

OUTCOMES FUNDING FOR TECHNICAL COLLEGES OF TEXAS: A MODEL

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TEXAS HIGHER EDUCATION
COORDINATING BOARD

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History

Rider 52 (81st legislature) 2009

TSTC commissioned a report to The Perryman Group: “The Impact of the Texas State Technical College (TSTC) System on Business Activity in Texas:

A Current Assessment and a Perspective on the Potential Effect of a More “Outcomes-Oriented” Funding Mechanism” (2008)

- **Directs the Coordinating Board to report to the 82nd Legislature on the feasibility of a funding model based on “returned value” to be used in calculating formula funding for the Texas State Technical Colleges. The study must be conducted in consultation with the Office of the Comptroller, the Texas Workforce Commission, and the Texas State Technical College System (TSTCS). The TSTCS must transfer up to \$100,000 in FY 2010 to the Coordinating Board to cover the cost associated with the study.**
- In addition to the mentioned Rider, HB 1935, 81st Texas Legislature requires the Comptroller’s Office conduct a similar feasibility study for all technical programs at two-year colleges.

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THECB conclusions:

Pros:

- Funding is outcomes-based and linked directly to economic value. TSTCS believes that its ability to respond to the needs of Texas industry will allow it to operate more efficiently, achieve improved outcomes, and possibly lower costs.
- Outcomes-based funding will be the most efficient methodology for the state by maximizing state value.
- TSTCS will have incentives to produce the highest valued outcomes, not just the largest number of contact hours.
- Value to the state is specifically recognized, which will allow the state to more appropriately fund higher education successes.

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THECB conclusions:

Cons:

- Budgetary considerations may limit the legislature’s ability to fully fund an output/value-based system.
- Funding is no longer resource-based and may result in inefficient resource allocation.
- Funding based on economic activity adds an additional element of risk and potential funding fluctuation.

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Comptroller’s conclusions:

- the UI wage data do not contain detail on the number of hours worked nor do they differentiate between full- and part-time employees, so it is not possible for our analysts to determine a quarterly or annual salary for individuals in the database.
- The UI database also lacks the detail needed to determine if a particular higher educational program was instrumental in obtaining high-wage employment.

History

Rider 52 (81st legislature) 2009 Methodology

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- **Basic Assumptions:**
 - Cohorts studied were TSTC graduates from 2000 to 2008
 - Comparison group includes high school graduates in the same age group as the graduates
 - The graduates are employed in Texas and reported on UI wage records
- **Methodology**
 - TSTC graduates were extracted from the THECB databases, including age, level of degree, and major (as defined by CIP code) and matched with Unemployment Insurance (UI) records for employment and wage information
 - Based on the wage information provided by THECB, the Comptroller’s Office estimated wages over the completer’s work lives (assumed to be till they turn 74 years old).

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Rider 52 (81st legislature) 2009 Methodology

- **Methodology – cont.**
 - A discount rate of 4% was applied to account for inflation.
 - The estimated rate of people between 30 and 74 year olds moving out of state was 1.49% and the rate of people likely to have injuries affecting at least one year of unemployment was 0.63%.
 - A rate for likelihood of death was applied based on age.
 - Attrition rate was considered to be an average of 3%.
 - The effective tax rate used for this analysis was 7.7%.
- **Issues**
 - UI Wage data does not include occupation and/or number of hours worked, so that it cannot be estimated if the wage was earned working full- or part-time.
 - Some programs (as defined by CIP code) have few graduates, making it difficult to get a correct estimate of lifetime earnings.
 - The data available does not indicate if an increase in wages is due to the training received.

History

Rider 52 (81st legislature) 2009 Methodology

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- **Under consideration**
- Combine CIP codes from 4-digit level to 2-digit level to increase the number of graduates.
- Finding a valid comparison group, for example high school graduates of the same age, students in the same program that never graduated
- Should graduates that leave the state be considered?
- Should credits earned through different methods, for example work in the military, transfer, dual credit, be considered toward TSTC?

History

Rider 42 (82nd legislature) 2011

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42. Texas State Technical College "Returned Value" Funding Model.

