

## DOCUMENT RESUME

ED 383 041

EA 026 496

AUTHOR Beales, Janet R.; Wahl, Maureen  
 TITLE Given the Choice: A Study of the PAVE Program and School Choice in Milwaukee. Policy Study No. 183.  
 INSTITUTION Reason Foundation, Los Angeles, CA.  
 PUB DATE Jan 95  
 NOTE 34p.  
 AVAILABLE FROM Reason Foundation, 3415 Sepulveda Blvd., Suite 400, Los Angeles, CA 90034 (\$15).  
 PUB TYPE Reports - Research/Technical (143)  
 EDRS PRICE MF01/PC02 Plus Postage.  
 DESCRIPTORS Academic Achievement; Academic Persistence; \*Access to Education; \*Educationally Disadvantaged; Educational Vouchers; Elementary Secondary Education; Equal Education; \*Minority Groups; Parent Attitudes; \*Private Education; \*School Choice; Tuition  
 IDENTIFIERS \*Milwaukee Public Schools WI

## ABSTRACT

In response to declining student performance in the Milwaukee Public Schools (MPS), the Wisconsin State Legislature and the private sector each created programs to give school choice to low-income students. In 1990-91 the Legislature implemented the Milwaukee Parental Choice Program (MPCP). About 750 students received government-funded tuition vouchers in 1993-94 to attend any one of a dozen nonreligious private schools in Milwaukee. In 1992, business and religious organizations joined to establish Partners Advancing Values in Education (PAVE), a privately funded school-choice program for low-income students. Unlike the MPCP, PAVE's tuition scholarships may be used at any private school in Milwaukee, including religious schools. PAVE served approximately 2,370 students enrolled in 102 private schools during the 1993-94 school year. This document presents findings of a study that compared the two programs. Data were obtained from parent surveys and student-academic records. Findings indicate that PAVE students outperformed both MPCP and MPS students on standardized tests, and that 57 percent of PAVE families were headed by a single parent. PAVE students who had previously been enrolled in private schools and PAVE students who had previously been enrolled in public schools held nearly identical demographic characteristics. However, PAVE students from private schools performed significantly better on standardized tests. Parents from both programs cited educational quality as the most important reason for choosing a school, followed by discipline and general atmosphere. PAVE parents and MPCP parents were both very satisfied with the amount their children learned in school, though PAVE parents were slightly more satisfied. Students of diverse religions used PAVE scholarships, but PAVE tended to enroll more white students. PAVE schools also had better retention rates than MPCP schools. It is recommended that promoters of school-choice programs improve information dissemination to reach the "mainstream" low-income public-school parents. Fifteen tables are included. Appendices contain survey data. (LMI)

ED 383 041



# Reason Foundation

JANUARY 1995

POLICY STUDY No. 183



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

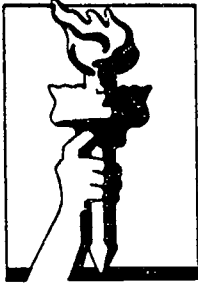
EA 026 496

Reason Foundation  
3415 S. Sepulveda Blvd., Suite 400 • Los Angeles, CA 90034  
(310) 391-2245 • Fax (310) 391-4395

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

*R. J. Phillips*

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."



The **Reason Foundation** is a nonpartisan, nonprofit public policy research and educational organization dedicated to advancing the principles of a free society. The **Reason Foundation** develops free-market solutions to public-policy issues in an effort to enhance economic and personal liberty.

In addition to its research and reports on public policy issues, the **Reason Foundation** also publishes REASON magazine, a leading general-interest "think" magazine.

The **Reason Foundation** also operates the **Reason Privatization Center**, a national information clearinghouse for state and local officials and members of the media seeking assistance in streamlining government. Interested parties should call the Privatization Hotline at (310) 391-6525.

*The Reason Foundation is a tax-exempt nonprofit educational organization as defined under IRS code 501(c)(3). The Reason Foundation neither seeks nor accepts government funding, and is supported by individual, foundation, and corporate contributions. Nothing appearing in this document is to be construed as necessarily representing the views of the Reason Foundation or its trustees, or as an attempt to aid or hinder the passage of any bill before any legislative body.*

## **GIVEN THE CHOICE: A STUDY OF THE PAVE PROGRAM AND SCHOOL CHOICE IN MILWAUKEE**

by  
Janet R. Beales and Maureen Wahl

### **EXECUTIVE SUMMARY**

In response to declining student performance in the Milwaukee Public Schools (MPS), the Wisconsin state legislature and the private sector each created programs to give school choice to low-income students.

In 1990-91 the Wisconsin state legislature implemented the Milwaukee Parental Choice Program (MPCP). Roughly 750 students received government-funded tuition vouchers in 1993-94 to attend any one of a dozen non-religious private schools in Milwaukee.

In 1992, business and religious organizations joined to establish Partners Advancing Values in Education (PAVE), a privately funded school-choice program for low-income students. Unlike the MPCP, PAVE's tuition scholarships may be used at any private school in Milwaukee, including religious schools. PAVE served roughly 2,370 students enrolled in 102 different private schools during the 1993-94 school year.

Key findings from parent surveys and student-academic records about the PAVE program include the following:

- PAVE students outperform both MPCP and MPS students on standardized tests of academic achievement.
- PAVE students who had previously been enrolled in private schools and PAVE students who had previously been enrolled in public schools were nearly identical in terms of demographic characteristics. However, PAVE students who had come from private schools performed significantly better on standardized tests, suggesting that school environment (i.e. public or private) directly influences student performance.
- Parents indicated the most important reason for choosing a school was educational quality, followed by discipline and general atmosphere. Ninety-six percent of PAVE parents were satisfied with the amount their child learned in school.
- Most PAVE families, or 57 percent, are headed by a single parent. Roughly half the parents of PAVE students are White. Over a third are African-American; one-sixth are Hispanic. The average age of PAVE parents is 35, with a range of 20 to 79 years of age.
- While most PAVE elementary-school students (60 percent) attend Catholic parochial schools, the PAVE program extends the greatest support, as a proportion of student enrollment, to Muslim, Jewish, and non-Catholic Christian schools where 49 percent, 29 percent, and 29 percent of students respectively use PAVE scholarships. By contrast, 13 percent of Catholic-school students use PAVE scholarships.

## TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. PARTNERS ADVANCING VALUES IN EDUCATION (PAVE) .....	3
A. Background .....	3
B. Participation .....	3
C. Operations .....	4
D. Schools Participating in PAVE .....	6
E. Parent Surveys and Methodology .....	7
F. Data Collection .....	8
G. Survey Results: Demographic Characteristics of PAVE Families .....	8
H. Survey Results: How Families Learned About PAVE .....	11
I. Survey Results: Parental Attitudes and Behavior .....	12
J. Survey Results: Parental Satisfaction .....	13
III. ACADEMIC PERFORMANCE .....	14
A. PAVE Student Performance .....	14
B. MPCP Student Performance .....	16
IV. ATTRITION RATE .....	17
Projecting a Drop-Out Rate .....	19
V. CONCLUSION .....	20
A. Summary of Key Findings .....	20
B. Lessons for Would-Be Designers of School Choice .....	21
C. School Choice as School Reform .....	22
ACKNOWLEDGEMENTS .....	23
ABOUT THE AUTHORS .....	23
APPENDIX I .....	24
APPENDIX II .....	24
APPENDIX III .....	25
APPENDIX IV .....	26

*PAVE has dispelled the myth that poor parents don't care about their children's education.  
—Mother of PAVE scholarship recipient*

## I. INTRODUCTION

By most accounts, the Milwaukee Public Schools (MPS) are not performing very well. Four-year graduation rates have fallen from 79 percent in 1971 to just 44 percent in 1993.<sup>1</sup> Those students that do make it through to the 12th grade have an average GPA of 2.18 on a four-point grading scale.<sup>2</sup> For African-American students, who make up 58 percent of MPS enrollment, the statistics show even worse levels of academic achievement.<sup>3</sup>

- Just 23 percent of African-American 10th-grade students score at or above the national average on standardized tests in reading and math compared with their White peers. Sixty-two percent of White students score at or above average in reading, and 60 percent score at or above average in math.<sup>4</sup>
- The average GPA of African-American high-school students is 1.38 compared with 2.10 for whites.<sup>5</sup>
- In the 1992-93 school-year alone, one out of five African-American high-school students dropped out of school. White students fared slightly better, with roughly one out of eight dropping out.<sup>6</sup>

As performance has grown worse, it has also grown more costly. Between 1973 and 1993, inflation-adjusted per-pupil spending has increased 21 percent, from \$5,820 to \$7,030 annually (in 1993 constant dollars).<sup>7</sup> Not surprisingly, the deterioration of academic quality, even in the face of greater spending, has led to a loss of confidence in public education. A 1992 survey of Milwaukee residents shows that 65 percent of respondents believe students are worse prepared for work today than they were 30 years ago; 53 percent believe students are worse prepared for college. Given a choice of public or private schools, just 22 percent of Milwaukee residents said they preferred public schools; 76 percent said they would prefer a private school.<sup>8</sup> Another 1992 survey found 89 percent of respondents rated MPS unfavorably, with 29 percent advocating a "complete overhaul."<sup>9</sup>

<sup>1</sup> *Why MPS Doesn't Work: Barriers to Reform in the Milwaukee Public Schools*, Wisconsin Policy Research Institute, January 1994, p. 3.

<sup>2</sup> *Grade Analysis Report*, Gary Peterson, Research Specialist, Milwaukee Public Schools, 1994. The GPA figure reflects average performance of students enrolled in the 12th grade, not those who have graduated from the 12th grade. The average GPA for MPS graduates is not available from MPS.

