

Reports

Upjohn Research home page

5-24-2018

Cost Estimate of a Promise Scholarship Program for the Evart (Michigan) Public Schools

Bridget Timmeney W.E. Upjohn Institute for Employment Research, timmeney@upjohn.org

Brian Pittelko W.E. Upjohn Institute for Employment Research

Michelle Miller-Adams W.E. Upjohn Institute for Employment Research, miller-adams@upjohn.org

Citation

Timmeney, Bridget F., Brian Pittelko, Michelle Miller-Adams. 2018. "Cost Estimate of a Promise Scholarship Program for the Evart (Michigan) Public Schools." Report prepared for Evart Promise Plus. https://research.upjohn.org/reports/233

This title is brought to you by the Upjohn Institute. For more information, please contact repository@upjohn.org.

Cost Estimate of a Promise Scholarship Program for the Evart (Michigan) Public Schools

Authors

Bridget Timmeney, W.E. Upjohn Institute for Employment Research Brian Pittelko, W.E. Upjohn Institute for Employment Research Michelle Miller-Adams, W.E. Upjohn Institute for Employment Research

Upjohn Author(s) ORCID Identifier

(ip https://orcid.org/0000-0001-6869-9063

This report is available at Upjohn Research: https://research.upjohn.org/reports/233

Cost Estimate of a Promise Scholarship Program for the Evart (Michigan) Public Schools

Bridget Timmeney Brian Pittelko Michelle Miller-Adams

> Final Report February 21, 2018

Introduction

This report provides a cost estimate for the first ten years of a Promise scholarship program for the Evart Public Schools (EPS) that would provide a flat rate (\$2,500 per year for up to four years) middle dollar scholarship that covers remaining costs after Pell and TIP are awarded. The program would allow graduates to attend any public accredited higher education institution in the State of Michigan. The estimate forecasts costs over a ten-year period beginning in 2019. Also included is an outline of the method used in the calculation of the cost estimate, as well as the major assumptions and variables and their sources.

Key parameters for the program are:

- Graduation from Evart High School (with a sliding eligibility scale for benefits through the twelfth grade);
- Enrollment at an accredited post-secondary public institution in Michigan;
- Scholarship covering \$2,500 per year for tuition and fees after PELL/TIP are received, up to \$10,000 per student; and
- Use of Promise funding within 4 years of high school graduation (the model assumes students will use the scholarship immediately following graduation, thereby slightly front-loading its costs).

Two factors work together to keep the cost of such a program low relative to other programs. First, a little over half of students enrolled in EPS are economically disadvantaged and likely to qualify for full Pell coverage; and second, a majority of students are attending 2-year colleges where Pell grants more than cover the cost of tuition. This means that the Promise program would pay tuition costs for only that small number of EPS graduates who 1) are not Pell/TIP eligible; and 2) choose to attend a 4-year college rather than a 2-year institution.

Even a program with low scholarship costs entails expenses, although in this case they will be largely administrative and marketing-related. We have discussed the need for a strong student

support infrastructure that would prepare EPS students for success in college. (A robust FAFSA support program is of course an essential element for a Promise program that relies heavily on Pell grants). The cost estimate below does not include these administrative, marketing, or student support expenses.

Each element in the forecast is addressed below, and the costs appear in the final table. To summarize, in the first year of the program, an Evart Promise modeled along these lines would cost \$37,407 in the first year, with costs rising to approximately \$20,000 a year during the first four years while the program becomes fully loaded and then \$110,269 by the end of the ten-year period.

Generation of an Enrollment Forecast for Evart Public Schools

The first step in estimating the cost of a Promise scholarship program is to understand enrollment trends in the school district. To generate a school enrollment forecast for the Evart Public Schools, historic enrollment trends were used. From 2010–11 to 2016–18, enrollment in the school district declined by 18 percent. This enrollment pattern served as the basis for estimating enrollment through the 10-year forecast period. The forecast assumes that the graduating class of 2019 would be the first recipients.

Table 1 shows the historic and forecasted enrollment for the resident population of the Evart Public Schools. The forecast includes students opting in under schools of choice, specifically, as these numbers are calculated within the overall move-in rate. The forecast also considers students who have resided in the district but have attended schools of choice outside the district and are now returning. The forecast increases enrollment by an annual rate of 2.0 percent, based on an analysis of schools of choice movement and discussions with the Evart Promise Plus Executive Director and Board Chairperson. Over the 10-year period, the declining enrollment pattern history is curbed and an additional 130 students are added to the district. The forecast is based on estimating the annual percentage change in total enrollment and using an average distribution of students at each grade level. For example, in the last five years students in grade 12 were 7.7 percent of enrollment. As enrollment increases, the number of 12th grade students increases from 64 to 74.

