The Minnesota School Choice Project
Part I: Segregation and Performance
February 2017
The Minnesota School Choice Project

For over two and a half decades, Minnesota has been ground zero for an ongoing national experiment in public school charterization. In the coming months, the Institute on Metropolitan Opportunity will be producing a series of reports on the results of that experiment.

In 1991, Minnesota passed the nation’s first charter school law. By 2016, despite continual controversy over their academic impact and educational role, there were over two hundred charter schools in the state, with more opening every year.

In Minnesota, the past, present, and future of charter schools collide. The principles of modern charter schools were largely developed in the Twin Cities, by civic organizations, policy scholars, and politicians. As an early adopter, the state has often served as a testing ground for political tactics and policy measures related to educational reform. Minnesota’s charter sector is unusually fragmented, representing the range of forms charter schools can take. The state’s charters run the gamut from remedial institutions for children of color, to online-only schools, to suburban classical academies. Minnesota also continues to experiment with new types of charter regulation, such as by adopting unusual and controversial policies for school accreditation.

The Institute on Metropolitan Opportunity has produced several previous studies of Minnesota charter schools, focusing on school segregation and performance. These studies reflected a broader national debate about whether charters improved test outcomes.

However, as charter schools have expanded nationally, they have come under broader scrutiny. Today, the debate over charterization extends far beyond performance alone. Recent reporting and research has raised questions about who these schools serve, how they are funded, how they are regulated, and their role in education politics. Answering these questions in Minnesota requires new dimensions of analysis.

Towards that end, the Institute on Metropolitan Opportunity is launching a new research initiative. Called The Minnesota School Choice Project, it will analyze the state’s charter school industry from a variety of perspectives. This research is intended to provide new insight into the effectiveness and impact of charter schools in the state, and serve as a launching ground for a more robust understanding of the role charter schools play in the educational ecosystem, both in Minnesota and nationwide.

Project results will be released in six parts, each bringing quantitative and qualitative analysis to specific subjects related to charter schools. These are as follows:

**Part I:** Segregation and Performance
**Part II:** Special Education and Discipline
**Part III:** Screening
**Part IV:** Funding and Expenditures
**Part V:** Charter Authorizers
**Part VI:** The Future of Charter School Politics

Additional updates, news analysis, case studies, and continuing commentary will also be provided on the Institute’s website and blog (found at https://www.law.umn.edu/institute-metropolitan-opportunity).
SUMMARY OF FINDINGS

- Charter schools continue to underperform traditional public schools, after controlling for student demographics and other characteristics.

- In Minnesota, charter schools are at the forefront of school segregation. Of the 50 most racially concentrated Twin Cities schools, 45 are charters.

- There is a social science consensus that racial and economic segregation produces academic, professional, social, and personal welfare penalties for students, while integration produces benefits in the same areas.

- Twin Cities charter segregation is driven almost entirely by the growth of highly-segregated “poverty academies” – schools that attempt to close racial achievement gaps by narrowly focusing on disadvantaged groups.

- Because Twin Cities traditional public schools are not typically racially homogeneous, the growth of poverty academies has led to levels of racial segregation heretofore unseen in Minnesota.

- Higher-performing poverty academies only appear to outperform traditional public schools in environments of near-complete segregation – which, combined with demographic evidence, suggests student screening plays an important role in producing their achievement gains.

- Even ignoring the potential effects of student screening, poverty academies underperform schools with low or even nominal levels of racial integration.

- The evidence suggests that, under the most favorable set of assumptions for poverty academies, racial integration is more likely to produce academic benefits for nonwhite and low-income students than the creation and maintenance of segregated charter schools.

BACKGROUND AND OVERVIEW

Questions about segregation, integration, and academic performance have been intrinsically linked in American education policy since at least 1954, when Brown v. Board held that segregated educational facilities are inherently unequal. The research leading to that decision,
and the overwhelming social science consensus ever since, has suggested that segregated schools produce a host of harms for their students, and integrated schools generate a host of benefits.

This linkage is particularly profound when it comes to charter schools. From their conception, charters have been explicitly proposed as a means of improving school outcomes for students of color, who, it has long been understood, suffer from lack of access to educational opportunity.

In the original charter proposal put forward by the Twin Cities Citizen’s League, these predicted improvements would have come because of improved integration.¹ As a product of school choice, charters, it was theorized, would be more integrated than traditional public schools, and would thus produce superior academic performance.

Over time, however, charter advocates have moved towards the position that charters will produce academic equality – or in their parlance, “narrow the achievement gap” – through special targeting, not universal instruction. In this view, charters have increased flexibility and incentive to innovate, and are therefore well-suited to provide underprivileged students what has historically been known as “compensatory education.” The ostensibly innovative methods adopted by charters would allow them to avoid pitfalls found in traditional schools, providing a superior education to their segregated traditional school competitors – albeit in an equally segregated environment.

In Minnesota, as in most of the country, this second approach has come to define the charter industry. Consequently, a racially divided charter system has emerged.