<sup>3</sup> *1992-93 Report Card: District Report*, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.

<sup>4</sup> Interview with Gary Peterson, Research Specialist, Milwaukee Public Schools, June 30, 1994.

<sup>5</sup> *1992-93 Report Card: District Report*, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.

<sup>6</sup> *1992-93 Report Card: District Report*, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.

<sup>7</sup> Correspondence with Sue Freeze, Wisconsin Department of Public Instruction, Madison, WI, July 27, 1994.

<sup>8</sup> *The Wisconsin Citizen Survey: A Survey of Wisconsin Public Opinion*, Vol. 5, No. 1, Wisconsin Policy Research Institute, January, 1992, pp. 11-12.

<sup>9</sup> *Why MPS Doesn't Work: Barriers to Reform in the Milwaukee Public Schools*, Wisconsin Policy Research Institute Report, January 1994, p. 36.

Even public-school teachers in the MPS seem reluctant to send their own children to public schools. Half of public-school teachers in central Milwaukee send their children to private schools, according to a University of Wisconsin study.<sup>10</sup>

Rising dissatisfaction from both within and without the school system has pressured the state and local government to embark on a number of reforms over the last decade. Significant among these is the Milwaukee Parental Choice Program (MPCP) implemented by the state legislature in 1990-91 through the leadership of Wisconsin State Representative Annette "Polly" Williams. The first of its kind in the nation, the MPCP gives low-income MPS students government-funded tuition vouchers to attend any one of roughly a dozen non-religious private schools in Milwaukee. In 1993-94, about 750 students participated in the MPCP program.

But the private sector has also taken a leadership role in school reform. In 1992, business and religious organizations joined to establish Partners Advancing Values in Education (PAVE), a privately funded school-choice program for low-income students. Unlike the MPCP, tuition vouchers from the PAVE program may be used at any private school in Milwaukee, including religious schools. PAVE served roughly 2,370 students enrolled in 102 different private schools during the 1993-94 school year. Compared to similar privately funded voucher programs around the country, PAVE has the distinguishing characteristics of being the largest program and the only program to operate alongside a government-supported school-choice program.

The latter circumstance affords a unique opportunity to compare the PAVE program with both the MPCP and the Milwaukee Public Schools (see Table 1). Doing so will provide information about what kinds of parents and students tend to participate in each program, why they made the choices they did, and what kinds of academic gains have been realized by students.

Table 1

School Choice in Milwaukee at a Glance		
Program:	Partners Advancing Values in Education (PAVE)	Milwaukee Parental Choice Program (MPCP)
• Year Began Operations	1992-93	1990-91
• Source of Funding	Private foundations, businesses, and individuals	State of Wisconsin
• Portion of Tuition Paid by Program	50% (up to \$1,000 for grades K-8; \$1,500 for grades 9-12)	100%*
<b>Students</b>		
• Number of Students Participating (1993-94)	2,370	750
• Eligibility		
• Economic	Low-income (less than 185% poverty level)	Low-income (less than 175% poverty level)
• Grade Level	K-12	K-12
• Residency	City of Milwaukee**	Milwaukee Public School District
<b>Schools</b>		
• Number of Schools	102	12
• Type of School	Private, including religious	Private, nonsectarian (other restrictions apply)

\* The MPCP voucher is equal to the amount of state aid per MPS pupil, or \$2,984 in 1993-94.

\*\* Students residing in the County of Milwaukee are eligible for PAVE scholarships at the secondary level.

<sup>10</sup> "Watch What Teachers Do," *The Wall Street Journal*, August 29, 1994, p. A10.

## II. PARTNERS ADVANCING VALUES IN EDUCATION (PAVE)

### A. Background

Partners Advancing Values in Education (PAVE) grew out of an existing foundation supporting Catholic schools known as the Milwaukee Archdiocesan Education Foundation. The nonprofit foundation provided an array of financial-support services to Catholic schools in order to further educational opportunities for Milwaukee children.<sup>11</sup>

Despite the fact that 66 percent of enrollment in Milwaukee's inner-city Catholic schools were non-Catholic students, the tenuous financial position of both the schools and the families with children enrolled in them was seen as a "Catholic problem," says Daniel McKinley, founder of the foundation and executive director of PAVE.<sup>12</sup> So the Archdiocesan Foundation's board of directors embarked on a strategic planning process in 1990 designed to "take the program from helping a central core of the city to serving the whole city," says McKinley. To do this, it joined forces with other religious and nonreligious private schools in the city to coordinate a broad-based financial-support plan for private education.

It was during the final stages of this planning process that the Golden Rule Insurance Company established the Educational CHOICE Charitable Trust in Indianapolis to provide tuition scholarships to children from low-income families. Using it as a model, the board of the Milwaukee Archdiocesan Education Foundation combined its \$800,000 trust with funding from other private sources to create PAVE—a scholarship plan giving children a choice of any private school, not just Catholic or religious schools.

One of the chief contributors to PAVE, outside the Archdiocese, was the Lynde and Harry Bradley Foundation, a Milwaukee-based foundation providing financial support to various education, research, and public-policy efforts. The Bradley Foundation pledged \$500,000 annually to the PAVE program for three years beginning in 1992-93 until 1994-95. Funding for PAVE has since been augmented by many smaller businesses and individual donors, and a number of major donors. These include the DeRance Foundation (\$400,000); and Johnson Controls, Northwestern Mutual Life, the Wisconsin Electric Power Co., and the Siebert Luthern Foundation, which each contributed \$100,000 annually for five years.

### B. Participation

In 1993-94, PAVE disbursed over 2,370 scholarships—up from 2,089 in 1992-93—valued at roughly \$1,642,000. PAVE grants scholarships, up to a capped amount, worth half the amount of tuition at any participating private school selected by the student's parent or guardian. Only children living within the city boundary of Milwaukee who qualify for the federal free or reduced-price school lunch program are eligible to receive a PAVE scholarship.

Although originally conceived to serve students in grades K-8, PAVE received numerous requests for scholarships at the high-school level. In response, PAVE set up a special fund to assist secondary-school students. Scholarships for elementary and middle-school students are capped at \$1,000. High-school students may request scholarships up to \$1,500 and may reside outside the city of Milwaukee to be eligible for the PAVE program.

---

<sup>11</sup> Organizations such as the Milwaukee Archdiocesan Education Foundation, Inc., which provide financial support to Catholic schools and tuition support to individuals, exist in many large cities in the United States. The Los Angeles Archdiocese's Education Fund, for example, awarded nearly \$4 million in scholarships to 3,600 students attending any one of the city's 290 Catholic private schools in 1993-94. As of November 1993, a capital campaign for the Education Fund had raised \$82 million for endowment and school operation purposes in Los Angeles.

<sup>12</sup> Interview with Daniel McKinley, executive director, PAVE, Milwaukee, Wisc., November 10, 1993.



Ninety-two elementary private schools and ten high schools accepted 2,370 students with PAVE scholarships in 1993-94 (including 406 high-school students). Paying half the tuition amount up to \$1,000 for elementary students and \$1,500 for secondary students, PAVE scholarships average \$542 and \$1,321 respectively.<sup>13</sup>

By comparison, the MPCP program serves roughly 750 students in twelve independent private schools, including two high schools specializing in education for at-risk students. MPCP vouchers are valued at \$2,984 and cover tuition-in-full at each of the participating schools.<sup>14</sup>

### C. Operations

PAVE differs somewhat from other privately funded choice programs in the way it distributes scholarships. Rather than granting scholarships directly to students on a first-come, first-served basis, PAVE coordinates with a private-school administrator at each of the participating schools. One-page scholarship applications are available at the PAVE office, libraries, community centers, and the participating schools. The tuition-grant applications ask the student's name, address, and telephone number. They also ask for the name of the school the student plans to attend and the school's tuition cost. Parents must also mark a box signifying their child qualifies for the federal free or reduced-price lunch program.

After selecting the private school for which they hope to receive a PAVE scholarship, applicants meet with the school's PAVE administrator. Assuming space allows, and the applicant meets school admission standards, if any, the applicant and school jointly fill out the remainder of the application and send it to PAVE. The signature of both the student's parent or guardian and the school administrator are required at the bottom of the application. The school is responsible for verifying that the student meets PAVE's financial eligibility requirements.

The purpose of this arrangement is to give more discretion to local administrators who better know the circumstances of the families and students they serve. In addition, administration of the scholarship program, from the standpoint of PAVE, is made easier, minimizing costs. (PAVE's overhead costs, including the cost of a full-time PAVE administrator, total 7 percent of annual costs and are paid out of a separate fund.)<sup>15</sup> Low-income families tend to be very mobile and difficult to keep track of over periods of several months. Some own neither cars nor telephones. By working through a local contact in closer touch with the applicant family, PAVE can easily locate applicants and award scholarships.

Roughly half the PAVE scholarships are awarded to low-income students who were enrolled in private schools prior to the advent of PAVE. Recognizing that low-income families often have difficulty maintaining tuition payments, PAVE organizers decided to dedicate some of their resources to stabilizing the education of those children already enrolled in private schools.

Payment for the tuition scholarship is made on behalf of each student twice a year and mailed to the school. The check requires parents to co-sign—a procedure intended to “empower” parents by directly involving them in the payment process, according to McKinley. Scholarships from PAVE are granted on a yearly basis, with no multi-year commitment to any one student. However, the scholarships may be renewed if the student continues to meet PAVE's eligibility requirements and is in good standing with the school.

<sup>13</sup> “PAVE Scholarship Report,” 1992-94, PAVE, Milwaukee, Wisc.

