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Cost Estimate for a Two-Year Beloit Promise

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Introduction

This report provides a cost-estimate of a two-year universal, place-based scholarship program for the School District of Beloit. The scholarship could be used at any technical two-year public college in Wisconsin. The cost estimates of a first-dollar and middle-dollar scholarship program, which would require students to complete their FAFSA, are provided to the year 2023.

This report is based on modifying an impact model constructed by the Upjohn Institute for the School District of Beloit to estimate the potential fiscal impact of a four-year scholarship program.

Methodology Used to Estimate the Impact of a Two-Year Promise Program

As in the previous study, the first step in estimating the potential cost of a two-year Beloit Promise is forecasting the school district's enrollment and graduation rate. Unlike a four-year Promise Scholarship Program, we do not expect the two-year program to have a measurable impact on future enrollment in the district. It is unlikely that a two-year program will be a strong enough incentive to impact the residential location decisions of the area's families. However, we do assume that the district's graduation rate will increase slightly in the future due to the scholarship.

A standard survival-cohort forecast model was created using the district's historical five-year average rate of grade advancement. This forecast is shown in Table 1 with Fall 2010 and Fall 2011 being actual enrollment numbers. The forecast calls for enrollment in the district to decline by 1.1 percent per year.

Table 1 Enrollment forecast for Beloit Public School District

Year	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022	Fall 2023
KG	541	516	508	501	493	486	479	471	464	457	451	444	437	431
1st	593	528	514	506	499	491	484	477	469	462	456	449	442	435
2nd	523	558	495	481	474	467	460	453	446	440	433	427	420	414
3rd	507	524	550	487	474	467	460	453	447	440	433	427	420	414
4th	537	497	515	541	479	466	459	452	446	439	432	426	420	413
5th	520	519	486	503	528	468	456	449	442	435	429	423	416	410
6th	482	494	501	469	486	510	452	440	433	427	420	414	408	402
7th	468	470	507	514	481	499	523	464	451	445	438	431	425	419
8th	461	467	479	517	524	490	508	533	473	460	453	446	440	433
9th	622	549	599	615	663	672	629	652	684	607	590	581	573	564
10th	433	441	418	456	468	505	512	479	497	521	462	450	443	436
11th	511	452	464	440	480	493	532	539	504	523	549	486	473	466
12th	488	465	404	415	393	429	440	475	482	451	467	490	434	423
Total	6686	6480	6440	6445	6443	6444	6394	6338	6239	6106	6013	5894	5752	5661
Per Chg		-3.1%	-0.6%	0.1%	0.0%	0.0%	-0.8%	-0.9%	-1.6%	-2.1%	-1.5%	-2.0%	-2.4%	-1.6%

To estimate the future cost of a two-year Beloit Promise, the following key assumptions were made.

1. It is assumed that the district’s current graduate rate of 77 percent (eight-year average) will increase by 0.5 percent per year reaching 87 percent in 2023. This increase is expected due to the impact of the two-year Promise Scholarship on performance of students. In particular, the availability of a two-year scholarship program could be an effective incentive for at-risk students to graduate by giving them the resources to go on to a technical college. Still, even with the higher graduation rates, the forecasted decline in district enrollment keeps the number of graduates stable in the 12-year-forecast period, from 408 graduates in 2011 to 396 graduates in 2023.
2. Due to the availability of the two-year scholarship, we are forecasting a steady increase in the percentage of graduates attending the region’s technical colleges. Although, students would be allowed to use the scholarship at any public technical college in the state, we assume that they would go to one of the three technical schools closest to Beloit, with the lion’s share attending Blackhawk Technical College. The college attendance assumptions used in the analysis are shown in Table 2.

Table 2 Percentage of Beloit High School Graduates Attending Wisconsin Technical College with Two-Year Promise

	2010	2012	2014	2016	2018	2020	2022	2024
Technical colleges	19.8	21.9	24.1	26.6	29.3	32.3	35.6	39.3
Milwaukee Area Technical College	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.6
Madison Area Technical College	0.8	0.9	0.9	1.0	1.1	1.3	1.4	1.5
Blackhawk Technical College	17.8	19.6	21.6	23.8	26.2	28.9	31.9	35.1

3. The Beloit Promise would adopt the same residency eligibility requirements as the Kalamazoo Promise
4. Unfortunately, many students do not complete college. For the state’s technical colleges, we assumed a 50 percent graduation rate which is greater than their current rate. Moreover, we assumed that these graduation rates will hold steady during the forecast period.
5. We forecast that tuition costs will increase three percent per year above the annual rate of inflation.
6. In preparing our cost forecast for the “middle-dollar” scenario, we assume that the usage rate of federally-funded Pell Grants will match the district’s current free and reduced-lunch rate of 64.3 percent for students attending the state’s technical colleges and 20 percent for students attending the state’s four-year universities. The Pell grant which stood at \$5,550 for a full-time student in 2010/11 is assume to increase by one percent per year.

Results

The estimated annual cost of the proposed two-year Beloit Promise is shown in Table 3. The cost of the scholarship for the 2012 class would be just over \$250,000 if the scholarship is structured as being first dollar. In the second year, the cost of the scholarship would jump to nearly \$375,000

because it is supporting the 2013 college entrants and 50 percent of the 2012 entrants who remain in school. The cost of the program continues to grow in the later years because of the rising cost of tuition and as more of the district's students take advantage of the program.

The cost of the middle-dollar scholarship is substantially less, as the Federal Pell Grant pays for 100 percent of the cost of tuition for those who are eligible.

It should be noted that the administrative costs associated with the middle-dollar and the last-dollar programs are not included in the estimates below.

Table 3 Cost of the Beloit Promise

Graduation year	Constant 2010 dollars		Difference first to middle dollar
	First dollar	Middle dollar	
2012	\$256,483	\$91,688	\$164,795
2013	\$374,795	\$135,545	\$239,250
2014	\$400,814	\$143,280	\$257,534
2015	\$424,591	\$151,779	\$272,812
2016	\$482,552	\$174,478	\$308,075
2017	\$555,581	\$198,599	\$356,981
2018	\$642,337	\$229,611	\$412,726
2019	\$723,018	\$261,369	\$461,650
2020	\$764,687	\$273,340	\$491,347
2021	\$834,673	\$298,356	\$536,317
2022	\$949,794	\$338,959	\$610,835
2023	\$967,346	\$345,223	\$622,123

Like all forecasts, this forecast has its up and downside risks. On the downside, we may be too conservative in our assumption on the future cost of tuition. Again, we are assuming that tuition costs will increase at three percent per year above the rate of inflation. On the upside, our cost estimates may be too high because of our assumption that 50 percent of the students will complete their first year of college. Nationwide, approximately 20 percent of full-time students at two-year colleges graduate.