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Texas Tech University Health Sciences Center – El Paso (TTUHSC-EP): 2010 Economic Impact on El Paso, Texas

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Economic Impact Summary Sheet

Increased Business Volume	$ 268.3 million
Incremental Employment	4,050
Increased Household Income	$ 447.3 million
Expansion of Credit Base in Local Depository Institutions	$ 28.0 million
Local Business Utilization of Capital Goods & Property	$ 105.1 million
Local Government Utilization of Capital Goods & Property	$ 8.1 million
Net Operating Revenues to Local Government	$ 8.7 million
Total Unreimbursed Charity Care in 2009	$ 38.7 million

Notes:

1. The IPED Regional Impact Model (IPED RIM) was utilized to determine the economic impact values. Formerly termed the Caffrey-Isaacs model, the approach is generally considered the classic method for determining the economic effects of an education institution.

2. Data was provided by the TTUHSC-EP; a survey of faculty, staff and residents; data generated in previous studies of educational facilities in the region; and federal government information on spending patterns of households in regions similar to El Paso County.

3. All economic impact values include the **direct effects** of spending and employment by TTUHSC-EP plus the **indirect** and **induced** (that is, **multiplier**) **effects**.

4. The incremental employment figure is a full-time equivalent value.

5. The additional income to the household sector includes any income received by workers given the presence of TTUHSC-EP (direct plus multiplier effects) **and** employed spouses of TTUHSC-EP employees.

6. An enhanced credit base results from checking, savings, and time deposit balances held by the TTUHSC-EP "family" in local depository institutions.

7. Increased property and capital utilization refers to additional land, buildings, equipment, etc. required by the local business and government sectors to support TTUHSC-EP-related activity.

8. Net revenues to local government estimates all tax and federal aid dollars coming into local government units (city, county, school districts, etc.) less local government costs to provide services allocable to the presence of TTUHSC-EP.

Economic Impact of Texas Tech University Health Sciences Center 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 University Health Sciences Center in El Paso (TTUHSC-EP) has served the community for over 30 years. With 446 students/residents, 1,143 faculty and staff, along with an operating budget of $160 million, TTUHSC-EP is a significant economic force in El Paso. The presence of TTUHSC-EP 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, TTUHSC-EP 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 TTUHSC-EP's economic impact.

Methodology

TTUHSC-EP students/residents, faculty, and staff were surveyed in the spring of 2010. Members of the TTUHSC-EP community were asked to respond to a series of questions concerning their status at TTUHSC-EP, their income/expenditures/savings levels, and about any dependents in their household. A total of 329 usable responses were received, an overall response rate of 20.7 percent of the TTUHSC-EP population. The response level from residents was relatively low. Given this, data on UTEP graduate students generated in a recently completed study by IPED along with federal government data on household expenditures by age, income, and geographical location was used to supplement this segment of the response group. Additional information was obtained from TTUHSC-EP financial documents and a variety of local, state and federal government agencies.

IPED's Regional Impact Model (IPED RIM) was used to measure the effects of the TTUHSC-EP community upon local economic activity. Developed in 1971, this comprehensive model, formerly known as the Caffrey-Isaacs 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 IPED RIM equations and calculations, is available from IPED (contact: Dr. David A. Schauer at dschauer@utep.edu or Dr. Dennis L. Soden at desoden@utep.edu).

Results

Local Business Effects

The first component of the IPED RIM assesses local business effects as a result of TTUHSC-EP's presence in the region. The incremental volume of business transactions in the region is estimated to be **$268.3 million** in 2010 dollars. This total results from $ 73.4 million in direct purchases by the TTUHSC community plus an additional $ 194.9 million of El Paso firms' purchases from local sources to support the TTUHSC-EP-related business volume plus business volume generated by expenditures of TTUHSC-EP-related income received by households not part of the TTUHSC-EP community. The last two factors estimate the so-called "second round" or multiplier effects on the local economy.

A second 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 TTUHSC-EP. It is assumed that TTUHSC-EP's share of total local business volume can be applied to the assessed valuation of total local business property. Overall, it is estimated that an additional **$ 105.1 million** of capital goods and property is utilized in the regional business sector as a result of the TTUHSC-EP presence.

A third impact value estimates the expansion in local depository institutions' credit base resulting from the presence of TTUHSC-EP. IPED RIM estimates that an incremental **$ 28.0 million** in demand/savings/times deposits is held by the TTUHSC-EP community in local financial institutions.

Local Household Effects

The next portion of the IPED RIM quantifies the increase in employment and income to the region as a result of TTUHSC-EP's presence in the community. The individual/household sector of IPED RIM calculates that **4,050 jobs** are attributable to the presence of TTUHSC-EP in El Paso. This figure results from the direct employment of individuals by TTUHS-EP along with the multiplier effects. The model assumes that the ratio of TTUHSC-EP-related local business volume to gross local sales or business volume is the same as the ratio of local jobs attributable to the presence of TTUHSC-EP to total local civilian employment. The incremental job number is on a full-time equivalent basis.

A second impact value in the household sector estimates the personal income to local individuals resulting from TTUHSC-EP-related jobs and business activity. Overall, **$ 447.3 million** in income goes to TTUHSC-EP community households along with employed and earning income as a result of TTUHS-EP-related business volume in the area.

Government Effects

The final portion of the IPED RIM is designed to reveal the effects of the presence of TTUHSC-EP upon local government revenues and expenditures. The overall, **net revenues** to local government are calculated to be **$ 8.7 million** in 2010 dollars. This net figure sums the TTUHSC-EP-related property and sales tax revenues paid to or received by local government plus federal aid dollars to local government allocable to the presence of TTUHSC-EP and then nets out the annual operating costs of government services provide

to TTUHSC-EP and/or to individuals related to TTUHSC-EP. The costs include municipal services allocable to TTUHSC-EP-related activities and costs for local public schools allocable to TTUHSC-EP faculty/staff/residents along with their spouse and dependents.

The last portion of the government sector determines the dollar value of local government owned capital facilities (land, buildings, equipment, etc.) utilized to support services provided to TTUHSC-EP and to TTUHSC-EP-related individuals. IPED RIM calculates that **$ 8.1 million** in government utilization of capital facilities is attributable to the presence of TTUHSC-EP in El Paso. 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 TTUHSC-EP-related activities.

Additional Impact

There is one additional, significant economic benefit which accrues to the region given the presence of TTUHSC-EP: unreimbursed care and uncompensated charity care provided by TTUHSC. The IPED RIM does not consider/quantify these important activities. Data provided by TTUHSC-EP sets the unreimbursed care value at **$ 38.7 million** for 2009. This amount translates to approximately $650 of free medical care annually to each household in El Paso County that falls below the poverty line.