<sup>14</sup> Interview with Sue Freeze, consultant, State School Aids Consultation and Audit Section, Wisconsin Department of Public Instruction, August 30, 1994.

<sup>15</sup> Interview with Dan McKinley, executive director, PAVE, Milwaukee, Wisc., November 16, 1994.

Scholarships are distributed fairly evenly between new entrants and continuing students, says McKinley. At the direction of PAVE, 45 percent of the scholarships were granted to students already enrolled in the private schools during PAVE's first year of operation. The remainder of the scholarships were granted to students new to private education, with 31 percent of the total going to students transferring from public schools, and 24 percent awarded to young children entering grade school for the first time (see Table 2).<sup>16</sup> PAVE's roots as an Archdiocesan scholarship fund may account for its commitment to serving a comparatively higher proportion of continuing private-education students.

In 1992-93, its first year of operation, PAVE received 4,094 applications, nearly double PAVE's capacity, despite the requirement that parents contribute to tuition. In 1993-94, an additional 2,200 applications were filed with PAVE.

PAVE's application process and eligibility criteria also differ from those of the MPCP. PAVE's eligibility requirements are broader than the MPCP, encompassing greater numbers of low-income children. To determine scholarship eligibility, PAVE uses the federal free and reduced-lunch program, which is calibrated to 185 percent of the poverty level, equivalent to \$26,584 in 1993-94 (\$27,380 in 1994-95) for a family of four. The MPCP program uses a cutoff of 175 percent of the poverty level, or \$25,113 for a family of four in 1993-94 (\$25,900 in 1994-95). According to Russ Whitesel, senior staff attorney with the Wisconsin Legislative Council and a consultant in the design of the MPCP, the figure of 175 percent was derived from a number of measures used to assess poverty levels in Milwaukee at the time the MPCP was established.<sup>17</sup>

The one-page applications for the MPCP program are available from the Department of Public Instruction (DPI), the governor's office, and the participating private schools themselves. While the DPI sends press releases to Milwaukee newspapers and radio stations every year announcing the availability of MPCP vouchers, MPS has done little, if anything, to formally publicize the choice program since it was created in 1990.<sup>18</sup> For the first time in 1993-94, by order of the legislature, information about the MPCP will be included in a brochure published annually by the MPS that describes various district programs.<sup>19</sup>

MPCP applications must be filed with the school or schools the student has selected between May 1 and June 30 for enrollment in the upcoming September. The applications require the applicant to fill out the student's name, address and grade level, name of the public-school the student was enrolled in during the previous year,

Table 2

Distribution of PAVE Scholarships in Year One	
Continuing private-school students	45%
Public-school student transfers	31%
Students new to grade school	24%

Source: PAVE and *First Year Report of the PAVE Scholarship Program*.

<sup>16</sup> Interview with Dan McKinley, April 6, 1994 and Maureen Wahl, *First Year Report of the PAVE Scholarship Program*, Family Service America, Inc., pp. 7-8.

<sup>17</sup> Interview with Russ Whitesel, Senior Staff Attorney, Wisconsin Legislative Council, Madison, Wisc., July 13, 1994.

<sup>18</sup> In all three of his annual reports evaluating the MPCP, John Witte indicates that information about choice has been inadequate. "The most prevalent source of information on choice remains friends and relatives, which basically means word-of-mouth information. That informal communication is more than double the frequency of almost all other sources." (Witte, *Third Year Report*, p. 4.) Resistance to the MPCP from the DPI and the MPS, responsible for the program's implementation, has been strong. In 1992, then state School Superintendent, Herbert Grover, joined with teachers unions to file suit against the MPCP. The Wisconsin Supreme Court ruled that the MPCP did not violate the Wisconsin Constitution. ("High Court Upholds Creation of Choice," *Milwaukee Sentinel*, March 4, 1992.)

<sup>19</sup> Section 119.23(10) of the Wisconsin State Statutes reads as follows: "The department of administration, in cooperation with the board, shall establish a public information campaign to inform the parents of all pupils who are eligible to attend a private school under this section, and the eligible pupils, about the program under this section." Effective 1993-94.

and name of the school to which the student is applying. To verify income eligibility, applicants mark the appropriate box in a chart listing household income levels, list their social security number, and sign the application.

Although the participating private schools may not screen applicants for admission, most of the private schools schedule an informational interview with the applicant and parent to discuss school policies and parent and student responsibilities.

The school must inform the student within 60 days after receipt of the application whether or not the student has been accepted by the school (acceptance or rejection may be based on capacity only). If more applications are received than there is space available, a lottery is used to randomly select students. Siblings of students already enrolled in the school and continuing MPCP students are exempt from the lottery and are given priority enrollment. Local administrative policies such as these were developed by an advisory council representing participating private schools.

Like PAVE, the MPCP has been oversubscribed every year of its operation. Between 1990-91 and 1993-94, the number of students turned away each year for lack of available private-school capacity has been 236, 168, 357 and 307 students respectively.<sup>20</sup>

The Wisconsin legislature enacted strict regulations when it created the MPCP; among them is the requirement that no more than 49 percent of students in any one grade level at each private school may be MPCP students. (The schools are permitted to accept fewer MPCP students than allowed by the cap.) In addition, no more than one percent of the total MPS student population may participate in the MPCP—a limit which has never been exceeded due to restricted private-school capacity. In the 1994-95 school year, these limitations were lifted slightly to 65 percent, and 1.5 percent respectively.

#### D. Schools Participating in PAVE

PAVE scholarships may be used at any private school selected by the recipient family. To date, PAVE's reach has been impressive, helping pay the tuition of 2,450 low-income students during 1993-94 in 102 of Milwaukee's 108 private schools.

Since all but 20 of the private schools participating in PAVE are religiously affiliated, nearly 95 percent of the PAVE students attend such schools. Over half (60 percent) of the PAVE students attend the 50 Catholic parochial schools participating in PAVE.<sup>21</sup>

Although most of the students receiving PAVE scholarships attend Catholic schools, PAVE appears to be having the greatest positive impact on non-Catholic Christian, Jewish, and Muslim schools. These schools have proportionately higher numbers of students receiving PAVE scholarships than do the Catholic schools. At least one in four students in the non-Catholic Christian and Jewish schools uses a PAVE scholarship. Almost half the students in Muslim schools participate in PAVE. By contrast,

Table 3

1993-94 PAVE Scholarships		
	Number of Scholarships Granted	Number of Students on the Waiting List
Elementary	2,033	879
Secondary	417	214
<b>Total</b>	<b>2,450</b>	<b>1,093</b>

Source: PAVE

<sup>20</sup> *Third-Year Report, Milwaukee Parental Choice Program*, p. 4.

<sup>21</sup> Correspondence with Dennis Kaluzny, PAVE, Milwaukee, Wisc., July 21, 1994.

just one in eight Catholic-school students receives assistance from PAVE. As Table 4 shows, PAVE provides support to a diversity of private schools.

In addition, seven of the twelve independent private schools participating in the MPCP program enroll students with PAVE scholarships. Since regulations restrict the supply of MPCP vouchers at these schools, some students use PAVE scholarships which are not restricted in their use to attend the same schools participating in the MPCP.

Table 4

1993-94 PAVE Scholarships				
Elementary School Affiliation	1993-94 Total Enrollment	Number of PAVE Scholarships to Students	Percent of Total Enrollment on PAVE	Value of Average Scholarship
Catholic	9,256	1,222	13%	\$561.00
Lutheran	2,658	395	15%	\$557.00
Other Christian	631	187	30%	\$581.00
Jewish*	134	39	29%	\$1,000.00
Muslim	26	12	46%	\$574.00
Independent	1,663	178	11%	\$752.00
Totals	14,368	2,033		

\* Tuition at the Yeshiva Elementary School, the only Jewish school for elementary-school students in Milwaukee, averages \$3,300 annually.

Source: PAVE

### E. Parent Surveys and Methodology

Much of the information about the PAVE program comes from surveys of parents whose children received PAVE scholarships. Commissioned by the Lynde and Harry Bradley Foundation, the survey of PAVE families was conducted by Family Service America (FSA), a national nonprofit corporation providing services, education, and advocacy for families in need through its 290-member agencies. The purpose of the survey was to describe the families that were granted PAVE scholarships during the 1992-93 academic year, to determine the amount of parental involvement in the participating schools, and to evaluate parental satisfaction with the PAVE program. Information about academic performance was collected in FSA's *Second Report of the PAVE Scholarship Program* and is reported in Section III below. This data will serve as the foundation for a three-year longitudinal study of the PAVE program.

The FSA survey design was based on a series of surveys conducted by Professor John F. Witte of the University of Wisconsin at Madison, to assess the attitudes and demographics of families participating in the publicly funded Milwaukee Parental Choice Program (MPCP).<sup>22</sup> Although the FSA survey does not include all of the questions contained in the survey conducted by Witte (FSA did not ask about household income, for example), there are many points of comparison. The Witte surveys provide two useful control groups: low-income families who participated in the MPCP and low-income families whose children remained in the Milwaukee Public Schools (MPS). Unless otherwise noted, all of the following statistics in Section II come from the FSA survey

<sup>22</sup> John F. Witte, Andrea B. Bailey, and Christopher A. Thorn, *Third Year Report: Milwaukee Parental Choice Program*, University of Wisconsin, Madison, December 1993. Data from the Third-Year Report combined survey data from the years 1990 to 1992.

(including the *First-Year Report of the PAVE Scholarship Program*) and the *Third Year Report, Milwaukee Parental Choice Program* by John F. Witte.

