenue were compared by the level of diversity for the 2013/14 fiscal year, F (4, 88) = 8.20, p = < .001, η^2 = .27. The large effect size for this analysis indicated that the findings had both practical and statistical significance. To determine which of the two revenue sources was contributing to the statistically significant findings, the between-subjects effects were examined. Table 18 presents results of these analyses.

Table 18

Between-Subjects Effects – Per-Pupil Foundation Allowance and Title 1, Part A, and At Risk 31a Revenue by Percentage of Minority Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η2
2009/10						
Foundation Allowance						
Low diversity	7,724.00$_a$	528.52	2, 46	5.91	.005	.20
Moderate diversity	9,005.82$_a$	1,470.18				
High diversity	8,627.44	1,045.44				
Title 1, Part A, and At Risk 31a						
Low diversity	208.70$_a$	61.64	2, 46	6.58	.003	.22
Moderate diversity	285.19$_b$	163.14				
High diversity	657.66$_{a,b}$	632.50				
2013/14						
Foundation Allowance						
Low diversity	7,353.94$_a$	484.63	2, 46	5.11	.010	.18
Moderate diversity	8,503.69$_a$	1,509.67				
High diversity	8,297.24	1,021.95				
Title 1, Part A, and At Risk 31a						
Low diversity	205.33$_a$	70.95	2, 46	5.16	.009	.18
Moderate diversity	296.20	198.04				
High diversity	560.67$_a$	523.19				

Note: Means in a cell sharing a subscript differ significantly.

The comparison of the per-pupil foundation allowance in the 2009/10 fiscal year by the level of diversity in the school district was statistically significant, F (2, 46) = 5.91, p = .005, η^2 = .20. The effect size of .20 was considered moderate, indicating that the result had some practical significance, in addition to the statistical significance. The results of the Scheffé post hoc tests used to compare all possible pairwise comparisons supported the theory that school districts with moderate diversity (M = 9,005.82, SD = 1.470.18) received a significantly higher per-pupil foundation allowance than school districts with low diversity (M = 7,724.00, SD = 528.52). School districts with high diversity (M = 8,627.44, SD = 1,045.44) did not differ significantly in their per-pupil foundation allowance from school districts with low diversity and those with moderate diversity.

The results of the between-subjects effects comparing per pupil Title 1, Part A, and At Risk 31a revenue by the level of diversity in a school district in 2009/10 were statistically significant, F (2, 46) = 6.58, p = .003, η^2 = .22. The moderate effect size of .22 indicated that the results had some practical significance, in addition to the statistical significance. To determine which level of diversity was contributing to the statistically significant findings, Scheffé post hoc tests were used. The results of these analyses indicated that school districts with high diversity (M = 657.66, SD = 632.50) received significantly higher per-pupil Title 1, Part A, and At Risk 31a revenues than school districts with low diversity (M =208.70, SD = 61.64) and those with moderate diversity (M = 285.19, SD = 163.14). The difference in per-pupil Title 1, Part A, and At Risk 31a revenue between school districts with low and moderate diversity was not statistically significant.

The results of the comparison of the per-pupil foundation allowance for the 2013/14 fiscal year by the level of diversity in the school district was statistically significant, F (2, 46) =

5.11, p = .010, η^2 = .18. The effect size of .18 was considered moderate, providing evidence that the findings had some practical significance, in addition to the statistical significance. Scheffé post hoc tests were used to compare all possible pairwise comparisons for per-pupil foundation allowance. The findings indicated that school districts with moderate diversity (M = 8,503.69, SD = 1,509.67) received significantly more per-pupil foundation allowance revenue than school districts with low diversity (M = 7,353.94, SD = 484.63). School districts with high diversity (M = 8,297.24, SD = 1,021.95) did not differ in their per-pupil foundation allowance revenue from school districts with either low or moderate diversity.

When per-pupil Title 1, Part A, and At Risk 31a were compared among the three levels of diversity in the school districts in 2013/14, the results were statistically significant, F (2, 46) = 5.16, p = .009, η^2 = .18. The moderate effect size of .18 was indicative of some practical significance as well as statistical significance. The results of the Scheffé post hoc tests indicated that school districts with high diversity (M = 560.67, SD = 523.19) received significantly greater per-pupil Title 1, Part A, and At Risk 31a revenues than school districts with low diversity (M = 205.33, SD = 70.95). School districts with moderate diversity (M = 296.20, SD = 198.04) did not differ significantly in their per-pupil Title 1, Part A, and At Risk 31a funding from school districts with low and high diversity.

Per-pupil fixed expenditures. The three levels of the percentage of net change from schools of choice and loss to charter schools were used as the independent variable in a one-way ANOVA. The dependent variable in these analyses was the per-pupil fixed expenditures for the 2009/10 and 2013/14 fiscal years. Table 19 presents results of these analyses.

Table 19

One-Way ANOVA – Per-Pupil Fixed Expenditures by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Fixed Expenditures						
Net gain	2,820.68	450.29	2, 46	1.15	.327	.05
Small net gain/loss	2,939.66	611.57				
Net loss	3,140.82	721.82				
2013/14						
Fixed Expenditures						
Net gain	2,766.40	464.09	2, 46	1.82	.174	.07
Small net gain/loss	2,642.17	668.07				
Net loss	3,147.54	1,096.38				

The comparisons of per-pupil fixed expenditures by level of the percentage of net change from schools of choice and loss to charter schools for both 2009/10, F (2, 46) = 1.15, p = .327, η^2 = .05, and 2013/14, F (2, 46) = 1.82, p = .174, η^2 = .07, were not statistically significant. These findings helped prove that regardless of the percentage of students lost to schools of choice and charter schools, per-pupil fixed expenditures were not significantly different.

The next set of analyses compared per-pupil fixed expenditures by the percentage of economically disadvantaged students for 2009/10 and 2013/14 fiscal years. The results of the one-way ANOVA used to make these comparisons are presented in Table 20.

Table 20

One-Way ANOVA – Per-Pupil Fixed Expenditures by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η^2
2009/10						
Fixed Expenditures						
Low poverty	2,927.47	652.92	2, 46	5.22	.009	.19
Moderate poverty	$2,662.69_a$	344.69				
High poverty	$3,289.16_a$	624.09				
2013/14						
Fixed Expenditures						
Low poverty	2,644.81	652.39	2, 46	2.00	.147	.08
Moderate poverty	2,735.57	437.10				
High poverty	3,151.65	1,081.61				

Note: Means in a cell sharing a subscript differ significantly.

The results of the one-way ANOVA used to compare per-pupil fixed expenditures by poverty levels for the 2009/10 fiscal year were statistically significant, F (2, 46) = 5.22, p = .009, η^2 = .19. The moderate effect size of .19 provided evidence that, in addition to statistical significance, the finding had practical significance. When all possible pairwise comparisons were made using Scheffé post hoc tests, school districts with high poverty rates (M = 3,289.16, SD = 624.09) had statistically higher per-pupil fixed expenditures than moderate-poverty districts (M = 2,662.69, SD = 344.69). The differences in per-pupil fixed expenditures between school districts with low poverty rates (M = 2,927.47, SD = 652.92) and school districts with moderate and high poverty rates were not statistically significant.

The comparison of per-pupil fixed expenditures by level of poverty in the school district for the 2013/14 fiscal year was not statistically significant, F (2, 46) = 2.00, p = .147, η^2 = .08. Based on this finding, it appears that the differences among the low-, moderate-, and high-poverty school districts on fixed expenditures were not substantial.

Per-pupil fixed expenditures for 2009/10 and 2013/14 were used as dependent variables in separate one-way ANOVA procedures. The independent variable in these analyses was the level of diversity within the school districts. Table 21 presents results of these analyses.

Table 21

One-Way ANOVA – Per-Pupil Fixed Expenditures by Percentage of Minority Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η^2
2009/10						
Fixed Expenditures						
Low diversity	$2{,}604.74_a$	331.06	2, 46	5.53	.007	.19
Moderate diversity	3,046.89	583.98				
High diversity	$3{,}242.83_a$	690.58				
2013/14						
Fixed Expenditures						
Low diversity	2,511.53	337.28	2, 46	2.40	.102	.09
Moderate diversity	2,946.99	584.46				
High diversity	3,078.11	1,137.43				

Note: Means in a cell sharing a subscript differ significantly.

The results of the comparison of per-pupil fixed expenditures by level of diversity for the 2009/10 fiscal year were statistically significant, F (2, 46) = 5.53, p = .007, η^2 = .19. The effect size of .19 was considered moderate, indicating that the results of the ANOVA had both statistical and practical significance. Scheffé post hoc tests were used to test all possible pairwise comparisons for significance. The results of these analyses indicated that school districts with high levels of diversity (M = 3,242.83, SD = 690.58) had significantly higher per-pupil fixed expenditures than school districts with low levels of diversity (M = 2,604.74, SD = 331.06). No statistically significant differences were found in the per-pupil fixed expenditures between school districts with moderate diversity (M = 3,046.89, SD = 583.98) and school districts with either low or high diversity.

When per-pupil fixed expenditures were compared by level of diversity within the school districts for the 2013/14 fiscal year, the results were not statistically significant, F (2, 46) = 2.40, p = .102, η^2 = .09. This finding provided support for the theory that any differences among the school districts with low, moderate, and high diversity levels were not sufficient to be considered statistically significant.

Fund balance as a percentage of total revenues. Fund balance as a percentage of total revenues was used as the dependent variable in a one-way ANOVA, with the percentage of net change from schools of choice and loss to charter schools used as the independent variable. Results of these analyses are presented in Table 22.

Table 22

One-Way ANOVA – Fund Balance as a Percentage of Total Revenues by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η2
2009/10						
Fund Balance						
Net gain	9.34_a	9.46	2, 46	8.34	.001	.27
Small net gain/loss	12.73_b	7.92				
Net loss	$-.10_{a,b}$	10.42				
2013/14						
Fund Balance						
Net gain	10.04_a	6.98	2, 46	6.42	.003	.22
Small net gain/loss	10.26_b	6.09				
Net loss	$-1.59_{a,b}$	16.29				

Note: Means in a cell sharing a subscript differ significantly.

The comparison of fund balance as a percentage of total revenues by level of percentage of net change from schools of choice and loss to charter schools for the 2009/10 fiscal year was statistically significant, F (2, 46) = 8.34, p = .001, η^2 = .27. The large effect size of .27 provided evidence that the finding had both practical and statistical significance. Scheffé post hoc tests were used to compare all possible pairwise comparisons to determine which percentage level of

net change from schools of choice and loss to charter schools was contributing to the statistically significant result. School districts with net losses from choice (M = -.10%, SD = 10.42) had statistically lower fund balances as a percentage of total revenues than school districts with net gains (M = 9.34%, SD = 9.46) and small net gains/losses (M = 12.73%, SD = 7.92). The difference in fund balance as a percentage of total revenues between school districts with net gains from choice and those with small net gains/losses were not statistically significant.

The results of the one-way ANOVA comparing fund balance as a percentage of total revenues by percentage of net change from schools of choice and loss to charter schools for the 2013/14 fiscal year were statistically significant, $F(2, 46) = 6.42$, $p = .003$, $\eta^2 = .22$. The moderate effect size of .22 indicated some practical significance. The results of the Scheffé post hoc tests used to compare all possible pairwise comparison indicated that school districts with net losses from choice (M = -1.59%, SD = 16.29) had significantly lower fund balances as a percentage of total revenues than school districts with net gains (M = 10.04%, SD = 6.98) and those with small net gains/losses (M = 10.26%, SD = 6.09). The difference in fund balance as a percentage of total revenues between school districts with net gains from choice and small net gains/losses was not statistically significant.

Fund balances as a percentage of total revenues were used as the dependent variable in a one-way ANOVA. The level of poverty in the school district was used as the independent variable in this analysis. Table 23 presents results of these analyses.

Table 23

One-Way ANOVA – Fund Balance as a Percentage of Total Revenues by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η^2
2009/10						
Fund Balance						
Low poverty	11.13_a	8.68	2, 46	9.12	<.001	.28
Moderate poverty	11.90_b	5.21				
High poverty	$-.24_{a,b}$	12.10				
2013/14						
Fund Balance						
Low poverty	11.56_a	7.04	2, 46	3.69	.033	.14
Moderate poverty	6.81	5.10				
High poverty	$.91_a$	17.19				

Note: Means in a cell sharing a subscript differ significantly.

The comparison of fund balance as a percentage of total revenues by level of poverty for the 2009/10 fiscal year was statistically significant, F (2, 46) = 9.12, p = < .001, η^2 = .28. The large effect size of .28 supports the belief that this analysis had both statistical and practical significance. To determine which levels of poverty were contributing to the statistically significant result, Scheffé post hoc tests were used. The findings indicated that school districts with high poverty levels (M = -.24%, SD = 12.10) had a significantly lower fund balance as a percentage of total revenues than school districts with low poverty (M = 11.13%, SD = 8.68) and moderate poverty (M = 11.90%, SD = 5.21) levels. There was no statistical difference in fund balance as a percentage of total revenues between school districts with low poverty and moderate poverty levels.

