AGENDA ITEM 6.

INVESTIGATING ALTERNATIVE FUNDING SOURCES FOR MAP: DATA ANALYSIS OF STATE INCOME TAX REVENUE STREAMS FROM COMMUNITY COLLEGE MAP RECIPIENTS

Submitted for: Information

Summary: In a September agenda item, ISAC staff described the problems with the Monetary Award Program (MAP) caused by level program funding coupled with rapidly rising college costs and college enrollments, increasing the demand for grants. Eligible application volume is over 20 percent higher than last year and the program is on track to suspend over 130,000 eligible applications with more than 90,000 from students who wish to attend Illinois community colleges. Average award coverage at public universities, that less than a decade ago was 100 percent, is now less than 50 percent and continues to lose ground.

A conservative estimate of MAP underfunding is least $200 million; to fully fund the portion going to students at community colleges is at least $100 million. The State's budget problems make it obvious that MAP cannot expect additional GRF funding in the near future. Funding at least part of MAP through another revenue source may be the only way to restore the buying power of the grant.

A proposal to use revenue bonds to fund the MAP grants provided to community college students is being evaluated by ISAC staff. Under this proposal, the bonds would be paid down with a specific legislative diversion of state income taxes paid by those specific MAP recipients until the bonds were paid off. Staff is working with the Illinois Department of Revenue (IDR) to calculate tax revenues generated by students who received MAP grants at community colleges. Preliminary results are provided in this agenda item.

Staff analysis of the data provided by IDR shows that a large majority of community college MAP recipients pay taxes every year, and these taxes are significant and may be sufficient to fund revenue bonds issued to pay for MAP. Further, the data show that there appear to be financial gains to community college attendance which are reflected in large increases in post-college tax revenues from community college MAP recipients.

Action requested: None

ILLINOIS STUDENT ASSISTANCE COMMISSION
INVESTIGATING ALTERNATIVE FUNDING SOURCES FOR MAP: DATA ANALYSIS OF STATE INCOME TAX REVENUE STREAMS FROM COMMUNITY COLLEGE MAP RECIPIENTS

Background

In a September agenda item, ISAC staff described the problems with the Monetary Award Program (MAP) caused by level program funding coupled with rapidly rising college costs and college enrollments, increasing the demand for grants. Eligible application volume is over 20 percent higher than last year and the program is on track to suspend over 130,000 eligible applications with more than 90,000 from students who wish to attend Illinois community colleges. Average award coverage at public universities, that less than a decade ago was 100 percent, is now less than 50 percent and continues to lose ground.

More students are choosing to attend college. Until 2012, total high school graduates will increase. Even after the number of high school graduates levels off, a larger percentage of high school graduates is expected to pursue some form of postsecondary education, often at community colleges. These students will be poorer than students in the past, and often minority and first generation. Further fueling the increase is the rapid demise of manufacturing jobs in Illinois coupled with an overall economic malaise that has driven independent students back to community colleges to acquire new skills. Many of these independent students are trying to "trade-up" from a minimum wage job; others are unemployed. Nearly all require financial assistance to get through any college program.

Due to the very early cut off date for MAP (this year May 15th) and our inability to fully pay tuition and fees (we now cover only about two-thirds of the cost), MAP for community college students is failing to meet their needs. MAP needs to fully cover tuition and fees for this very price-sensitive group of students, and it needs to provide awards to students who apply for aid later in the year than traditional students because of uncertain family and work commitments, and who often attend school less than full-time each semester but do attend year round.

A conservative estimate of MAP underfunding is at least $200 million; to fully fund the portion going to students at community colleges is at least $100 million. The State's budget problems make it obvious that MAP cannot expect additional GRF funding in the near future. Funding at least part of MAP through another revenue source may be the only way to restore the buying power of the grant.

Funding MAP grants for community college students through workforce development bonds

If funding exclusively from GRF cannot support the demand for the MAP program what other options are there? One proposal described in the September agenda item for alternative funding for need-based education grants is a variation of the real estate Tax Increment Financing (TIF) program. Instead of funding new construction by issuing bonds, as with a TIF, Illinois would fund human capital investments by funding MAP grants with revenue bonds. A revenue bond or bonds would be issued to fund MAP grants for all eligible community college students in a given academic year. The bonds would be paid down with a specific legislative diversion of state income taxes paid by those specific MAP recipients until the bonds were paid off. For example, students attending community colleges and receiving bond-funded MAP grants in FY2011 would have their future tax revenues dedicated to paying off that bond until it is retired.