Grade	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
GK	87	82	72	66	68	56	92	75	77	79	80	81	81	82	82	82	82
G1	69	76	74	65	58	57	49	64	66	68	69	69	70	70	70	70	70
G2	70	61	75	76	64	52	56	68	70	72	73	74	74	74	74	74	74
G3	70	64	64	64	70	59	61	67	70	71	72	73	73	73	74	74	74
G4	75	62	63	67	66	72	58	69	72	73	74	75	75	75	76	76	76
G5	78	78	66	64	62	59	76	69	72	73	74	75	75	75	75	76	76
G6	70	74	75	62	66	62	55	67	70	72	73	73	74	74	74	74	74
G7	69	67	75	76	59	67	66	72	75	77	78	79	79	79	79	79	79
G8	68	60	64	79	68	65	75	74	77	79	80	81	81	81	81	81	81
G9	71	69	91	79	76	74	73	83	86	88	89	90	90	91	91	91	91
G10	64	71	72	77	61	79	68	75	78	80	81	82	82	82	83	83	83
G11	79	65	70	51	58	62	80	68	70	72	73	74	74	74	74	74	74
G12	88	88	62	59	67	64	68	68	70	72	73	73	74	74	74	74	74
Total	958	917	923	885	843	828	877	919	953	976	990	998	1,002	1,005	1,006	1,006	1,007

In response to the introduction of the Kalamazoo Promise, the Kalamazoo Public Schools witnessed a large 10-percent bump in enrollment in the first year and a more stable 3.0 percent growth in each of the following years. Moreover, research indicates that the ongoing stable enrollment growth is because families who in the past would have left the district before their children entered high school are now staying. We are not predicting a large increase during the first year of the Evart Promise because of the need to rebuild trust in the school system and an award amount that is not as robust as the Kalamazoo Promise scholarship. Moreover, with the proliferation of Promise scholarship programs, the one-time enrollment boost seen in Kalamazoo has become increasingly unlikely.

A fixed middle-dollar scholarship program with an effective outreach strategy, a quality mentorship program such as envisioned with the Evart Promise Plus, and solid assistance for students and families in completing the Free Application for Federal Student Aid (FAFSA), the Michigan Tuition Incentive Program (TIP) application, and other institutional and private scholarship opportunities may assist in curbing exits from the school district and may bring some existing residents back to their home school district after leaving under the schools-of-choice option. This is the basis for our enrollment forecast.

An estimate of the number of students eligible for the scholarship also requires assumptions about high school graduation rates. Of those enrolled in ninth grade, how many will graduate from EPS in four years and be eligible for the scholarship? Table 2 identifies the projected annual graduation rate and number of graduates. The graduation rate used is 72 percent in the first year, increasing by 0.50 percent each subsequent year. The 5-year average graduation rate is 71.5 percent from 2011-12 to 2015-16, which serves as the basis for this assumption.

			Graduation		
	Seniors	Graduates	rate		
2019	68	55	72.0		
2020	70	54	72.5		
2021	72	53	73.0		
2022	73	61	73.5		
2023	73	64	74.0		
2024	74	66	74.5		
2025	74	67	75.0		
2026	74	67	75.5		
2027	74	69	76.0		
2028	74	69	76.5		

Table 2: Eligible Graduates and Graduation Rate

The third step in generating an enrollment forecast is to estimate the length of residency of eligible students. As shown in Table 3, scholarship eligibility depends upon the length of residency in the school district. Only students who have attended school in the district continuously since kindergarten or first grade receive the full scholarship. From second grade through ninth grade, the scholarship rate steps down. Students enrolled from tenth grade on are not eligible. Table 3 also shows the number of new enrollees in the district each year. Generally,

we base our forecast on the national Census-derived estimate that annually 3.4 percent of all families move from one geographic area to another. Of course, this varies greatly by community; however, without longitudinal student-level enrollment data this is our starting point and our assumption with Evart is that this rate of annual mobility is less than the national rate given the rural nature of the community and the availability of employment and amenities.

	Percent of	Percent of
	Award	Class
Kindergarten	100	78.5
First	100	1.6
Second	95	1.6
Third	95	1.7
Fourth	90	1.7
Fifth	85	1.7
Sixth	80	1.8
Seventh	75	1.8
Eighth	70	1.8
Ninth	70	1.9
Tenth	50	1.9
Eleventh	25	2.0
Twelfth	25	2.0

Table 3: Percent Eligibility Based on Enrollment Tenure

The assumption underlying our forecast is that 78.5 percent of the students will attend Evart schools from kindergarten through twelfth grade, and an additional 1 percent will move in every year from outside of the district. So, as suggested by Table 3, of the approximately 64 forecasted students in the 2017–18 class, nearly 50 (or 78.5 percent) would be estimated to have started Kindergarten in the Evart Public Schools.

Estimating the Cost of an Evart Promise Scholarship Program

In modeling the cost of the Evart Promise, an estimate of the number of eligible students who will use the scholarship is needed. Currently approximately 58 percent of Evart students go on to college within one year of graduating: of these, just over one-third (or 21 percent of graduates) attend community college while just under two-thirds (or 37 percent of graduates) attend a four-year institution. With a Promise Scholarship we expect that this rate will increase, as discussed below. The model also assumes that 33 percent of community college students will transfer to a four-year college and graduate.

Table 4 presents the college-going trends of Evart high school graduates. It is assumed that the percentage of Evart graduates attending community college will increase by 0.25 percentage points annually, and the percentage of graduates attending a four-year university will increase by 0.25 percentage point annually during the forecast period.