The results of the one-way ANOVA used to compare fund balance as a percentage of total revenues by poverty levels for the 2013/14 fiscal year were statistically significant, F (2, 46) = 3.69, p = .033, η^2 = .14. The effect size of .14 indicated that the results had practical significance. The results of the Scheffé post hoc tests used to compare all possible pairwise

comparisons found a significantly lower fund balance as a percentage of total revenues for school districts with high poverty levels (M = .91%, SD = 17.19) than school districts with low poverty levels (M = 11.56%, SD = 7.04); however, the differences in fund balance as a percentage of total revenues between school districts with moderate poverty levels (M = 6.81%, SD = 5.10) and school districts with low or high poverty levels were not significant.

Fund balance as a percentage of total revenues was used as the dependent variable in a one-way ANOVA. The level of diversity within the school district was used as the independent variable in this analysis. Table 24 presents results of these analyses.

Table 24

One-Way ANOVA – Fund Balance as a Percentage of Total Revenues by Percentage of Minority Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Fund Balance						
Low diversity	10.92_{a}	3.89	2, 46	6.48	.003	.22
Moderate diversity	10.82_{b}	9.60				
High diversity	$.35_{a,b}$	12.98				
2013/14						
Fund Balance						
Low diversity	9.79	5.76	2, 46	2.36	.106	.09
Moderate diversity	7.96	10.32				
High diversity	1.49	15.96				

Note: Means in a cell sharing a subscript differ significantly.

The results of the comparison of fund balance as a percentage of total revenue by level of diversity for the 2009/10 fiscal year were statistically significant, F (2, 46) = 6.48, p = .003, η^2 = .22. The effect size of .22 was considered moderate, providing support for the belief that the result had some practical significance in addition to statistical significance. To determine which level of diversity was contributing to the significant difference, Scheffé post hoc tests were used to compare all possible pairwise comparisons. The results of this analysis indicated that high-

diversity districts (M = .35%, SD = 12.98) had a statistically lower fund balance as a percentage of total revenues than districts with low diversity (M = 10.92%, SD = 3.89) and moderate diversity (M = 10.82%, SD = 9.60) levels. The comparison of fund balance as a percentage of total revenues between school districts with low and moderate diversity levels was not statistically significant.

The comparison of fund balance as a percentage of revenue by level of diversity in the school districts for the 2013/14 fiscal year was not statistically significant, $F(2, 46) = 2.36$, $p = .106$, $\eta^2 = .09$. This result indicated that any differences among school districts with low, moderate, and high levels of diversity were not sufficient to be considered statistically significant.

Standard and Poor's credit rating. Standard and Poor's school district credit ratings were used as a measure of credit worthiness and credit quality of a school district. Separate one-way ANOVAs were used to compare Standard and Poor's credit rating by the percentage of net change from schools of choice and loss to charter schools. Table 25 presents results of these analyses.

Table 25

One-Way ANOVA – Standard and Poor's Credit Rating by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η2
2009/10						
Standard and Poor's Credit Rating						
Net gain	5.17	1.34	2, 34	2.29	.117	.12
Small net gain/loss	5.53	1.19				
Net loss	4.40	1.43				
2013/14						
Standard and Poor's Credit Rating						
Net gain	5.07_{a}	1.14	2, 36	6.92	.003	.28
Small net gain/loss	5.20_{b}	1.74				
Net loss	$3.20_{a,b}$	1.23				

Note: Means in a cell sharing a subscript differ significantly.

The results of the one-way ANOVA used to compare Standard and Poor's credit rating by the level of loss for the 2009/10 fiscal year were not statistically significant, F (2, 34) = 2.29, p = .117, η^2 = .12. This result indicated that the differences between school districts with low, moderate, and high rates of loss were not sufficient to significantly impact credit ratings.

The comparison of Standard and Poor's credit rating by level of loss from choice for the 2013/14 fiscal year was statistically significant, F (2, 36) = 6.92, p = .003, η^2 = .28. The large effect size of .28 proved that the results had both practical and statistical significance. Scheffé post hoc tests were used to compare all possible pairwise comparisons. The results of these analyses indicated that school districts with net losses from choice (M = 3.20, SD = 1.23) had significantly lower Standard and Poor's credit ratings than school districts with net gains (M = 5.07, SD = 1.14) and small net gains/losses (M = 5.20, SD = 1.74). Standard and Poor's credit ratings between school districts with net gains did not differ significantly from those with small net gains/losses.

Separate one-way ANOVAs were used to compare Standard and Poor's credit ratings by the level of poverty within the school districts. Table 26 presents results of the analyses for the 2009/10 and 2013/14 fiscal years.

Table 26

One-Way ANOVA – Standard and Poor's Credit Rating by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Standard and Poor's Credit Rating						
Low poverty	5.36	1.65	2, 34	.39	.681	.02
Moderate poverty	5.00	1.04				
High poverty	4.89	1.36				
2013/14						
Standard and Poor's Credit Rating						
Low poverty	5.27_a	1.39	2, 36	5.13	.011	.22
Moderate poverty	4.92	1.66				
High poverty	3.45_a	1.37				

Note: Means in a cell sharing a subscript differ significantly.

The comparison of Standard and Poor's credit ratings for the 2009/10 fiscal year by the level of poverty was not statistically significant, F (2, 34) = .39, p = .681, η^2 = .02. This result indicated that although the ratings varied among the school districts relative to their level of poverty, these differences were not sufficient to be considered statistically significant.

The results of the one-way ANOVA comparing Standard and Poor's credit rating by level of poverty for the 2013/14 fiscal year were statistically significant, F (2, 36) = 5.13, p = .011, η^2 = .22. The moderate effect size of .22 indicates that the results have some practical significance along with the statistical significance. To determine which of the three poverty levels were contributing to the significant result, Scheffé post hoc tests were used to compare all possible pairwise comparisons. The results of this analysis found that school districts with high poverty

levels (M = 3.45, SD = 1.37) had significantly lower credit ratings than school districts with low poverty levels (M = 5.27, SD = 1.39). School districts with moderate poverty levels (M = 4.92, SD = 1.66) did not differ significantly in their Standard and Poor's credit rating from either school districts with low or high levels of poverty.

Separate one-way ANOVAs were used to compare Standard and Poor's credit ratings by the level of diversity in the school districts for the 2009/10 and 2013/14 fiscal years. The results of these analyses are presented in Table 27.

Table 27

One-Way ANOVA – Standard and Poor's Credit Rating by Percentage of Minority Students 2009/10 and 2013/14

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	η2
2009/10						
Standard and Poor's Credit Rating						
Low diversity	4.64	.84	2, 34	1.49	.240	.08
Moderate diversity	5.29	1.59				
High diversity	5.56	1.51				
2013/14						
Standard and Poor's Credit Rating						
Low diversity	4.86	1.03	2, 36	2.74	.078	.13
Moderate diversity	5.25	1.49				
High diversity	3.85	2.04				

The results of the comparisons of Standard and Poor's credit ratings by level of diversity for 2009/10, F (2, 34) = 1.49, p = .240, η^2 = .08 and 2013/14, F (2, 36) = 2.74, p = .078, η^2 = .13, were not statistically significant. These results indicated that for both years in the study, the differences in the credit ratings between low-, moderate-, and high-diversity districts were not substantial enough to be considered statistically significant.

Standard and Poor's credit outlook. The financial outlook of the school districts as measured by the likelihood of a school districts' credit rating change over the next 6 to 24 months was analyzed. The outlook for credit rating changes was crosstabulated by the percentage of net change from schools of choice and loss to charter schools for the 2009/10 and 2013/14 fiscal years. The results of these analyses are presented in Table 28.

Table 28

Crosstabulations – Change in Credit Outlook by Percentage of Net Change from Schools of Choice and Loss to Charter Schools 2009/2010 and 2013/2014

	Percentage of Net Change from Schools of Choice and Loss to Charter Schools							
	Net Gain		Small Net Gain/Loss		Net Loss		Total	
Outlook (Change in Credit Ratings)	N	%	N	%	N	%	N	%
2009/10								
Negative	0	0.0	1	6.7	2	20.0	3	8.1
Stable	12	100.0	14	93.3	8	80.0	34	91.9
Total	12	100.0	15	100.0	10	100.0	37	100.0
χ^2 (2) = 3.00, p = .223								
2013/14								
Negative	0	0.0	4	26.7	4	40.0	8	20.5
Stable	14	100.0	11	73.3	6	60.0	31	79.5
Total	14	100.0	15	100.0	10	100.0	39	100.0
χ^2 (2) = 6.29, p = .043								

In 2009/10, three (8.1%) school districts had negative outlooks, including one (6.7%) school district with small net gain/losses from schools of choice and loss to charter schools and two (20.0%) school districts with net losses. Of the 34 (91.9%) school districts that had stable outlooks, 12 (100.0%) were in school districts with net gains, 14 (93.3%) were in school districts with small net gains/losses, and eight (80.0%) were in school districts with net losses from schools of choice and loss to charter schools. The results of the chi-square test for independence

comparing net change from schools of choice and loss to charter schools was not statistically significant, $\chi 2$ (2) = 3.00, p = .223. This finding provided evidence that there was no association between net change from schools of choice and loss to charter schools and the credit outlook for the school districts. Care must be taken in interpreting these findings, as the chi-square test failed to meet the assumption that no more than 20% of the cells could have expected frequencies less than five.

In the 2013/14 fiscal year, eight (20.5%) school districts had negative outlooks, including four (26.7%) school districts with small net gains/losses from schools of choice and loss to charter schools and four (40.0%) school districts with net losses. Of the 31 (79.5%) school districts with stable outlooks, 14 (100.0%) were in school districts with net gains, 11 (73.3%) were in school districts with small net gains/losses, and six (60.0%) were in school districts with net losses. The chi-square test for independence used to compare the percentage of net change from schools of choice and loss to charter schools by the outlook of school districts was statistically significant, χ^2 (2) = 6.29, p = .043. This result indicated that in 2013/14, an association existed between the percentage of net change from schools of choice and loss to charter schools and the outlook of the school district. Care must be taken in interpreting these findings, as the chi-square test failed to meet the assumption that no more than 20% of the cells could have expected frequencies less than five.

The outlook scores were crosstabulated by the percentage of economically disadvantaged students for the 2009/10 and 2013/14 fiscal years. The results of these analyses are presented in Table 29.

Table 29

Crosstabulations – Change in Credit Outlook by Percentage of Economically Disadvantaged Students 2009/10 and 2013/14

Outlook (Change in Credit Ratings)	Percentage of Economically Disadvantaged Students							
	Low Poverty		Moderate Poverty		High Poverty		Total	
	N	%	N	%	N	%	N	%
2009/10								
Negative	0	0.0	0	0.0	3	33.3	3	8.1
Stable	14	100.0	14	100.0	6	66.7	34	91.9
Total	14	100.0	14	100.0	9	100.0.	37	100.0
χ^2 (2) = 10.16, p = .006								
2013/14								
Negative	2	13.3	3	23.1	3	27.3	8	20.5
Stable	13	86.7	10	76.9	8	72.7	31	79.5
Total	15	100.0	13	100.0	11	100.0	39	100.0
χ^2 (2) = .84, p = .659								

All three (33.3%) of the school districts with negative outlooks were high-poverty districts in 2009/10. Thirty-four (91.9%) of the school districts had stable outlooks. Of this number, 14 (100.0%) were in school districts with low poverty levels, 14 (100.0%) were in school districts with moderate poverty levels, and six (66.7%) were in school districts with high poverty levels. The results of the chi-square test for independence were statistically significant, χ^2 (2) = 10.16, p = .006, indicating there was an association between the change in credit outlook and the level of poverty in the school district. Care must be taken in interpreting these findings, as the chi-square test failed to meet the assumption that no more than 20% of the cells could have expected frequencies less than five.

For the 2013/14 fiscal year, eight (20.5%) of the school districts had negative outlooks, including two (13.3%) with low poverty levels, three (23.1%) with moderate poverty levels, and three (27.3%) with high poverty levels. Stable outlooks were obtained in 31 school districts

including 13 (86.7%) with low poverty levels, 10 (76.9%) with moderate poverty levels, and eight (72.7%) with high poverty levels. The chi-square test for independence comparing the outlook for the school district by level of poverty was not statistically significant, χ^2 (2) = .84, p = .659. Care must be taken in interpreting these findings, as the chi-square test failed to meet the assumption that no more than 20% of the cells could have expected frequencies less than five.

The outlook scores were crosstabulated by the percentage of minority students in the school districts for the 2009/10 and 2013/14 fiscal years. The results of these analyses are presented in Table 30.

Table 30

Crosstabulations – Change in Credit Outlook by Percentage of Minority Students 2009/10 and 2013/14

	Percentage of Minority Students							
	Low Diversity		Moderate Diversity		High Diversity		Total	
Outlook (Change in Credit Ratings)	N	%	N	%	N	%	N	%
2009/10								
Negative	0	0.0	0	0.0	3	33.3	3	8.1
Stable	14	100.0	14	100.0	6	66.7	34	91.9
Total	14	100.0	14	100.0	9	100.0.	37	100.0
χ^2 (2) = 10.16, p = .006								
2013/14								
Negative	4	28.6	2	16.7	2	15.4	8	20.5
Stable	10	71.4	10	83.3	11	84.6	31	79.5
Total	14	100.0	12	100.0	13	100.0	39	100.0
χ^2 (2) = .88, p = .645								

All three (33.3%) districts with negative outlooks were high-diversity districts in 2009/10. The remaining 34 (91.9%) school districts had stable outlooks, including 14 (100.0%) of low diversity, 14 (100.0%) of moderate diversity, and six (66.7%) of high diversity. The chi-

square test for independence used to compare changes in credit outlook by percentage of diversity was statistically significant, χ^2 (2) = 10.16, p = .006. This finding indicated that an association existed between the outlook of the school district and the level of diversity.