In the September agenda item, the advantages to such a system were presented, especially the advantage of having a countercyclical funding mechanism. During recession, tax receipts are down yet the demand for services such as MAP rises, creating even greater hardship. Creating an ongoing bonding structure would allow the state to increase human capital investment when the demand is greatest and then pay the bonds faster (with increased tax revenue) when the business cycle is stronger Separating out community college students by funding source would also allow for program changes to make the program work better for these students.

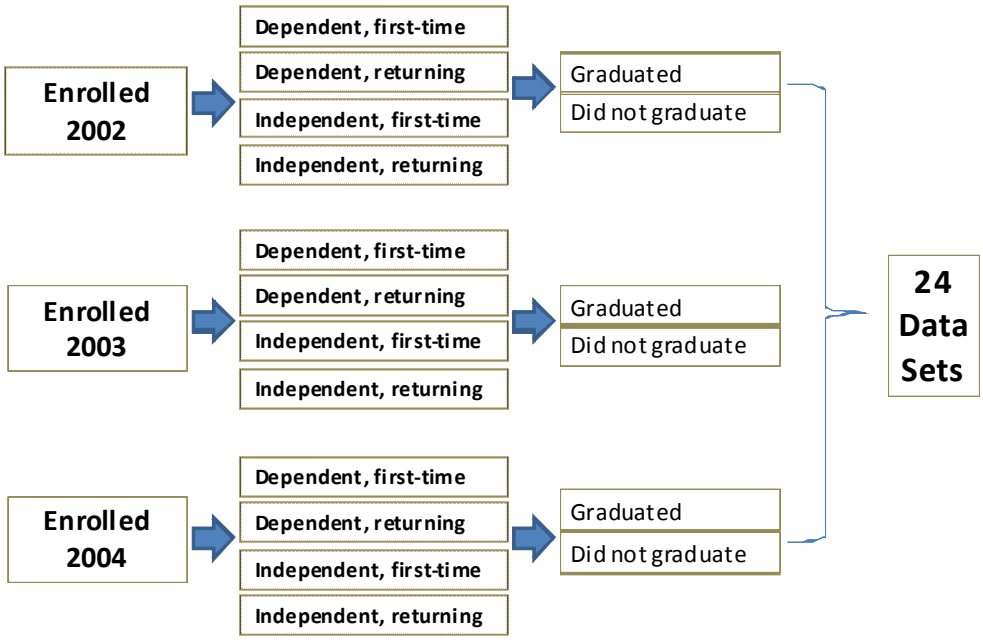
Staff is working with the Illinois Department of Revenue to calculate tax revenues generated by students who received MAP grants at a community college. We have received a data set from IDR and this agenda item summarizes the data and staff conclusions about the feasibility of funding MAP through revenue bonds.

Data Collection and Analysis

ISAC staff is working with IDR to understand the change in the level of income tax receipts as a function of the year of school matriculation. Staff created files of community college MAP recipients from FY2002 through FY2004. These files were matched with Shared Enrollment and Graduation Consortia (SEGC) data to determine which of the students had graduated with a certificate, Associate Degree, Bachelors Degree, or higher, as of FY2008. Of the 174,563 (unduplicated) students who received MAP while attending an Illinois community college in that time period, 58,296 (33 percent) have since graduated with some type of credential; 54 percent with an Associate degree, 34 percent with a certificate, and the remaining 12 percent with a Bachelor's degree or higher.

Staff divided community college MAP recipients by year attended, first-time attendance or returning, dependency type (dependent or independent) and whether they graduated. Twenty-four blocks of data were sent to revenue, divided as shown in Figure 1.

Figure 1: MAP community college recipient data blocks sent to Revenue



Staff sent these files to IDR asking it to match to its revenue data base for years 2001 through 2008. IDR sent back tax data from 2001 through 2007. The 2008 data is available if needed but it is on a different IDR system and requires extra work for their analysts to procure it. If it is decided that we need it, they will provide it. IDR provided total tax data from FY2001 through FY2007 for single filers and joint filers and the number who had not filed in each group for each year. In total, for each year, for each data set we had the number of and the total taxes paid by single filers; the number of and total taxes paid by joint filers and the number of non-filers.

