Comments on

The Economic Impact of the Proposed Erie County Community College – 2019 Update (EMSI Main Report, September 2019)

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General Comments

Overall, the methodology used by Economic Modeling Specialists International (EMSI) to prepare their report, *The Economic Impact of the Proposed Erie County Community College – 2019 Update* (September 2019), appears to be sound. According to EMSI, their analysis is based on a Social Accounting Matrix (SAM) input-output model that is "in the same general class" as two other modelling systems frequently used in economic impact studies, the RIMS II model developed by the U.S. Bureau of Economic Analysis and the IMPLAN model developed by the Minnesota Implan Group.

EMSI has employed this methodology to conduct economic impact studies for many other educational institutions, including large public universities such as the University of Illinois and relatively smaller community colleges such as the Community College of Aurora (Colorado).[1] This suggests that EMSI's methodology has generally been accepted as a feasible modeling system capable of providing reasonable economic impact estimates.

Like all other modelling systems, the economic impact estimates generated by EMSI's model relies on certain assumptions. For example, in estimating the impact of the capital spending for the proposed Erie County Community College, the EMSI model assumes that the college's spending patterns on construction or renovation, equipment, and other needs are similar to national average spending patterns on those three categories of expenditures by junior colleges across the country. Likewise, in estimating the impact of the operations spending (including payroll) by the proposed community college, the EMSI model assumes that the spending patterns of college personnel are similar to those of the average consumer in the entire economy.[2] While there is no reason to doubt the accuracy or plausibility of these or other assumptions used in the model, it is important to remember that the accuracy of the economic impact estimates will depend on the degree to which these assumptions are met.

Major Conclusions

The EMSI report provides a persuasive argument that the proposed Erie County Community College will generate substantial economic benefits for the local economy, and quantifies those benefits with the following estimates of the income (in present value terms) that is projected to be generated in Erie County over the 2020-2030 time horizon as a result of the new college:

Added Income for Erie County due to:	Capital Spending Impact	Operations Spending Impact	Student Spending Impact	Alumni Impact	**Total Impact**
	$15.1 million	$60 million	$6.3 million	$45.3 million	**$126.7 million**

[1] Analysis of the Economic Impact and Return on Investment of Education: The Economic Value of the University of Illinois at Urbana-Champaign, August 2018.
https://www.uillinois.edu/common/pages/DisplayFile.aspx?itemId=1022838 (Accessed Oct. 17, 2019)

Analysis of the Economic Impact and Return on Investment of Education: The Economic Value of the Community College of Aurora, May 2017.
https://www.cccs.edu/wp-content/uploads/documents/CCA_MainReport_1516_Final.pdf (Accessed Oct. 17, 2019)

[2] EMSI, *The Economic Impact of the Proposed Erie County Community College – 2019 Update*, September 2019, pp. 10, 17.

Specific Questions That May Be Raised

While the case for the proposed Erie County Community College is strong in terms of projected economic benefits to the local economy, it is reasonable to expect that some Erie County residents may raise the following questions regarding the EMSI report:

1. **Capital Spending Impacts** (Tables 2.1 and 2.2):
   The economic impact estimates rely on the projected capital expenditures necessary to get the proposed community college up and running. In the EMSI report, the biggest projected expense is $27,000,000 in 2027, for renovations or construction of facilities for the college.

   Is this a reasonable estimate of the capital expenditure on the new facilities? Is there any built-in cushion for potential cost overruns?

2. **Operations Spending Impacts** (p. 3 and Tables 2.4 and 2.5):
   The new community college will hire faculty and staff as well as make expenditures on day-to-day operations. By the fifth year (2026), the new college is projected to employ 101 full-time equivalent (FTE) employees. The number of FTE employees is presumably based on community college enrollment projections summarized in the original proposal for the establishment of a public community college. College enrollment rates in turn are based on "a review of Erie high school graduates and the population of Erie County residents between the ages of 25 to 64. High school graduates are projected to have a postsecondary attainment rate of 50%, with 22% of those attending a community college. It also anticipated that 2% of the Erie County residents age 25-64 will attend a community college."[3]

   Do these projections regarding enrollment rates and FTE employees appear to be reasonable?

3. **"Alternative Uses of Funds" (Tables 2.2, 2.3, 2.5, 2.6):**
   Forty percent of the total funding for the proposed community college is expected to come from state and local government sources. The EMSI report posits a "counterfactual" scenario in which the public monies which would have been used for the capital and operation expenditures related to the community college are returned to taxpayers instead. The impacts of these expenditures are then reduced by the amount of the "alternative uses of funds," which would have created other local economic impacts. In this "counterfactual" scenario, the EMSI report assumes that households would spend the returned public monies on consumer goods and services.