The change in credit outlook for the 2013/14 fiscal year found that eight (20.5%) of the school districts had negative ratings. This number included four (28.6%) in low-diversity school districts, two (16.7%) in moderate-diversity school districts, and two (15.4%) in high-diversity school districts. Thirty-one school districts had stable outlooks, of which 10 (71.4%) were in low-diversity school districts, 10 (83.3%) were in moderate-diversity school districts, and 11 (84.6%) were in high-diversity school districts. The results of the chi-square test for independence was not statistically significant, χ^2 (2) = .88, p = .645, indicating that level of diversity was independent from the credit outlooks for the school districts. Care must be taken in interpreting these findings, as the chi-square test failed to meet the assumption that no more than 20% of the cells could have expected frequencies less than five.

Table 31 presents a summary of the findings for the 2009/10 and 2013/14 fiscal years comparing net choice, student poverty, and student diversity on finances in school districts in two counties.

Table 31

Comparison of Results of Statistical Analyses for Finances – 2009/10 and 2013/14 Fiscal Years

	Net Choice		Student Poverty		Student Diversity	
Finances	2009/10	2013/14	2009/10	2013/14	2009/10	2013/14
Per pupil total revenues	NS	NS	Sig	NS	Sig	Sig
Per pupil total expenditures	NS	NS	Sig	NS	Sig	Sig
Per pupil foundation allowance	NS	NS	NS	NS	Sig	Sig
Title 1, Part A, and At Risk 31a	Sig	Sig	Sig	Sig	Sig	Sig
Per pupil fixed expenditures	NS	NS	Sig	NS	Sig	NS
Fund balance as a % of total revenues	Sig	Sig	Sig	Sig	Sig	NS
Standard and Poor's credit rating	NS	Sig	NS	Sig	NS	NS
Standard and Poor's change in credit outlook	NS	Sig	Sig	NS	Sig	NS

Note: Sig denotes results were statistically significant; NS denotes results were not statistically significant.

The null hypotheses in Research Question One—are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity—were rejected if the majority of the financial factors were found to be statistically significant. The conclusion for Null Hypothesis One—there will be no difference in finances between districts that experience a greater negative choice impact than districts that experience a lesser negative choice impact—is, therefore, accepted for both 2009/10 and 2013/14. Null Hypothesis Two—there will be no difference in finances between districts with greater concentrations of student poverty than districts with lesser concentrations of student poverty—is rejected for 2009/10 and accepted for 2013/14. Mirroring the results for districts with high poverty, Null Hypothesis Three—there will be no difference in finances between districts with greater concentrations of student diversity than districts with lesser concentrations of student diversity—was rejected in 2009/10 and accepted in 2013/14. It should be noted that no value was assigned to each financial factor to create factors of greater or lesser weight. This stands somewhat in contrast to the State of Michigan, which has recently

deemed a fund balance of less than 5% of revenues as an important factor in determining whether a district is in financial distress (Senate Fiscal Agency, 2015b).

Research Question Two. Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations?

H_{01}: There is no relationship between choice impact and the socioeconomic concentration of student populations.

H_{02}: There is no relationship between choice impact and the racial/ethnic concentration of student populations.

All decisions on the statistical significance of the findings were made using the criteria alpha level of .05. The first analyses compared the percentage of net change from schools of choice and loss to charter schools by percentage of economically disadvantaged students. Separate analyses were completed for 2009/10 and 2013/14. Table 32 presents results of these analyses.

Table 32

Analysis of Variance – Percentage of Net Change from Schools of Choice and Loss to Charter Schools by Percentage of Economically Disadvantaged Students

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Low poverty	2.63_{a}	7.89	2, 46	5.57	.007	.20
Moderate poverty	5.49_{b}	11.69				
High poverty	$-14.90_{a,b}$	29.32				
2013/14						
Low poverty	2.94_{a}	7.85	2, 46	5.00	.011	.18
Moderate poverty	1.72_{b}	26.94				
High poverty	$-27.06_{a,b}$	45.00				

Note: Means in a cell sharing a subscript differ significantly.

A statistically significant difference was found for the percentage of net change from schools of choice and loss to charter schools in 2009/10 among the three levels of poverty as

measured by the percentage of economically disadvantaged students, F (2, 46) = 5.57, p = .007, η^2 = .20. The effect size of .20 indicates that in addition to statistical significance, the comparison has some practical significance. To determine which of the levels of poverty are contributing to the statistical significance, Scheffé post hoc tests were used to compare all possible pairwise comparisons. The findings showed that high-poverty schools (M = -14.90, SD = 29.32) experienced a significantly higher negative net impact from choice than did low-poverty schools (M = 2.63, SD = 7.89) and moderate-poverty schools (M = 5.49, SD = 11.69). The high-poverty schools lost students through choice, while the districts with low and moderate poverty levels gained students. The difference between the low-poverty schools and moderate-poverty schools was not statistically significant.

The 2013/14 comparison of the percentage of net change from schools of choice and loss to charter schools by the three levels of poverty was statistically significant, F (2, 46) = 5.00, p = .011, η^2 = .18. The effect size of .18 indicated that the practical significance of the findings was moderate. The results of the Scheffé post hoc tests used to compare all possible pairwise comparisons found that schools with high levels of poverty (M = -27.06, SD = 45.00) experienced a significantly higher negative net impact from choice than those with low (M = 2.94, SD = 7.85) and moderate levels (M = 1.72, SD = 26.94). The high-poverty schools lost students through choice, while the low- and moderate-poverty districts gained students. The difference between schools with low and moderate levels of poverty was not statistically significant.

The percentage of net change from schools of choice and loss to charter schools was compared by the three levels of diversity in the schools. The results of these analyses are presented in Table 33.

Table 33

Analysis of Variance – Percentage of Net Change from Schools of Choice and Loss to Charter Schools by Percentage of Diversity in Schools

Source of Variation	Mean	*SD*	*DF*	*F* Ratio	*p*	$\eta 2$
2009/10						
Low diversity	2.34	10.41	2, 46	1.58	.217	.06
Moderate diversity	-.16	18.09				
High diversity	-9.87	28.98				
2013/14						
Low diversity	3.31_a	15.67	2, 46	3.86	.028	.14
Moderate diversity	-.89	24.54				
High diversity	-24.95_a	45.66				

Note: Means in a cell sharing a subscript differ significantly.

The results of the comparison of the percentage of net change from schools of choice and loss to charter schools in 2009/10 among the three levels of diversity were not statistically significant, F (2, 46) = 1.58, p = .217, η^2 = .06. Based on this finding, although the percentage of net change from schools of choice and loss to charter schools differed among the three levels of diversity, the change was not statistically significant.

The comparison of the percentage of net change from schools of choice and loss to charter schools in 2013/14 was statistically significant, F (2, 46) = 3.86, p = .028, η^2 = .14. The effect size of .14 provided support for the practical significance of the findings. The results of the Scheffé post hoc tests indicated that high-diversity schools (M = -24.95, SD = 45.66) experienced a significantly higher negative choice impact than low-diversity schools (M = 3.31, SD = 15.67). The high- and moderate-diversity districts lost students through choice, while the low-diversity districts gained students. No differences were found between low- and moderate-diversity schools (M = -.89, SD = 24.54) and moderate- and high-diversity schools.

The above findings provide the data necessary to answer Research Question Two: Is there a relationship between choice impact and the socioeconomic and racial/ethnic

concentrations of student populations? Hypothesis One—There is no relationship between choice impact and the socioeconomic concentration of student populations—is rejected for both 2009/10 and 2013/14. With somewhat differing results, Hypothesis Two—There is no relationship between choice impact and the racial/ethnic concentration of student populations—is accepted for 2009/10 but rejected for 2013/14.

Interview content analysis. This portion of Section Two provides the content analyses of the interviews of selected superintendents that were used to address Research Question Three.

Research Question Three. What are superintendents' perceptions of the impact of choice on the changing student demographics within the district?

Seven superintendents from Macomb and Oakland County school districts were interviewed to better understand their perceptions about demographic changes within their districts over the period from 2009/10 through 2013/14. Districts were selected by the researcher to include those experiencing great changes in student demographics and district finances and one district within close proximity to these districts that seemed to be relatively unaffected by the factors creating these changes. Three male and four female superintendents were interviewed. Five of the superintendents were White, and two were African American. Four of the superintendents were serving in the position of superintendent for their first time. The seven interview participants ranged in experience serving as a superintendent from 2 to 10 years. Interviews were recorded and transcribed and then checked for accuracy by the interviewees. Provisional coding (Miles, Huberman, & Saldana, 2014) was used to code interview transcripts. Codes including changing student demographics, changing student needs, staff's skills in supporting the changing population of students, the community's reactions to changing demographics, and district finances were developed to group interview responses.

Changing student demographics. Changing student demographics was a significant topic of conversation throughout the interviews. The changes occurred through a combination of declining enrollment and increases in economically disadvantaged and minority students entering the districts. One superintendent suggested that a catalyst to the change was the softening home prices that allowed students from neighboring districts to move into districts with what were perceived as better schools. Additionally, superintendents suggested that choice allowed some struggling nonresident students to attend their district while they simultaneously lost some of their academically successful resident students through choice to another district that was perceived as superior. The research is mixed on what criteria families use to choose schools and the impact of choice on the demographics mix of the student population. When considering family choice criteria, intuitively one would expect that parents select schools based primarily on the quality of the education provided. Parents' prioritizing academic quality in the selection of schools is supported by a number of studies (Carlson et al., 2011; Koedel et al., 2009; Reback, 2008). However, parent school-selection decisions also point to other factors such as race and socioeconomics (Hastings et al., 2005; Holme & Richards, 2009; Koedel et al., 2009; Ni & Arsen, 2011; Reback, 2008) and proximity to choice options (Bell, 2009b; Carlson et al., 2011; Hastings et al., 2005). In relation to the impact of choice on the demographics of the student population, numerous studies found that choice increased segregation of schools by race, socioeconomics, and academic ability (Bifulco et al., 2009; Carlson et al., 2011; Holme & Richards, 2009; Miron et al., 2010; Ni, 2010). Fewer studies found that choice did not create segregated schools (Powers et al., 2012; Zimmer, 2009).

Superintendents' observations of enrollment decline and changes in student demographics around poverty and diversity are supported by data. Both Oakland and Macomb

Counties, over the five-year period of study, have experienced both a loss in enrollment and an increase in the percentages of students in poverty and of minority students. Table 3 shows the change in total enrollment, with both the mean and median enrollment decreasing for the 49 districts in the two counties. The range in district size narrowed, with the largest district declining in enrollment at a greater rate than the decline experienced by the smallest district.

Table 5 shows that both the mean and median percentage of economically disadvantaged students increased in the 49 districts combined. The range between the lowest- and highest-poverty percentage districts narrowed, with both the lowest-poverty district and the highest-poverty district increasing in their percentage of poverty. Despite the narrowing of the poverty gap between the 49 districts, the gap was substantial in 2013/14, with the lowest-poverty district at 7.18% of total enrollment and the highest at 88.48%.

Table 6 shows that the trend with racial/ethnic diversity in the 49 districts looks much the same as poverty. Both the mean and the median percentage of minority enrollment increased over the 5-year period. The gap between the lowest and highest diversity percentage districts also narrowed slightly, with the district with the smallest percentage of minority students and the district with the greatest percentage of minority students both increasing their percentage of minority students. Despite the narrowing of the gap, in 2013/14 the district with the smallest percentage of minority students, 3.28%, remained at a far lower level than the district with the largest percentage, 96.77%.

Interviews with superintendents highlighted the changes their districts experienced in poverty levels but also revealed that the beliefs and perceived challenges related to student poverty were relative. For example, one district with the vast majority of students in poverty seemed to willingly accept their high rates of poverty: “So X now is at 80% poverty level. Now

was it at 80% five years ago, or was that 72%? We were going there anyway." In contrast, another superintendent with far less student poverty, approximately 27%, expressed alarm related to the changes in the district's poverty rate: "We have a couple of elementary schools that are over 40%, and it is just shocking that it happens." However, while the majority of superintendents identified increasing levels of student poverty in their district, the superintendent who was selected for interview due to the somewhat incongruent lack of demographic and financial changes in comparison to nearby districts explained their enrollment patterns as a spike in poverty that "rose dramatically in 2007 through 2012," followed by a post-recession positive economic shift that drove a turnover in the housing stock and the houses being flipped into rebuilds.

