
Robert M. Costrell

SCDP Milwaukee Evaluation Report #22

December 2010
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The College of Education and Health Professions established the Department of Education Reform in 2005. The department’s mission is to advance education and economic development by focusing on the improvement of academic achievement in elementary and secondary schools. It conducts research and demonstration projects in five primary areas of reform: teacher quality, leadership, policy, accountability, and school choice.

The School Choice Demonstration Project (SCDP), based within the Department of Education Reform, is an education research center devoted to the non-partisan study of the effects of school choice policy and is staffed by leading school choice researchers and scholars. Led by Dr. Patrick J. Wolf, Professor of Education Reform and Endowed 21st Century Chair in School Choice, SCDP’s national team of researchers, institutional research partners and staff are devoted to the rigorous evaluation of school choice programs and other school improvement efforts across the country. The SCDP is committed to raising and advancing the public’s understanding of the strengths and limitations of school choice policies and programs by conducting comprehensive research on what happens to students, families, schools and communities when more parents are allowed to choose their child’s school.

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In February 2008 and March 2009, the School Choice Demonstration Project (SCDP) issued its first report and subsequent update on the fiscal impact of the Milwaukee Parental Choice Program (MPCP) on taxpayers in Milwaukee and the state of Wisconsin. These reports covered the period 1993-2009, and addressed two distinct questions:

1. What is the net impact of the MPCP on state and local public funds? That is, what is the difference between the public funds expended on Wisconsin students, including MPCP students, and the amount that would have been spent without the MPCP?

2. How is the fiscal impact distributed among:
   a. Milwaukee property taxpayers
   b. property taxpayers outside of Milwaukee
   c. Wisconsin state taxpayers (e.g. those who pay state income and sales tax)
   d. Milwaukee Public Schools (MPS)

The methodology of these reports centered on close examination of the MPCP funding formula and its interaction with the state’s two intertwined funding formulas for district schools -- the revenue limit and equalization aid formulas. The first key feature of the state’s funding system is that a district’s available revenues (from state and local sources combined) rise and fall with enrollment, according to the revenue limit formula. The second key feature is that the equalization aid formula apportions each district’s “shared costs” between state aid and local property taxes, based on property values. The MPCP funding formula has interacted with these two district formulas in ways that have evolved over the program’s history to the present day.

The two main findings from the previous SCDP reports were:

1. The net fiscal impact of the MPCP is somewhat sensitive to assumptions, but for most likely scenarios the net impact is positive taxpayer savings. That is because the size of the voucher is considerably smaller than the per pupil revenues allocated to MPS under the revenue limit formula. Under one likely scenario, the estimated taxpayer savings from the voucher program was $37.2 million in fiscal year 2009 (FY09).

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2. The distribution of the fiscal impact is highly uneven. Despite likely net benefits for taxpayers as a whole, Milwaukee property taxpayers have been adversely affected, due to the specific nature of the funding formula adopted for the MPCP. The estimate for FY09 was a $44.7 million adverse impact on Milwaukee property taxpayers. At the same time, the estimated net benefits for local property taxpayers outside of Milwaukee and for those who pay Wisconsin state taxes were $52.0 million and $30.0 million respectively.

It is important to understand how the fiscal benefits came to be distributed so unevenly. The main reason is that early in the evolution of the MPCP funding formula, funds for state aid ceased flowing to Milwaukee for voucher students, but about half the voucher expenses continued to be deducted from Milwaukee’s aid allotment. These features, taken alone, reduce the per pupil revenues available to MPS. However, Milwaukee is allowed to offset the voucher deduction from state aid by raising property taxes -- the “choice levy.” Milwaukee almost always exercises this option to maintain per pupil revenues. As a result, the program has had an adverse impact on Milwaukee property taxpayers, despite net benefits to the state’s other taxpayers. This is the explanation of the “funding flaw” -- the adverse impact on Milwaukee property taxpayers -- that has been much discussed in Milwaukee and Wisconsin for a number of years.

There are two reasons to update the previous reports. First, in the 2009 legislative session, the size of the MPCP voucher was cut, for the first time in the program's history, from $6,607 in FY09 to $6,442 for FY10 and FY11. In addition, the funding formula for the MPCP was modified to address the “funding flaw.” So it is of interest to see how these developments play out on the net fiscal impact and its allocation among groups of taxpayers.

Second, since the next biennial budget will be established in 2011, it may be helpful to outline various policy options. Should the Legislature decide to revisit the MPCP voucher amount and the funding formula, what policy changes could still generate net fiscal benefits and distribute them more evenly?

To summarize the results of this update:

1. The net fiscal benefits of the MPCP have continued to grow. The estimated increase was particularly sharp in FY10, from $37.2 million to $46.7 million. This increase was primarily due to the cut in the voucher amount, while MPS’ per pupil revenues continued to grow from $9,462 to $9,727, and secondarily due to MPCP enrollment growth. For FY11, continuing growth in the MPS revenue limit to $10,013 will widen the gap with the voucher, raising the net fiscal benefit of the program from $46.7 million to $51.9 million, even assuming no growth in MPCP enrollment.

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2 The $46.7 million net fiscal benefit represents the difference between the voucher expenditures of $130.1 million and the estimated $176.8 million state and local expenditures on those voucher students who would have otherwise attended MPS.
2. The net fiscal benefits continue to be unevenly distributed, with an adverse impact on Milwaukee property taxpayers, although mitigated somewhat by recent legislative efforts. That adverse impact is estimated at $40.8 million for FY10, while other property taxpayers and state taxpayers benefit by $55.3 million and $32.2 million, respectively. For FY11, assuming constant enrollments, these figures are projected to be $36.5 million (adverse impact), $57.0 million and $31.5 million (favorable impacts), respectively.