On one hand, the Twin Cities contain a body of white-segregated and diverse charters, such as classical academies, European language immersion schools, and Montessori schools. These “oddball” charters fill small, narrow educational niches – often niches sought by affluent white parents. They are typically located in diversifying suburbs, though a handful of the whitest institutions can be found in the central cities, often suspiciously close to much more diverse traditional public schools.

On the other hand, there are the schools that constitute the majority of Minnesota’s charter sector: the segregated poverty academies, sometimes serving almost entirely homogeneous student bodies. Many of these schools are true single-race schools. Some explicitly target and recruit students from particular racial or “cultural” groups.

¹ The Citizen’s League report was one of the first, if not the first, detailed proposal for charter schools in the nation. Although the term had been used prior to the report, the Citizen’s League described the idea in greater detail than any previous proposal. Most of its recommendations can still be seen in modern charters, with a key exception: it described compliance with integration rules as fundamental to the charter idea. Citizen’s League, Chartered Schools = Choices for Educators + Quality for All Students (1988).
These schools are built around the idea of making segregated education work. Rather than providing facilities, curriculums, and staff to educate the full, diverse range of students that make up the Twin Cities, they narrowly target a single subset of students, often by race and income. This distinguishes them from traditional public schools, which, at least in theory if not in practice, are structured to serve all comers regardless of socioeconomic status.

A similar spectrum of charter education exists in other cities and states. But in other regions, segregated charters are often located in racially isolated school districts. In those places, segregated charters are able to claim to be merely adapting to realities on the ground – after all, the nearby traditional public schools are equally segregated.

While the number of highly segregated public schools is growing in the Twin Cities, they are still far rarer than in cities such as Detroit or Chicago. Charters seeking to provide single-race remedial instruction have been forced to create a segregated environment that is far more racially isolated than the traditional public school system.

The result has been a region in which 45 of the 50 most segregated schools are charters. The Twin Cities region contains 78 schools that are more than 95 percent nonwhite; of these, 59, or 76 percent, are charter schools. Unsurprisingly, children of color at charters are vastly more likely to attend a segregated school than children of color at traditional public schools.

This has in turn led to the adoption of explicitly pro-segregation rhetoric among Minnesota charter advocates, who have sought to create legal carveouts for “culturally-focused” single-race schools. With increasing boldness, those same advocates have adopted pro-segregation rhetoric in policy arenas, as well as in public debates around charters. Several key Twin Cities charter advocates have become national voices skeptical of school integration.

In short, charter schools are at the vanguard of Minnesota educational segregation.

From an academic perspective, the complex interplay of segregation, integration, and academic performance in the Twin Cities creates several opportunities to analyze the impact of charter schools. It provides a powerful case in which to examine the claims of two competing, and mutually exclusive, methods of improving the academic performance of children of color: the civil rights preference for integrated schools, and the charter industry’s preference for highly segregated schools that focus on “compensatory education” for disadvantaged groups.

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2 For instance, charter schools, granted an exemption from the state’s desegregation/integration rule on policy grounds in 1999, have intervened in a recent school desegregation lawsuit in order to receive a declaratory judgment that the state is statutorily barred from applying its civil rights rules to them. For additional background, see Rachel M. Cohen, School Desegregation Threatens Charters, THE AMERICAN PROSPECT (Jan. 26, 2016).

3 For instance, a recent Atlantic article questioned whether “racial isolation is necessarily a bad thing,” citing a prominent Twin Cities charter advocate. Natalie Gross, The Benefit of Racial Isolation, ATLANTIC (Feb. 8, 2017).
ACADEMIC PERFORMANCE IN CHARTER AND TRADITIONAL SCHOOLS

Charter school advocates have consistently maintained that Minnesota charters improve student performance across the board. Previous reports from the Institute on Metropolitan Opportunity in 2008, 2012, and 2013 have demonstrated that this is not the case when student demographics and other school characteristics are controlled for. This section updates the performance analyses from the previous IMO studies, which focused on Twin Cities charters in the aggregate, with the most recent data. Before subdividing the charter sector for closer analysis, it is important to understand that charters as a whole have no special formula for academic success, and indeed seem to underperform traditional schools.

IMO’s 2008, 2012 and 2013 studies produced evidence that charter schools in the Twin Cities were not out-performing elementary traditional schools on state math and reading tests. The same models were rerun with data for the 2013-14 and 2014-15 school years. Table 1 summarizes the results of this analysis, which indicates the difference between the charter and traditional school elementary pass rate in each subject.

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The numbers in the table represent the estimated percentage point difference between reading and math pass rates in elementary charter and traditional schools from a series of multivariate regressions that control for various demographic factors and school characteristics.