Several superintendents also identified significant increases in student racial/ethnic diversity over recent years. One superintendent explained: "Twelve years ago in the 2004/05 school year we had 5,600 students, and 10% of our students were African American. Currently in the 2015/16 school year we will start with approximately 3,300 kids, 85% of which are African American." A second superintendent noted: "As we have shrunken enrollment, our minority population has increased as a percentage [of enrollment] and our majority population has decreased." In a third district, the superintendent found two primary changes in demographics in relation to race and ethnicity:

> In the last five years, a significant change in our demographics has been [from] an influx of both refugees and immigrants from the Middle East, primarily Iraq … In fact, one-fifth of our student population is now somehow connected to the Middle East…The other change in demographics has been with regard to the number of African-American

students who have come to the district, and the perception is they are coming from Detroit in the south.

However, unlike the majority of superintendents interviewed, one superintendent of a district with the majority of the population African American stated that the district had experienced no significant racial/ethnic shift in the student population in the past 5 years.

Several responses by superintendents in regard to changing student demographics point to the proximity of many Macomb and Oakland County districts to Detroit. Superintendents' comments on demographic population shifts from the southern border of each county were nuanced around race/ethnicity, socioeconomics, and the perceived quality of education. Superintendents noted that even when a district did not accept out-of-county schools-of-choice students, out-of-county students were entering their districts as families moved across county lines into new neighborhoods. For example, one superintendent noted, "We are a district of choice within X County only, and when you consider the number of people who have left the city to the suburbs, all of the inner ring suburbs around the city have taken in a tremendous amount of students." A second superintendent whose district has 141 apartment complexes, some of the highest rates of transience and homelessness in the county, and is on the perimeter of Detroit, voiced concern: "They can more easily get into the apartments but they are bringing the same values, in many cases, some of the same needs that they were struggling with, so we get that even though we are not open to Wayne County." Schools-of-choice was also noted as a vehicle for students to attend schools in contiguous counties. For example, one superintendent specifically attributed the increase in student poverty levels to the district practice of accepting out-of-county schools-of-choice students: "Because X has been receiving schools of choice 105c for more than ten years, the poverty level has been growing."

Several superintendents spoke specifically about schools-of-choice students and the process of indoctrinating them into the district culture. For example, as one superintendent shared beliefs, it became evident that creating a cohesive culture was fraught with challenges, in the work with both schools-of-choice students and the existing students and staff in the school.

> It is not where you came from, it is where you are. You are an X student. You are going to act like it. … There is no separation, no difference. We don't put D's on kids' heads that are from Detroit and H's from _____.… I expect all of them to learn and I expect all of them to behave accordingly.

Changing student needs. Significant research documents the challenges in educating students in poverty. For example, Jensen (2009) identified four types of risk factors when living in poverty: "emotional and social challenges, acute and chronic stressors, cognitive lags and health and safety issues" (p. 7). Each of these risk factors creates a wide range of behaviors that manifest in school in ways that create greater challenges for teaching and learning, such as increased absenteeism and a more limited range of appropriate emotional responses. The frustrations of superintendents in supporting the needs of students are many and varied, ranging from the challenges of educating at-risk students, to witnessing the despair of families in crisis, to the seemingly misguided expectations of the state. The angst of one superintendent was evident while explaining the challenges faced by the district when supporting families in distress:

> How do you, when you have children that may not have the same level of financial support at home, may be struggling with parents who are _____, all the dysfunction that goes on sometimes when economics start to break down in a household, divorce. I know a child that last week is living with his stepfather. The mother and father are not together, the mother and stepfather are not together, but the child is with the

stepfather…How do you address academics when children are engaged in that kind of emotional banking and anchoring?

One superintendent shared the academic and financial challenges experienced by the district as new families, from a neighboring district perceived as inferior, began attending the district.

> We have probably the second if not the highest [number of] students with special needs. We have parents who have been moving into this area from [the] Detroit area because they think that the special education programming is going to be better, which [places] another extra burden on our district. We have landlords who offer specials that would allow people to move in, they get enrolled [and] they have multiple families in the homes. I value the fact that they see this as an opportunity, and an opportunity of hope, so to speak, for the education of their children, but no one truly gets the financial burden that falls upon the district, because when you have children that are having greater needs, they require greater interventions, which requires more money.

A combination of factors may be occurring as another superintendent spoke of losing resident students to other public schools while simultaneously attracting students with greater needs from outside the county:

> We have a total loss of 2,300 kids over the past 12 years, and there are 1,800 kids that live in our community, but do not attend our schools. They are school-of-choice students of other X County districts. So it has had a tremendous impact, and what has happened is the perception of the school district has now become one of, not a very quality school district because of the demographic shift. We border Eight Mile, so we are getting students from Detroit… Parents are bringing

> kids to X because they want better for their kids, but they are coming from underperforming schools in the city of Detroit, charters, publics, and we are getting kids that are three and four and five years below grade level, so it has had a significant impact on the district.

One superintendent spoke directly about the needs of students coming from impoverished families, a situation made more heartbreaking when compared side by side with more affluent students.

> The reading and/or fluency of kids who enter schools that come from poverty are definitely much lower than a kid that comes from an affluent district. Their vocabulary is ten times what a child from an impoverished family would be. Meaning that child has had experiences, probably has gone on camping trips, probably is being read to several times, sung to, has been in a variety of activities even with family, family activities that were learning activities, science center trips, etc. where in some cases children from poverty have not been to the zoo until the school took them to the zoo. They have not been to the science center until the school took them to the science center.

A second superintendent noted the compounding challenges of student poverty when coupled with state requirements and assessments: “There are lots of things going on at the state [level] that are a huge disadvantage for working with high-poverty kids.”

Staff’s skills in supporting the changing population of students. Superintendents were highly focused and appropriately concerned about their district’s ability to meet student needs. Their unease was supported by research which identified concerns related to the educational opportunities in districts in a choice environment. While choice was thought to benefit the choosers, the cost of the benefits for these individuals was the erosion of the educational

environment in the districts they left behind (Bifulco et al., 2009; Carlson et al., 2011). The erosion includes issues such as reduced district revenues and an increase in the population of high-needs students, including students in poverty. Research has identified successful strategies to support vulnerable students, with much of the work around the softer skills of building relationships. For example, Warren (2013) studied four teachers who were identified by both administrators and students as exceptional. They found that each of these highly successful teachers used a variety of strategies to understand students' perspectives and offer empathy. From the students' perspectives, these teachers took more time to learn about each of the students, created a community context for classroom work, provided time for student expression, and leveraged prior knowledge on successful student-management strategies such as maintaining a calm voice. Empathy was displayed through behaviors such as showing concern for the whole student, correlating the classroom behaviors and expectations to that of a family, and being more flexible and available with time for students.

Superintendents shared the challenges their districts encountered as they began to assess the staff's level of skill in the instructional strategies required to support the changes in student needs. The superintendents' conversations suggested that districts were slow to understand the new skill sets that were required of teachers. Describing the process of accepting the need for change, one superintendent noted, "The paradigm shift is so huge to make the staff understand we are not educating the kids that we had 25 years ago, and unfortunately everybody wants to go back."

Another superintendent discussed the process by which the staff began to realize their need to change as they discovered their previously successful strategies were no longer successful.

> What happened with the staff is they did not realize they needed to change. They were used to being a school that was very, very high achieving and now they had students _____, and they had to do more to help make up, they had to work harder to get to that higher student achievement. They were doing the same things and they were not seeing the same results anymore because the students had a different set of needs and they did not recognize that at first. They did not recognize that they had to make a change, they had to figure out how to scaffold learning differently, they had to figure out if they come into second grade and they do not know certain things, we have to back up and make sure they can read. We cannot just go second grade stuff, so that was a big "aha" for them.

One superintendent described the staff's initial misconceptions and subsequent growth while working with students from other cultures.

> I think one of the neatest things we have learned collectively as a team is [that] families who come to us without the ability to speak English can often be discriminated against as though they are not intelligent. I have met so many parents who do not speak English, who are electrical engineers, and they are doctors, and they are professionals, but given that language barrier, for some your first reaction to them is [thinking that] they need help in all the wrong ways… It was probably more of a factor earlier when the influx started and we have really tried to focus on improving our cultural awareness of those kinds of situations.

In some cases, concerns extended to staff's willingness to change for reasons such as fear of failure, and difficulty in accepting change and bias. One superintendent articulated the mindset of some staff members:

> The perception of many staff members [is that] yes, kids are not the same; yes, there has been a change; yes, it is not my problem, it is their problem. I am doing what I was taught and how I was taught and in many cases it is not working with the children here. It is a whole different type of child.

A second superintendent's comments hinted of a bias by some staff toward schools-of-choice students.

> Often they come in with deficits. Often the family structures are not as supportive of education as our X families are. Some of that is because we have [a] greater percentage of African-American students through choice than through attendance area enrollment… There are more tardies. It is the staff's perception of choice students. Some of that is reality. You drive farther; chances are more likely you are going to get stuck. Some of that bleeds over into questions about whether or not different ethnic groups have a problem getting to school on time versus other ethnic groups.

Another superintendent talked about experiencing significant changes in the racial/ethnic make-up of the student population without similar changes at the staff level. In sharing the conversation the superintendent had with staff, the superintendent's concern of potential staff bias is clear.

> You must be open to change, you must really believe that there's a possibility that all children can learn. Okay, I'm telling you they all can learn, but you need to at least believe that there is some truth in that. You can't believe that these children can't learn because … if you are looking for other children they are not here.

One district experienced an unintended benefit during negotiations of salary concessions. As teachers with 5 to 10 years of experience left for higher-paying districts, the vacant positions

created an opportunity to hire new teachers from charter schools and urban schools who "get our kids. They have experience; they know how to teach our kids."

Despite concerns about some staff members' willingness or ability to change, the vast majority of staff members were believed to be ready to make the changes needed to help their students but wanted more tools for their toolbox, as noted by a superintendent.

> I think that there is a desire to help everyone and a desire to help all students achieve. There is a slow recognition that the kids that are walking through the door today are very different than a decade ago or even 5 years ago, but our toolkit needs to be expanded and sharpened quite a bit to deal with some of their needs. I think they are open for the most part.

Several superintendents discussed the impact of state requirements, assessments, and ratings on the district through the process of change. Despite the frustrations often articulated about the state's interactions with districts, superintendents' comments suggested that the accountability measures were having an impact on the districts' work. Priority school status catapulted a district into intensive staff training in areas such as Classroom Instruction that Works, Professional Learning Communities, implementing block scheduling at the high school, and understanding and owning the data for their students. The superintendent noted that teachers were engaged in the work but also shared the need to have serious conversations with some staff members who may not be able to make the necessary changes. Interestingly, another superintendent saw the positive value of one of the district's schools becoming a priority school: "While I hate having one particular school identified as a priority school, it does force you to look at yourself; it forces you to say what we need to do differently. It gives you that sense of urgency." The superintendent talked about developing an understanding of the need to change

expectations at the district level in addition to the work of classroom teachers, such as giving teachers more flexibility to deviate from pacing guides when students needed more time and instruction. Another superintendent also talked about how outside accountability can be a catalyst for needed change:

> We have done a lot of work in the district around biases, about differentiation, culture, meeting the needs of the children, embracing Charlotte Danielson the learning environment, all those various things to help support, but still sometimes the change does not happen intrinsically on their own until there is the monitoring and the outside accountability … Most teachers go to school, secondary level in particular, they may take two methods courses. The rest of it is content. But here you are teaching children who need much more. They need your content, but you will not be able to disseminate any content or teach that content until they know, especially children of color oftentimes, [until they are] very anchored in making sure before I receive what you have to give, I need to know that you care about me.

However, despite the recurring acknowledgement of the work needed at the district level, frustration with the state was clearly evident by one superintendent when responding to the changing requirements of the staff's work:

> It has changed, but not because of schools of choice. Because of poverty, and because of the increased testing, assessment, state standards, jump through every hoop, jumping to M-Step, ACT to SAT. Yes, the work has changed because in all honesty, we are just chasing targets now. The work has changed because of those reasons, not because of school of choice, because they are just kids.

Another superintendent identified three significant impacts on instructional practices due to changing demographics, including language acquisition and remediation for English Language learning students; reluctance by many parents to participate in their children's education, which the superintendent noted has "been the story in education for years but it gets compounded here when you pile onto the equation language barriers, poverty and other things"; and differentiated instruction. Parental involvement resonated with another superintendent who looked for greater empathy for parents whose time and attention must often be focused on keeping their families safe, housed, and fed:

> I think it is just the nature of our community. We have parents that work three jobs to support their families. We have grandparents raising children... So they don't have time to come to the schools. They don't have time to get involved. If the child comes home happy, the parent is happy, we never hear from them. But I think as educators we look at that as [if] they do not care. Well they do care, but they have to care about their basic needs and their survival before they can care about what we are doing.

Community's reaction to changing demographics. A challenge discussed by several superintendents was managing community perception and support as the student population became more racially/ethnically diverse and no longer mirrored the racial/ethnic make-up of the community. One superintendent reflected that in the past, the district had more of a balance in the racial/ethnic make-up between the district and the community; however, recently that changed and the community remained primarily White, while the majority of the student population became a combination of minorities, primarily African Americans. The superintendent described the tension these changes created:

> More of our White students were going to other schools and our Black students were walking downtown to go home and the perception was very bad that the high school, in this case, it's like an all-Black high school and they are coming downtown, and they are making trouble and they are bringing in kids from Detroit who are Black so they must also be trouble too, and it was a real problem. It did change how the community viewed our kids… One of the things that we have had to work on with the community is we had to go out to our downtown development authority and meet with the business owners and tell them how wonderful our kids are and that we have students who have needs and we really need their support in helping them. We are trying to work that relationship to improve their perception.