3. The MPCP voucher, which was reduced, could be increased by various amounts and still generate positive net fiscal impact. Under the assumption that 90 percent of MPCP enrollees would have otherwise attended MPS, the voucher could have been as high as 90 percent of the MPS revenue limit -- about $9,000 -- before eliminating the FY11 net fiscal benefit of the program. If, for example, the voucher were set at 80 percent of the MPS revenue limit, $8,010 in FY11, the net fiscal benefit would have been $20.2 million, holding MPCP enrollment constant. If the supply response to increasing the voucher size is positive, the net fiscal benefits could be larger.

4. If, in addition, the funding mechanism were revamped in a way to eliminate the “funding flaw,” all groups of taxpayers could benefit, to varying degrees, from the program. Two methods are presented: (i) adding MPCP enrollments to the MPS student counts for the funding formulas and fully funding the voucher out of MPS aid, but eliminating the “choice levy;” or (ii) funding the program entirely out of the general fund. Details on how these reforms could be implemented, as well as pros and cons, are presented.

This report is part of a series of annual reports on the Milwaukee Parental Choice Program (MPCP) conducted by the School Choice Demonstration Project (SCDP). An initial draft of this report was improved based on comments from Anneliese Dickman and Andrew Reschovsky. The author also benefited from comments by members of the SCDP research team and the SCDP Research Advisory Board. An advance copy of this report was reviewed by the Wisconsin Legislative Fiscal Bureau and also provided to School Choice Wisconsin. All remaining errors and opinions are the responsibility of the author alone.

This ongoing research project is being funded by a diverse set of philanthropies including the Annie E. Casey, Joyce, Kern Family, Lynde and Harry Bradley, Robertson, and Walton Family Foundations. We thank them for their generous support and acknowledge that the actual content of this report is solely the responsibility of the author and does not necessarily reflect any official positions of the various funding organizations or the University of Arkansas.
The Net Fiscal Impact on Public Funds

The net fiscal impact of the MPCP on state and local public funds is the difference between the voucher expenditures on MPCP students and the allocation of revenues to the public schools that voucher students would otherwise attend. This can be formally expressed as follows:

\[
\text{Net Impact} = (\text{MPS revenue/pupil} \times \text{reduction in MPS enrollment}) - (\text{voucher} \times \text{MPCP enrollment}).
\]

This expression can be informatively rewritten in two ways:

1. \[
\text{Net Impact} = (\text{MPS revenue/pupil} - \text{voucher}) \times p \times \text{MPCP enrollment} - \text{voucher} \times (1-p) \times \text{MPCP enrollment},
\]

2. \[
\text{Net Impact} = [(\text{MPS revenue/pupil} \times p) - \text{voucher}] \times \text{MPCP enrollment},
\]

where \(p\) is the percentage of MPCP students who would have otherwise attended MPS.

The first term in (1) is the per pupil savings of public funds for each student who attends an MPCP school instead of MPS. The second term is the public voucher expenditure for families that would be otherwise borne privately, either by the families themselves or by privately-funded scholarships. Expression (2) shows that net benefits are generated by the difference between the voucher and \(p\) times the MPS per pupil revenues.

The key variables that determine the net impact are: (i) MPS per pupil revenues; (ii) the voucher amount; (iii) MPCP enrollment; and (iv) \(p\), the percentage of voucher students who would have otherwise attended public schools. We take these each in turn.

(i) MPS Per Pupil Revenue Limit

Figure 1 presents data from the Wisconsin Department of Public Instruction (DPI) on the per pupil revenue limit for MPS and the maximum MPCP voucher amount.\(^3\) The 2008 report and 2009 update presented these figures through FY09, and Figure 1 extends these to FY11, along the dotted lines. The revenue limit, set by Wisconsin statute, specifies the maximum district revenues from state general school aids and local property taxes (i.e. excluding Federal funds and state categorical aid). From FY09 to FY11, the MPS revenue limit has grown by $551 per pupil, from $9,462 to $10,013, slightly slower than the $629 growth of the previous biennium.

The annual growth in the revenue limit is determined under statute. It has two pieces. The first piece is the general statutory growth for all districts, a specific dollar amount that was indexed annually for inflation and stood at $275 in FY09. Under Act 28, which established the budget for the FY09-FY11 biennium, the general

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\(^3\) Although both figures are maximum amounts, the actual amounts have almost always been at or very near the maximum. For an exception, when MPS did not tax up to the revenue limit in FY08, see note 13 below. It is, of course, possible that such cases may be more common in the future, under pressure of taxpayer duress.
statutory growth was reduced to $200 for FY10 and FY11 (with a provision to revert in FY12 to $275 growth, indexed for inflation thereafter).

Milwaukee’s revenue limit is raised annually by a second factor, known as “transfer of service,” which typically refers to costs of students with serious disabilities, over and above what is reimbursed from categorical aids. In the two years of the current biennium these increases are $65 and $86. Together with the general increases of $200 per year, this accounts for the $551 per pupil increase identified above. These increments due to “transfer of service” have risen over those of the previous biennium, mitigating the slowdown in the general statutory growth.

(ii) MPCP Voucher Amount

The value of the MPCP voucher, by contrast, not only slowed in growth but was actually cut. Previously, the funding formula specified that the voucher would grow each year by the same percentage as the general school aids appropriation, and if that percentage were negative, the voucher would not be cut. Prior to that, for FY00-FY04, the MPCP voucher increased annually by the same dollar amount as the general statutory growth for the per pupil revenue limit.