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4 Institute on Race and Poverty, “Failed Promises: Assessing Charter Schools in the Twin Cities,” November 2008 reviews several of these. IMO’s updates of this study in 2012 and 2013 reinforced this finding.
5 Data was provided by the Minnesota Department of Education.
6 Comparisons represent regression coefficients from multiple regressions that control for school racial mix, percentage of students in limited English programs, percentage of students in special education programs, percentage of low-income students, attendance rate, mobility rates (inter-district and intra-district), school days per year, school minutes per day, whether schools are in a Choice is Yours participating suburban district, and total school enrollment. All of the measured shortfalls are statistically significant at the 95 percent confidence level. The full regression results are available in Table A.1 at the conclusion of this report.
Although the absolute difference between student pass rates for math and reading in charters and traditional schools varies a bit, the findings are, on the whole, remarkably stable. Elementary school charters underperform their traditional counterparts in all years in both math and reading. After controlling for school demographics pass rates in charter school, math pass rates were between 7.5 percent and 11.2 percent lower in charters while reading pass rate shortfalls varied between 4.4 percent and 9.6 percent.

Charts 1 and 2, below, demonstrate the relationship between student performance and the school characteristic which is, by far, the dominant explanatory variable in the statistical analysis – poverty. The predicted line in these figures corresponds to the performance level one would expect from schools given their student poverty rate. The figures break down the performance of charter and traditional public schools in 2015-16.

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The data needed for the regression is not yet available for 2015-16. However, sufficient data from that year is available to analyze poverty and school pass rates.
In 2015-16, the math performance of students in only 41 percent of charter schools was better than expected given the poverty levels of these schools – the rest, 59 percent, under-performed expectations. In contrast, more than half of traditional elementary schools out-performed expectations. The results are very similar for reading pass rates.

The inability of Twin Cities charter advocates to produce evidence of across-the-board charter achievement gains has helped shift the focus of the public debate. Over time, advocacy has focused increasingly on the majority of charters with a high degree of economic and racial segregation. It is in these schools, advocates claim, where the academic benefits of charterization are realized.

**COSTS OF SEGREGATION AND BENEFITS OF INTEGRATION**

Before addressing the claim that segregated charters are high-performing, it should be noted that this assertion is, at minimum, extremely counterintuitive. This is because decades of empirical social science research has created a strong consensus that segregation, regardless of whether it is created by government fiat or a combination of other factors, causes significant harm to students. In a similar vein, research also clearly shows that integration generates a bevy of benefits for students, many of which have lasting, lifelong effects. These benefits are shared by white and nonwhite students alike.
The most straightforward cost of segregation is reduced academic achievement. Children at segregated schools perform less well on standardized math and reading tests, and suffer reduced graduation and college attendance rates.\(^8\)

Conversely, attending a racially integrated school and learning in a racially integrated classroom boosts academic achievement, particularly for minority students.\(^9\) These gains do not come at the expense of white students, who perform equivalently or better in integrated classrooms than they do in segregated classrooms. Sociological studies have shown that diverse learning environments help enhance critical thinking skills among all students, white and nonwhite alike.\(^10\)

But the effects of segregation and integration are not limited to academic performance. Integrated schools offer all students access to networks of opportunity through both adults and their peers; these networks are instrumental in determining educational and professional attainment.\(^11\) Minority students who attend integrated schools are likely to have higher incomes later in life than their peers in segregated schools.\(^12\) Minority students graduating from desegregated high schools tend to complete more years of education, have higher college attendance rates, and tend to choose more lucrative careers, even in fields where minorities are historically underrepresented.\(^13\)

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10 Anthony Lising Antonio et al., Effects of Racial Diversity on Complex Thinking in College Students, 8 PSYCHOLOGICAL SCIENCE 507 (2004).
On the other hand, minority students who attend segregated schools are more likely to enter the juvenile justice system, and when they graduate, more likely to enter the criminal justice system. These effects are life-long and life-altering.

Some of the most important benefits of integration are hard-to-quantify social effects, identified through dedicated sociological research. For example, students – white and nonwhite alike – who experience interracial contact in integrated schools are also more likely to live, work, and attend college in integrated settings. Interracial contact decreases racial prejudice among students and facilitates more positive interracial relations. Students attending integrated schools report an increased sense of civic engagement compared to their peers in segregated schools. And integrated classrooms improve the stability of interracial friendships and increase the likelihood of interracial friendships as an adult.

Finally, it must be recognized that integrated schools have major second-order effects on neighborhood and municipal stability. Regions with interdistrict or metropolitan-wide desegregation plans see lower levels of white flight. Such plans can enhance residential integration and promote neighborhood stability over time. Cities and neighborhoods served by segregated schools, by contrast, often suffer from severe white flight, and consequently, severe disinvestment and a reduced tax base.

At times, charter advocates have attacked the benefits of school integration as the product of mystical thinking. A common refrain is that integration strategies are premised on the idea that “black children can’t learn without white children” or there are magical educational qualities

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implicit in “seating black kids next to white kids.” In reality, there are several concrete mechanisms through which integration confers its benefits.