The superintendent noted that efforts to enhance community support were working, using as an example a community group reaching out to provide resources for a student field trip, an offer the superintendent suspected would not have occurred without the district's efforts to rebuild community support. The second superintendent talked about the district's experiences with the community as the demographics of the student population were changing.

> We went through a period of time where the community was angry, especially the community leaders from the mayor down to the city manager, the fire department, and the police department. Why did you let those kids in? They have caused us problems; we do not want those _____. They made ordinances; all of a sudden we have an ordinance now the kids cannot walk in the street, because kids would walk in gangs. Community members see these kids walking home, they call the police. They think there is going to be a riot because there are 15 African-American kids walking down the street.

The superintendent noted that many retirees still lived in the district and wanted the community to remain as it was in the past. As evidence of the nostalgia, the superintendent noted that the school board currently had only one African-American board member, and no minority candidates ran for the position of mayor or the councilmember in the most recent election. Instead of a diverse candidate pool, the superintendent noted that candidates were "third- and fourth-generation kids running for these positions." Despite these challenges, the superintendent was proud to describe a partnership with an all-Black group of pastors from the community who were supporting the district and helping to have the "courageous conversations about race." These efforts were coupled with work to gain community support with enhanced communications through social media about the positive work of students and staff and by involving students in community activities.

One superintendent's comments alluded to the differences in how neighborhoods were affected by changing demographics and the influence the impact created on their understanding and support for the district.

> It is striking [the] lack of awareness depending on where you live. If you live on the north end of our community that has not seen significant change, you do not believe it. You think that everybody that is from a family of poverty or maybe from a family of color really hasn't moved in to the district or that they are sneaking in or there is something not quite right. If you live in the south, particularly that southeast corner that has gone through some really dramatic change, you realize this is a whole different community than existed there a decade ago.

Emphasizing the impact of choice on the erosion of the local neighborhood, one superintendent noted that students living in the homes around the high school attended charter schools or schools in other districts, lamenting "there isn't a community school anymore."

As expected, academic challenges within a district also influenced the support of the community. One superintendent discussed the academic challenges the district was facing and the mixed perspectives of community members:

> Currently our secondary population is the most problematic; K-8 tends to be pretty good. There is a lot of shaking up that needs to happen. I will say in X we have two factions; one is homeowners who live and have residences [here]. The majority of our homeowners do not have children in X public schools, so their perception is going to be a little bit different. They are going off of what X used to be when their kids were here. Then you have another group of residents who have a perception coming off of a whole different kind of value anchoring.

Some superintendents' comments were specific to schools-of-choice students. They shared perceptions from some within their district that nonresident students entering the district through schools of choice were not of equal character to resident students. One superintendent found that people in the district were erroneously attributing discipline issues to schools-of-choice students. Another superintendent noted, "There are people who wonder about those kids being in our schools, and those kids they refer to very often are not choice kids. There is a presumption that they are choice kids." A third superintendent gathered data to help convince the school community of the quality of students attending the district through schools of choice:

> We did an informal study a few years ago and we found that our schools-of-choice students perform at the same level as our kids if not better in some cases, because of the expectations their parents have for an education.

Another superintendent, noting that "school of choice is understood in this community to be not an answer to excess capacity, but a management strategy for the capacity we have," discussed the community's challenging of schools of choice in the district and the resulting decline in the district's level of participation.

> We tried schools of choice: wide open Wild West. That blew up. We found that the community would not support a bond issue to maintain capacity that was being filled by choice students. Turnover of superintendents: choice is now restricted in X, and we dealt with our capacity issue by closing buildings [and] doing a dramatic reorganization of the district. Now our choice is K-3 unlimited, very select, targeted seats in grades 4-8 that are approved on a year-to-year basis, [and] no schools of choice grades 9 through 12. There was a story around changing demographics because of choice. There was a reaction to that, and then to where we are now with a different style of choice….We use choice to backfill enrollment.

One superintendent described the ambivalence of families to the changing demographics and achievement levels within the district.

> What I am hearing really loudly and clearly are [sic] that people in this area want to be proud of their school district again and they are not quite sure they can because the student achievement story has changed a little bit because of demographics. The look of the community has changed and they are not quite sure how to understand; is that an okay thing for a community to be this diverse multicultural, multiracial place where in the past

> it has been predominantly majority upper-middle class? They are coming to grips with that.…There is this sense of wanting to be inclusive and wanting to create a real multicultural diverse community, and yet there is a sense of loss too that people are coming to grips with because this isn't the X that they grew up in. And yet they stay, they want their kids to come back here and raise their kids, and when that doesn't happen they blame the school system because we are not achieving well enough and we are not providing what they want, and yet I think they are not coming here because they can't find the kind of life they grew up in.

A chilling conclusion to discussions on the changing demographics and increased diversity came from a superintendent sharing a global perspective:

> Given our history with the '67 riots and the racial division that exists here, race is a significant factor in perception, especially in this part of town. And if you go to any of the outer ring suburbs that I mentioned, race is front and center to many people's perceptions about things… It doesn't go away, ever.

District finances. Concerns about district finances include reduced revenues from declining enrollment and increased costs to educate students with greater needs. From a revenue perspective, Michigan's public school-district funding formula allocates revenue based on student enrollment; therefore, in addition to lower school age student populations within a district, choice competition has a direct effect on school-district finances (Arsen & Ni, 2012; Bifluco & Reback, 2014; Carlson et al., 2011; Ni, 2009; Pennsylvania School Boards Association, 2014). The loss of students to charter schools takes funding away from traditional public school districts, while schools of choice creates winners and losers by shifting dollars from one traditional public school to another. A review of Table 4, which presents the percent

net change from schools of choice and loss to charter schools, shows that choice is having a significant impact on districts in Macomb and Oakland Counties. The mean net percentage loss of students increased by more than 200% from 2009/10 through 2013/14, while the district with the greatest percentage loss of students to choice was at 135% of enrollment in 2013/14.

Student demographics may also affect choice decisions and therefore the finances of the school district. High levels of poverty place districts at greater risk of student loss to choice. This occurs through increased charter school competition, as charter school operators look for favorable sites to locate new schools (Lubienski et al., 2009; Ni & Arsen, 2011). The risk of student loss from schools of choice, however, is mixed, with some studies finding students leave districts with poorer student populations at a lower rate than districts with wealthier student populations (Bifulco et al., 2009; Carlson et al., 2011), whereas other research found that families attempt to move students into districts with higher socioeconomic student populations (Holme & Richards, 2009; Koedel et al., 2009; Ni & Arsen, 2011; Reback, 2008). Tables 32 and 34 analyze the impact of choice on Macomb and Oakland County districts based on student poverty and diversity levels. In 2009/10 and 2013/14, districts with high rates of poverty experienced a significantly greater negative choice impact than districts with both low and moderate rates, while in 2013/14, districts with high levels of diversity experienced a significantly greater negative choice impact than districts with low levels.

Given the interaction between district revenues, enrollment, student demographics, and criteria for choice decisions, school districts must balance the need to generate additional revenue with their community's perceptions of schools of choice. Several superintendents talked about their experiences. One superintendent shared the challenges encountered as a district that was perceived to be of lower quality. The superintendent discussed an unsuccessful attempt to

mitigate enrollment decline through acceptance of in-county schools-of-choice students, followed by a reluctant but successful decision to accept out-of-county schools-of-choice students.

> When you are not increasing your revenue, but you are expending more than you were, inevitably you are going to go into a deficit, so then the only way to get yourself out of it is through enrollment, because you can't cut your way out, it's too huge.…The board decided let's just open to X County but people are not coming in from X County. They are not choosing my district because of its location. There are four districts that border Eight Mile, and we are all struggling with the same thing. So three years ago, I made a recommendation that if we really want to increase enrollment we have to look outside of this community, because people were illegally trying to get the kids enrolled into our district. We were the first district in the county… that is open to Wayne, X, Lapeer, and St. Clair Counties. It was a successful campaign for us; every year we are netting 200 kids and it has really gotten us out of our debt.

While discussing the process of educating the community on the financial necessity of participating in schools of choice, another superintendent conveyed the negative sentiment within the district for this program.

> If we did not have 1,500 choice students here, they wouldn't be supplanting those students who have gone elsewhere either through a transient situation like the loss of a job or their choice to go to X or some other district. We have taken the innocence out of it for a lot of people to just say we do not want them here because they are not ready or able to embrace the consequence. It is 1,000 kids, that [is] $9 million.

The increased demand for resources due to changing demographics was also an area of focus by some superintendents. One superintendent commented on the increased number of students who are eligible for Title 1 services and "the challenges that go with that," while another superintendent found "a greater percentage of resources being allocated to our neediest students because the population is growing." A third superintendent attributed the number of apartment complexes within the district to the turnover of approximately one third of the high school population, noting, "That does require more money to support interventions."

Summary of interviews. Interviews with seven superintendents within the 49 districts in Macomb and Oakland Counties used in this study provided perceptions by the superintendents that the demographics in the districts changed considerably and the students who attend the schools today have different and greater needs than the student populations of the past. The perceived, relatively quick, and significant change in student demographics appeared somewhat unexpected by the superintendents, the staff, and the communities. Superintendents discussed their current efforts to help staff members master new skills and embrace diverse cultures, revealing that districts were not fully prepared for the change in student needs prior to the changes and as the changes were first occurring. A number of superintendents also noted that changes in the student demographics were occurring while the overall community was experiencing far less demographic change, and this difference resulted in an erosion of the community's support and perception of the quality of the local schools. Finally, district finances were a concern to superintendents, with discussions around the loss of funding related to lower enrollments coupled with higher costs to educate the population of students with greater needs. Superintendents also discussed the opportunities to generate additional revenue through schools of choice.

Conclusion. Chapter Four provides data to answer the three research questions contained in this study. The inferential statistics presented earlier in this chapter answer the quantitative portions of this study, including Research Question One: Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity? Null Hypothesis One—There will be no difference in finances between districts that experience a greater negative choice impact than districts that experience a lesser negative choice impact—was accepted for both 2009/10 and 2013/14. Null Hypothesis Two—There will be no difference in finances between districts with greater concentrations of student poverty than districts with lesser concentrations of student poverty—was rejected in 2009/10 and accepted for 2013/14. Null Hypothesis Three—There will be no difference in finances between districts with greater concentrations of student diversity than districts with lesser concentrations of student diversity—was rejected in 2009/10 and accepted in 2013/14.

The test for statistical significance related to Research Question Two—Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations—resulted in the rejection of Null Hypothesis One: There is no relationship between choice impact and the socioeconomic concentration of student populations for both 2009/10 and 2013/14. However, Null Hypothesis Two—There is no relationship between choice impact and the racial/ethnic concentration of student populations—was accepted for 2009/10 and rejected for 2013/14.

The summary of the interviews with seven superintendents in Macomb and Oakland Counties provide the information needed to address Research Question Three: What are superintendents' perceptions of the impact of choice on the changing student demographics

within the district? The interviews provided a rich description of the perceptions of these superintendents around the changing demographics within their districts as well as their perceptions of their staff's and community's thoughts and beliefs on student demographic changes. Meeting the needs of students, maintaining community support, and managing the district budget weighed heavily on the superintendents interviewed for this study.

The interviews of the seven superintendents within the 49 traditional public school districts in Macomb and Oakland Counties, coupled with the inferential statistics presented earlier in the chapter, provided the data to address the three questions identified for analysis in this study. Chapter Five will provide the summary, conclusions, and recommendations based on these findings.

Chapter Five: Summary, Conclusions, and Recommendations

This research examined Michigan's policy on choice, investigating the effects of choice on 49 traditional public school districts located in two Michigan intermediate school districts. This study focused on how the net change in enrollment from schools of choice and loss of enrollment to charter schools influenced finances and student demographic mix by race/ethnicity and socioeconomic concentrations, as well as perceptions of changes in the demographic mix in the traditional public school districts within the two counties.

A mixed-methods research design using data from publicly available databases was used in this study. The variables that were collected included the percentage of net change in enrollment due to schools of choice and loss of enrollment to charter schools (in groups); poverty (in groups); diversity (in groups); per-pupil General Fund total revenues; per-pupil General Fund total expenditures; per-pupil foundation allowance; per-pupil Title 1, Part A, funding; per-pupil At-Risk 31a funding; per-pupil General Fund fixed expenditures; General Fund - fund balance as a percentage of total revenues; Standards and Poor's credit ratings; and Standard and Poor's change in credit outlook. In addition, face-to-face, semi-structured interviews were conducted with seven superintendents of the school districts included in this study.

Findings and Discussion

Three research questions were developed for this study. The first two questions were addressed using inferential statistical analyses, with all decisions on the statistical significance made using a criterion alpha level of .05. For Question One, separate one-way multivariate analyses of variance (MANOVA), one-way analysis of variance (ANOVA), and chi-square test for independence were used to compare financial data points for each of the three independent

variables: percentage of net gain or loss of enrollment from schools of choice and loss to charter schools, percentage of economically disadvantaged students, and percentage of minority students. The null hypothesis in Research Question One was rejected if the majority of the financial factors were found to be statistically significant. To answer Question Two, one-way ANOVA was used. The third research question presented a summary of the interview responses from the superintendents.