For the FY10-FY11 biennium, the legislature cut the voucher by 2.5 percent, from $6,607 in FY09 to $6,442 for FY10 and FY11, with a provision to resume growth in FY12, from the reduced base, by the percentage growth in general school aids. Consequently, the gap between the MPS revenue limit and the voucher has widened, from $2,855 in FY09 to $3,285 in FY10 and $3,571 in FY11.4 Thus, each voucher student who enrolls in an MPCP school instead of MPS now provides a net savings of $3,571 from state and local funds. The growth in this per pupil savings over the last two years increases the net fiscal benefit from the MPCP, holding other things constant.

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Figure 1: MPS Revenue Limit and MPCP Maximum Voucher, FY91-FY11

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4 Viewed as a percentage of the MPS revenue limit, the voucher amount has now fallen to 64.3 percent, after hovering between 71 percent and 74 percent from FY98 to FY08.
(iii) MPCP Enrollment

Figure 2 presents DPI data on MPCP enrollment. These data are full-time equivalents, the units to which the per-pupil voucher amount applies. The program continued to grow in FY10, rising from about 19,500 students to 20,200. Projections for FY10 and FY11 were presented in 2009, during the biennial budget process. At that time, the Governor and Legislature projected FY10 growth of 1,000 (from 19,500 to 20,500), but differed on FY11 growth: the Governor projected further growth of 1,000 and the Legislature projected no growth. Since we have no data for FY11, we use the conservative projection of no growth. The program’s enrollment cap is 22,500.

(iv) Percentage of MPCP Students Who Would Have Otherwise Attended MPS

The last statistic that is needed to calculate the program’s net fiscal impact is the percentage of MPCP students who would have otherwise attended the public schools. Unlike the other data, this figure cannot be readily measured -- it can only be estimated from one source or another. The 2008 report discussed this issue in some

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5 Four-year-old kindergarteners and summer students count as less than one FTE.
detail, and no further information has become available to update this estimate. Specifically, the best estimate available was 90 percent, a figure derived from the choices of lottery winners and losers in other low-income voucher programs. This figure was also consistent with long-term downward trends in Milwaukee private school enrollments outside of the voucher program. That said, there is uncertainty regarding the estimate, so the calculations for net fiscal impact were presented for a range of assumed percentages of MPCP students who would have otherwise attended MPS. These ranged from a low of 70 percent (representing the outside limit of what might conceivably be consistent with long-term private school enrollment trends) to a high of 100 percent.

**Estimates of Net Fiscal Impact, FY09-FY11**

Table 1 presents the net fiscal impact of the MPCP on public funds, for FY09, FY10, and FY11 under varying assumptions regarding the percentage of MPCP students who would have otherwise attended MPS. As indicated above, the figures have grown, due to the widening gap between the voucher and the MPS revenue limit. For years prior to FY09, the net fiscal impact was positive for most reasonable assumptions regarding the percentage of MPCP students who would have otherwise attended MPS, but under the 70 percent assumption it was negative. Since FY09, however, the net impact is no longer negative, even under that extreme assumption. That is because the voucher has fallen below 70 percent of the MPS revenue limit; as equation (2) shows, if voucher/revenue limit is less than $p$, the net benefits are positive.

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6 Wisconsin’s Legislative Fiscal Bureau (LFB) periodically receives legislative requests to estimate the potential fiscal impact of eliminating the MPCP. As discussed in a prior report, the LFB estimates have previously implied a greater net fiscal benefit from the MPCP than the methodology employed here. This has been primarily due to the LFB’s use of a projection for future per pupil MPS revenues, rather than the current revenue limit, to model the program’s use of a 3-year rolling average for enrollments (see note 12 of the 2008 SCDP report). For example, the LFB estimates issued on September 10, 2008 include, at the request of Representative Jeff Fitzgerald, an estimate assuming 90 percent of MPCP students would have attended MPS. This estimate, for FY08, implies a $46.6 million net benefit, which exceeds the corresponding $31.9 million estimate here (see Figure 3). This is because the implied revenue limit of $10,022 in the LFB study exceeds the actual FY08 MPS revenue limit of $9,141 by $881. This was also characteristic of the three previous LFB reports (January 14, 2008; January 23, 2006; and January 21, 2005), with implied revenue limit gaps of $849, $965, and $771. However, the most recent LFB estimates, dated January 13, 2010, use a different methodology that reverses the gap for FY10. The implied revenue limit is $8,421, while the actual FY10 figure is $9,727, a gap of negative $1,306. As a result, the LFB’s implied estimate of the net fiscal benefit for FY10 (on the 90 percent assumption) is $22.4 million, instead of this report’s $46.7 million estimate. The LFB’s new methodology uses prior years’ data to model the scenario of the enrollment shift being fully phased into the 3-year rolling average by the present day, instead of beginning at the present day. In addition, two hold harmless provisions, which temporarily mitigate the effect of enrollment changes on the revenue limit, are reflected in the new methodology. LFB has also calculated the FY10 impact using the prior methodology, and the implied revenue limit per pupil is $10,560 instead of $8,421. LFB views either method as reasonable. The methodology employed here, using the FY10 revenue limit of $9,727, lies in between the two LFB estimates.
Table 1: Net Impact of MPCP on Public Funds, FY09-FY11

<table>
<thead>
<tr>
<th>% of MPCP students that would have attended MPS</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11*</th>
</tr>
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<tbody>
<tr>
<td>100%</td>
<td>$55.7</td>
<td>$66.4</td>
<td>$72.1</td>
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<tr>
<td>90%</td>
<td>$37.2</td>
<td>$46.7</td>
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<td>80%</td>
<td>$18.8</td>
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<td>$31.7</td>
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<td>70%</td>
<td>$0.3</td>
<td>$7.4</td>
<td>$11.4</td>
</tr>
</tbody>
</table>

* FY11 enrollment figures unavailable; calculations assume no change from FY10

Figure 3 presents the estimated net impact of the MPCP on state and local public funds, from FY94 to FY11, under the 90 percent assumption rooted in the voucher lottery literature. The red bars were presented in the 2008 report and 2009 update. The blue bars show this figure rose from $37.2 million in FY09 to $46.7 million in FY10, a 25.5 percent jump. This jump was primarily due to the cut in the MPCP voucher, while the MPS revenue limit continued to grow. (The growth in MPCP enrollment accounted for 3.6 of the 25.5 percent growth.) The net positive fiscal impact from the program is estimated to grow further in FY11, by 11.1 percent, to $51.9 million, due to the continuing growth in MPS’ revenue limit, while the MPCP voucher remains unchanged.

