

# THE ECONOMIC IMPACT OF CALIFORNIA NORTHSTATE UNIVERSITY MEDICAL CENTER

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## Executive Summary

The primary purpose of this report is to document the economic impact of California Northstate University (CNSU) Medical Center on the local economy of Elk Grove, California as well as the economy of the whole Greater Sacramento Area.

The primary tool used for this analysis was IMPLAN - an economic impact assessment software system. It combines a set of extensive databases concerning economic factors, multipliers and demographic statistics with a highly refined and detailed system of modeling software.

Multipliers are the basis of how an input- output analysis such as IMPLAN used for this study makes estimations of the potential impacts of economic changes caused by certain economic activities (in this case Medical Center construction and then Medical Center operations). The multiplier is defined as the impact of a one-unit change in indicators such as income, sales, employment, that causes the respective effect in income, sales, employment in the economy of the area.

Four types of multiplier effect are usually analyzed in the output-input models like IMPLAN: direct, indirect, induced, and total.

- The *direct* effect characterizes an initial impact of an economic activity on the region's economy. For every dollar spent in an industry, if the industry exists in the region, there is one-dollar worth of direct impact in the local economy.
- The *indirect* effect defines the creation of additional economic activity that results from linked businesses, suppliers of goods and services, and provision of operating inputs. For example, the Medical Center purchases food, detergents, blankets and other products and services.
- The *induced* effect measures the consumption expenditures of direct and indirect sector employees. While indirect effect considers business-to-business transactions only, the induced effect includes the sum of household purchases per dollar spent, based on the respective labor income payments. Examples of induced benefits include employees' expenditures on items such as retail purchases, housing, banking, medical services, and insurance.
- The *total* effect is the sum of the direct, indirect, and induced effects.

The direct, indirect, and induced benefits arising due to the multiplier effects can be presented in five ways: output, employment, labor income, value added, and indirect business taxes.

- **Output** accounts for total revenues including all sources of income for a given time period for an industry in dollars. This is the best overall measure of business and economic activity because it is

the measure most firms use to determine current activity levels. For example, an output multiplier of 1.5 means that for each dollar of Medical Center spendings, additional 50 cents are spent in other sectors because of related business-to-business and consumer spendings.

- **Employment** demonstrates the number of jobs generated and is calculated as a full-time/part-time annual average. An employment multiplier of 1.5 means that for each two jobs created by the Medical Center, an additional one job is created because of related business-to-business and consumer spendings.
- **Labor Income** includes all forms of employee compensation paid by employers (e.g., total payroll costs including benefits, wages and salaries of workers, health and life insurance, retirement payments, non-cash compensation), and proprietary income (e.g., self employment income, income received by private business owners including doctors, lawyers). A labor income multiplier of 1.5 means that for each dollar of labor income created by the Medical Center, an additional 50 cents of labor income are created in other sectors because of related business-to-business and consumer spendings.
- **Value Added** is the difference between an industry's total output and the cost of its intermediate inputs. It equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). Value added multiplier of 1.5 means that for each dollar of value added by the Medical Center there will be an additional value added in the amount of 50 cents in other sectors because of related business-to-business and consumer spendings.
- **Indirect Business Taxes** consist of property taxes, excise taxes, fees, licenses, and sales taxes paid by businesses. While all taxes during the normal operation of businesses are included, taxes on profits or income are not included. Indirect business taxes multiplier of 1.5 means that for each dollar of taxes generated by Medical Center additional 50 cents are paid as taxes by taxpayers in other sectors because of related business-to-business and consumer spendings.

The economic impact analysis was performed for two geographic areas: Greater Sacramento and City of Elk Grove. The Greater Sacramento area for the purposes of this study was defined to be including Sacramento, Placer, Yolo, El Dorado, and San Joaquin counties. Elk Grove area for the purposes of this study was defined to include three zip code areas: 95757, 95758, and 95624.

The analysis was limited by the foreseeable period of the next 10 years (till 2028) and it operated with NPV 2018 US dollars. The study revealed that during this period Medical Center construction and operations will add to the economic output of the Greater Sacramento and Elk Grove areas, act as a catalyst for new economic activity, create new jobs, add to the labor income, produce net new indirect business taxes, and in general add to the gross state product of the region.

Specifically, the total economic impact to the Greater Sacramento region (to include direct, indirect, and induced effects) will:

- Produce \$4.04 billion of economic Output.
- Create 24,129 new jobs.
- Result in more than \$1.74 billion of new Labor Income.
- Yield more than \$2.45 billion of new Value Added.

- Generate nearly \$113 million in new Indirect Business Taxes.

This study finds that the CNSU Medical Center acting as a catalyst for faster growth and accelerated economic activity between 2019 and 2028 will create a substantial incremental economic impact in the local Elk Grove area. The total incremental economic impact to Elk Grove area (to include direct, indirect, and induced effects) will:

- Produce \$3.12 billion of economic Output.
- Create 18,216 new jobs.
- Result in \$1.45 billion of new Labor Income.
- Yield \$1.96 billion of new Value Added.
- Generate \$62.7 million in new Indirect Business Taxes.

The study estimated per capita benefits of CNSU Medical Center construction and operations specifically in Elk Grove area. If the increased activity were to be divided equally, 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.

The increased indirect business tax dollars (on average \$6.3 million per year) would be a substantial addition to \$147 million budget of Elk Grove. It would be enough, for instance to cover 15.3% of budget for police or 69.3% for public transit department.

In addition to the directly quantifiable economic impact resulting from the construction and operations of the CNSU Medical Center, additional impacts will result due to improving healthcare infrastructure of the area. The Medical Center will increase the attractiveness of life in Elk Grove and thus support new housing and employment activity. Finally, to fully understand the total economic impact of the CNSU Medical Center once completed, one must also consider the benefits that would accrue to all from the value of lives saved due to improved availability of emergency care in the area.

In recent years, Greater Sacramento area have struggled to attract new industries and jobs. Within this area, there appears 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 CNSU Medical Center could have a significant impact on the success of the Elk Grove area community in the future in being a vibrant economic center. The investment in Medical Center construction will potentially have a tremendous payoff worth billions of dollars in the long run.