## F. Data Collection

FSA surveys were mailed in May 1993 to every family in which at least one child had been a PAVE scholarship recipient during the 1992-93 academic year. Three weeks after the initial mailing, surveys were sent to all non-responding families in an attempt to raise the overall response rate. Of the 1,549 families who were mailed surveys, 955 (or 62 percent) returned completed surveys; 35 (or 2 percent) of the surveys were returned to FSA with undeliverable addresses. FSA received surveys from families representing all 85 schools participating at that time. Sixty-four elementary schools had a 50 percent or greater response rate among surveyed families; all high schools had at least a 50-percent response rate. The responses of individuals have been kept confidential by aggregating the survey results.

## G. Survey Results: Demographic Characteristics of PAVE Families

Chief among the questions asked about school choice is what kinds of families would be likely to transfer their children from public to private schools. Limited as it is in size, and shaped by specific design features discussed above, the PAVE program can only partially answer those questions. What we do find is that the survey results about family demographics are consistent with those collected from the privately funded choice program operating in San Antonio, Texas, the only other program to have conducted parent surveys using public-school control groups. This suggests that PAVE can tell us a great deal about how similarly structured programs would perform, but less so about a full-scale state-supported program.

The PAVE program targets low-income families without regard to a student's race, ethnicity, gender, or religious preference. By accepting only those students from low-income households, the program has clearly reached its goal. Demographic statistics describing PAVE parents are presented in Table 5.

### 1. Race

Roughly half the parents/guardians of PAVE students are white (46 percent of females and 52 percent of males). African-Americans are the next largest group, representing 37 percent of the female and 31 percent of the male parents/guardians. Hispanics, Asians, and Native Americans of both genders made up 13 percent, 2 percent, and 2 percent of the respondents respectively (see Table 5).

Table 5

Race of Parents/Guardians				
	PAVE (mother/father)	MPCP*	MPS	City of Milwaukee
White	46/52%	3%	29%	42%
African-American	37/31	78	55	45
Hispanic	13/13	17	10	10
Asians	2/2	0.2	4	--
Native Americans	2/2	1	1	--
Other	--	--	--	4

\* Applied to the MPCP 1990 to 1992.

Source: *First-Year Report of the PAVE Scholarship Program*, *Third-Year Report, Milwaukee Parental Choice Program*, and Bureau of the Census data from the Demographics Services Center, State of Wisconsin.

Of the three school groups described (PAVE, MPCP, and low-income MPS), PAVE most closely reflects the racial characteristics of the City of Milwaukee. Nonwhites comprise 58 percent of all school-age children in the City of Milwaukee, and 54 percent (designated by race of mother) in PAVE. By comparison, 97 percent of MPCP students are nonwhite; 71 percent of low-income MPS students are nonwhite.

Comparing PAVE students to low-income MPS students, whites, Hispanics, and Native Americans are over-represented in the PAVE program. However, since close to half of PAVE participants are drawn from private schools, one would expect that the PAVE program would be more likely to mirror the current private-school population than the MPS population from which just 31 percent of PAVE students are drawn.

In fact, PAVE students fall somewhere in the middle between the MPS population and Milwaukee's Catholic-school student population—which comprises 65 percent of all privately enrolled elementary-school students—with regard to the number of minority students represented.

Table 6 shows the racial composition of elementary students in the Catholic parochial schools of Milwaukee compared to the PAVE elementary students. As can be seen, the PAVE program includes a higher proportion of minority students (54 percent) than the Catholic schools (over 8 percent).<sup>23</sup> Since roughly 60 percent of PAVE scholarships at the elementary level are given to students who choose Catholic schools, and 54 percent of all PAVE students are racial minorities, PAVE makes it possible for proportionately more minority students to attend Catholic schools—and private schools generally—than otherwise would do so.

Demographic characteristics, particularly with respect to race, also differ significantly between MPCP families and the low-income MPS control group. The MPCP has proportionately more African-American students and fewer white students compared to the MPS low-income student population as a whole. (See Table 2.) Student participation may be influenced by characteristics of the private schools themselves. The two schools serving the largest numbers of MPCP students, the Harambee School and the Urban Day School, which together enroll approximately 400 MPCP students, primarily enroll African-American students. Various characteristics, such as school location, of the participating schools may explain why a higher proportion of African-American students choose to participate in the MPCP than their numbers in the MPS would indicate.

## 2. Marital Status

Most PAVE families are headed by a single parent. Roughly a quarter of the PAVE parents have never been married, another quarter are divorced. Forty-two percent of PAVE parents are married or have remarried. An even greater proportion of families in the low-income MPS group and the MPCP are headed by a single parent.

Table 6

	Race of Students	
	PAVE Scholarship Recipients (race of mother)	Milwaukee Catholic Schools (total elementary students)
Other (White)	46%	92%
African-American	37	3
Hispanic	13	3
Asian	2	1
American Indian	2	< 1

Source: *U.S. Catholic Elementary and Secondary Schools, 1993-94, Annual Statistical Report on Schools, Enrollment and Staffing*, National Catholic Education Association, Washington, D.C. and *First-Year Report of the PAVE Scholarship Program*, Family Service America, 1993, Milwaukee, Wisc.

<sup>23</sup> Since "White" is combined with "Other" in the reporting process of the National Catholic Education Association, which compiles such information, we don't have an exact figure for white students.

Thirty-five percent of MPS parents are married; interestingly, the number of married parents in the MPCP program is even lower with just 23 percent (see Table 7).

Because PAVE scholarships cover only half of tuition costs, families with two parents may be in a better financial position to participate in such a program. Alternatively, single parents might be more inclined to apply for the MPCP voucher, which covers total tuition costs. Also, since the PAVE program includes religious schools, parents with strong religious values, which typically emphasize marriage and family life, may be more inclined to seek out the PAVE scholarships rather than enroll their children in the MPCP or MPS, which exclude religious teachings.

Table 7

Marital Status of Parent/Guardian			
	PAVE	MPCP	MPS (low-income)
Married/Remarried	43%	23%	35%
Divorced	23	16	13
Single (never married)	22	40	32
Separated	9	12	11
Widowed	3	4	2
Living Together	1	5	6

Source: *First-Year Report of the PAVE Scholarship Program and Third-Year Report, Milwaukee Parental Choice Program.*

### 3. Religious Preference

Results from surveys of PAVE parents regarding religious involvement are not conclusive. Less than 2 percent of respondents expressed no religious preference. The majority, or 53 percent, identified themselves as Catholic. Forty-one percent were Protestant, 2 percent were Jewish, and 1 percent were Muslim. Although the survey of MPCP parents did not collect data about religious affiliation, it did ask parents to rate the importance of "maintaining religion/belief" compared to the importance of education. Fifty-eight percent thought, as a goal, it was as important as education. Twelve percent responded that religion/belief was more important, and 30 percent stated education was of greater importance. The response rates of MPS parents were very similar to those of the MPCP parents, suggesting that religion/belief did not play a part in the decision to transfer from the non-sectarian MPS to the MPCP, which also excludes religious education by excluding religious schools. The FSA survey did not attempt to assess the degree of importance religion and beliefs played in the lives of PAVE parents. Therefore, we can not determine whether or not religion played a significant role in the decision by parents to participate in PAVE. We can only report their religious affiliation.

### 4. Age of Parent

The average age of PAVE parents is 35, with a range of 20 to 79 years of age. The average number of children in a PAVE family is 2.3 compared with 2.6 in MPCP families and 3.2 in low-income MPS families.

### 5. Educational Attainment of Parent

The educational attainment of PAVE parents is strikingly similar to that of MPCP parents. Roughly 30 percent of female parents/guardians from each group earned, at most, a high-school diploma or its equivalency; almost half had continued their education, taking some college courses. Just 7 percent of PAVE female parents and 6 percent of MPCP female parents were college graduates. Likewise, just 3 percent of PAVE female parents, and 4 percent of MPCP female parents reported having an eighth-grade education or less. Male parents/guardians had similar responses (see Table 8).

Educational attainment differences are greatest between MPS low-income parents and the two school-choice programs. The difference is especially noticeable among the least-educated parents—those with less than a high-school degree. Among choice parents, from either PAVE or the MPCP, just 10 percent fell into this category; among low-income MPS parents, 37 percent of both females and males had less than a high-school education. The differences were also great at the other end of the scale—parents with some college or more. Fifty-four

percent of PAVE and MPCP parents had attended some college or more; just 29 percent of low-income MPS parents had attained this educational level.

(Interestingly, although MPCP parents are more educated than MPS parents on average, their incomes are slightly lower than those of low-income MPS parents. MPCP households averaged \$11,625 while average household income for MPS low-income families was \$12,130 for the years 1990 to 1992 combined. The FSA survey did not collect household-income data for the PAVE families.)

These findings suggest that better educated parents are more likely to seek educational opportunities for their children, and that school choice is perceived as such an opportunity. This hypothesis is somewhat confirmed by the opinion surveys of PAVE and MPCP parents in which both groups overwhelmingly rated "educational quality" as "very important" in their decision to participate in school choice. Both groups also tended to report higher levels of parent involvement in their children's educations compared to MPS parents.

#### 6. *Public vs. Private-School Parents in PAVE*

One finding of the parent surveys is that PAVE appears to attract public-school students whose demographic characteristics more closely resemble those of PAVE students who had previously been enrolled in private schools compared to MPS students, MPCP students, or Catholic parochial-school students (see Table 6 for differences in race between PAVE students and parochial-school students).

If one breaks out the responses of the 400 PAVE parents who indicated their children had at one time been enrolled in the public schools, there is little if any difference between the survey responses of those parents and the 529 low-income PAVE parents who have had their children enrolled in private schools all along. This similarity applies not just to race, marital status, age, religion, and education level, but to qualitative measures such as the parents' level of involvement in their children's schools.