Figure 3: Net Fiscal Impact of MPCP on State and Local Funds, FY94-FY11

Assumption: 90% of voucher students would have otherwise attended MPS.
FY11 enrollment figures unavailable; calculation assumes no change from FY10.
The Distribution of Fiscal Impact Among Groups of Taxpayers

Background

The net fiscal benefit from the MPCP is allocated among Wisconsin’s state and local taxpayers through a set of three school funding formulas: (i) the revenue limit formula; (ii) the equalization aid formula; and (iii) the MPCP formula itself. The salient features of these formulas are these: \(^7\)

- The revenue limit formula allocates to each school district a maximum amount of revenues (from state formula aid and local levy together) that is equal to a per-pupil revenue limit times enrollment. This means that for every student who attends an MPCP school instead of MPS, the total state and local revenues available for MPS decline by the per pupil revenue limit, but the per-pupil revenues for those who remain are unaffected.

- The equalization aid formula, in conjunction with the revenue limit formula, splits each district’s allowable revenues between state formula aid and local levies. The overall statewide split depends on the total state aid appropriated. Within the overall split, the formulas set each district’s allowable local levy in a way that equalizes the levy rate across districts with equal per pupil revenues. The key point here is that the allowable local levy is independent of enrollments. Consequently, when MPS loses enrollment, the normal (i.e. non-MPCP) operation of these formulas would be to reduce state aid by the full amount of the per-pupil revenue limit, while leaving the allowable levy unaffected.

- The MPCP formula modifies the normal operation of these formulas. A specified percentage of the voucher expense is deducted from MPS’ aid allocation. Milwaukee is allowed (but not required) to recoup this deduction from local property taxes by raising its local levy beyond the limit that would otherwise obtain. This is the “choice levy.”

The main implication of this system is that Milwaukee does not share in the overall net fiscal benefit from the program. The reason is that a portion of the voucher expenses are deducted from Milwaukee’s state aid even though no funds are allocated to Milwaukee for the voucher students, because MPCP students are not counted toward Milwaukee’s revenue limit or equalization aid.

As a result, there will be an adverse impact either on MPS (through a reduction in per-pupil revenues) or on Milwaukee property taxpayers (through the choice levy), depending on Milwaukee’s levy decision. In general, Milwaukee has chosen to shift the adverse impact from MPS to the property taxpayers by utilizing the authority to offset the MPCP aid deduction with the choice levy.

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\(^7\) This account is slightly simplified. For a complete discussion, including mathematical formalization, see the 2008 SCDP report, which also includes a detailed analysis of how these formulas evolved over time. Note also that this analysis omits a number of minor complications that always attend funding formulas, such as three-year averaging of enrollments, hold harmless provisions, and minor definitional differences between comparable concepts that enter the revenue limit and equalization aid formulas. Note also that the revenue limit formula does not include categorical aids, which is received by districts, but not MPCP schools. Thus, to the extent that MPCP schools enroll students who would otherwise be eligible for categorical aids, the savings from the revenue limit understates the total savings in public revenues.
Regardless of how this impact is split (i.e. how much is shifted onto property taxpayers), the underlying basis for the “funding flaw” is the deduction of the voucher from MPS aid, combined with the exclusion of MPCP student counts from the MPS revenue limit and aid formulas. One or the other -- the aid deduction or the MPCP student count exclusions -- would let the “dollars follow the child” and spare Milwaukee the adverse impact. But the combination of the two imposes a fiscal burden on Milwaukee, as the program benefits the rest of the state.  

That is the big picture. Now we consider recent modifications.

Recent Modifications

In the previous biennium, FY08-FY09, a new element, “high poverty aid,” was introduced with the intention of alleviating the adverse impact of the MPCP on Milwaukee property taxes. Other districts are also eligible for this aid, but the legislative history is clear that the primary intention was to alleviate the MPCP “funding flaw” for Milwaukee.

In the current biennium, further changes were made. Since FY02, the MPCP deduction from MPS aid had been 45 percent of the voucher expenditure. In the current biennium this was effectively reduced to 41.6 percent in FY10 and 38.4 percent in FY11 and beyond. Technically, the aid reduction remained at 45 percent, but amounts equal to 3.4 percent (in FY10) and 6.6 percent (in FY11 and beyond) are paid to the City of Milwaukee (not MPS) with the requirement that they be used to help defray the choice levy for MPS. These funds, therefore, operate similarly to the “high poverty aid,” except that they go to Milwaukee property taxpayers through the city instead of through the district, and they do not go to other districts.

Distribution of Fiscal Impact in FY10 and FY11

Table 2 presents the full picture for FY10. Row 1 presents the details for the MPCP impact on Milwaukee’s taxpayers. The first cell represents the choice levy, calculated as 41.6% × $6,442 × 20,200 = $54.1 million. This entry reflects the fact that in FY10 (as in almost all previous years), Milwaukee fully utilized its tax capacity, so the full choice levy was added to property taxes. The second cell ($3.6 million) is the estimate of a small offset discussed below. The third cell represents “high poverty aid,” introduced in FY08 with the requirement that it be used to defray Milwaukee’s choice levy. For FY10, Milwaukee’s share of high poverty aid was $9.7 million. The resulting net adverse impact is estimated at $40.8 million. This is a drop from the FY09 estimate of $44.7 million, due to the reduction in the choice levy from 45 percent to 41.6 percent of the voucher expense.