ISAC staff has evaluated the IDR data. For the initial run through the data, staff attempted to answer three questions: Who filed? How much tax revenue was collected and how was it distributed? And finally, is there a financial benefit (in the form of increased tax revenues) from community college attendance?

Who Filed a Tax Return?

As shown in Table 1, about two-thirds of all community college MAP recipients receiving awards during 2002 through 2004 filed in 2001, an interesting result as many of the dependent students were in high school at the time. By 2007, three-quarters of the students were filing tax returns. Joint filers increased from about 12 percent to about 22 percent during the period.

Table 1: Who Filed Tax Returns?

		Single Filers							% Filed 2001	% Filed 2007
Began CC in	**# Claimed**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**		
2002	**48,501**	26,398	29,047	28,234	27,384	26,345	25,241	24,303	54%	50%
2003	**48,438**	26,091	29,313	29,167	28,620	27,666	26,612	25,740	54%	53%
2004	**51,680**	24,971	30,278	30,963	31,321	30,758	29,703	28,995	48%	56%
Total	**148,619**	77,460	88,638	88,364	87,325	84,769	81,556	79,038	52%	53%
		Joint Filers							**% Filed 2001**	**% Filed 2007**
Began CC in	**# Claimed**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**		
2002	**48,501**	5,964	7,342	8,182	8,905	9,738	10,549	11,332	12%	23%
2003	**48,438**	5,805	6,795	7,552	8,200	9,069	9,849	10,671	12%	22%
2004	**51,680**	5,851	6,735	7,176	7,839	8,625	9,456	10,330	11%	20%
Total	**148,619**	17,620	20,872	22,910	24,944	27,432	29,854	32,333	12%	22%
		Total Filers							**% Filed 2001**	**% Filed 2007**
Began CC in	**# Claimed**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**		
2002	**48,501**	32,362	36,389	36,416	36,289	36,083	35,790	35,635	67%	73%
2003	**48,438**	31,896	36,108	36,719	36,820	36,735	36,461	36,411	66%	75%
2004	**51,680**	30,822	37,013	38,139	39,160	39,383	39,159	39,325	60%	76%
Total	**148,619**	95,080	109,510	111,274	112,269	112,201	111,410	111,371	64%	75%

How Much Tax Revenue was Collected?

There are significant tax revenues generated by community college MAP recipients, even when they are in school. As shown in Table 2, after 6 years, about $28 million in revenue was collected from students who began in 2002 (total MAP appropriation that year: $46.5 million.) This assumes 50% of revenue from joint filers belonged to our MAP recipients – the analysis is obviously very sensitive to that assumption. If this project is implemented decisions will have to be made with IDR about how to handle joint revenue.

Staff had to make another assumption for this analysis about how many of the students we have already "captured" in the first-time attendance group appear in the "not-first-time" group in the following year. We determined our percentages from our MAP data but applying this to revenue data may not be completely accurate. This would not be an issue if the project were implemented because the calculations would be done by IDR at the unit record data level. But IDR cannot release unit record data to ISAC so staff had to work with data groups.

The revenues for the first few years will decline a little because of the declining number of "not-first-time" attendees each year. In 2002, we had first-time attendees and not-first-timers and all of the not-first-time revenues could be dedicated to paying off the 2002 bonds. However in 2003, we had a new group of first-timers and the rest were not-first-timers but now some of those not-first-time revenues were already dedicated to the 2002 bond issue. In 2004, the not-first-time revenues would have revenues dedicated to both the 2002 and 2003 bond issues that would have to be subtracted out. And so forth. We calculate that after about six years, there are essentially no not-first-time revenues that are not already claimed by another bond issue. So the not-first-time revenues decline during the first few years and become essentially zero after six.

The not-first-revenues only appear during the first year of the revenue income stream. Looking at the second year and further, it is clear that revenues increase each year after the first. For the 2002 MAP recipients we have six-year data; for the 2003 recipients we have five-year data and for the 2004 group we have four-year data. Because these are community college students who often carry less than a full course load, who may need remedial courses, and who, if they are pursuing a four-year degree, may lose some courses during the transfer process, some of them will still be in school even at year six. Despite that, year six total revenues for the students receiving MAP in 2002 is over $28 million; the five year revenues for those receiving MAP beginning in 2003 is about $21.6 million and for those receiving MAP beginning in 2004, about $16.6 million (all estimates use the 50 percent of joint return taxes are from MAP recipients assumption.) The estimate for the 2004 group is probably the best estimate for planning purposes because it has the smallest impact of the non-first-time revenues.