One possible explanation for the similarities between seemingly different populations (parents new to private schools and parents who have always elected for private schools) is that PAVE may make possible private education for parents who would have opted for private schools in the first place, and who would have been willing to pay for them, but whose financial resources were insufficient to cover full-tuition costs. PAVE simply bridges the financial gap for these low-income parents.

#### H. **Survey Results: How Families Learned About PAVE**

The most common source of information about the PAVE program was the private schools themselves, where 54 percent of parents learned about PAVE. Since just 45 percent of PAVE students had been enrolled in private schools prior to PAVE, this result could suggest that some parents—or roughly 10 percent—who had children either in public schools, or just entering school for the first time, were in the process of investigating private schools before they learned about PAVE. From a policy standpoint, this could mean that PAVE provided

Table 8

Educational Attainment of Parent			
	PAVE (Mother/Father)	MPCP (Mother/Father)	MPS (Mother/Father)
8th Grade	3/5%	4/8%	12/15%
Some High School	12/14	12/17	25/22
High School Degree	25/30	22/29	25/25
GED	5/8	10/8	9/9
Some College	46/31	45/29	26/21
College Graduate	7/6	6/7	3/6
Some Post Graduate	3/5	2/2	1/2

Source: *First-Year Report of the PAVE Scholarship Program and Third-Year Report, Milwaukee Parental Choice Program.*



support to first-time private-school parents who would have chosen private schools even in the absence of a voucher.

On the other hand, because parents could check more than one source of information on the parent survey, some double counting may be involved. Additional research is needed to determine what the original source of information was for PAVE parents.

Other sources of information marked off on the survey were friends and family (14 percent), church (11 percent), newspapers (10 percent) and television/radio (9 percent). Community centers played a very small role in informing parents about PAVE (less than 1 percent) (see Table 9).

Parents learned about the MPCP in quite different ways. Most of these parents heard about the program by word-of-mouth, through friends and family. Private schools were a source of information for just 22 percent of parents. This is probably because, unlike the PAVE program, MPCP students had to have been enrolled in the public schools prior to participating in the MPCP. Half the students in the PAVE program were already enrolled in a private school before applying for a scholarship. Both the PAVE and MPCP programs distribute applications directly to the participating schools.

A revealing difference between the two programs is that PAVE families were far more likely to learn about the program through church than MPCP families. Eleven percent of PAVE families learned about school choice in this way compared with only 3 percent of MPCP families. This could indicate that PAVE parents attend church on a more regular basis, and so would be more likely to hear about a school-choice program. On the other hand, since PAVE includes religious schools and the MPCP does not, churches would be more likely to know of, and promote, the PAVE program, particularly if a private school were affiliated with that church. Neither the MPCP nor PAVE targeted churches for disseminating applications, however both specifically targeted private schools, and for PAVE, this included religious schools. Such schools could have been a conduit for information to their affiliated churches about the PAVE program.

### 1. Survey Results: Parental Attitudes and Behavior

Foremost among the reasons parents participated in the PAVE program was education quality. Eighty-nine percent of parents rated education quality as "very important," more than any other consideration listed. Educational quality was very important to MPCP parents, 87 percent of whom marked it as "very important."

The other reasons parents gave for participating in school choice, shown in Appendix I, were very similar for both the PAVE program and the MPCP, with discipline, general atmosphere, and financial considerations being judged "very important" by roughly three-quarters of choice parents. Frustration with the public schools also seems to have played a significant role in parents' selections. Although just a third of PAVE parents transferred their children out of public schools, 65 percent of PAVE parents indicated that "frustration with the public schools" was a very important reason for their choice.

Roughly the same number, or 64 percent, of MPCP parents indicated that their negative experience with the public schools had been a major reason for transferring into private education. Besides indicating widespread dissatisfaction with public education among PAVE and MPCP parents, these figures also indicate that many

Table 9

How Parents Learned About the School Choice Program		
	PAVE	MPCP*
Friends or Relatives	14%	44%
Television or Radio	9	21
Newspapers	10	24
Private Schools	54	22
Churches	11	3
Community Centers	< 1	4

\* 1992

Source: *First-Year Report of the PAVE Scholarship Program* and *Third-Year Report, Milwaukee Parental Choice Program*.

PAVE parents originally chose private schools because of their dissatisfaction with public education, prior to the advent of PAVE. Low-income parents who are willing to pay tuition to send their children to private school, instead of sending their children to public school where no financial sacrifice is required, probably perceive substantial differences in quality between the two settings.

The importance of the reasons parents gave for participating in choice differ between PAVE and MPCP participants in just two areas. MPCP parents seemed to place greater importance on other children (siblings) enrolled in the MPCP program. This may be because MPCP families have more children, 2.6 on average compared to 2.3 children on average for PAVE families.

The second noticeable difference in survey responses was that MPCP families indicated "special programs" played a significant role in their choice far more often than PAVE families. Seventy percent of MPCP parents marked "special programs" as "very important" compared to just 48 percent in the PAVE program. Since 90 percent of the schools participating in PAVE have a religious orientation—a distinguishing characteristic from public schools—parents may have considered religion a "special program." However, it is difficult to know what "special programs" meant to survey respondents, so no conclusions can be drawn about this response.

#### J. Survey Results: Parental Satisfaction

Overall, parents participating in the PAVE program seem to be highly satisfied with the schools they selected. (Recall, 65 percent of PAVE parents had indicated that frustration with the public school had been a "very important" reason for their selecting a private school.) On questions about school discipline, school location, instructional programs, textbooks, and the performance of the schools' teachers and principals, well over 90 percent of the PAVE parents expressed satisfaction. (See Appendix II.) By contrast, satisfaction levels among MPS parents were lower on each of the eight factors evaluated. Where satisfaction levels differed the most between PAVE and MPS parents were in the areas of discipline and student learning. Among PAVE parents, satisfaction levels did not differ significantly between those parents whose children had previously been enrolled in public school compared with those with children previously enrolled in private school.

PAVE parents gave the private school they had selected high grades. Ninety percent rated the schools with an "A" or "B": 56 percent gave their school an "A" and 34 percent gave the school a "B." Eight percent gave the school a "C." Less than 2 percent gave their schools a "D" or "F." The grades MPCP parents gave their schools were good, but somewhat lower. Low-income parents with children in the MPS were least satisfied with their children's schools (see Table 10).

Table 10

Grade Parents Gave to School Their Child Attend			
Grade	PAVE	MPCP	MPS
A	56%	35%	26%
B	34	38	39
C	8	19	24
D	1	2	8
F	1	5	3

Source: *First-Year Report of the PAVE Scholarship Program and Third-Year Report, Milwaukee Parental Choice Program.*

Parents in the MPCP were also very satisfied with their schools, although not quite as satisfied as the PAVE parents. Almost 90 percent of MPCP parents were satisfied with school discipline, school location, instructional programs, textbooks, and staff performance. (See Appendix II.)

Ninety-six percent of PAVE parents were satisfied with the amount their child learned in school; 94 percent were satisfied with opportunities for parental involvement. Again, satisfaction on these two parameters was also high for MPCP parents, although not quite as high as for PAVE parents. In the MPCP, 88 percent were satisfied with the amount their child learned; 91 percent were satisfied with the opportunities for parental involvement in the private school they chose.

Parent participation in both their child's education and school appears to be higher among choice families than public-school families. Parents of children in the PAVE program or the MPCP were more likely to read to their children, or work on math or writing, for example. Parents' reported involvement was slightly higher for MPCP families than it was for PAVE families. For example, 40 percent of MPCP parents indicated they helped their children with reading and math at least five times a week. For PAVE parents, 38 percent helped their children with reading and 30 percent helped their children with math five or more times a week. (Figures for PAVE are for elementary-school aged children only.) Ninety-six percent of PAVE parents and 97 percent of MPCP parents reported attending parent-teacher conferences compared with 84 percent of MPS parents.

One might have expected that parents who contributed financially to their children's education (PAVE) would be more inclined to take an active role in helping their children learn. However, it appears that participation in choice, be it MPCP or PAVE, is a better predictor of parental involvement than whether or not the parent must also pay for that choice.

Results from the work by John Witte show that prior to participation in choice, MPCP parents were more involved in their children's school as compared to nonchoosing families. Witte's data indicate that choice may appeal to a more motivated parent. But Witte's data also show that parental involvement increases after parents have switched, suggesting that there is something about either the school chosen, or the act of choice itself that is a motivator in its own right.

The last open-ended question on the PAVE survey asked parents to comment on their decision to send their child to a nonpublic school or on the PAVE scholarship program in general. Responses to this question are categorized in Appendix III.

### III. ACADEMIC PERFORMANCE

#### A. PAVE Student Performance

Early evidence collected by Family Service America indicates that students who participate in PAVE outperform their public-school counterparts on standardized tests. This difference holds not just against other low-income MPS students, but for the MPS student population as a whole, and for students in the MPCP. In fact, twice as many PAVE students, in percentage terms, score at or above the National Percentile Standard (NPS) (50th percentile) on the Iowa Tests of Basic Skills (Iowa Basics) as low-income MPS students.

In its *Second-Year Report of the PAVE Scholarship Program*, Family Service America obtained results from the Iowa Basics for 110 of 172 seventh graders enrolled in the PAVE program. A self-selection bias may have been introduced since test scores were obtained only for those students whose parents agreed to release their child's academic information. The test results of PAVE students were compared to those of students in the MPS and the MPCP as reported in John Witte's *Third-Year Report of the Milwaukee Parental Choice Program*. (Note: The Witte report aggregates test scores for multiple grade levels, including the 7th grade. Grade-equivalent scores for individual grade levels are not available from the Witte data. Test scores were released to John Witte by the MPS.)