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8 The reasons behind the combination appear to be historical in nature. That is, the system retains vestiges of the formula from the program’s earliest days, as discussed in the 2008 SCDP report.

9 Other districts are also eligible for this aid, but the legislative history is clear that the primary intention was to alleviate the MPCP “funding flaw” for Milwaukee.

10 The amount that went to other high-poverty districts was $2.1 million in FY09, and $9.0 million in FY10 and FY11. The dramatic rise in other districts’ share of these funds was due largely to the fact that while the total appropriation rose, MPS’ enrollments dropped and the formula now allocates this aid in proportion to enrollments among eligible districts.
Table 2:  
Distribution of MPCP’s Fiscal Impact, FY10  
($ millions)  

Data: 20,200 MPCP students, $6,442 voucher, $9,727 MPS revenue limit  
Assumptions: 90% of voucher students would have otherwise attended MPS;  
state share of public education held constant at 2/3.  

<table>
<thead>
<tr>
<th>Voucher Expense</th>
<th>Share of Revenue Limit Reduction</th>
<th>High Poverty Aid</th>
<th>NET IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milwaukee property taxpayers</td>
<td>($54.1)</td>
<td>$3.6</td>
<td>$9.7</td>
</tr>
<tr>
<td>Other property taxpayers</td>
<td></td>
<td>$55.3</td>
<td></td>
</tr>
<tr>
<td>State taxpayers</td>
<td>($76.0)</td>
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<td>($9.7)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>($130.1)</td>
<td>$176.8</td>
<td>$0.0</td>
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Before turning to the second and third rows of Table 2, consider the second column. This represents the fiscal benefit from the reduction in the revenue limit, as voucher students attend MPCP schools instead of public schools. The reduction in the revenue limit is calculated as $9,727 × 90% × 20,200 = $176.8 million. This releases state and local funds. The split between the two depends on the legislature’s appropriation decisions.

Prior to FY04, the split of statewide school revenues between state aid and local levies was set in law at 2/3 state funding and 1/3 local funding (the split varied by district, depending on property values). Since FY04, the 2/3 rule-of-thumb has largely persisted as a non-binding guide to policy, and the actual share of state and local funding provided by the state (using the same definitions as prior law) has ranged from 63.7 - 66.1 percent, and stands at 63.9 percent for FY10. In this analysis (as in the previous SCDP reports), we assume the 2/3 split still holds, both for total school revenues as well as the reduction in school revenues due to the MPCP.¹¹

This implies that the $176.8 million reduction in the revenue limit frees up $117.9 million in state funds (row 3, column 2) and $58.9 million in local property taxes (rows 1-2, column 2). The $58.9 million in local property tax relief is allocated by the equalization aid and revenue limit formulas across districts in general proportion to property values.¹² Milwaukee has a small share of the state’s total property values, so it receives only a small

¹¹ To illustrate the impact of deviations from the 2/3 rule, we recalculated Table 2 under the assumption of 63.9 percent, FY10’s actual split. This would reduce the state taxpayers’ share from $117.9 million to $113.0 million and correspondingly raise the estimated benefit to property taxpayers from $58.9 million to $63.8 million, of which the vast majority accrues to those outside of Milwaukee. Thus, the assumption of 2/3 split may modestly underestimate the net fiscal benefit of the MPCP to Wisconsin’s local property taxpayers and overestimate the net fiscal benefit to the state taxpayers.

¹² The mechanism through which property taxes are adjusted to complement the state’s aid appropriation in meeting the statewide revenue limit is through a specific parameter in the equalization aid formula. See pp. 21-22 of the 2008 SCDP fiscal impact report.
benefit from the revenue limit reduction (estimated here at $3.6 million). The vast majority of property tax relief, estimated here at $55.3 million, accrues to property taxpayers outside Milwaukee, as shown in row 2. This is an increase from the FY09 estimate of $52.0 million, due to the rise in MPCP enrollments and the rise in the MPS revenue limit.

Finally, row 3 depicts the impact on state taxpayers. The general fund benefits from the revenue limit reduction ($117.9 million), but this is offset by the state’s share of voucher expenses (58.4% × $6,442 × 20,200 = $76.0 million), and also by the high poverty aid ($9.7 million) used to help defray Milwaukee’s choice levy. This leaves a net benefit for state taxpayers of $32.2 million. This is a rise from the FY09 estimate of $30.0 million, despite the rise in the state share of the voucher expense, due to the rise in MPCP enrollments and the MPS revenue limit.

Table 3 provides the same detail for FY11. The salient points here are: (i) the adverse impact on Milwaukee taxpayers continues to drop due to the reduction in the choice levy from 41.6 percent to 38.4 percent; (ii) the net benefit to property taxpayers outside of Milwaukee rises due to the rise in the MPS revenue limit; and (iii) the net benefit to state taxpayers drops a bit, as the rise in the state share of the choice levy slightly outweighs the effect of the higher MPS revenue limit.

<table>
<thead>
<tr>
<th>Voucher Expense</th>
<th>Share of Revenue Limit Reduction</th>
<th>High Poverty Aid</th>
<th>NET IMPACT</th>
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<tr>
<td>Milwaukee property taxpayers</td>
<td>($50.0)</td>
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<td>Other property taxpayers</td>
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</tbody>
</table>

To complete this update, consider Figure 4. This figure adds the fiscal impacts for FY10 and FY11 (drawn from Tables 2-3) to the corresponding diagram in previous reports. In this graph, the blue segment in the negative territory represents the adverse impact on Milwaukee property taxpayers. The red and yellow segments, in positive territory, represent the net benefits from the MPCP for other property taxpayers and state taxpayers. The difference between the positive and negative bars represents the net fiscal benefit, depicted in Figure 3.