Research Question One. Are the finances in districts with greater concentrations of student poverty and diversity more affected by choice than districts with lesser concentrations of student poverty and diversity? The null hypotheses are as follows:

1. There will be no difference in finances between districts that experience a greater negative choice impact than districts that experience a lesser negative choice impact. The null hypothesis was accepted for both 2009/10 and 2013/14.
2. There will be no difference in finances between districts with greater concentrations of student poverty than districts with lesser concentrations of student poverty. The null hypothesis was rejected for 2009/10 and accepted for 2013/14.
3. There will be no difference in finances between districts with greater concentrations of student diversity than districts with lesser concentrations of student diversity. The null hypothesis was rejected for 2009/10 and accepted for 2013/14.

***Discussion of statistical significance*.** Testing the eight financial variables against the three independent variables of percentages of net choice, percentage of poverty, and percentage of diversity for both 2009/10 and 2013/14 yielded statistically significant findings limited to the 2009/10 fiscal year and to the independent variables of poverty and diversity. Specifically, the results of the testing determined that in 2009/10, finances in districts with greater concentrations

of student poverty and student diversity were statistically different from districts with lesser concentrations of student poverty and diversity. In order to understand the results, a discussion on the eight financial variables follows.

Statistically significant findings: 2009/10 poverty and diversity. Per-pupil total revenues were statistically significant when compared to student poverty; however, there was no statistical significance between districts with low, moderate, and high levels of poverty. This contrasts with the findings when comparing per-pupil total revenues to student diversity where moderate- and high-diversity districts had statistically higher funding than low-diversity districts. Given that districts with more vulnerable student populations receive additional state and federal grant dollars to serve the greater needs of their vulnerable populations, it is somewhat surprising that per-pupil total revenues for high-poverty districts is not significant in comparison to the low- or moderate-poverty districts. This may indicate that the additional state and federal funding to help students in poverty was insufficient to provide a greater level of overall support for districts with greater concentrations of student poverty.

The findings for per-pupil foundation allowance showed no statistical significance based on the level of district poverty; however, districts with moderate levels of diversity received statistically higher per-pupil foundation allowances than those with low levels of diversity. Given the foundation allowance originated from a district's combination of the tax base and taxpayer support for millages back in 1994/95 when Proposal A was developed, the difference in foundation allowance could be a relationship between districts with higher concentrations of businesses, and therefore greater tax bases, having more student diversity. This does not explain why districts with high levels of diversity did not also receive statistically higher per-pupil foundation allowances than districts with low levels of diversity.

When focusing on per pupil Title 1, Part A, and At Risk 31a revenues, districts with high levels of poverty and diversity received statistically greater revenues than districts with low and moderate levels of poverty and diversity. This was expected, given these grant dollars are targeted to high-needs populations.

Per-pupil total expenditures for districts with high poverty levels were statistically higher than those for districts with moderate poverty levels but, perhaps surprisingly, not statistically higher than districts with low poverty levels. When comparing per-pupil total expenditures with student diversity, districts with high and moderate levels of diversity spend statistically more than those with low levels.

Per-pupil fixed expenditures were higher for districts with high levels of poverty than for districts with moderate levels, and for districts with high levels of diversity compared to those with low levels, indicating less flexibility in making reductions to expenditures. When coupling the fixed expenditure finding for poorer districts with the results of Research Question Two, which showed that poorer districts experienced greater losses of enrollment from choice in 2009/10, the finding is consistent with Bifulco and Reback (2014), who delineated expenditures as either fixed or variable, and found that the level of fixed expenditures inhibited districts experiencing enrollment losses from reducing expenditures equal to the loss in revenues while still maintaining quality of service.

Fund balance as a percentage of revenues was statistically lower for districts with high levels of poverty and high levels of diversity. When again coupling the fund balance finding for high-poverty districts with the results from Research Question Two, which showed that the highest-poverty districts experienced greater losses of enrollment from choice in 2009/10, the

finding is consistent with Arsen and Ni (2012), who found districts subject to higher enrollment competition experienced significant fund balance reductions.

Standard and Poor's credit ratings of districts with high levels of poverty and diversity were not statistically significant, which is somewhat surprising, as it would be expected that the ratings would mirror the fund balance findings. Standard and Poor's change in credit rating outlook showed that districts with higher levels of poverty and diversity are more likely to have a negative credit outlook, which is consistent with the fund balance findings.

No statistical significance: 2013/14 poverty and diversity. Two significant modifications in funding occurred that might be partially responsible for the change in statistical significance of district finances when compared to district poverty and district diversity between 2009/10 and 2013/14. In 2009/10 those districts that were entitled to Title 1, Part A, funding received a significant supplemental payment through the American Recovery and Reinvestment Act. This was a one-time benefit; therefore, districts receiving Title 1, Part A, funding in 2013/14 received substantially less. Additionally, in 2011/12 districts across Michigan received a permanent $470 reduction in their per-pupil foundation allowance. All districts felt the impact of this reduction as they attempted to bring expenditures in line with a new, reduced revenue base. It is interesting to note that while the findings between poverty and diversity with each of the financial data points were very similar in 2009/10, there were more differences in 2013/14, as the intervening years seemed to affect high-poverty and high-diversity districts differently. While districts with high levels of poverty and diversity continued to receive statistically greater Title 1, Part A, and At Risk 31a funding in 2013/14, districts with high and moderate levels of diversity had significantly higher per-pupil total revenues and expenditures than districts with low levels of diversity, and districts with moderate levels of diversity had significantly higher foundation

allowances than districts with low levels of diversity. In contrast, findings for districts with high poverty rates showed statistically lower fund balances as a percentage of revenues and lower Standard and Poor's credit ratings than districts with low poverty rates for 2013/14.

No statistical significance: 2009/10 and 2013/14 choice. While there was no statistical difference in finances between districts that experience a greater negative choice impact than districts that experience a lesser negative choice impact in 2009/10 and 2013/14 using the statistical significance of the majority of financial data points in making this decision, it should be noted that the number of statistically significant financial data points doubled from 2009/10 to 2013/14. This increase in statistically significant factors is driven by an erosion of Standard and Poor's credit rating and Standard and Poor's change in credit rating outlook for districts with net losses from choice.

In both 2009/10 and 2013/14, total revenues and total expenditures were not significantly different based on district choice levels. The findings of no significance are unexpected and may be the result of calculating the revenues on a per-pupil basis instead of on a total revenue basis. Differences on a total revenue basis by choice levels would be expected, as net loss districts under Michigan's funding formula would lose 100% of the foundation allowance for every student lost to choice, while net gain districts would gain 100% of the foundation allowance for every student gained through choice. Additionally, findings within this study contrast with Arsen and Ni's (2012) research that finds the loss of students to charter schools exposes districts to a significant negative impact on revenues without a corresponding reduction in expenditures.

In both 2009/10 and 2013/14, fund balance as a percentage of total revenues is statistically significant, with significantly lower fund balances in districts that experienced a net loss from choice than fund balances in districts that experienced a net gain or small net gain/loss

from choice. These findings are consistent with Arsen and Ni's (2012) research noted previously in relation to fund balance in poverty and diversity districts.

Discussion through an alternative lens. Two additional considerations warrant discussion in addressing Research Question One. First, when looking at the eight financial variables, two groupings emerge. The first four financial variables of per-pupil total revenues, per-pupil total expenditures, per-pupil foundation allowance, and per-pupil Title 1, Part A, and At Risk 31a revenues indicate resource availability of the districts. Of these four resource availability variables, per-pupil total revenues is arguably the most important, as revenues are expected to be the driver of expenditures, and the two remaining revenue variables are simply a subset of total revenues.

The remaining four financial variables of per-pupil fixed expenditures, fund balance as a percentage of total revenues, Standard and Poor's credit rating, and Standard and Poor's change in credit outlook indicate the financial stability of the districts. Of these four financial stability variables, fund balance as a percentage of total revenues arguably is the most important, in large part because this is a variable noted in the state early warning legislation as an indicator of fiscal distress and potential state intervention. Additionally, the percentage of fixed expenditures suggests only the level of pressure that fund balance will experience during budget reductions, and the two Standard and Poor's variables are both driven largely by a district's fund balance.

This first consideration therefore suggests that all eight financial variables may not be equal. Instead, greater scrutiny of the most important resource availability variable (per-pupil total revenues) and financial stability variable (fund balance as a percentage of total revenues) are warranted.

The second consideration requires greater introspection of the results one would hope for when testing the significance of financial variables on vulnerable populations. Understanding the greater needs of vulnerable populations, desired results from this testing would include the four resource availability variables, particularly the most important of these four—per-pupil total revenues—to show a statistically greater benefit to these populations. Specifically, desired results would show that districts with high negative net choice and high levels of poverty and diversity receive significantly more funding than districts with low and moderate levels of vulnerable student populations.

In contrast, when looking at the four financial stability variables, particularly the most important of these four—fund balance as a percentage of total revenues—no statistical difference in financial stability findings for vulnerable districts would be desired in comparison to their peers with less vulnerable populations. Specifically, desired results would show that districts with high negative net choice and high levels of poverty and diversity had no statistically significant difference in the financial stability variables from districts with low and moderate levels of vulnerable student populations.

When examining the results of the financial variable testing through the lens of greater sensitivity and support for vulnerable populations, concern emerges. Per-pupil total revenues are not statistically greater for districts with high negative net choice and high levels of poverty than for their low and moderate district counterparts in both 2009/10 and 2013/14. However, districts with high and moderate diversity levels were statistically higher-funded than districts with low diversity levels in both 2009/10 and 2013/14. These findings indicate that for both 2009/10 and 2013/14, high negative net choice districts and high-poverty districts are not receiving the greater

funds necessary to support their highly vulnerable student populations, whereas districts with high levels of diversity are receiving more funding.

Fund balance as a percentage of total revenues was statistically lower for districts that experienced a net loss from choice than those that experienced a net gain or a small net gain/loss in both 2009/10 and 2013/14. Fund balance as a percentage of total revenues was statistically lower for high-poverty districts than low- and moderate-poverty districts in 2009/10 and low-poverty districts in 2013/14. Fund balance as a percentage of revenues was statistically lower for high-diversity districts than for low- and moderate-diversity districts in 2009/10 and not statistically significant in 2013/14. These findings indicate that in 2009/10, districts with high levels of negative net choice, poverty, and diversity were all experiencing significantly greater financial distress than their low- and moderate-level district counterparts. By 2013/14, districts with high negative net choice and high poverty still experienced greater financial distress, while districts with high diversity levels were no longer statistically different from districts with low and moderate levels of diversity.

Through this lens of providing support for vulnerable student populations in areas of resource availability, as evidenced by per-pupil total revenues, and financial stability, as evidenced by fund balance as a percentage of total revenues, in 2009/10 districts with high negative net choice, high poverty, and high diversity levels all experienced greater challenges. By 2013/14, districts with high levels of diversity were no longer facing challenges greater than their low and moderate counterparts. Districts with high negative net choice and high poverty levels continued in 2013/14 to have significant resource availability and financial stability challenges.

Research Question Two. Is there a relationship between choice impact and the socioeconomic and racial/ethnic concentration of student populations? The null hypotheses are as follows:

1. There is no relationship between choice impact and the socioeconomic concentration of student populations. The null hypothesis was rejected for both 2009/10 and 2013/14.
2. There is no relationship between choice impact and the racial/ethnic concentration of student populations. The null hypothesis was accepted for 2009/10 and rejected for 2013/14.

Discussion. Districts with high levels of poverty and diversity that were already experiencing a net loss of students through choice in 2009/10 experienced an increased loss of students and erosion in the mean of an additional 82% and 153%, respectively, through 2013/14. Low-poverty and low-diversity districts continued to gain enrollment through choice, experiencing a small increase in the mean between 2009/10 and 2013/14. Districts with moderate levels of poverty and diversity lost students between these years, but remain at a mean much closer to the low-poverty and -diversity districts. There are ample studies to support the impact of choice on high-poverty and high-diversity districts. While some studies show academics (Carlson et al., 2009; Hastings et al., 2005; Ni, 2010; Reback, 2008; Spalding, 2013; Zeehandelaar & Northern, 2013), geography (Bell, 2009b; Bifulco et al., 2009; Carlson et al., 2011; Hastings et al., 2005), and district funding levels (Carlson et al., 2011; Ni & Arsen, 2011) as reasons for parental selection of schools, significant studies identify parental selection criteria favoring districts with lower concentrations of student poverty and diversity (Bifulco et al., 2009; Hastings et al., 2005; Holme & Richards, 2009; Koedel et al., 2009; Miron et al., 2010; Ni &

Arsen, 2011; Reeback, 2008; Spalding, 2013). When executed, these selection criteria then create greater segregation in the schools (Carlson et al., 2011; Holme & Richards, 2009). For example, Ni (2010) commented, "As more advantaged or moderately disadvantaged students tend to go to charter schools, and more low-income students return to TPSs, the severely disadvantaged students – low income students of color – become even more isolated in ineffective urban schools serving high percentages of low-income students of color" (p. 237).

