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Economic Impact of Texas Tech  
University School of Medicine on El  
Paso, Texas

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# Economic Impact of Texas Tech University School of Medicine on El Paso, Texas



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## **Economic Impact of Texas Tech University School of Medicine on El Paso, Texas**

### **Introduction**

The Texas Tech University Health Sciences Center was created by the Texas legislature in 1969 as a multi-campus institution including a school in El Paso. The Texas Tech Medical Center in El Paso (TTMC) has served the community for 30 years. With 277 students/residents, 663 faculty and staff, along with an operating budget of \$71 million, TTMC is a significant economic force in El Paso. The presence of TTMC impacts, directly and indirectly, local business volume, household income, the lending capacity of local depository institutions, employment opportunities, and revenue/expenditure levels of local government units. In addition, TTMC provides a substantial amount of charity care in the region. This report, prepared by The University of Texas at El Paso's Institute for Policy and Economic Development (IPED), examines these components of TTMC's economic impact. In addition, the effects of an additional 400 students attending an expanded TTMC are identified.

### **Methodology**

TTMC students/residents, faculty, and staff were surveyed in the fall of 2002. Members of the TTMC community were asked to respond to a series of questions concerning their status at TTMC, their income/expenditures/savings levels, and about any dependents in their household. A total of 330 usable responses were received, an overall response rate of 35.1 percent of the TTMC population. The response level from students was relatively low. Given this, data on UTEP graduate students generated in a recently completed study by IPED was used to supplement this segment of the response group. Additional information was obtained from TTMC financial documents and a variety of local, state and federal government agencies.

The Caffrey-Isaacs impact model (CIM) was used to measure the effects of the TTMC community upon local economic activity. Developed in 1971, this comprehensive model is generally considered the classic approach for determining the economic effects of a college or university. The model consists of a sophisticated system of equations (technically, linear cash flow formulas) for a variety of sub-sectors of the institution being analyzed. These equations are employed to determine the economic effects on regional business, household, and local government sectors. A complete file containing data, survey

questionnaire and responses, references, as well as the CIM equations and calculations, is available from IPED (contact: Dr. David A. Schauer at [dschauer@utep.edu](mailto:dschauer@utep.edu) or Dr. Dennis L. Soden at [desoden@utep.edu](mailto:desoden@utep.edu)).

**Results**

**Local Business Effects**

The first component of the CIM assesses local business effects as a result of TTMC’s presence in the region. The business effects (BUS) are considerable and include:

|               |  |                      |
|---------------|--|----------------------|
| <b>BUS-1:</b> | <b>Total impact of TTMC-Related Expenditures on Local Business Volume</b>  | <b>\$56.6million</b> |
| (A)           | Purchases by TTMC Community  | \$28.5 million       |
| (B)           | El Paso Firms’ Purchases from Local Sources in Support of TTMC-Related Business Volume                             | \$23.4 million       |
| (C)           | Business Volume Generated by Expenditures of TTMC-Related Income Received by Households not Part of TTMC Community | \$4.6 million        |

BUS-1 (A) computes the direct purchases from local businesses made by TTMC, its faculty, staff, and students/residents.

BUS-1 (B) and (C) estimate the so called “second round” or multiplier effects on local firms.

***Under the 400 incremental students’ scenario, BUS-1 increases to a \$73.3 million level, an increase of 29.5 percent.***

|               |   |                       |
|---------------|---|-----------------------|
| <b>BUS-2:</b> | <b>Value of Local Business Property</b> | <b>\$16.6 million</b> |
|---------------|---|-----------------------|

This impact component captures the capital goods (for example, machinery and equipment) and property utilized in the region as a result of the business volume generated by the presence of TTMC. It is assumed that TTMC’s share of total local business volume can be applied to the assessed valuation of total local business property.



HH-2 (B) picks up the indirect or multiplier effects of this component of CIM.

***With 400 additional students, HH-2 rises 33.9 percent to \$75.5 million.***

**Government Effects**

The final segment of the CIM is designed to reveal the effects of the presence of TTMC upon local government revenues and expenditures (GOV). The overall, net cost to local government and the two components of this figure are:

|               |  |                         |
|---------------|--|-------------------------|
| <b>GOV-1:</b> | <b>Net Operating Cost of Local Government Provided Municipal Services Allocable to TTMC Presence</b> | <b>(\$505 thousand)</b> |
| (A)           | TTMC-Related Revenues Received by Local Government   | \$5.3 million           |
| (B)           | Operating Cost of Government Provided Municipal Services Allocable to TTMC Presence                  | \$4.8 million           |

GOV-1 (A) sums TTMC-related property and sales tax revenues paid to or received by local government units plus federal aid dollars to local government allocable to the presence of TTMC.

GOV-1 (B) measures the annual operating costs of government services provided to TTMC and/or to individuals related to TTMC. The costs include municipal services allocable to TTMC-related activities and costs for local public schools allocable to TTMC faculty/staff along with their spouse and dependents.

The negative value for GOV-1 reflects the fact that revenues received by local governments are slightly larger than the gross operating costs incurred by local government.

***Under an expanded TTMC, GOV-1 rises to \$194 thousand, a \$699 thousand increase in net operating costs.***

The last portion of the GOV sector determines the dollar value of local government owned capital facilities (land, buildings, equipment, etc.) utilized to support services provided to TTMC and to TTMC-related individuals. Specifically:

**GOV-2: Capital Required by Local Government to Provide TTMC-Related Municipal Services \$4.4 million**

This figure is not an annual expense or cost number. It represents the current value of the stock of local government capital goods allocable to TTMC-related activities.

***A larger TTMC presence in El Paso raises this figure to \$5.3 million, a 20.5 percent increase.***

**Additional Impact**

There is one additional, significant economic benefit which accrues to the region given the presence of TTMC: unreimbursed care and uncompensated charity care provided by TTMC. The CIM does not consider/quantify these important activities. Data provided by TTMC sets **the unreimbursed care value at \$40.8 million on an annual basis**. A significant portion of this figure (**\$27 million**) **represents the level of uncompensated charity care** in the region.

The \$27 million amount translates to approximately **\$550 of free medical care annually to each household in El Paso County that falls below the poverty line**.