Much analysis of segregation focuses on the role of racial demographics on resource allocation. In many places, segregated schools have significant resource shortfalls, and research has shown that these gaps can have a major impact on student outcomes.21

But resource allocation is not the only mechanism through which segregation and integration have an impact. After all, if it were, negative effects could be erased by simply redistributing resources—and Minnesota’s own experience proves this is not the case. Minnesota is comparatively successful at allocating financial resources in accordance with need. In the Twin Cities, there is a strong positive correlation between segregation and state financial allocations to a school; highly-segregated, high-poverty schools and districts might spend twice as much per student as predominantly white schools and districts. If this progressive distribution of resources is having an ameliorative effect on racial gaps, however, it has been far from sufficient to prevent large racial disparities from emerging. Instead, other mechanisms are at work.

Peer effects are an important component of student achievement. Alongside a student’s own socioeconomic status, a major predictor of student performance is the socioeconomic status of a students’ peers. In effect, students in a school are learning from their peers as well as their teachers.22 This means that the deleterious effects of poverty on learning can be insulated somewhat through exposure to middle-income classmates.

Another important factor in student outcomes – especially “real world” outcomes like college attendance, adult employment, and career choice – is exposure to social and professional networks. Few people succeed on the basis of merit alone; career and social advancement typically rely to some extent on contacts in business or academia. Not all social networks are equal: some are more expansive than others, and include more influential or higher-profile connections. Historical segregation and racial inequality has the effect of limiting the networks available within nonwhite-segregated schools, thereby allowing white students privileged access to many social spheres. Since access to these networks is often merely a matter of proximity and exposure, integration can help provide equal opportunity for that white and nonwhite children.

Integration improves students’ lives in other ways that are harder to quantify. Across centuries, the United States has developed what is effectively a racial caste system, inculcating in its citizens a belief that racial groupings are important determinants of who succeeds and what role people play in society. Strict school segregation was originally instituted for the express aim of

advancing this system and the ideas underlying it. Though most of the nation has now at least nominally rejected these ideas, many of their undercurrents persist. Schoolchildren absorb ideas about group identity and racial prejudice throughout their education. When the schools themselves are organized along racial lines, it can bolster the implicit idea that society should also be organized along racial lines. In short, school segregation, whatever its cause, strengthens socially constructed racial categories and helps build the framework for future racial oppression and inequality. Integration tears down that framework and contributes to a society where an individual’s racial identity is not a predictor of life trajectory.

Modern debates about school segregation sometimes attempt to detach it from its historical context and address it as a purely technical matter, a sort of “policy treatment” that can be dispassionately evaluated. It is important to remember, however, that segregation has played an instrumental role in creating and maintaining America’s de facto racial hierarchy and thus has a political and social resonance that most policy issues lack.

Opinion polls help show that we not yet escaped historical divides in popular sentiment about segregation, with nonwhite parents – especially black parents – preferring integration, while white parents remain unconcerned about racial isolation. For instance, in a 2015 poll, 74 percent of black respondents said it was important to send their child to a racially diverse school, compared to 31 percent of white respondents. Over a third of whites – 34 percent – said it was “not at all important” to send their child to a diverse school. In the same poll, half of black respondents said they’d prefer a distant school that was integrated to a nearby, homogeneous school; among whites, 67 prefer racially isolated neighborhood schools. Similarly, 61 percent of black respondents said that the government should make sure schools are racially balanced, with 17 percent opposed. Among white respondents, 28 percent of respondents support government action to achieve racial balance while 42 percent are opposed.

These figures are important to keep in mind going forward. Despite the tremendous benefits provided by integration, it has proven difficult to create and maintain in piecemeal fashion – a problem that can be largely be attributed to the historical and ongoing preference of white parents for educational enclaves.

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23 Studies have shown that racial isolation in schools at a young age creates adult preferences for same-race contact. Educational racial isolation appears to more strongly affect adult preferences than even residential racial isolation does. Jomills Henry Braddock II and Amaryllis Del Carmen Gonzalez, *Social Isolation and Social Cohesion: The Effects of K-12 Neighborhood and School Segregation on Intergroup Orientations*, 112 *Teacher’s College Record* 1631 (2010).

SEGREGATION AND CHARTER SCHOOLS

Segregation in Twin Cities charter schools is severe and increasing. The Institute on Metropolitan Opportunity’s previous reports on the subject in 2008, 2012, and 2013 all found high levels of racial isolation. Little has changed today.

For students of color, segregation has continued to worsen at Minnesota charters. In the 2015-16 school year, most nonwhite charter students were at segregated schools where more than 60 percent of the student population is nonwhite, including 88 percent of black students, 78 percent of Hispanic students, 80 percent of Asian students, and 64 percent of Native American students (Chart 3). The number of black and Hispanic students in segregated schools rose slightly compared to the previous year; the number of Native American students in segregated schools rose sharply, by seven percent. These represent dramatically higher rates of segregation than are seen in Twin Cities traditional schools – black, Hispanic, and Asian students in charters are twice as likely (or more) to attend a segregated school than their peers at traditional institutions.25

But these figures understate the severity of racial isolation at charters. That is because a huge number of charter schools are not just segregated, but highly segregated, with student populations that are more than 90 percent nonwhite. Indeed, as seen in Chart 4, 72 percent of

25 Data for 2014-15, not shown in Chart 3, are computed from the Minnesota Department of Education data.
black students, 68 percent of Hispanic students, and 74 percent of Asian students at charters are attending a highly segregated school. Here, too, segregation is worsening: in each case, these figures represent an increase over the previous year. For comparison, at traditional schools, no more than 18 percent of any nonwhite student group attends highly segregated schools.