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13 As discussed in the 2009 update, the green segment in the negative territory for FY08 represents Milwaukee’s choice to not fully utilize its tax capacity, an event that appears to have been unique in recent years.
The main point to be drawn from this update of Figure 4 is that the adverse impact on Milwaukee has been shrinking since FY07. This is due to the Legislature’s two measures to address the funding flaw -- the introduction of high poverty aid in FY08 and the reduction in Milwaukee’s choice offset from 45 percent to 41.6 percent and 38.4 percent in FY10 and FY11. The effect of these measures, taken alone, would have reduced the adverse impact on Milwaukee from $47.0 million in FY07 to $30.0 million in FY11. At the same time, the estimated benefits to other property taxpayers outside of Milwaukee have grown each year since FY02, and benefits to state taxpayers have generally grown as well. That is because the growth in net benefits as a whole, depicted in Figure 3 and discussed earlier, have outweighed the changes enacted to reduce Milwaukee’s adverse impact. Thus, there may still be room for improvement in the formulas, to spread the fiscal benefits of the MPCP to all parties, as will be discussed further below.

14 The smaller actual reduction, to $36.5 million, is due to the growth in MPCP enrollments.
Options to Revisit the Voucher Size

As discussed above, the size of the voucher was cut in FY10 for the first time in the program's history. Act 28 specifies that in FY12, the annual adjustments to the voucher amount will resume according to prior law, increasing at the same rate as general school aids, but without restoring the cut in the base.

There are two conflicting effects of the voucher size on the net fiscal benefit. First, a smaller voucher will increase potential savings, for any given MPCP enrollment, by widening the gap with the revenue limit, as shown above. However, a smaller voucher would also be expected to eventually reduce MPCP enrollments, as the supply of voucher spots shrinks, due to the inability or unwillingness of voucher schools to educate that many students. That is, according to basic economics, the quantity supplied of any commodity varies with its price. In the concrete environment of the MPCP, voucher schools sometimes have the option of converting to charter schools, with a more generous funding formula.15 Thus, between charter conversions and some schools ceasing to accept vouchers (or shutting down entirely), the potential supply response to a smaller voucher is not merely theoretical.

The supply response to variations in the voucher size affects the net fiscal benefit. At one extreme, voucher spots would disappear entirely as the voucher approaches zero (if not before), in which case the net fiscal benefit from the program vanishes. At the other extreme, the net fiscal benefit would also vanish as the voucher approaches a maximum at \( p \times MPS \text{ revenue/pupil} \), as seen in equation (2). In between these extremes, the net benefit is positive and an interior maximum exists.16

The relationship between the voucher size and net fiscal benefit is illustrated in Figure 5 for FY11. The black point represents the actual voucher amount, $6,442, and the estimated net fiscal benefit, $51.9 million. The blue line through that point varies the voucher and calculates equation (1), holding MPCP enrollment constant, and assuming 90 percent of voucher students would otherwise attend MPS. If enrollment were indeed constant, one could cut the voucher further and raise the net benefit, as indicated.

However, we know the blue line cannot literally pertain throughout its extent -- enrollment will eventually respond to price, both for cuts in the voucher and for increases. The red dotted lines illustrate two hypothetical responses, both of which have the same endpoints. Moving to the left of the current point, voucher cuts will eventually lead schools to reduce their voucher enrollments or exit the market entirely. Of course, we do not know the minimum voucher amount that would drive net benefits to zero: the minimum figure of $3,000 for these curves is purely illustrative. On the other hand, as we raise the voucher, we have a better idea of how far

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15 As of 2008, six of Milwaukee's 51 charter schools had converted from private schools. Religious schools must give up their church affiliation to become charter schools.

16 This is similar to the relationship between tax revenues and the tax rate (on whatever is being taxed). At a zero tax rate, no revenue is raised, and at prohibitively high tax rates, the taxed activity disappears, so again no revenue is raised. In between the extremes, revenues are positive and an interior maximum exists, as famously pointed out in a cocktail napkin sketch by economist Arthur Laffer. The existence of the Laffer curve itself is not in serious dispute; the controversy it elicited was over the question of whether current tax rates place us above or below the point of maximum revenues.
we can go before driving the net fiscal benefits of the program to zero: it is \( p \times MPS \text{ revenue/pupil} = \$9,011 \), under the 90 percent assumption. That maximum will rise in future years as the MPS revenue limit rises.

We know that the net fiscal benefit is maximized somewhere between the two extremes, but, importantly, we do not know whether the maximum is above or below the current voucher amount. That is why the two hypothetical curves are presented, depicting both cases. There are various reasons why the currently available data are not sufficient to distinguish between these two cases. For example, even though MPCP enrollment continued to rise as the voucher size was cut, we do not know how much the underlying growth factors would have raised enrollment absent the cut. At the same time, we do not know how much of the ultimate impact of the voucher cut has yet to be incurred: conversions to charters and shutting down can take time. Consequently, we are agnostic regarding which of the two curves better illustrate the underlying, long run response of the net fiscal benefit to changes in the voucher amount.