What was surprising for staff was the amount of revenue that could be collected during the year the bond was implemented and for a few years thereafter when students are likely still in school. Overall, there is considerable revenue collected from community college MAP recipients to fund the revenue bonds and those funds begin the year the bond is issued since the majority of community college MAP recipients are working and paying some taxes. About $3 million in revenues for the first year is a reasonable figure.

After about five years, as shown in Table 2, about 40 percent of the MAP appropriation for a given year appears to be covered (not counting interest) by tax revenue from community college MAP recipients. Assuming that these recipients' salaries rise further out in time, as much as 100 percent of the appropriation could be covered in ten years. If the MAP appropriation was increased, and the increase was used to extend awards to suspended students, then the above conclusion could probably still hold. However, an increase in MAP appropriation that is used to increased the size of the award may not be fully covered after a decade because the burden to pay it back would fall on the same number of students that received the smaller awards.

Table 2: Tax Revenues Generated by Year and Filing Status for Community College MAP Recipients

CC MAP $ Claims		$46.5 M	$45.3 M	$43.2 M	$47.8 M	$52.2 M	$56.6 M
Revenue		2002	2003	2004	2005	2006	2007
from	2002	$9,212,089	$3,572,674	$3,843,099	$4,466,767	$4,868,417	$5,851,033
All Tax Filers	2003		$7,769,694	$3,263,581	$3,788,896	$4,205,087	$5,060,852
Joint=66%	2004			$6,863,611	$3,331,371	$3,822,607	$4,512,134
Revenue		2002	2003	2004	2005	2006	2007
from	2002	$8,407,996	$3,257,052	$3,450,446	$3,970,996	$4,258,745	$5,098,484
All Tax Filers	2003		$7,097,460	$2,950,700	$3,386,913	$3,694,747	$4,421,962
Joint=50%	2004			$6,247,931	$2,996,582	$3,383,763	$3,967,391
Revenue		2002	2003	2004	2005	2006	2007
from	2002	$7,603,903	$2,941,431	$3,057,793	$3,475,225	$3,649,073	$4,345,935
All Tax Filers	2003		$6,425,227	$2,637,818	$2,984,930	$3,184,408	$3,783,071
Joint=33%	2004			$5,632,250	$2,661,793	$2,944,920	$3,422,647

Revenue		Tot Rev 4 yr	Tot Rev 5 yr	Tot Rev 6 yr
from	2002	$21,094,629	$25,963,046	$31,814,079
All Tax Filers	2003	$19,027,258	$24,088,111	
Joint=66%	2004	$18,529,722		
Revenue		Tot Rev 4 yr	Tot Rev 5 yr	Tot Rev 6 yr
from	2002	$19,086,490	$23,345,235	$28,443,719
All Tax Filers	2003	$17,129,820	$21,551,782	
Joint=50%	2004	$16,595,666		
Revenue		Tot Rev 4 yr	Tot Rev 5 yr	Tot Rev 6 yr
from	2002	$17,078,352	$20,727,424	$25,073,359
All Tax Filers	2003	$15,232,382	$19,015,454	
Joint=33%	2004	$14,661,611		

Does Attending a Community College Increase Future Income and Enhance State Tax Revenues?

These data show that community college students, especially independent students, are better off financially after they attend school. Completers do better than non-completers but both groups see increases. In Table 3 below (each year shows number of records and average tax paid) there is a significant increase for independent students, both for those who graduated (Grad) and those who did not (NG). The 2001 figure is pre-college (this group began at a community college in 2002). Most of the increase shown in the table is real, family incomes during this period only increased from 13 percent to 17 percent for the first three income quintiles while these tax revenues, which are being generated by a flat rate tax and should follow income increases, are instead increasing from 70 percent to 125 percent. These MAP recipients are doing much better after attending college.

