

Review of the “Impact of California Northstate University
Medical Center” by Varshney and Associates

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Dr. Jeffrey A. Michael
Executive Director, Center for Business and Policy Research
Professor of Public Policy
University of the Pacific

This report reviews the December 2018 report “The Impact of California Northstate University Medical Center,” by Varshney and Associates and a recent mailing to Elk Grove residents in October 2020 describing the results of the report. Based on my extensive experience with economic impact studies using the models in this report, including studies of construction and hospital impacts, I conclude that the Report, especially its Executive Summary, and the associated promotional mailing and CNU website provide an inaccurate and misleading interpretation and presentation of the hospital’s economic impact.

The Varshney and Associates analysis is conducted with the IMPLAN model. IMPLAN is a popular and useful commercial economic impact model with which I have extensive experience. Typically, an economic impact report completed with IMPLAN will provide a detailed description of the input data, the specific sectors to which new spending is attributed, and any other. While the Varshney report lists some key assumptions, such that it assumes CNU medical center is a for-profit hospital and the analysis is based on a cumulative 10-year period including 3 years of construction and 7 years of operation, it does not provide any specific data on the inputs such as the amount of construction spending or the scale of operations. Thus, I can’t verify or replicate the specific IMPLAN model results. However, the report’s cumulative 10-year output impact of \$4 billion over a multi-county region is a reasonable and plausible cumulative total based on my experience with IMPLAN analysis of hospitals and construction projects. Thus, for the purposes of my review, I am assuming that the data inputted into the IMPLAN model was accurate and correctly allocated, and my comments focus on the inaccurate interpretation and misleading presentation of the IMPLAN results.

This White Paper discusses four major problems with the interpretation and presentation of IMPLAN results in the Executive Summary of the CNU Economic Impact Report and promotional mailing. First, the report substantially overestimates new business tax revenue for the City of Elk Grove. Second, the executive summary and promotional mailings misleadingly describes the employment impacts over the 10-year analysis period as jobs instead of years of employment or job-years. Third, the report and promotional materials misleadingly describe all the jobs and other economic impacts that result from the hospital as “new.” Fourth, the report presents a misleading and overestimated estimate of the expected income increase to the average Elk Grove household and resident. Finally, though not an error with the economic impact analysis, the relationship of the report co-author to CNU should be disclosed. Each of these points are described in more detail below.

Grossly Overestimates Tax Revenue Gains to the City of Elk Grove

The CNU website and promotional mailer incorrectly claim that the Medical Center project will “create \$113 million in new business tax revenue for the City of Elk Grove,” over 10 years. The report makes a smaller, but still incorrect, claim that the IMPLAN estimate of \$62.7 million in Indirect Business Taxes “(on average \$6.3 million per year) would be a substantial addition to (the) \$147 million budget of Elk Grove.” The report goes on to compare this inaccurate estimate of new City revenues to various part of the City’s budget, portraying the CNU project as an enormous revenue windfall to the City.

Indirect Business Taxes are primarily sales taxes and business property taxes, but also include some miscellaneous revenue such as business licenses. The claim of \$113 million in new tax revenue to the City of Elk Grove on the website and promotional mailer is a particularly egregious error because it attributes all the indirect business taxes in a 5-county regional economic impact model to the City of Elk Grove. In fact, only a small portion of this estimated tax revenue would accrue to the City of Elk Grove as the State of California would receive the largest share of the estimated indirect business taxes. Furthermore, CNU announced last year that it would seek tax-exempt bonds to finance construction, which require the medical center to be owned and operated by a non-profit corporation.

The announced change from a for-profit to a non-profit operation substantially changes the tax revenue impacts of the facility, yet CNU continues to promote tax revenue benefits in its promotional mailings and website based on a 2018 analysis of a for-profit hospital. Even if were a for-profit hospital proposal, the CNU tax revenue estimates for the City are highly inflated. The IMPLAN model tax revenue estimates are based on aggregate regional data, and it does not break down results to individual cities and special districts. IMPLAN recommends that local tax revenue impacts such as this be estimated directly rather than taken directly from the model. Below are some simple estimates that show how the CNU claims of \$113 million in new tax revenue to the City of Elk Grove over 10 years are grossly exaggerated.