**Figure 5:**
Simulated FY11 Net Fiscal Benefit, Varying Voucher

*Data:* 20,200 MPCP students, $10,013 MPS revenue limit

*Assumption:* 90% of voucher students would have otherwise attended MPS

Leaving the supply response aside, then, Table 4 presents the numerical calculations represented by the blue line in Figure 5, for vouchers set at 70, 80, and 90 percent of the MPS revenue limit, assuming \( p = 0.90 \). Raising the voucher from the currently depressed level of 64.3 percent to 70 percent (still a bit shy of the average for FY98-FY09), reduces the net fiscal benefit from $51.9 million to $40.5 million -- a figure that exceeds the net fiscal benefit for all years prior to FY10. Raising it further, to 80 percent, reduces the net fiscal benefit to $20.2 million -- a level that still generally exceeds that experienced prior to FY07.
Table 4: Hypothetical Fiscal Impact, FY11

**Data:** 20,200 MPCP students, $10,013 MPS revenue limit

**Assumptions:** 90% of voucher students would have otherwise attended MPS; MPCP enrollment does not respond to voucher amount.

<table>
<thead>
<tr>
<th>Voucher</th>
<th>Net Fiscal Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6,442 (actual, 64.3% of revenue limit)</td>
<td>$51.9 million</td>
</tr>
<tr>
<td>$7,009 (70% of revenue limit)</td>
<td>$40.5 million</td>
</tr>
<tr>
<td>$8,010 (80% of revenue limit)</td>
<td>$20.2 million</td>
</tr>
<tr>
<td>$9,011 (90% of revenue limit)</td>
<td>$0.0 million</td>
</tr>
</tbody>
</table>

Again, these estimates assume no supply response to the higher vouchers. If higher vouchers induce a positive supply response (or avoid a negative supply response to the previous cuts), this in turn may attract more applicants (e.g. if the additional variety appeals to different students). Thus, the net fiscal benefit may not drop quite as much, or might even rise, as illustrated with the hypothetical dotted curves in Figure 5. In any case, the net fiscal benefits would remain positive until the voucher is raised to $p \times MPS revenue/pupil$, calculated here as $9,011$. 
Further reform to the underlying funding formulas would be required to ensure the net fiscal benefits are shared by all. Previous SCDP reports outlined two possible approaches:

1. The Legislature could count MPCP students in MPS’ revenue limit and equalization aid calculations, and then deduct voucher expenditures from MPS’ aid. This was the system prior to FY00. However, that system also gave Milwaukee the option of raising property taxes by the amount of the voucher deduction, in order to preserve total revenues for MPS, even as enrollments declined with students leaving for the MPCP. This “choice levy” might have been justifiable in the early days of the program when MPCP enrollments were small relative to the fixed costs of MPS, but would not be justifiable today.

One could count MPCP students in MPS’ revenue limit and aid formulas, but delete the choice levy. Such a system would cease to adversely affect Milwaukee property taxpayers. One drawback of such a system, however, is that it would actually reward MPS for each student it loses to the MPCP, since the aid it would receive for each MPCP student (which approximately equals the per pupil revenue limit) would exceed the voucher deduction under current law by $3,571.

To avoid this, MPCP students could each be counted as fractional students for the purpose of calculating revenue limits and aid. The logical fraction to use would be the voucher’s percent of the revenue limit. For example, if the voucher were set at 80 percent of the revenue limit, MPCP students could be counted as 0.80 for those calculations.

Table 5 illustrates how this might work. In this exercise, we assume high poverty aid is either discontinued, or re-classified as categorical aid and thus de-coupled from the MPCP. The “voucher expense” column is empty for Milwaukee property taxpayers, since there is no choice levy. It is also empty for state taxpayers, since the voucher comes out of the MPS aid allocation, rather than the general fund.

All the action is in the revenue limit column. The effect of the program on MPS’ student count for revenue limits is the difference between the effective pupil count for MPCP students (0.80 × 20,200 in this example) and the number of such students who would have attended MPS anyway (p × 20,200).

Multiplying this by the per pupil revenue limit gives us (0.80 - p) × 20,200 × $10,013 = -$20.2 million, on the assumption p = 0.90. This is also the change in the statewide revenue limit, and represents the total

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17 This feature explains the green bars for MPS in Figure 4, for FY94-FY99. These bars represent the extra spending in MPS over and above what would have been required to maintain per pupil revenues. For further discussion of the possible fixed costs rationale at that time, see note 46 of the 2008 SCDP report.

18 The allowable levy is the revenue limit minus general school aids. The way the choice levy works is that when general school aid is subtracted off the revenue limit, it is net of the voucher deduction. To eliminate the choice levy, one would subtract off gross school aid instead. Thus, the revenue limit would include the voucher students and so would the aid, leaving the levy unaffected by the voucher students.

19 It has been hypothesized that the MPCP itself might affect the total state aid appropriation. If so, this can be thought of as modifying the 2/3 rule assumed in the revenue limit column, discussed below. The result would be a corresponding redistribution of the $20.2 million benefit between state and local taxpayers.
net fiscal benefit, corresponding to the figure in Table 4. On the assumption that costs are shared according to the 2/3 rule, the state taxpayers benefit by $13.5 million and the property taxpayers garner the rest, as indicated in Table 5. Of course, this benefit can be split in any fashion chosen by the Legislature.