Table 3: Average Tax Revenues for Independent MAP Recipients in 2001 and 2007

Single Filers	2001		2007		CC Class 2002
Independents FT Grad	1,639	$211	1,557	$475	125%
Independents FT NG	3,693	$185	3,132	$314	70%
Joint Filers					
Independents FY Grad	796	$587	1,043	$1,254	114%
Independents FT NG	1,238	$519	1,573	$982	89%

Additional Funding Needed to "Fully-Fund" Community College MAP

Community college students need more flexibility with FAFSA-filing deadlines than traditional students. A two-deadline calendar with a cut-off at the end of August for fall term and the end of December for spring term would better serve their needs. The MAP cost for community college students was $57 million in FY2009; the FY2010 estimate is lower due to the earlier suspense date. The $57 million served about 57,000 students in FY2009 or about 39 percent of the students who received MAP. This is only about half of the community college students who are eligible for MAP – the rest are suspended.

Using FY2010 application volume rates, extending award announcements would cost about $32 million for applications received between May 15 and August 31st and $7 million for spring-term awards to applicants filing between August 31st and December 31st. Approximately $3 million more would be needed to serve applicants who apply between the end of the year and the end of the processing cycle.

Many community college students attend part-time due to family and work obligations. If a student completes two classes per semester but cannot afford to take summer school because MAP is not available, it will take the student at least 10 semesters or five years to graduate with a "two-year" degree. Providing MAP for summer school could reduce the time-to-degree to just over three years. The longer it takes students to complete, the fewer will do so. Adding payment for summer school would likely cost between $15 and $20 million.

The variable in the current MAP formula that is most important to community college students is the year of tuition and fees included in the budget. Currently the formula uses FY2004 tuition and fees. Incorporating FY2010 tuition and fees would increase the maximum award available to these students by over $1,000 and would require about $28 million. However, if the FY2010 Pell table with a $5,350 maximum was also incorporated, updating tuition and fees would cost very little. Eighty percent of a student's estimated Pell award is included in the MAP formula as a resource. The FY2010 Pell maximum of $5,350 is $1,300 higher than the FY2004 $4,050 maximum. Eighty percent of the difference is $1,040 which is very close to the difference between the average FY2010 and the average FY2004 community college

tuition and fee figure. Over 90 percent of MAP recipients at community colleges receive Pell and nearly 60 percent are eligible for the maximum so incorporating the FY2010 Pell table along with FY2010 tuition and fees barely increases the estimated cost for MAP at community colleges.

MAP Improvements at Community Colleges	ESTIMATED *Marginal* Costs for Improvements at Community Colleges
BASE - funding for apps received through 5/14	$50 million
Extend awards for apps received 5/15 through 8/31	$32 million
Extend awards for apps received 9/1 through 12/31	$7 million
Extend awards for apps received 1/1 through 6/1	$3 million
Provide awards for summer term	$15 - $20 million
FY2010 tuition and fees	Up to $28 million (Aug 31 suspension)
FY2010 T&F/10% reduction	Up to $25.2 million (Aug 31 suspension)

For FY2010 the cost of serving community college MAP recipients who applied through May 14 is expected to be about $50 million. Under an application volume scenario similar to FY2010, expanding award announcements through August and upgrading the formula to include current tuition and fees would cost between $33 and $60 million, depending on whether the Pell table was also updated, bringing the cost of the program to between $83 and $110 million. Processing year round and adding summer term awards could cost $25 million to $30 million more for a total cost between $108 and $140 million. Obviously, there are many other variations that would be possible; all would be an improvement over current conditions.

Conclusion

Although it is a large program, over $385 million, and has been spared funding cuts during a very difficult budget year, the current GRF funding for MAP is inadequate to meet demand. If MAP continues to be funded exclusively with GRF, and the state budget problems continue as they are projected to do, MAP is unlikely to see any funding increases in the near future during a period where postsecondary training has never been more important nor costs so much. This agenda item outlines an alternative funding source for MAP grants given to community college students where MAP could be funded with state revenue bonds that are paid back from the taxes paid by the MAP recipients. At a minimum, this would free up $57 million of MAP funds funded through GRF that are now being used for community college students and may allow for the expansion of the existing community college MAP program to extend processing deadlines and perhaps increase the size of the award.

ISAC staff is pursuing the feasibility of using revenue bonds to fund MAP. Data exchanged with the Department of Revenue indicates that a large majority of community college MAP recipients pay taxes every year, and these taxes are significant and may be sufficient to fund revenue bonds issued to pay for MAP. Further, the data show that there appears to be financial gains to community college attendance which are reflected in large increases in post-college tax revenues from community college MAP recipients.