Property tax is the largest source of tax revenue to the City of Elk Grove. The City budget estimates nearly \$28 million in property tax revenues in FY 2020-21. However, a non-profit hospital would be eligible for an exemption from the 1% ad valorem property tax from which the City of Elk Grove derives its property tax revenue. Thus, the CNU medical center is likely to generate \$0 in property tax revenue if it is built and operated as a non-profit according to the current plan.¹ If CNU’s plans shifted back to a for-profit hospital with private financing or if it were to forgo the property tax exemption, it could generate property tax revenue for the City. According to Sacramento County, the total assessed value of property in Elk Grove is approximately \$22 billion. Assuming a \$750 million medical center, the new CNU facility could boost total assessed value in the City by 3.4%, which would generate about \$950,000 in property tax revenue for the City. **Given the currently proposed plan for a non-profit structure, the most likely case is that the CNU medical center will not generate any property tax revenue for the City of Elk Grove.**

Sales tax is the second largest tax revenue source to the City, estimated at about \$25 million in the 2020-21 City of Elk Grove budget fact sheet. A new business can generate new sales tax revenue to a City in two ways, new taxable sales for goods and services delivered at the place of business in the City,

¹http://www.elkgrovecity.org/city_hall/departments_divisions/planning/current_development_projects/california_northstate_university_hospital/frequently_asked_questions

and induced taxable sales at other city businesses from new income generated by the business. Because medical goods and services are exempt from sales tax in California, CNU would not be paying sales tax on its direct revenue in either a non-profit or for-profit status. Any new sales tax to the City would have to result through taxable sales in the City supported by new income generated by the project.

A reasonable lower and upper bound on new induced sales tax revenue to the City of Elk Grove can be estimated as follows. The lower-bound for new sales tax revenue is zero. The new hospital may not generate any new sales tax revenue, because, as the Executive Summary of the CNU report itself notes and is discussed below, a new CNU medical center would change the location of medical service delivery in the Sacramento region but would not significantly change the total amount of medical services and resulting income in the region. In addition, both the household income supported by CNU and the location of taxable sales supported by that income would be broadly distributed across the Sacramento region.

In this lower bound scenario, there would be no new sales tax revenue to the City of Elk Grove because the City is likely to capture a similar share of induced sales tax revenue from people working in the health care center with or without the new CNU facility. An upper-bound estimate of sales tax revenue can be calculated by assuming that all the income supported by the medical center would stay in Elk Grove households and is new to Elk Grove, and that all the taxable sales supported by this income increase would occur in the City of Elk Grove. The Varshney and Associates report estimates \$1.45 billion in additional income to jobs located in Elk Grove over 10 years, an average of \$145 million per year. If we assume all of this is new income to households in Elk Grove who spend exclusively in the City of Elk Grove, there would be \$43.5 million in new taxable sales within the City assuming 30% of additional personal income is spent by households on taxable sales.² The City's share of sales taxes would amount to 1% of the \$43.5 million in taxable sales as sales tax revenue, for an upper bound estimate of \$435,000 in new sales tax revenue per year. **Thus, the new sales tax revenue for the City of Elk Grove from the CNU medical center project is estimated to range between \$0 and \$435,000 per year.**

I estimate the combined total of new sales and property tax revenue to the City of Elk Grove from \$0 to a maximum of \$1.385 million annually in a best-case scenario if the CNU abandoned its current plan to operate as a tax-exempt non-profit. Even considering some potential for some miscellaneous revenue beyond the City's main sources of property and sales tax revenue, the most optimistic scenario for City revenues is about one-eighth the level touted in CNU's promotional materials. **In summary, the tax revenue to the City of Elk Grove is likely to be negligible, as the proposed non-profit CNU medical center would be exempt from paying most property and sales taxes on its direct activities in Elk Grove, and the project would not be expected to significantly increase the regional demand for healthcare services.**

Years of Employment, Sometimes Called Job-Years, Are Misleadingly Labeled Jobs

The data and units of analysis in the IMPLAN model are recorded on an annual basis. Thus, employment impacts in the IMPLAN model are full-time or part-time jobs on an annual basis. For example, IMPLAN would report 2 jobs of six-month duration as one job. When conducting a multi-year analysis, IMPLAN

² In California, total taxable sales have been about 30% of total personal income, so this calculation assumes the same taxable sales share for this new income. California Legislative Analyst's Office, "California Tax System: A Visual Guide." Available at <https://lao.ca.gov/reports/2018/3805/ca-tax-system-041218.pdf#page=3>

reports employment results on a year-by-year basis. When results of a multi-year analysis like the 10-year period of the CNU analysis are aggregated, employment impacts are properly reported as **job-years**. Unfortunately, some consultants will report **job-years** as **jobs** to make employment impacts of projects sound more impressive. IMPLAN documentation is clear that its employment measure is annual and advises that multi-year “employment impacts can be communicated as ‘job-years’ which are used by many economic impact reporting methodologies.”