Evidence suggests that this increase in segregation in Minnesota charters is driven almost entirely by the formation and growth of the sort of highly-segregated remedially-oriented academies that are found often found in high-poverty areas. For instance, while nonwhite segregation has increased, there has been a small but noticeable reduction in the number of white-segregated charter schools (Table 1). While 49 percent of white charter students still attend schools that are more than 80 percent white, and 20 percent attend schools that are more than 90 percent white, this is a substantial improvement over the preceding year, in which the figures were 58 and 28, respectively. (These rates roughly reflect the rate of white segregation in traditional schools; in traditional schools, unlike charters, white students are more likely to attend a segregated school than children of color.)
Nonetheless, the defining feature of charter demographics continues to be extreme rates of segregation. This is perhaps best reflected by a “missing middle” among charters: the relative absence of racially diverse, integrated schools. Instead, Twin Cities charters are bimodally distributed: a great many are heavily nonwhite, and a large number are heavily white, but vanishingly few are between 40 and 80 percent nonwhite (Chart 6). Traditional schools show a much flatter distribution (Chart 8).

Another lesson of these figures is that there appears to be only one pathway to the creation racially diverse charters: integrating students of color into schools that were previously heavily white. The number of schools that are predominantly white is decreasing, while the number of lightly integrated schools, with student populations between 20 and 40 percent nonwhite, is increasing. (Charts 7 and 8 show a similar trend occurring in Twin Cities traditional public schools.) By contrast, there is virtually no movement in the other direction – no indication that more white students are attending heavily nonwhite schools. Indeed, the percentage of charter

Table 2: Distribution of Charter Schools and Traditional Schools by School Type, 1995-2015

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Source: Computed from Minnesota Department of Education data.
Predominantly White: non-white student share < 20%; Non-white Segregated: non-white student share > 60%; Diverse: non-white student share between 20% and 60%.
more than 80 percent nonwhite has increased. This can be seen by comparing Charts 5 and 6, below.
THE POVERTY ACADEMIES

As seen above, nearly half of Twin Cities charters are heavily segregated schools, and these schools account for a growing share of the charter sector. These charters, high- and low-performing alike, are members of a class of schools that has become central to the debate around charter education, both nationally and in Minnesota. They have been referred to as “no excuses” schools, “culturally-specific” schools, or “beat-the-odds” charters. This report adopts the term “poverty academies” for this group, as their dominant characteristic is the heavy concentration of nonwhite and low-income students.26

Proponents of these schools defend them on various grounds. Some assert that poverty academies allow educators to target high-risk students with specially designed curricula and unusually rigorous teaching methods, dragging academic performance to a level where it is comparable to white, middle-class students in traditional schools. In recent years, this argument has been extended to encompass the idea of “culturally-focused” schools. Proponents of culturally-focused charters have argued that racial concentration, far from being harmful, is in fact often beneficial and necessary to educate students of color, who perform better if they can be targeted for instruction that conforms to their racial or ethnic background.27

Whatever rationale is provided for them, there is little question that the popularity of these schools within the charter industry has contributed to extremely high – and increasing – overall levels of racial segregation among charters.

In legal proceedings and in the press, Twin Cities charter proponents have defended poverty academies by focusing heavily on a handful of schools that “beat the odds.”28 There is a group of roughly a dozen high-poverty charters exhibiting pass rates significantly better than predicted by regression models, and for the most part, performing better than their traditional public school counter-parts. This group has emerged over the previous decade.

26 “Segregation academies” would be an even more accurate term for these schools, as they tend to be more segregated by race than by income. (And they are often segregated by various nonwhite racial categories – for instance, some charter chains subdivide immigrant East African students and non-immigrant black students, despite both groups suffering from very high poverty.) However, the term “segregation academy” has an independent historical meaning that could potentially produce confusion.

27 See, e.g., Solvej Wastvedt, No Consensus in Minnesota on Calls for Moratorium on Charter Schools, MPR (Sept. 23, 2016); Alejandro Matos, Minnesota School Integration Proposals Draw Fire, STAR TRIBUNE (Jan. 6, 2016); Beth Hawkins, Culture-Conscious Higher Ground Academy Serves Largely East African Student Body, MINNPOST (Jan. 31, 2013).