Table 11 shows that a higher fraction of PAVE students scored at or above the National Percentile Standard (NPS) than all other comparison groups. In reading, over 63 percent of PAVE students scored at or above the NPS on the Iowa Basics test compared with just 25 percent of low-income MPS students and 17 percent of MPCP students. Similarly, in math, more than 60 percent of PAVE students scored at or above the NPS as opposed to 30 percent of MPS low-income students and roughly 29 percent of MPCP students. Because these scores report only the percentage of students scoring at or above the NPS (or 50th percentile), and not their actual test scores, this measure provides only a general indication of the performance of a student cohort.

Mean and median National Percentile Rank (NPR) scores in Table 11 tell us that PAVE students are, on average, above the national average, but only slightly so. Conversely, MPS students—from all three control groups—are, on average, significantly below the 50th percentile.

Table 11

Iowa Tests of Basic Skills 1993				
PAVE scores reflect test results of 7th grade students MPCP scores reflect test results of students from multiple grade levels.				
	PAVE	MPCP Students	Low-Income MPS Students	All MPS Students
<b>Reading</b>				
NPR*	63.2%	16.7%	24.9%	29.9%
Median	58.5	26.0	30.0	32.0
Mean**	55.5	36.0	38.8	40.9
Standard Deviation	24.7	15.0	16.9	18.0
	n=106	n=389	n=1,212	n=1,443
<b>Math</b>				
NPR*	60.4%	28.7%	29.5%	35.0%
Median	57.5	32.0	32.0	36.0
Mean**	54.1	39.4	39.9	42.7
Standard Deviation	28.5	17.4	18.9	20.2
	n=106	n=384	n=777	n=984

\* Measures percentage of students who score at or above 50 percent of National Percentile Rank on tests.

\*\* Measures average student performance relative to the National Percentile Standard of the 50th percentile.

Source: *Second-Year Report of the PAVE Scholarship Program* and *Third-Year Report, Milwaukee Parental Choice Program*.

When PAVE students are broken out into two groups—those who had previously attended public school (transfer students) and those who had always attended private school—the differences in achievement are significant. The 52 students sampled who had transferred from public schools rate consistently lower in math, reading, and on the composite score, than the 47 students who had only attended private schools<sup>24</sup> (see Table 12). These results hold not only for NPR scores, but also for grade-equivalent scores.

(Note: transfer students include those students who transferred from public schools to private schools prior to the advent of PAVE. Roughly half the 7th-grade transfer students left the public schools using PAVE scholarships—after attending public schools for six or seven years. The remainder had left the public schools sometime before entering the 5th grade, and before the PAVE program was operating.)

Yet, based on available demographic data, the two groups have similar family background characteristics. Both groups come from low-income households. The parents of both groups of students are also very similar in terms of race, marital status, age, religious preference, and education level. That is, the demographic characteristics of parents in one group matched those in the other group. Even on qualitative measures, such as level of

<sup>24</sup> *Second-Year Report of the PAVE Scholarship Program*, Family Service America, pp. 28-29 draft, July 22, 1994.

parental involvement in their children's education, the responses from both sets of parents were essentially the same.

Given that the only significant difference between the transfer group and the private-school-only group is their past school environment, the evidence suggests that differences in test scores may be due to prolonged enrollment in private schools of choice. In other words, private schools may have a positive impact on the academic performance of low-income students.

However, there may be additional variables (such as degree of religious involvement among private-school families or socio-economic status within the low-income parameters), which may alter these conclusions. Moreover, the small sample size (n=99) drawn from 7th-grade students, makes extrapolation to the K-12 student population problematic. More extensive research is required to verify these preliminary results.

Table 12

Iowa Tests of Basic Skills			
Median Scores for Transfer and Private School Only Students in the 7th Grade			
		PAVE students transferring from public to private schools. (n=52)	PAVE students who have always attended private schools. (n=47)
Reading	Grade Equivalent Score*	7.2	7.9
	National Percentile Ranking (mean scores)	48.5%	66.0%
Math	Grade Equivalent score*	7.1	7.8
	National Percentile Ranking (mean scores)	44.0%	73.0%
Composite	Grade Equivalent score*	7.5	8.2
	National Percentile Ranking (mean scores)	47.0%	69.0%

\* Grade equivalent scores benchmark test scores to the standard of achievement for each grade level. The first digit corresponds to a particular grade level, while the second digit refers to the number of months beyond that grade level.

Source: *Second-Year Report of the PAVE Scholarship Program.*

(Note that the lower performing PAVE students in Table 12 who had transferred from public schools appear to outperform all other MPS control groups shown in Table 11 on academic tests. However, due to the large differences in sample size, more data are needed before meaningful conclusions can be drawn.)

## B. MPCP Student Performance

Perhaps more puzzling are findings on MPCP achievement levels reported by John Witte in his *Third-Year Report*. On test scores, there is a very significant difference between the PAVE students, who perform well, and the MPCP students, who perform poorly. This is despite the fact that both groups attend private schools, and despite the fact that some PAVE students attend the same schools as MPCP students.

Research by Witte may provide some answers. In his *Third Year Report*, he writes that:

The attitudes of parents toward their children's prior public school within MPS may be a reflection of the fact that their children were not doing well in those schools....The absolute level of the (Iowa Tests of Basic Skills) scores indicates the difficulty these students were having prior to entering the MPCP program. The median national percentile for choice students ranges from 26 to 31, compared with the national median of 50. The Normal Curve Equivalent, which is standardized to a national mean of 50, ranges from 37.5 to 39.8, which is about two-thirds of a standard deviation below the

national average. *In short, the choice students in this program enter very near the bottom in terms of academic achievement*<sup>25</sup> [Italics original].

Therefore, the MPCP appears to receive a higher concentration of low-performing students to start out with compared to the MPS. In addition, the MPCP requires that students have attended the public schools in the year prior to enrolling in the program, therefore these students have not been exposed to private education to the same extent as PAVE students.

The question for researchers is whether or not these low-achieving MPCP students improve academically once they transfer to schools of choice. Data from Witte's *Third-Year Report* provide some evidence of minor improvements. He reports a significant increase in math scores for MPCP students coupled with an insignificant decline in reading scores.<sup>26</sup>

More research is required to fully assess the impact of both the MPCP and the PAVE program on student achievement. However, as PAVE shows, on average, low-income students in private schools achieve at higher levels than their public-school counterparts in the MPS on standardized tests. These trends corroborate the findings of several other major studies including research by John Chubb and Terry Moe,<sup>27</sup> and James Coleman.<sup>28</sup>

#### IV. ATTRITION RATE

Compared to the MPCP, the PAVE program does a better job at retaining students. Of 2,450 PAVE students, 95 (or 4 percent) left the PAVE program during the 1992-93 academic year. Over the same time period, 50 students (the difference between the September-student count of 620 students and the June count of 570 students) left the MPCP, representing 8-percent attrition.<sup>29</sup>

(Note: the attrition rate, which refers to students who leave the school-choice program mid-year, should not be confused with the drop-out rate, which refers to students who leave education altogether.)

Tables 13 and 14 present the reasons students left the PAVE and MPCP programs respectively. Researchers for the MPCP aggregated the reasons of students who left mid-year with those who failed to return to the program following the summer break. Researchers with the PAVE program present data in Table 13 for only those students who left the PAVE program mid-year.

---

<sup>25</sup> Witte, *Third-Year Report*, p. 8.

<sup>26</sup> John Witte, *Third-Year Report*, p. vi.

<sup>27</sup> John Chubb and Terry Moe, *Politics, Markets & America's Schools*, The Brookings Institution, Washington, D.C., 1990.

<sup>28</sup> James Coleman, Thomas Hoffer, and Sally Kilgore, *High School Achievement: Public, Catholic and Private Schools Compared*, Basic Books, Inc., New York, 1982.

<sup>29</sup> Maureen Wahl, *Second-Year Report of the PAVE Scholarship Program*, Draft Report, Family Service America, p. 32, July 1994, and John Witte, *Third-Year Report, Milwaukee Parental Choice Program*, p. 33.

Table 13

Student Attrition: Reasons for Leaving the PAVE Program  
1992 Academic Year

Reason	Number of Students	Percent of Students who Leave PAVE	Percent of All PAVE Students
Transferred to another private or public school	23	24.21%	0.94%
Increased family income made student ineligible	15	15.78	0.61
Family moved	14	14.73	0.57
Student's behavioral problems in school	10	10.52	0.41
Dissatisfaction with school chosen	6	6.31	0.24
Family could not pay other half of tuition	5	5.26	0.20
Expulsion	4	4.21	0.16
Academic performance of student	2	2.10	0.08
Withdrew to study at home	1	1.05	0.00
No reason obtained	15	15.78	0.61
Total	95		

Source: *Second-Year Report of the PAVE Scholarship Program*

With respect to PAVE, if we omit the students whose families became financially ineligible for the scholarships, the attrition rate drops to 3 percent. This is a remarkably low rate for any population, but especially so for a low-income population facing a greater degree of financial and other types of instability than the population at large.

Regarding the MPCP, roughly half the students leaving the program, or 49 percent, enrolled in MPS schools. Nineteen percent enrolled in MPS contract schools (nonpublic schools), home-school environments, or schools outside Milwaukee. One-third, or 32 percent, enrolled in other private schools, often for religious reasons, according to the *Third-Year Report, Milwaukee Parental Choice Program*.