   But what if the public monies are not returned to taxpayers, but instead spent on other local projects that have bigger multiplier effects (or social value) than consumer goods and services?

   If so, the "alternative use of funds" could potentially be higher, and therefore the net impact of the new community college could potentially be lower. Of course, the comparison is difficult to make because it would require an analysis of other possible uses of the public monies (e.g., spending to upgrade infrastructure) rather than returning them to taxpayers.

[3] The County of Erie, *A Proposal for the Establishment of a Public Community College in Erie County, Pennsylvania*, Submitted to the State Board of Education, June 2017. https://www.empowererie.org/uploads/Erie-Community-College-Plan.pdf (Accessed Oct. 17, 2019)

A related issue is the potential displacement effect due to higher taxes. If state and/or local taxes increase to sustain the community college, some county residents may reduce local spending in other expenditure categories or move away.

How big might this displacement effect be, and would it potentially offset some of the projected benefits of the proposed community college?

4. **Student Spending Impacts:**
The report implicitly assumes that all students who choose to attend the proposed community college are individuals who otherwise would not have enrolled in other local colleges, universities, or vocational training programs. However, it's plausible to expect that there will be some students enrolled in existing programs at other local institutions who will decide to transfer to the new community college. This is most likely to occur for existing associate degree and vocational training programs in the local area. Consequently, the net positive economic impact on the region may be smaller than the estimates suggest, since some of the positive "student spending" impacts of the proposed community college would come from those transfer students and there may be possible contraction of existing programs that would compete with the new community college.

How might the EMSI model take this into account?

Of course, if the community college does draw in individuals "who would otherwise not have been served" (i.e., individuals who would otherwise not have attended any of the existing programs in the local area such as associate degree or vocational training programs), there would be a bigger net positive effect.

5. **Alumni Impact:**
The estimated impact depends on the percentage of community college alumni who will stay in Erie to work after graduation. The EMSI report tries to take this into account by factoring in an "attrition rate" (p. 26), which is used to adjust the number of alumni each year based on unemployment and migration.

But what are the specific assumptions regarding the percentage who remain in Erie versus the percentage who leave Erie?

The EMSI also posits two "counterfactual" scenarios: one in which it is assumed that 15% of alumni would have received an alternative comparable education elsewhere if the community college did not exist, and another one in which it is assumed that 50% of the jobs locally could have been filled by workers recruited from outside Erie County if a community college were not here to provide the skills needed by local businesses.

Are these reasonable assumptions?

In estimating the positive "human capital impact" on the region as the proposed community college generates a continuous stream of graduates, the EMSI report allocates the increase in labor income to the "NAICS industry sectors where students are most likely to be employed"? (p. 27).

But how were these industries (where students are most likely to be employed) chosen? How might the estimated impacts change if graduates of the proposed community college were to enter different industry sectors?

6. **Implicit Multiplier**
   Based on the projected total impact of $126.7 million over the next 10 years, the EMSI report concludes (p. 5) that "from 2020 to 2030, for every dollar of the $44.4 million in capital spending (on the proposed community college), a present value of $2.85 in added income will be generated throughout Erie County," suggesting an "implicit multiplier" of 2.85.

   An interesting question that might be asked is whether this implicit multiplier is considered relatively high or low, especially when compared to the multiplier for similar community college investments in other geographic areas, or compared to the multiplier for other local public investments.

7. **The Challenge of Rapid and Ongoing Technological Change**
   Technology continues to advance at a breakneck pace, so the proposed community college will succeed only if it is able to adapt constantly to the changing skill demands of local businesses in addition to the economic and demographic changes in the local region. The projected economic benefits assume implicitly that the new community college will succeed in meeting this challenge to adapt/evolve as necessary. An important policy implication is that oversight and governance of the community college will require input from community business leaders and workforce analysts regarding expected future trends, so that the community college can continually adapt and develop new programs as necessary to keep up with technological advances.

   Will there be mechanisms or protocols in place to insure that this will be the case?

Summary

The EMSI report does a thorough job in estimating the potential economic impact of the proposed Erie County Community College in terms of added income that would be injected into the local economy. Based on their generally accepted methodology, the projected economic impacts appear to be reasonable. Nevertheless, the questions posed above may arise in future discussions of the proposed community college.