Superintendents' interviews substantiated these findings. For example, one superintendent whose district borders the City of Detroit discussed the shift in demographics as students entered from Detroit and resident families began using schools of choice to attend neighboring districts. The superintendent further noted that the change in demographics resulted in the erosion of the district's reputation. Another superintendent described the demographic changes in the district with the resident White students going to other schools, resulting in the high school becoming "an all-Black high school." One superintendent stated concisely that choice increased the level of poverty in the district. Despite the challenges, some districts felt compelled to accept students to generate additional revenues.

Research Question Three. What are superintendents' perceptions of the impact of choice on the changing student demographics within the district?

***Discussion*.** Superintendents' interviews provided a deeper understanding of their perceptions related to the student demographic shifts within the district as well as their feedback on the staff's and community's perceptions. Provisional coding was used to identify and refine themes from the interviews, including changing student demographics, changing student needs, staff's skills in supporting the changing population of students, the community's reaction to changing demographics, and district finances. The single greatest level of feedback of

superintendents was related to the increased needs of the changing student populations and the work with staff to enhance their technical and soft skills. Comments described a change in demographics from relatively White, middle-class neighborhoods to districts that included greater socioeconomic and racial/ethnic diversity. Superintendents expressed a level of urgency in updating staff's skills, citing failures in meeting the needs of some students and diminishing community support. The superintendents' perceptions of the staff's understanding of the urgency was mostly favorable; however, there appeared to be resistance by a minority of staff members to accept responsibility for student learning for the new, needier student population.

Superintendents discussed cultures that sent mixed messages, welcoming of the new students by some, unwelcoming by others. Conversations describe work to assimilate students into the district culture, gain community and staff support for schools-of-choice students, and address real or perceived biases around schools-of-choice students' prior academic attainment and current needs. These biases, while directed at schools-of-choice students who are assumed to come from districts of inferior quality, sometimes expanded to include resident students who were assumed to be schools-of-choice students based on their race/ethnicity or socioeconomics. From a financial perspective, superintendents placed greater focus on the revenue that could be generated from schools of choice than on the revenue lost from resident students who chose to attend elsewhere. At the time of the interviews, the superintendents appeared driven by the immediate issues of meeting students' needs, enhancing staff's skills, maintaining community support, and balancing the budget.

Implications for Educational Leadership

The findings of this study identify numerous implications for educational leadership. Across the state, enrollment is declining while more students are living in poverty and student

populations are becoming more racially/ethnically diverse. For some districts, this demographic shift is exacerbated by Michigan's choice policy, which creates winners and losers for districts and the students they serve. Depending on where districts land on the win/loss spectrum, they may have different levels of resources that will affect their ability to provide programs and services. In addition, districts will likely serve populations of students with far different academic and emotional needs. This creates new importance in projecting student demographic trends to plan for the necessary technical and soft skills that will be needed by staff to support the anticipated student populations. Expanding cultural competency with staff and the larger community will be critical to maintain community support. Finally, budgets will continue to be stressed for the foreseeable future. Challenging work around developing priorities and gaining stakeholder support for changes will require significant leadership.

Significance of Findings

From a financial perspective, this study found that districts with high negative choice impact and high levels of poverty are not receiving the additional funding necessary to support their more vulnerable populations, and they have statistically lower fund balances, creating greater susceptibility to state interventions. From a choice impact, this study found that districts with more poverty and diversity experienced greater negative choice impact.

Choice options continue to grow in public education, and Michigan is a leader in this area, with policymakers seemingly open to continued expansion. While there has been significant debate related to how choice affects those who choose an alternate educational venue, discussions related to the students who remain in their resident district has received far less attention. With the majority of school-aged students enrolled in traditional public schools, ample research indicating that segregation of students by race and class is expanding, and the increased

needs of high concentrations of at-risk students, it is critical for research to continue to pursue the impact of choice on traditional public schools and the students they educate. The findings of this study advance the understanding of this area while also suggesting opportunities for additional research.

Recommendations for Future Research

Research using a larger sample size would provide greater delineation and refinement of levels of choice, poverty, and diversity that could either validate or challenge the findings within this study. Given the contrary outcomes for district poverty versus district diversity, greater delineation of the diversity groups could determine whether differences exist between high diversity/high poverty and high diversity/low poverty districts. Interesting trends may also emerge if choice is separated based on educational level, elementary and secondary.

Additionally, while the financial integrity of districts is important, certainly of greatest importance is academic achievement. The information contained in the superintendents' interviews suggests the need for more research that evaluates the consequences of choice and the concentrations of student poverty and diversity on academic achievement. Their comments further suggest a need to study the impact that distressed districts have on the viability of neighborhoods.

In concluding this report, readers are encouraged to contemplate the comments of superintendents who described the changing demographics within their districts with increased stratification by race and class and greater concentrations of high-needs students, and their heavy burden suspecting they were not meeting many of their students' needs. While it appears that as a state we have acquiesced to the existence of robust choice options, we remain morally obligated to ensure that all students have an opportunity for an adequate public education. The research and findings contained in this study indicate that we may be falling short.

References

Alexander, K. (2012). Asymmetric information, parental choice, vouchers, charter schools and Stiglitz. *Journal of Education Finance*, *38*(2), 170-176. doi: 10.1353/jef.2012.0016

Arsen, D., & Ni, Y. (2008). The competitive effect of school choice policies on performance in traditional public schools. *Education and the Public Interest Center*. Retrieved from http://nepc.colorado.edu/publication/the-competitive-effect-school-choice-policies-performance-traditional-public-schools

Arsen, D., & Ni, Y. (2012). The effects of charter school competition on school district resource allocation. *Educational Administration Quarterly*, *48*(1), 3-38. doi: 10.1177/0013161X11419654

Baker, B. D., Libby, K., & Wiley, K. (2012). Spending by the major charter management organizations: Comparing charter school and local public district financial resources in New York, Ohio, and Texas. *National Education Policy Center*. Retrieved from http://nepc.colorado.edu/publication/spending-major-charter

Bankstron III, C. L., Bonastia, C., Petrilli, M. J., Ravitch, D., Renzulli, L. A., & Paino, M. (2013, Summer). *Charter.* American Sociological Association. Retrieved from http://contexts.org/articles/charter-schools/.

Bell, C. A. (2009a). All choices created equal? The role of choice sets in the selection of schools. *Peabody Journal of Education*, *84*(2), 191-208. doi: 10.1080/01619560902810146

Bell, C. A. (2009b). Geography in parental choice. *American Journal of Education*, *115*(4), 493-521. doi: 10.1086/599779

Bifulco, R., Ladd, H. F., & Ross, S. L. (2009). The effects of public school choice on those left behind: Evidence from Durham, North Carolina. *Peabody Journal of Education*, *84*(2), 130-149. doi: 10.1080/01619560902810104

Bifulco, R., & Reback, R. (2014). Fiscal impacts of charter schools: Lessons from New York. *Education*, *9*(1), 86-107. doi: 10.1162/EDFP_a_00121

Booker, K., Gilpatric, S. M., Gronberg, T., & Jansen, D. (2008). The effect of charter schools on traditional public school students in Texas: Are children who stay behind left behind? *Journal of Urban Economics*, *64*(1), 123-145. doi: 10.1016/j.jue.2007.10.003

Bowman, K. L. (2013). State takeovers of school districts and related litigation: Michigan as a case study. *The Urban Lawyer*, *45*, 11-13. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2303857

Buddin, R. (2012). The impact of charter schools on public and private school enrollments. *Cato Institute Policy Analysis*, (707). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226597

Carlson, D., Lavery, L., & Witte, J. F. (2011). The determinants of interdistrict open enrollment flows evidence from two states. *Educational Evaluation and Policy Analysis*, *33*(1), 76-94. doi: 10.3102/0162373710388643

Center for Research on Education Outcomes (2013). *Charter school performance in Michigan*. Stanford, CA. Retrieved from http://credo.stanford.edu/pdfs/MI_report_2012_FINAL_1_11_2013_no_watermark.pdf

Diaz, V. (2008). Relationships between district size, socioeconomics, expenditures, and student achievement in Washington. *Rural Educator*, *29*(3), 30-39. Retrieved from http://www.ruraleducator.net/archive/29-3/29-3_Diaz.pdf

Dixon, J. (2014a, June 29). Michigan's assignment: Toughen charter laws. *Detroit Free Press.* Retrieved from http://archive.freep.com/article/20140629/NEWS06/306290103/charters-schools-solutions-Michigan

Dixon, J. (2014b, June 22). Michigan spends $1B on charter schools but fails to hold them accountable. *Detroit Free Press.* Retrieved from http://archive.freep.com/article/20140622/NEWS06/306220096/Michigan-charters-1-billion-taxpayer-dollars

English, F. W. (2014). *Educational leadership in the age of greed: A requiem for Res Publica*. Ypsilanti, MI: NCPEA Publications.

Finnigan, K. S., & Scarbrough, B. (2013). Defining (and denying) diversity through interdistrict choice. *Journal of School Choice*, *7*(2), 142-162. doi: 10.1080/15582159.2013.788958

Garcia, D. R. (2007). The impact of school choice on racial segregation in charter schools. *Educational Policy.* doi: 10.1177/0895904807310043

Garcia, D. R. (2008). Academic and racial segregation in charter schools: Do parents sort students into specialized charter schools? *Education and Urban Society*, *40*(5), 590-612. doi: 10.1177/0013124508316044

Godshall, S., & Hill, J. (1995). Michigan. In T. Mauhs-Pugh (Ed.), Charter Schools 1995: A survey and analysis of the laws and practices of the states. *Education Policy Analysis Archives, 3*(13). doi: 10.14507/epaa.v3n13.1995

Gulosino, C. A., & Lubienski, C. (2011). Schools' strategic responses to competition in segregated urban areas: Patterns in school locations in Metropolitan Detroit. *Education Policy Analysis Archives*, *19*, 13. doi: 10.14507/epaa.v19n13.2011

Hastings, J. S., Kane, T. J., & Staiger, D. O. (2005). *Parental preferences and school competition: Evidence from a public school choice program* (Working Paper w11805). Cambridge, MA: National Bureau of Economic Research. doi: 10.3386/w11805

Higgins, L. (2014, August 13). State board calls for an overhaul of charter school law. *Detroit Free Press*. Retrieved from http://archive.freep.com/article/20140812/NEWS06/308120092/michigan-board-charter-schools-vote

Higgins, L., & Tanner K. (2014, August 4). Concerns over charter school performance persist as more open in state. *Detroit Free Press*. Retrieved from http://archive.freep.com/article/20140626/NEWS06/306260052/charter-schools-michigan-performance-academics

Holme, J. J., & Richards, M. P. (2009). School choice and stratification in a regional context: Examining the role of inter-district choice. *Peabody Journal of Education*, *84*(2), 150-171. doi: 10.1080/01619560902810120

Hoxby, C. M., & Murarka, S. (2009). *Charter schools in New York City: Who enrolls and how they affect their students' achievement* (Working Paper No. w14852). Cambridge, MA: National Bureau of Economic Research. doi: 10.3386/w14852

Huerta, L., Rice, J. K. & Shafer, S. R (2014). Key policy issues in virtual schools: Finance and governance, instructional quality and teacher quality. In A. Molnar (Ed.), *Virtual schools in the U.S. 2014: Politics, performance, policy, and research evidence.* Boulder, CO: National Education Policy Center. Retrieved from http://nepc.colorado.edu/ files/virtual-2014-1-policy-final_0.pdf

Imberman, S. A. (2011). The effect of charter schools on achievement and behavior of public school students. *Journal of Public Economics*, *95*(7), 850-863. doi: 10.1016/j.jpubeco.2011.02.003

Izraeli, O., & Murphy, K. (2012). An analysis of Michigan charter schools: Enrollment, revenues, and expenditures. *Journal of Education Finance*, *37*(3), 234-266. Retrieved from http://muse.jhu.edu.ezproxy.emich.edu/journals/journal_of_education_finance/v037/37.3.izraeli.pdf

Jensen, E. (2009). *Teaching with poverty in mind*. Alexandria, VA: ASCD.

Jesse, D. (2014). Most Michigan charter companies don't follow financial disclosure law. *Detroit Free Press.* Retrieved from http://www.freep.com/article/20140622/NEWS06/306220104/

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14-26. doi: 10.3102/0013189X033007014

Jones, T. B., & Slate, J. R. (2010). The 65% instructional expenditure ratio and student achievement: Does money matter? *Current Issues in Education*, *13*(4). Retrieved from http://cie.asu.edu/

Koedel, C., Betts, J. R., Rice, L. A., & Zau, A. C. (2009). The integrating and segregating effects of school choice. *Peabody Journal of Education*, *84*(2), 110-129. doi: 10.1080/01619560902810096

Lacireno-Paquet, N., & Brantley, C. (2008). Who chooses schools, and why. *Education Policy Research Unit and the Education and the Public Interest Center, Arizona State University*. Retrieved http://www.greatlakescenter.org/docs/Policy_Briefs/Lacireno-Paquet_Who%20Chooses%20Schools.pdf

Linkow, T. W. (2011). Disconnected reform: The proliferation of school choice options in US school districts. *Journal of School Choice*, *5*(4), 414-443. doi: 10.1080/15582159.2011.624932

Linkow, T. W., Streich, F., & Jacob, B. (2011). Response to market threats: How Michigan public schools react to a growing school choice movement. Retrieved from http://www.aefpweb.org/sites/default/files/webform/Linkow_Streich_Jacob_competition.pdf

Loeb, S., Valant, J., & Kasman, M. (2011). Increasing choice in the market for schools: Recent reforms and their effects on student achievement. *National Tax Journal*, *64*(1), 141-164. Retrieved from http://ntj.tax.org/wwtax/ntjrec.nsf/

Lubienski, C. (2002). Charter schools and privatization, (pp. 1-16). In G. Miron, & C. Nelson, *What's public about charter schools? Lessons learned about choice and accountability*. Thousand Oaks, CA: Corwin Press.