Because researchers with the MPCP had not expected to analyze the cause of attrition when designing the study, they had difficulty following up with nonreturning students/families, especially those families who had moved out of the area entirely. Results in Table 14 reflect this bias and should be viewed as preliminary.

However, several findings are worth noting. Of those who left the MPCP, approximately 40 percent of respondents indicated they were dissatisfied with some aspect of the school chosen. By contrast, just 6 percent of the PAVE parents whose children left the program indicated they were dissatisfied with the school they had selected. Ten percent of the students left the MPCP because of lack of religious training, which is prohibited by state statute in the MPCP schools. By including religious schools from which families may choose, the PAVE program avoids this problem. Also, transportation-related difficulties were cited by almost 16 percent of MPCP respondents, yet were absent from the responses by PAVE families. Since the MPCP includes just 12 schools while the PAVE program includes 102, families residing in Milwaukee are more likely to be located closer to a participating PAVE school than an MPCP school. With a greater supply of schools from which to choose, transportation problems appear to become fewer.

A number of additional factors may help explain why PAVE experiences an attrition rate that is half the amount of the MPCP. Parental satisfaction with the PAVE program is higher than in the MPCP, and parents have a

Table 14

Student Attrition: Reasons for Leaving the MPCP*		
Reason	Number of Students	%
<b>Program Quality</b>		
Lack of religious training	8	10.0%
Lack of transportation	7	8.75
Income	3	3.75
Application problems	4	5.0
Fee changes	1	1.25
<b>Quality of the Choice School</b>		
Poor education	8	10.0
Too disciplinarian	4	5.0
Unhappy with staff	11	13.75
Lack of programs for talented students	1	1.25
Lack of programs for students with special needs	6	7.5
Too segregated	2	2.5
Child expelled	2	2.5
<b>Child/Family specific</b>		
Transportation far away	6	7.5
Moved	6	7.5
Pregnancy	2	2.5
Quit school	2	2.5
Child custody change	2	2.5
<b>Miscellaneous</b>		
	3	3.75
<b>Total</b>	<b>78</b>	<b>100.0</b>

\* Results from brief, open-ended, surveys and interviews of 78 students/families (out of a possible 174 responses) who enrolled in the MPCP for the 1991-92 school year and then left the program during or after the academic year.

Source: *Third-Year Report, Milwaukee Parental Choice Program.*

### Projecting a Drop-Out Rate

If we assume that student behavior, expulsion, academic performance, and "no reason obtained" resulted in the student dropping out of school altogether, then at worst, the annual hypothetical drop-out rate for PAVE elementary and secondary students would be less than 1 percent.

A corresponding figure for K-12 students in the Milwaukee Public Schools is not available.<sup>30</sup> However, at the high-school level, the annual, *actual*, drop-out rate in the MPS is 17.4 percent.<sup>31</sup>

greater variety of school choices under PAVE. These are two reasons why families might remain in the PAVE program longer compared with the MPCP. Demographic characteristics may also play a role. Students from two-parent families, which are more common in the PAVE program than in the MPCP, may experience a more stable home environment, which in turn may contribute to more stability in their school environment. Moreover, the average academic performance of PAVE students is significantly higher than that for MPCP students. Students who are succeeding in a particular school may be more inclined to continue their education at that school.

On the other hand, one might expect that the PAVE attrition rate would be higher than the MPCP given the fact that low-income parents may have difficulty maintaining their share of tuition payments from year to year. Yet this does not appear to be the case. Just five percent of PAVE families in Table 13 indicate that they left the program because of their inability to maintain their share of the tuition payments.

<sup>30</sup> Interview with Gary Peterson, Research Specialist, Milwaukee Public Schools, September 28, 1994.

<sup>31</sup> 1992-93 Report Card: District Report, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.



## V. CONCLUSION

Although comparisons between the different educational settings are simple to make, drawing accurate conclusions about them is a more difficult process. The PAVE program and the MPCP program differ in several fundamental ways. The PAVE program requires families of scholarship recipients to come up with half the tuition payment (some families have obtained additional scholarships or other support to reduce their share of tuition costs); the MPCP parents pay nothing toward private-school tuition. The PAVE program allows a greater diversity of private schools, including religious schools, to participate, while the MPCP tightly restricts private-school participation. Students receiving MPCP vouchers for the first time must have attended the MPS in the previous year. By comparison, roughly half of the PAVE students had already been in the private schools before receiving a tuition scholarship.

Because of these and other differences in program design, PAVE and the MPCP may be serving different constituencies within the eligible low-income population. As these two programs demonstrate, school-choice programs can be designed in many different ways, and that design may influence what kinds of families are attracted to the program, as well as the success of the programs themselves in improving student performance.

### A. Summary of Key Findings

In general, answers by parents to survey questions show that PAVE and MPCP parents tend to be better educated, are more likely to be married, and have higher educational expectations for their children than their low-income MPS peers.

Preliminary findings from research on standardized test scores of 7th-grade students show that PAVE students on average outperform both MPCP students and MPS students in math and reading. When PAVE students are grouped according to prior school experience (i.e. previously enrolled in private or public school), the test scores of PAVE students who had previously attended private schools were significantly higher than those PAVE students who had attended public school. Yet in all other demographic, family, and other background characteristics surveyed, the two groups were virtually identical. This suggests that the type of school (public or private) is a strong predictor of student academic performance. The test scores also show that the group of lower performing PAVE students who had previously been enrolled in public school still outperform the other public-school control groups reported. This indicates that PAVE may attract low-income students who are stronger academically than their public-school peers. Additional research is necessary to confirm the preliminary results presented here.

The attrition rate for K-12 students in PAVE is half that of the MPCP, or 4 percent. Reasons for this difference may include the higher parental satisfaction levels reported by PAVE parents, higher levels of academic achievement by PAVE students, and more variety and availability of schools from which to choose under the PAVE program. Based on the attrition rate of PAVE, it is reasonable to assume that the *drop-out* rate of PAVE high-school students is also significantly lower than the 17.4 percent annual high-school drop-out rate of the Milwaukee Public Schools.

Beyond offering greater academic opportunities to low-income students and broadening access to private education for low-income students, PAVE also brings benefits to the private schools. Roughly one in four students attending non-Catholic Christian, and Jewish schools, and nearly one in two students attending Muslim schools, does so with the financial support of PAVE. For private schools generally, PAVE enables more minority students to partake in private education.

While the MPCP tends to enroll a higher proportion of African-American students compared to their share of the MPS student population, the PAVE program tends to enroll more Whites. Because both the MPCP and PAVE are school-choice programs, and do not award vouchers or scholarships on the basis of race, these differences may stem more from the characteristics of the private schools themselves and less from the appeal

of school choice to various racial and ethnic groups. Of all three school populations studied here, PAVE most closely reflects the racial composition of the school-aged population in the City of Milwaukee.

### B. Lessons for Would-Be Designers of School Choice

Not only does the design of a school-choice program influence what kinds of families will participate, it can also influence its reach. Milwaukee's two school-choice programs provide a compelling example of how restrictions on school choice end up limiting the number of students who can participate, and the number of schools which might serve them.

Despite the fact that it involves significant financial costs, the PAVE program is in greater demand among low-income families than the MPCP. In 1993-94, the MPCP received approximately 970 applications; PAVE received close to 4,000.

Because of capacity restrictions, just 746 of roughly 1,000 MPCP vouchers authorized by the state were used by students to attend private schools. Capacity need not be so limited, but legislative constraints have severely restricted choice's reach. As compared to PAVE, the MPCP limits participating schools to nonsectarian institutions willing to accept the \$2,987 voucher amount as payment-in-full for tuition. Even parents who would be willing to pay extra in exchange for additional school services for their children cannot do so under MPCP rules.

Admission standards at the private schools may not select on the basis of gender, religion, or academic achievement, discouraging or disqualifying some private schools. No more than 49 percent (65 percent beginning in 1994-95) of the students enrolled at any one private school may use vouchers—a clause which simultaneously restricts the number of students who can use the voucher while discouraging new private schools from opening, which would otherwise cater to a primarily voucher-holding clientele.

Moreover, restricting total participation to just 1 percent (1.5 percent beginning in 1994-95) of public-school enrollment hobbles market dynamics by artificially restricting the market's scale. Only two high schools participate, and both of these are alternative schools for at-risk students. Of 108 private schools in the Milwaukee area, twelve are able or willing to accept students with MPCP vouchers. Consequently, the number of available seats for voucher students are few and students applying to the choice program have been turned away. In 1993-94, the choice program had 307 more applicants than available seats.<sup>32</sup>

In general, regulations, not a failure of choice, have severely restricted the ability of the MPCP to expand educational opportunities for the low-income population it is intended to serve.

For those students the program does serve, the MPCP is, for the most part, successful. Parents report high levels of satisfaction with the program overall, and, in particular, with the amount their children are learning. Test scores from the third year of the program's administration show a significant increase in math scores and a slight decrease in reading.<sup>33</sup> Most significantly, the number of applications to the MPCP has increased in each of the four years since its inception, and the legislature has expanded the program slightly beginning in the 1994-95 school year. The attrition rate, defined as students who leave mid-year and students who do not return to the MPCP the following year, continues to hover around 30 percent, however, with half those students returning to the MPS and another third enrolling in other private schools. Increasing the supply of private schools from which parents may choose may help reduce the attrition rate.

---

<sup>32</sup> *Third-Year Report*, p. 4.

<sup>33</sup> John F. Witte, *Third-Year Report*, p. v.