28 For instance, in an administrative law proceeding in 2016, charter advocates mentioned Harvest Preparatory no fewer than 23 times, often lauding it for being noted by the Minneapolis Star Tribune as a “beat the odds” school. Likewise, Higher Ground Academy was mentioned half a dozen times, and was also described on multiple occasions as a “beat the odds” school. Most of the dozens of low-performing Twin Cities charters were never mentioned a single time. Transcript of Record, In the Matter of the Proposed Rules Governing Achievement and Integration for Minnesota (2016).
It must be noted that these unusually high-performing schools are counterbalanced by a roughly equal number of very low performing poverty academies. Charter advocates argue that low-performing schools will ultimately shutter due to market competition or state oversight, and thus can be safely excluded from analysis. But a number of such schools have been open for many years; some are expanding. Absent more concrete evidence, there is no empirical justification for cherry-picking high-performing schools for analysis.

Nonetheless, in the aggregate, the most segregated poverty academies seem to produce higher test scores than equivalently segregated traditional public schools. A student at a racially homogeneous poverty academy with an entirely black or Hispanic student body is somewhat more likely to be proficient on state exams than a student at a traditional school with identical demographics.

It must be emphasized that this finding alone cannot vindicate those charters’ methods, for two important reasons. First, key questions about these achievement gains remain unanswered. Most notably, charters nationwide have been accused of producing high test scores by screening out low-achieving students. Screening may be a particular danger in the instance of the Twin Cities’ so-called “culturally-focused” schools, which are already targeting a narrow segment of students from a much more diverse population. These enrollment methods create ample opportunity and incentive to screen – for example, by failing to recruit the most troubled children as potential enrollees.

Analysis of enrollment trends does indeed produce considerable evidence of screening in Twin Cities poverty academies. For instance, many higher-performing poverty academies serve notably fewer special education students than traditional schools with similar racial demographics. This tends to inflate the reported differences in test scores between higher-performing charters and traditional schools. These trends will be discussed in subsequent reports.

The second major caveat is that while poverty academies produce higher proficiency than equivalently segregated traditional schools, very few traditional Minnesota schools are equivalently segregated. Instead, the comparison relies almost entirely on the predicted performance of hypothetical schools. One way to think of this is to recognize that the poverty academy model was designed for intensely segregated cities such as Detroit or Chicago; in cities where racial concentration is lower, poverty academies seem to proactively intensify it. It is only at these profound, unnatural extremes of racial isolation where charters compare favorably to traditional schools. The efforts of poverty academies to create and protect high levels of segregation will also be documented in subsequent reports.

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29 Examples of long-lived, dismally performing schools are plentiful. St. Paul’s Dugsi Academy, for instance, opened in 2006, and serves 315 students. Its academic proficiency, never high, has been falling over time. In 2012, 36 percent of students were proficient in reading and 18 percent in math; today, the figures are 7 percent and 5 percent, respectively.
But even taking the most favorable set of assumptions about poverty academies – that they genuinely improve academic performance of low-income and nonwhite students through innovation, and that intentionally creating segregation is legally and ethically permissible – a question still remains. Is the creation of these schools a better educational strategy than pursuing racial integration, which is also proven to create significant benefits?

**THE SCHOOL CHOICE: POVERTY ACADEMIES VERSUS INTEGRATION**

The creation of poverty academies and the fostering of school integration are mutually exclusive, because poverty academies – by definition narrowly targeted institutions – cannot be integrated. For policymakers, this creates a stark choice about how to improve the academic performance of disadvantaged students.

This section seeks to answer two questions about that choice. Do poverty academies provide academic performance that is superior to integrated schools? And if not, what level of integration is necessary to achieve greater academic gains than those produced by poverty academies?

Our analysis suggests that even very low levels of integration can produce greater academic gains than can be reliably produced by poverty academies that are more than 90 percent nonwhite.

Charts 9 through 14 outline the math and reading proficiency of several groups of students in charter and traditional elementary schools according to the racial make-up of the school. School-level student performance for low-income students, black students, and Hispanic students is graphed against the percentage of students in each school who are non-white. (Due to data suppression there is not sufficient information to include other racial categories.) As expected, the scatters for each group of students show a negative relationship between student performance and higher non-white shares. Low-income, black, and Hispanic students consistently show higher pass rates in racially diverse and predominantly white schools than in highly segregated, largely non-white schools.³⁰

The poverty academies can be found at the far right-hand side of the charts. The charter schools above the black line are the “beat the odds” schools used to defend the concept of segregated charter education.

³⁰This is true despite the fact that testing results for black, Hispanic and Asian students are suppressed for confidentiality reasons in many predominantly white (and lower poverty) schools because of low numbers of students.
In the aggregate, the poverty academies seem to produce higher academic performance than the (very few) equivalently segregated traditional public schools with the same level of racial concentration. With this said, the poverty academies do not produce reliable academic performance gains, as each chart contains a substantial number of schools “below the line.” Among these schools, variations in student performance are very wide. This is especially true for low-income students and black students.

In addition, each of the charts also suggests that even very modest levels of school diversity are associated with performance increases that outstrip whatever gains are associated with poverty academies.