The CNU promotional materials and executive summary claims of creating 24,000 new jobs region-wide is incorrect. **A reasonable claim may be that the project would support 24,000 job-years, or most accurately an average of 2,400 jobs over a ten-year period. Furthermore, most of these jobs are not “new” as described below.** It should be noted that the full report does give a correct definition of employment in its definition of terms, stating that “one job sustained over 5 years is counted as 5 jobs.” However, the results of the report, the executive summary, and promotional materials do not clearly indicate that they are referring to job-years or annual average employment.

Inaccurately Describes All the Economic Impacts of a New Medical Center as “New” to the Region

Economic impact analysis describes employment, income and other measures that are supported or derived from a project. However, the economic impacts can only be described as new to a region if they are bringing new demand, dollars from outside the region, rather than redirecting spending within the region. The misleading labeling of all the economic impacts of CNU as new is surprising, given that the final paragraph of the Executive Summary describes the Greater Sacramento area as experiencing

competition between the communities for attracting new population and employment centers. Given the zero-sum game nature of these efforts and results, the construction of the CNU Medical Center will have a significant impact on the success of the Elk Grove area ...

In addition, the first section of the report discusses the primary benefit of the Medical Center to Elk Grove is redirecting health care employment and spending from other parts of the Sacramento region to Elk Grove, contradicting the report’s own interpretation of the region-wide results. While the CNU Medical Center may generate some new demand for healthcare services in the Sacramento area, it is true that most demand for healthcare services are local, and that most of CNU medical center’s employment and output would be generated by other regional medical centers in the absence of CNU.

Thus, very few of the 24,000 **job-years** region-wide would be new, as the Executive Summary and promotional materials claim. Some of the employment and other economic impacts to Elk Grove would be new to Elk Grove, but the CNU materials inaccurately describe all Elk Grove impacts as new.

Invalid Estimate of Income Increase to the Average Elk Grove Household

The Executive Summary deceptively states, “each household in Elk Grove would benefit from the additional labor income in the amount of \$2,630.14 on average each year. Similarly, every resident of Elk Grove would benefit from the additional labor income in the amount of \$829.70 on average each year due to the Medical Center construction and operations.” There are several problems with this statement.

First, this claim confuses labor income payments by place of work with place of residence; income that is earned in Elk Grove does not necessarily accrue to Elk Grove residents due to commuting. Second, as described above, it incorrectly describes all of the economic impacts as new to the region, and the income as incremental to current income. Finally, the income from this future activity would not be evenly distributed among households, making the estimates of household incremental impacts misleading. It should be noted that this claim is not repeated in the website or promotional mailing, and thus it is of less concern than the other problems when it comes to misleading the public regarding the potential economic implications of the proposed CNU medical center.

Co-Author Personal Stake in CNU Should be Disclosed

Mr. Varshney's coauthor, Andrey Mikhailitchenko, was appointed to the CNU board of trustees in July 2018. As a CNU trustee, it appears Mr. Mikhailitchenko has a personal stake in the outcome of the CNU hospital project. As a result, it may be more appropriate to characterize the estimates as a CNU internal analysis. In addition, Mr. Mikhailitchenko is a marketing professor, not an economist or trained in a related field. Sometimes, a consultant's economic impact report is misinterpreted or exaggerated in a client's marketing materials over which the consultant has no control. In this case, the consultant is a marketing expert who serves on the board of the client. Mr. Mikhailitchenko's board position with CNU should be disclosed.

Conclusion

In conclusion, the CNU Economic Impact Report and related promotional materials regarding the economic benefits of the proposed CNU medical center project are highly misleading and do not follow best practices. The most serious error is a substantial overestimate of tax revenue benefits to the City of Elk Grove, the jurisdiction that would approve this large development project. The materials also contain highly misleading descriptions of the employment and income benefits from the project that do not correspond to best practices in economic analysis or proper use of the IMPLAN model. The City and the citizens of Elk Grove should not rely on the Executive Summary or the CNU promotional materials in their consideration of economic benefits that could result from the proposed CNU Medical Center.