Lubienski, C., Gulosino, C., & Weitzel, P. (2009). School choice and competitive incentives: Mapping the distribution of educational opportunities across local education markets. *American Journal of Education*, *115*(4), 601-647. doi: 10.1086/599778

Mackinac Center for Public Policy (2002, November 17). The Engler education legacy. *Michigan Education Report.* Retrieved from http://www.mackinac.org/4847

Mao, L. & Landauer-Menchik, B. (2014). Michigan cyber schools, 2010 to 2013. Education Policy Center, Michigan State University. Retrieved from http://www.michigan.gov/documents/mde/cyber_school_2014.09.18_469529_7.pdf

Mathis, W. J. & Hinchey, P. H. (2012). Conclusion. In G. Miron, K. G. Welner, P. H. Hinchey, & W. J. Mathis (Ed.), *Exploring the school choice universe: Evidence and recommendations*. Charlotte, NC: Information Age Publishing.

Mickelson, R. A., Bottia, M., & Southworth, S. (2012). School choice and segregation by race, ethnicity, class, and achievement. In G. Miron, K. G. Welner, P. H. Hinchey, & W. J. Mathis (Ed.), *Exploring the school choice universe: Evidence and recommendations*. Charlotte, NC: Information Age Publishing.

Mikulecky, M., T. (2013). *Open enrollment is on the menu – But can you order it*? Education Commission of the States, Denver Co. Retrieved from http://www.ecs.org/open-enrollment-is-on-the-menubut-can-you-order-it/

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook*. SAGE Publications, Incorporated.

Miron, G., Gulosino, C., & Horvitz, B. (2014). Full-time virtual schools: Enrollment, student characteristics, and performance (Section III). In A. Molnar (Ed.), *Virtual schools in the U.S. 2014: Politics, performance, policy, and research evidence.* Boulder, CO: National Education Policy Center. Retrieved from http://nepc.colorado.edu/publication/virtual-schools-annual-2014

Miron, G., Urschel, J. L., Mathis, W. J., & Tornquist, E. (2010). Schools without diversity: Education management organizations, charter schools, and the demographic stratification of the American school system. Boulder and Tempe: Education and the Public Interest Center & Education Policy Research Unit. Retrieved from http://epicpolicy.org/publication/schools-without-diversity *Education and the Public Interest Center*.

Miron, G. & Welner, K., G. (2012). Introduction. In G. Miron, K. G. Welner, P. H. Hinchey, & W. J. Mathis (Ed.), *Exploring the school choice universe: Evidence and recommendations*. Charlotte, NC: Information Age Publishing.

Ni, Y. (2009). The impact of charter schools on the efficiency of traditional public schools: Evidence from Michigan. *Economics of Education Review*, *28*(5), 571-584. doi: 10.1016/j.econedurev.2009.01.003

Ni, Y. (2010). The sorting effect of charter schools on student composition in traditional public schools. *Educational Policy*, *26*(2), 215-242. doi: 10.1177/0895904810386598

Ni, Y., & Arsen, D. (2011). School choice participation rates: Which Districts Are Pressured? *Education Policy Analysis Archives*, *19*(29), n29. Retrieved from http://epaa.asu.edu/ojs/article/view/777

Park, J. (2012). *The determinants of school choice level and the effects of school choice on the performance of traditional public schools* (Doctoral dissertation, The Florida State University). Retrieved from http://diginole.lib.fsu.edu/cgi/viewcontent.cgi?article=6645&context=etd

Pennsylvania School Boards Association. (2014). The costs of charter and cyber charter schools. Mechanicsburg, PA: Education Research & Policy Center. Retrieved from https://www.psba.org/wp-content/uploads/2014/09/Charter_School_Funding-White-Paper_Update_2014.pdf

Powers, J. M., Topper, A. M., & Silver, M. (2012). Public school choice and student mobility in metropolitan Phoenix. *Journal of School Choice*, *6*(2), 209-234. doi: 10.1080/15582159.2012.673862

Price, W. J., & Jankens, B. P. (2013). *Charter schools in Michigan: A handbook for understanding public policy and practice for Michigan's public school academies*. Ypsilanti, MI: NCPEA Publications. Retrieved from http://www.ncpeapublications.org/index.php/component/hikashop/product/12-michigan-charter-schools-a-handbook-for-understanding-public-policy-and-practice-for-michigan-s-public-school-academies-2nd-edition

Reback, R. (2008). Demand (and supply) in an inter-district public school choice program. *Economics of Education Review*, *27*(4), 402-416. doi: 10.1016/j.econedurev.2008.01.001

Roda, A., & Wells, A. S. (2013). School choice policies and racial segregation: Where White parents' good intentions, anxiety, and privilege collide. *American Journal of Education*, *119*(2), 261-293. doi: 10.1086/668753

Schneider, M., Teske, P., & Marschall, M. (2002). *Choosing schools: Consumer choice and the quality of American schools*. West Sussex, UK: Princeton University Press.

Senate Fiscal Agency. (2015, June 10). Bill analysis: Emergency municipal loan act revisions, House Bill 4331 (Substitute H-1 as reported without amendment), House Bill 4332 (as reported without amendment). Lansing, MI. Retrieved from http://www.legislature.mi.gov/documents/2015-2016/billanalysis/Senate/htm/2015-SFA-4331-F.htm

Senate Fiscal Agency. (2015 June 22). Bill analysis: Financially distressed schools, House Bill 4325 (Substitute S-5 as retransmitted by the House), House Bill 4326 (as enrolled), House Bill 4327 (as enrolled), House Bill 4328 (as enrolled), House Bill 4329 (as enrolled), House Bill 4330 (as enrolled). Lansing, MI. Retrieved from https://www.legislature.mi.gov/documents/2015-2016/billanalysis/Senate/htm/2015-SFA-4325-F.htm

Spalding, A. (2013). *The public school market in Michigan: An analysis of schools of choice*. Mackinac Center for Public Policy, Midland, MI.

Standard & Poor's. (2012, March 31). *Standard & Poor's general obligation ratings of Michigan local governments as of 03/31/2012*. [Spreadsheet]. Retrieved from http://www.standardpoors.com

State of Michigan (2009). Enrolled House Bill No. 4787. Retrieved from http://www.legislature.mi.gov/documents/2009-2010/billanalysis/LSB/pdf/2009-LSB-4787-A.pdf

State of Michigan. (2012). Enrolled Senate Bill No. 619. Retrieved from http://www.legislature.mi.gov/documents/2011-2012/publicact/pdf/2012-PA-0129.pdf

State of Michigan, Department of Education. (2014, April). 2012-13 Bulletin 1011: Analysis of Michigan public school districts revenues and expenditures. Retrieved from http:// www.michigan.gov/documents/mde/b1011_13final_454423_7.pdf

State of Michigan, Department of Education. (2014, August 11). 11 Authorizers put "At Risk of Suspension" to create future charter schools. News release. Retrieved from http://www.michigan.gov/mde/0,4615,7-140--334791--,00.html

State of Michigan, Department of Education – Center for Educational Performance and Information. (2015). MI school data. Retrieved from www.mischooldata.org

State of Michigan, Department of Education – Office of Field Services. (2014, August 28). Section 31a Program for at-risk pupils legislation. Retrieved from http://www.michigan.gov/documents/Section_31a_Legislation_37026_7.pdf

State of Michigan, Department of Education – School Nutrition Programs, (2014). Community eligibility provision: Frequently asked questions. Retrieved from http://www.michigan.gov/documents/mde/CEO_FAQ_2014-2015_08202014_ 466071_7.pdf

U.S. Department of Agriculture. (2014). Income eligibility guidelines, *Federal Register,* 79 (43). Retrieved from http://www.fns.usda.gov/sites/default/files/2014-04788.pdf

U. S. Department of Education. (2014, October 8). U.S. Department of Education awards $39.7 million in grants to expand high quality charter schools. Press release. Retrieved from www.ed.gov/news/press-releases/us-department-education-awards-397-million-grants-expand-high-quality-charter-sc

U. S. Department of Education. (2015). Laws & guidance, elementary & secondary education, improving basic programs operated by local educational agencies (Title I, Part A). Retrieved from http://www2.ed.gov/programs/titleiparta/index.html

U. S. Department of Education, National Center for Education Statistics. (2010). *Trends in the use of school choice: 1993 to 2007, Statistical analysis report*. (NCES 2010-004). Retrieved from http://nces.ed.gov/pubs2010/2010004.pdf

Van Beek, M. (2011). Virtual charter schools. Mackinac Center For Public Policy. January 27, 2011. Retrieved from http://mackinac.org/14492

Vogt, W. P., & Johnson, R. B. (2011). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences*. Thousand Oaks, CA: Sage.

Warren, C. A. (2014). Towards a pedagogy for the application of empathy in culturally diverse classrooms. *The Urban Review*, *46*(3), 395-419. doi: 10.1007/s11256-013-0262-5

Wilson, T. S. (2012). Negotiating public and private: Philosophical frameworks for school choice. In G. Miron et al. (Ed.), *Exploring the school choice universe: Evidence and recommendations*. Charlotte, NC: Information Age Publishing.

Zeehandelaar, D. & Northern, A. M. (2013). *What parents want: Education preferences and trade-offs, a national survey of K-12 parents.* The Fordham Institute, Washington, DC. Retrieved from http://edex.s3-us-west-2.amazonaws.com/publication/pdfs/20130827_What_Parents_Want_Education_Preferences_and_Trade_Offs_FINAL.pdf

Zimmer, R., & Buddin, R. (2009). Is charter school competition in California improving the performance of traditional public schools? *Public Administration Review*, *69*(5), 831-845. doi: 10.1111/j.1540-6210.2009.02033.x

Zimmer, R., Gill, B., Booker, K., Lavertu, S., Sass, T. R., & Witte, J. (2009). *Charter schools in eight states: Effects on achievement, attainment, integration, and competition*. Arlington, VA: Rand Corporation. http://www.rand.org/content/dam/rand/pubs/monographs/2009/RAND_MG869.pdf

Appendices

Appendix A

Superintendent Interview Questions

All interviews will begin with the following explanations/requests:

* All information gathered will be confidential

* Approval requested to audiotape interview

* Member checking will involve sending the interview transcriptions to the Superintendent for validity.

Questions

1) What is your perception of the change in student demographics in your district over the past 5 years?

2) Has the change in student demographics influenced the operations of your district? If so, in what ways?

3) What is your perception of the staff's reaction to changes in student demographics?

4) Has the change in student demographics affected the staff's work? If so, in what ways?

5) What is your perception of the community's reaction to changes in student demographics in their school district?

6) Has the change in student demographics affected the community's support for its school district? If so, in what ways?

Appendix B

RESEARCH @ EMU

UHSRC Determination: **EXEMPT**

DATE: **March 12, 2015**

TO: **Jackie Johnston, EdD**
Department of Leadership and Counseling
Eastern Michigan University

Re: **UHSRC: # 715839-1**
Category: Exempt category 2
Approval Date: March 12, 2015

Title: **An Examination of School Choice on the Financial Integrity and Demographic Mix of Traditional Public Schools**

Your research project entitled **An Examination of School Choice on the Financial Integrity and Demographic Mix of Traditional Public Schools,** has been determined **Exempt** in accordance with federal regulation 45 CFR 46.102. UHSRC policy states that you, as the Principal Investigator, are responsible for protecting the rights and welfare of your research subjects and conducting your research as described in your protocol.

Renewals: Exempt protocols do not need to be renewed. When the project is completed, please submit the **Human Subjects Study Completion Form** (access through IRBNet on the UHSRC website).

Modifications: You may make minor changes (e.g., study staff changes, sample size changes, contact information changes, etc.) without submitting for review. However, if you plan to make changes that alter study design or any study instruments, you must submit a **Human Subjects Approval Request Form** and obtain approval prior to implementation. The form is available through IRBNet on the UHSRC website.

Problems: All major deviations from the reviewed protocol, unanticipated problems, adverse events, subject complaints, or other problems that may increase the risk to human subjects or change the category of review must be reported to the UHSRC via an **Event Report** form, available through IRBNet on the UHSRC website.

Follow-up: If your Exempt project is not completed and closed after three **years**, the UHSRC office will contact you regarding the status of the project.

Please use the UHSRC number listed above on any forms submitted that relate to this project or on any correspondence with the UHSRC office.

Good luck in your research. If we can be of further assistance, please contact us at 734-487-3090 or via e-mail at human.subjects@emich.edu. Thank you for your cooperation.

Sincerely,

Beth Kubitskey
Chair
College of Education Human Subjects Review Committee

- 1 -