The red lines on the charts show the predicted pass rate for each type of student in a school that is 50 percent nonwhite. For instance, in Chart 9, the red line indicates that the average pass rate for low-income students in a school that was 50 percent nonwhite in 2015-16 was about 46 percent. This pass rate for low-income students that was greater than the pass rate in 27 out of 34 charter schools that were more than 90 percent nonwhite.

The same conclusion holds true in reading and math for low-income, black, and Hispanic elementary students: aggregated pass rates are substantially higher in a school that is 50 percent nonwhite than in highly segregated poverty academies.

This same data can be reframed to answer a similar question: what level of integration would be necessary before predicted pass rates outstrip those found in poverty academies? In other words, how much do schools need to integrate until they’re better than poverty academies?

Table 3, below, provides an approximate answer to this question for black, Hispanic, and low-income students, in both elementary and middle/high grades.
The data suggests that minimalistic or even token levels of integration produce academic performance comparable to that in poverty academies. For example, black students attending an elementary school in which only 19 percent of students are white would perform equivalently or better on average than would black students attending a segregated poverty academy, on average.

Moreover, adopting integration as an educational strategy creates space for continual improvement. Continuing the above example, black students attending an elementary school in which 40 percent of students are white would be expected to considerably outperform the attendees of a segregated poverty academy. By gradually upping the level of integration in a school, the data imply that higher and higher levels achievement may be obtained.

By contrast, the segregation of demographically similar students, even into ostensibly specially-tailored schools, is a pedagogical strategy with a very clear endpoint: 100 percent concentration. Most poverty academies are at or near this endpoint already, meaning that any future improvement is reliant on future, hypothetical educational innovation.

And it should be noted that this analysis likely overstates the performance of charter students, because it incorporates an unrealistically favorable set of assumptions for charters – it assumes that charter students are not differentiable from traditional school students along any dimension. In reality, as will be seen in subsequent reports, there is considerable evidence that charter schools have worked to tailor their student populations, with inexplicably low numbers of students in lower-performing groups, including special education students, homeless students, ESL students, and in at least one notable instance, male students.

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th></th>
<th>Middle/High</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Math 19%</td>
<td>Reading 16%</td>
<td>Math 43%</td>
<td>Reading 39%</td>
</tr>
<tr>
<td>For black students:</td>
<td>19%</td>
<td>16%</td>
<td>43%</td>
<td>39%</td>
</tr>
<tr>
<td>For Hispanic students:</td>
<td>22%</td>
<td>13%</td>
<td>51%</td>
<td>21%</td>
</tr>
<tr>
<td>For low-income students:</td>
<td>12%</td>
<td>15%</td>
<td>37%</td>
<td>29%</td>
</tr>
</tbody>
</table>

When the white share of the student population exceeds the percentages above, predicted test score performance for each group rises above observed test score performance for the group in segregated, "culturally specific" charters. Estimates use 2015-16 data from the Minnesota Department of Education.
Moreover, these factors amplify the inherent selection bias already at work in charter schools. The way that parents and students select charters means that, as a group, parents are more involved on average in charter students’ schooling than with students in traditional, assigned schools. By definition, charter parents went to the trouble of selecting a school other than the one assigned to them by their school districts. Parents of kids in traditional schools have not universally demonstrated the same degree of participation. This matters because active participation by parents is an important contributing factor to student achievement.31

In sum, the data imply that even very modest efforts to integrate schools have the potential to improve low-income and non-white student performance beyond what all but the highest performing poverty academies can produce. When it comes to helping the most disadvantaged students, integration remains the strongest choice for Minnesota.

Chart 10: Low-income Student Math Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.68)

- 3,277 students (2,921 LI) in 7 charter schools

- Predicted pass rate if FRED = 50%

- 9,082 students (8,177 LI) in 27 charter schools

- 90%

- Percentage of Students Non-white

- Percentage of Students Proficient in Math

- Traditional

- Charter

- Predicted

Chart 11: Low-income Student Reading Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.62)

- 2,484 students (2,252 LI) in 7 charter schools

- Predicted pass rate if NW = 50%

- 9,875 students (8,846 LI) in 27 charter schools
Chart 12: Black Student Math Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.55)

3,322 students (2,697 black) in 8 charter schools

Predicted pass rate if FRED = 50%

Chart 13: Black Student Reading Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.58)

2,002 students (1,407 black) in 5 charter schools

Predicted pass rate if NW = 50%

5,584 students (4,172 black) in 18 charter schools
Chart 14: Hispanic Student Math Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.49)

- 730 students (412 Hisp.) in 2 charter schools
- Predicted pass rate if FRED = 50%
- 2,396 students (1,314 Hisp.) in 7 charter schools

Chart 15: Hispanic Student Reading Proficiency Rates in Twin Cities Elementary Grades, 2015-16
(correlation = -.53)

- 387 students (350 Hisp.) in 1 charter school
- Predicted pass rate if NW = 50%
- 2,739 students (1,376 Hisp.) in 8 charter schools
Chart 16: Low-income Student Math Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = .56)