The fixed rate model assumes that all students will complete the FAFSA, and not everyone will necessarily meet this criterion. This overestimation is likely offset by not including students who enroll more than a year after graduation. Table 4 shows that 32 students will receive a scholarship in 2019 and 77 in 2022 when there are students enrolled at every grade level of college.

	4-year	2-year	
	college	college	Total
2019	20	12	32
2020	31	16	48
2021	45	18	64
2022	57	20	77
2023	60	21	81
2024	64	21	85
2025	66	22	87
2026	67	22	89
2027	68	23	91
2028	70	23	93

Table 4: College Enrollment Projection

Unfortunately, not everyone who attends college completes a college degree or certification. As shown in Table 5, on average, about 35.2 percent of the EPS graduates attending two-year institutions return for the second year, while 54.6 percent of four-year institution attendees return for their second year and only 41.4 percent of the college students attending four-year schools enter their fourth year, on average. In the model, we assume that the retention rate for all Evart students remains the same during the forecast period. In addition, as stated earlier, the model assumes that 33 percent of the students attending community college will transfer to a four-year university after completing their Associate's degree.

While this retention rate may be increased as some students are induced to return for a second year due to the financial support provided by the scholarship, another increment – those who are not well prepared for college success but have chosen to attend due to the scholarship – are unlikely to persist. We assume that these two trends would cancel each other out in the short-term forecast, so we kept the retention rate consistent with the rates noted in Table 5.

Table 5: College Retention Rates

	Retention Rate
Community Colleges	35.2
4-Year Colleges	
retain 2 yr	54.6
retain 3 yr	48.0
retain 4 yr	41.4

The estimated cost of a fixed-dollar Evart Promise, based on the factors outlined above, is shown in Table 6. **The cost is fixed at a flat scholarship rate of \$2,500 per student per year**. The actual per student average cost is less, \$1,193 per year, as not all students will be eligible for the full award due in combination to the length of attendance in the district and eligibility for other financial aid. This average cost is largely driven by students attending four-year schools. The value of the award is assumed in this estimate not to rise with inflation. The first-year cost is estimated to be about \$37,407 since only one class of graduates is enrolled. Costs rise as each additional class enters college for the first time (and some students do not persist), until 2022 when it reaches roughly \$91,317. In 2022 the scholarship is "all in" with students at every grade level of college. After 2022, costs rise more modestly to about \$110,269 in 2028.

		Cost Per Student	
Class	Students	(\$)	Annual Cost (\$)
2019	32	1,155	37,407
2020	48	1,167	55,789
2021	63	1,189	74,920
2022	76	1,201	91,317
2023	80	1,202	96,209
2024	84	1,203	100,939
2025	86	1,204	103,980
2026	88	1,204	106,424
2027	90	1,204	108,466
2028	92	1,204	110,269

Table 6: Estimated Costs

Although the scholarship program may opt to allow graduates three years in which to use their two years of funding (with possible deferrals for military service), we modeled the forecast based on community college attendance the year following high-school graduation. It is very difficult to estimate what proportion of students will choose to enroll immediately, who will choose to enroll six months after graduation, and who will choose to enroll a full year after graduation. In order to avoid underestimating costs we frontload the estimate by assuming that all scholarship recipients will begin college the fall after high-school graduation.

Forecast Risks

Promise scholarship programs benefit from a secure and sustainable funding stream that remains in place for a long period. This helps students, families, educators, and other stakeholders make decisions within a predictable framework. At the same time, all forecasts embody some element of risk. There are several areas of uncertainty embedded in this forecast. Among the most important of these are district enrollment trends and the rate of increase in community college tuition, as discussed above. We have used conservative assumptions in both these areas to ensure that there will not be unforeseen developments that would drive up the cost of the program. Actual performance can be monitored over time through the Evart school district data and through the National Student Clearinghouse data.

As mentioned in the report, all costs are front-loaded since it is assumed that eligible students will use the scholarship in the fall after they graduate from high school. This assumption is based on the historical patterns of post-secondary enrollment balanced by the eligibility requirement that all students must complete a FAFSA to receive a scholarship. It is assumed that not all students will complete a FAFSA, making some students ineligible while some students will defer use of their scholarship until later in the 4-year window of eligibility. The result of this assumption means that the first several years of the cost estimates are overestimated while the later years may prove to be more expensive (although total costs will remain within the bounds of the forecast).

In this forecast, the small size of the district's enrollment and relatively small number of graduates creates significant volatility in the outcomes of college going, persistence, graduation and associated costs. For instance, enrollment is projected to increase modestly despite recent trends that depict a gradual decline. If enrollment continues to decline, the costs of the program will be reduced. Conversely, if a significant number of students return to the district from schools-of-choice activity, the costs of the program will increase. In addition, if college going patterns shift and more students select 4-year paths and/or retention increases, projections will also increase.

It is possible that more students who would have previously chosen to go to a community college without the availability of the Promise will now make a different choice and attend a four-year university eligible for the scholarship. These trends could have implications for the local community college and for the local workforce.