Table 5:
Hypothetical Distribution of Fiscal Impact, FY11
Voucher = 80% of Revenue Limit
Alternative 1: count MPCP students in MPS @ 80%
Deduct Vouchers from MPS Aid

($ millions)

<table>
<thead>
<tr>
<th>Voucher Expense</th>
<th>Share of Revenue Limit Reduction</th>
<th>High Poverty Aid</th>
<th>NET IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milwaukee property taxpayers</td>
<td>$0.4</td>
<td></td>
<td>$0.4</td>
</tr>
<tr>
<td>Other property taxpayers</td>
<td>$6.3</td>
<td></td>
<td>$6.3</td>
</tr>
<tr>
<td>State taxpayers</td>
<td>$13.5</td>
<td></td>
<td>$13.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$0.0</strong></td>
<td><strong>$20.2</strong></td>
<td><strong>$20.2</strong></td>
</tr>
</tbody>
</table>

2. Alternatively, the Legislature could continue to exclude MPCP students from MPS’ revenue limit and aid calculations but cease deducting voucher expenses from MPS’ aid. Instead, all voucher expenses would come out of the state’s general fund. In this system, Milwaukee property taxpayers would no longer be adversely affected: there would be no choice levy, since there would be no aid deduction to offset. The general fund would cover all voucher expenses, but this would be outweighed by the savings in revenue limits, which jointly benefit the state taxpayers and the property taxpayers.
However, the rule (or convention) for allocating education costs among state and local sources would have to be modified if Wisconsin is to prevent an adverse impact on the state’s general fund. Wisconsin would have to drop the artificial distinction between revenue limits (for districts) and voucher expenses (for the MPCP) as separate species of public funding for education, with the state/local sharing rule applying only to the former. To spread the net benefits of the MPCP, the sharing rule would have to apply to the combined expenditures. The combined expenditures are reduced by the MPCP, and those net gains can be split between state and local taxpayers (including Milwaukee) in any proportions chosen by the Legislature.

Table 6 illustrates this, with the 2/3 rule. The voucher expense, $0.80 \times 10,013 \times 20,200 = 161.8$ million, comes entirely out of the general fund, as depicted in the first column. The revenue limit is reduced by $p \times 10,013 \times 20,200 = 182.0$ million, on the assumption that $p = 0.90$, as indicated at the bottom of the second column. The sum of the revenue limit and voucher expenses falls by $20.2$ million. If the sum is split by the 2/3 rule, then the program would have the effect of reducing general school aids by $175.3$ million, for a net benefit to state taxpayers of $13.5$ million, while the property taxpayers benefit by $6.7$ million.

\begin{table}
\centering
\caption{Hypothetical Distribution of Fiscal Impact, FY11}
\begin{tabular}{|l|c|c|c|}
\hline
\textbf{Voucher Expense} & \textbf{Share of Revenue Limit Reduction} & \textbf{High Poverty Aid} & \textbf{NET IMPACT} \\
\hline
Milwaukee property taxpayers & $0.4$ & & $0.4$ \\
Other property taxpayers & & $6.3$ & $6.3$ \\
State taxpayers & $161.8$ & $175.3$ & $13.5$ \\
\hline
TOTAL & \textbf{($161.8$)} & \textbf{182.0} & \textbf{0.0} & \textbf{20.2} \\
\hline
\end{tabular}
\end{table}

In comparing these two alternatives, the net impact on the different sets of taxpayers is identical. However, the public perception may well differ. Under Alternative 2, the direct state budgetary cost of the voucher program is observed by all, while the indirect budgetary benefit of the reduced attendance at MPS may be easily missed. Under Alternative 1, the cost and benefit are more readily matched with one another, as Milwaukee is credited with aid for the voucher students, which then directly funds the vouchers. If the choice levy is eliminated, then so is the adverse impact on Milwaukee property taxpayers. The net benefit to the state taxpayers and non-Milwaukee property taxpayers may not be universally recognized, but at least under Alternative 1 there is less risk of misconstruing the program as imposing any costs on them.
Conclusion

This third SCDP fiscal impact report finds the following:

• The net fiscal impact of the MPCP is positive and growing, reaching an estimated $51.9 million in FY11, assuming no change in MPCP enrollments in FY11 and that 90 percent of enrollees would have otherwise attended MPS. By comparison, the previous SCDP report estimated $37.2 million net benefit in FY09.

• The notable development in the FY10-FY11 biennium is the program's first reduction in the MPCP voucher, from $6,607 in FY09 to $6,442, while the MPS per pupil revenue limit continued to grow over the same period, from $9,462 to $10,013. As a result, the gap has widened between the per pupil public revenues allocated to the MPS and the MPCP, to the benefit of taxpayers, if not the MPCP schools.

• The distribution of fiscal benefits continues to be uneven: Milwaukee property taxpayers remain adversely affected. The Legislature has addressed this in two ways, in the last biennium and the current one, by introducing “high poverty aid,” and reducing the voucher deduction from MPS aid. These measures have noticeably reduced the adverse impact, both in relative and absolute terms. However, the negative fiscal impact on Milwaukee remains sizeable at an estimated $36.5 million in FY11 and the net fiscal benefits accruing to others continued to be larger yet, reaching an estimated $57.0 million for non-Milwaukee property taxpayers and $31.5 million for state taxpayers.

• In light of the first program cuts to the MPCP voucher, this report considered alternative voucher amounts as a percent of the MPS revenue limit. The voucher currently stands at 64.3 percent, well below the FY98-FY09 average of 72.3 percent. The program would continue to offer net fiscal benefits so long as the voucher percentage is less than the percentage of MPCP students who would have otherwise attended MPS. On the assumption that this is 90 percent, for example, a voucher worth 80 percent of the revenue limit would still have generated net fiscal benefits of $20.2 million in FY11, holding MPCP enrollment constant. If the supply response to increasing the voucher size is positive, the net fiscal benefits could be larger.

• Two alternative funding mechanisms were considered to spread the net benefits among all groups of taxpayers. The Legislature could fund the vouchers entirely out of the general fund, reducing the current MPS aid deduction of 38.4 percent down to zero. Alternatively, the Legislature could return to its original practice of counting MPCP students in MPS for aid and revenue limit purposes, and then deducting the amount of the voucher, but eliminating the choice levy. It was shown how this could be done by counting MPCP students at the same percentage as the voucher value stands to the MPS revenue limit. In this way, the net benefits of the program could be shared by all in a fairly transparent fashion.
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