- 1,914 students (1,759 LI) in 7 charter schools

Predicted pass rate if FRED = 50%

3,959 students (3,151 LI) in 15 charter schools

Traditional  Charter  Predicted

Chart 17: Low-income Student Reading Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = -.67)

- 1,929 students (1,797 LI) in 6 charter schools

Predicted pass rate if NW = 50%

3,514 students (3,113 LI) in 14 charter schools

Traditional  Charter  Predicted
Chart 18: Black Student Math Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = -.63)

1,458 students (1,426 black) in 5 charter schools

Predicted pass rate if FRED = 50%

2,945 students (1,809 black) in 8 charter schools

Chart 19: Black Student Reading Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = -.67)

1,171 students (1,158 black) in 5 charter schools

Predicted pass rate if NW = 50%

3,232 students (2,077 black) in 7 charter schools
Chart 20: Hispanic Student Math Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = -.50)

Chart 21: Hispanic Student Reading Proficiency Rates in Twin Cities Middle/High Schools, 2015-16
(correlation = -.63)
### Table A.1: Multiple Regression Results
#### The Determinants of Elementary School Performance in the Twin Cities, 2014-15

<table>
<thead>
<tr>
<th>School Characteristics</th>
<th>Math</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of Students Free or Reduced-price Lunch Eligible</td>
<td>-0.416 **</td>
<td>-0.530 **</td>
</tr>
<tr>
<td></td>
<td>(8.03)</td>
<td>(12.31)</td>
</tr>
<tr>
<td>Charter Schools</td>
<td>-9.349 **</td>
<td>-6.236 **</td>
</tr>
<tr>
<td></td>
<td>(4.85)</td>
<td>(3.93)</td>
</tr>
<tr>
<td>Choice is Yours Receiving Schools</td>
<td>-1.797</td>
<td>0.494</td>
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<tr>
<td></td>
<td>(1.10)</td>
<td>(0.37)</td>
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<tr>
<td>% of Students Special Education</td>
<td>-0.510 **</td>
<td>-0.113</td>
</tr>
<tr>
<td></td>
<td>(3.73)</td>
<td>(0.98)</td>
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<tr>
<td>% of Students Limited English</td>
<td>0.023</td>
<td>-0.045</td>
</tr>
<tr>
<td></td>
<td>(0.45)</td>
<td>(1.04)</td>
</tr>
<tr>
<td>Mobility Rate (inter-district)</td>
<td>-0.171</td>
<td>-0.192 **</td>
</tr>
<tr>
<td></td>
<td>(1.90)</td>
<td>(2.58)</td>
</tr>
<tr>
<td>Mobility Rate (intra-district)</td>
<td>-0.522</td>
<td>-0.558 *</td>
</tr>
<tr>
<td></td>
<td>(1.71)</td>
<td>(2.20)</td>
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<tr>
<td>Attendance Rate</td>
<td>1.839 **</td>
<td>1.524 **</td>
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<tr>
<td></td>
<td>(3.72)</td>
<td>(3.71)</td>
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<tr>
<td>School Days per Year</td>
<td>0.064</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.38)</td>
<td>(0.01)</td>
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<tr>
<td>Minutes per School Day</td>
<td>0.191 **</td>
<td>0.109 **</td>
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<tr>
<td></td>
<td>(5.01)</td>
<td>(3.47)</td>
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<tr>
<td>Total Enrollment</td>
<td>0.000</td>
<td>-0.002</td>
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<tr>
<td></td>
<td>(0.08)</td>
<td>(1.04)</td>
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<tr>
<td>% of Students Black</td>
<td>-0.084</td>
<td>0.053</td>
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<tr>
<td></td>
<td>(1.73)</td>
<td>(1.32)</td>
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<tr>
<td>% of Students Hispanic</td>
<td>-0.162 **</td>
<td>-0.035</td>
</tr>
<tr>
<td></td>
<td>(2.79)</td>
<td>(0.72)</td>
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<tr>
<td>% of Students Asian</td>
<td>-0.072</td>
<td>0.030</td>
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<tr>
<td></td>
<td>(1.45)</td>
<td>(0.73)</td>
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<tr>
<td>% of Students Other Races</td>
<td>-0.079</td>
<td>0.035</td>
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<td></td>
<td>(0.69)</td>
<td>(0.36)</td>
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<tr>
<td>Intercept</td>
<td>-161.4 **</td>
<td>-98.8 **</td>
</tr>
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<td></td>
<td>(2.68)</td>
<td>(12.31)</td>
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<tr>
<td>Adj. $R^2$</td>
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<td>0.83</td>
</tr>
<tr>
<td>Number of Schools</td>
<td>457</td>
<td>458</td>
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</tbody>
</table>

$t$ statistics in parentheses.

**: Coefficient significant at 99% confidence level.

*: Coefficient significant at 95% confidence level.

Dependent variables: percentage of students meeting or exceeding standards in the relevant subject.
All variables are measured for the 2014-15 school year.
All elementary schools in the 11- county metropolitan area with more than 25 test takers and data for all variables are included in the analysis.