A couple of lessons also emerge from the study of the PAVE program. In surveys, PAVE parents most often stated that education quality was a very important reason for selecting the school. (See Appendix I). And while most parents were pleased with the school they had selected, a number were disappointed. To help families make informed choices about where to send their children to school, information about school and student performance should be made widely available to prospective students and their parents.

Another finding is that those PAVE families who transferred from public schools are nearly identical in demographic characteristics and survey responses as those PAVE families who have had children in private schools all the way along. Yet, in general, PAVE parents had very different characteristics compared with the control group of low-income MPS parents. This suggests that, among low-income families, school-choice programs such as PAVE are not reaching the "mainstream" low-income public-school parent, but instead are attracting low-income families who would have put their children in private schools in the first place, but who, perhaps, could not afford full tuition. Here again, additional research would be helpful to clarify the motivations of choosing and nonchoosing parents.

This is not a criticism of PAVE—the objective of PAVE is to assist low-income families to obtain private education, and in this it has succeeded. But if school-choice programs wish to reach those families who have never considered private education, or who believe they are entitled to a free public education, then they must either change the thinking and behavior of these parents, or change the school-choice programs themselves to attract more such parents.

### C. School Choice as School Reform

Opponents of choice say vouchers will result in a two-tier system. But PAVE scholarships have enabled low-income students to enroll in nearly every private school in Milwaukee, representing, broadly speaking, every type of school. As PAVE has demonstrated, school choice promotes diversity—not just among schools, but among students afforded a private-school education. PAVE has enabled more low-income and minority students to enter private education compared to their current numbers in the Catholic parochial schools—the only type of school for which we have comprehensive demographic information.

Indeed, the current status of public schooling in Milwaukee has led to a concentration of low-income and minority students in the Milwaukee Public Schools (see Table 15). Minorities comprise 75 percent of children (aged 5 to 17) enrolled in the Milwaukee Public Schools, but just 58 percent of all children living in the city of Milwaukee.<sup>34</sup> On measures of poverty, 73 percent of MPS children come from households with incomes low enough to qualify for the federal free or reduced lunch program, while just 55 percent of children living in the city of Milwaukee fall into that same category.<sup>35</sup>

Table 15

Percentage of Children Aged 5 to 17 Living in Poverty		
	MPS*	City of Milwaukee**
Hispanic	10%	10%
White	26	42
Black	58	45
Other	6	4
All children under 185% poverty level	73	55

\* 1992-93

\*\* 1989 Census Bureau data

Source: Milwaukee Public Schools and U.S. Bureau of the Census.

<sup>34</sup> Census of Population and Housing, 1990: Summary Tape File 4A Wisconsin, prepared by the Bureau of the Census, Department of Administration, Madison, Wisconsin, July, 1994, and *1992-93 Report Card: District Report*, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.

<sup>35</sup> *Summary Population and Housing Characteristics, Wisconsin*, U.S. Bureau of the Census, 1991, and *1992-93 Report Card: District Report*, Office of Educational Research and Program Assessment, Milwaukee Public Schools, p. 8.

"What these numbers tell you is that people who have choice have already exercised it, enrolling their children in private or suburban public schools. Those who are left tend to be poor and black," says Susan Mitchell, a policy consultant who has worked with the Milwaukee Public Schools.<sup>36</sup> The current system of public education precludes people from seeking alternatives and getting the financial support to do so. Students from low-income families caught in inferior public schools have little recourse.

School choice has the potential to give all children access to quality education. As the PAVE program and the MPCP demonstrate, school choice opens up educational opportunities to low-income and minority students and gives parents the satisfaction of selecting the school that best meets the needs of their own child. In the words of one parent, PAVE "make[s] private education possible for those who could not otherwise afford this privilege....[I] wanted very much for my children to receive the same outstanding education I did so many years ago. Because of the generosity and concern of PAVE donors, this wish has become reality."<sup>37</sup>

### ACKNOWLEDGEMENTS

The authors wish to thank the following people for their input and suggestions: Terry Moe, Dan McKinley, Dennis Kaluzny, John Witte, Sue Freeze, Susan Mitchell, Sheryl Kelber, and Raymond Ng.

We would also like to extend our appreciation to the supporters of the Reason Foundation and Family Service America who made this research possible.

### ABOUT THE AUTHORS

Janet R. Beales is a policy analyst with the Education Studies Program of the Los Angeles-based Reason Foundation. She holds an M.B.A. degree from the University of Washington. The Reason Foundation is a nonprofit research organization dedicated to finding market-based solutions to public-policy issues.

Maureen Wahl, Ph.D., is director of research for the Milwaukee-based Family Service America. Dr. Wahl holds a doctorate in urban education from the University of Wisconsin, Milwaukee. Family Service America's research staff conducts studies on various issues and topics that affect family life across the life span.

---

<sup>36</sup> Interview with Susan Mitchell, The Mitchell Company, Inc., Milwaukee, Wisc., May 25, 1994.

<sup>37</sup> Correspondence from Theresa J. Sawinski, mother of two children who received PAVE scholarships to attend St. Alexander Grade School, to PAVE administrators, August 31, 1994.

## APPENDIX I

Factors Affecting Decision to Participate in a School-Choice Program (Reported by Parents)				
	Very Important (PAVE/MPCP)	Important (PAVE/MPCP)	Somewhat Important (PAVE/MPCP)	Not Important (PAVE/MPCP)
Education Quality in Chosen School	89/88%	11/11%	4/1%	<1/0%
Discipline in School	72/77	22/21	4/3	1/0
General Atmosphere of Chosen School	73/76	21/21	5/3	1/1
Financial Considerations	77/71	18/22	4/5	<1/2
Special Programs in Chosen School	48/67	29/26	13/4	11/3
Location of Chosen School	60/62	22/19	12/14	6/5
Frustration with Public Schools	65/61	18/22	10/11	8/6
Other Children in Chosen School	36/39	25/29	14/13	25/19

MPCP data combined for 1990-92

Source: 1993 Surveys of PAVE parents, Family Service America, and *Third-Year Report of the Milwaukee Parental Choice Program*, University of Wisconsin.

## APPENDIX II

Parental Satisfaction with the PAVE, MPCP, and MPS Programs (Reported by Low-Income Parents)				
	Very Satisfied (PAVE/MPCP/MPS)	Satisfied (PAVE/MPCP/MPS)	Somewhat Dissatisfied (PAVE/MPCP/MPS)	Very Dissatisfied (PAVE/MPCP/MPS)
Textbooks	47/42/29%	47/47/63%	3/6/6%	1/5/1%
Location of School	52/46/41	42/37/44	4/10/10	1/6/5
Opportunities for Parent Involvement	55/52/36	40/39/54	3/4/8	1/4/3
Teacher's Performance	52/54/40	43/35/48	3/6/9	1/5/3
Program of Instruction	53/45/33	43/44/56	3/6/9	1/5/5
Principal's Performance	50/48/37	43/38/48	4/7/9	2/6/5
Amount Child Learned	54/52/36	42/36/47	3/6/13	1/6/4
Discipline in the School	51/43/27	42/41/48	4/9/17	2/7/8

Source: *First-Year Report of the PAVE Scholarship Program*, Family Service America and *Third-Year Report of the Milwaukee Parental Choice Program*, University of Wisconsin.

## APPENDIX III

Many of the 940 families responding to the PAVE survey wrote comments about the program and the school (n=730). The following table categorizes these responses by subject matter.

Open-Ended Survey Responses, PAVE	
	Number of Responses
Gratitude for financial assistance	251
Quality of education	237
Importance of religious education	127
Importance of values	38
Dissatisfaction with public schools	75
Dissatisfaction with school of choice	19
Satisfaction with curriculum and school programs	152
Opportunities available in the private schools	43
Small school and class size	56
Safety	50
School location and dissatisfaction with busing	14

Source: *First-Year Report of the PAVE Scholarship Program*, Family Service America.

## APPENDIX IV

Iowa Tests of Basic Skills  
PAVE Seventh-Grade Student Scores

Grade Equivalent Scores	Median	Mean	Standard Deviation	Range	n
Reading	7.70	7.66	1.91	2.7-13.0	106
Math	7.55	7.53	1.88	2.5-13.0	106
Composite	7.65	7.61	1.71	2.2-13.0	

Iowa Test of Basic Skills  
National Percentile Scores (PAVE, MPCP, MPS)

National Percentile Scores	Percent at or Above 50% of NPR	Median NPR	Mean NCE	Standard Deviation of NCE	n
<b>Reading</b>					
PAVE	63.2	58.5%	55.5%	24.7%	106
MPCP	16.7	26.0	36.0	15.0	389
Low-income MPS	24.9	30.0	38.8	16.9	1,212
MPS	29.9	32.0	40.9	18.0	1,443
<b>Math</b>					
PAVE	60.4	57.5%	54.1	28.4%	106
MPCP	28.7	32.0	39.4	17.4	384
Low-income MPS	29.5	32.0	39.9	18.9	777
MPS	35.0	36.0	42.7	20.2	984
<b>Composite</b>					
PAVE	N/A	60.0%	56.0%	25.3%	106
Low-income MPS	N/A	N/A	N/A	N/A	N/A
MPS	N/A	N/A	N/A	N/A	N/A

PAVE scores reflect test results of 7th-grade students. MPS and MPCP scores reflect test results of students from multiple grade levels.

Source: *Second-Year Report of the PAVE Scholarship Program*, Family Service America, and the *Third-Year Report of the Milwaukee Parental Choice Program*, University of Wisconsin.

# Notes



# Notes



*Reason  
Foundation*

3415 S. Sepulveda Blvd., Suite 400  
Los Angeles, CA 90034  
(310) 391-2245 Fax (310) 391-4395