The Texas Higher Education Coordinating Board shall work with the Texas State Technical College System, the Legislative Budget Board and other relevant agencies to develop a new A&I funding formula to be implemented for the 2014-15 biennium for the Texas State Technical Colleges. The formula shall reward job placement and graduate earnings projections, not time in training or contact hours.

History

Rider 42 (82nd legislature) 2011 Methodology

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- **Basic Assumptions:**
- Cohorts studied were TSTC graduates, transfers, and leavers from 2005 and 2006
- There is no comparison group. The comparison wage is minimum wage for 40 hrs/week, 52 weeks (\$15,080/year)
- The graduates are employed in Texas and reported on UI wage records
- **Methodology**
- Students graduating or leaving TSTC in a certain year were extracted from the THECB databases, including age, level of degree, and major (as defined by CIP code)
- The TSTC graduates were matched with Unemployment Insurance (UI) records for employment and wage information for 5 years after graduating or leaving TSTC

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- **Methodology – cont.**
- Cohort calculation:
 - Select all students enrolled at TSTC in fiscal years 2005 and 2006
 - Remove all students who did not graduate and who reenrolled in TSTC at any time during the following 2 years
 - Remove all students who did not graduate in the cohort year but graduated from TSTC at any time during the following 2 years. They will be part of that year cohort

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- **Methodology – cont.**
- Cohort calculation:
 - Students should take at least 9SCH at TSTC
 - Students are placed in different groups based on the highest award earned, previously award earned, and leaver status:
 - Graduates: Associates - the associate degree is the highest degree earned
 - Graduates: Certificates- certificate is the highest award earned
 - Graduates: Marketable Skills Awards – MSA is the highest award earned
 - Transfers: students enrolled in a 4-year university in the following fall
 - Leavers: students did not graduate, transfer, or reenroll at TSTC in the next 2 years
 - University graduates: students received a university degree prior to enrolling at TSTC

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- **Methodology – cont.**
- Wage calculation:
 - Calculate the sum of wages for each student (by SSN) for each quarter of the 5 years after graduation
 - Apply inflation factors in such a way that wages are expressed in 2011 dollars.
 - Remove from calculation any student who did not work at least 3 quarters of the year.
 - Calculate the annual wage
- Calculate the difference between earnings and base wage by groups by year
- Calculate the extra tax revenues for the state. The tax rate used is 7%. The economic multiplier is 1.5
- Calculate the present value of revenue.

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- **Methodology – cont.**
- Formula calculation assumptions:
 - Funding represents about 50% of the present value of revenue
 - The allocation is based on the same percentage representing the percentage of contribution of each college to the revenues
- Calculate the new allocations for each college in the TSTC System
- **Issues**
- UI Wage data does not include occupation and/or number of hours worked, so that it cannot be estimated if the wage was earned working full- or part-time.
- The data available does not indicate if an increase in wages is due to the training received.

Allocation Methodology

The new funding model was approved by the legislature and used in the allocations for the current biennium

Wages

- **FY2007 Cohort:**
 - Wage year1: 2008
 - Wage year2: 2009
 - Wage year3: 2010
 - Wage year4: 2011
 - Wage year5: 2012
- **FY2008 Cohort:**
 - Wage year1: 2009
 - Wage year2: 2010
 - Wage year3: 2011
 - Wage year4: 2012
 - Wage year5: 2013
- **Inflation applied**
- **Minimum wage:**
 - \$15,080
- **Tax rate: 7%**

Allocation Methodology

| group | Total Graduates | Average Wage Year1 | Average Year1 Wage no minwage | Tax Value | Average tax per group |
|----------------------------|-----------------|--------------------|--------------------------------|---------------------------------------|---|
| GRADUATES: ASSOCIATES | 983 | \$ 36,794 | \$ 21,714 | \$ 1,520 | \$ 1,925 |
| GRADUATES: CERTIFICATES | 442 | \$ 29,700 | \$ 14,620 | \$ 1,023 | \$ 1,425 |
| | | | =Average Wage Year1 - \$15,080 | =(Average Wage Year1 - \$15,080)*0.07 | Average of the 5 years of the tax value |

Allocation Methodology

| group | Total Graduates | Average tax per group | Avg Tax Revenue with multiplier | Sum of Avg Tax & Multiplier | PV of revenue | Funded Amount |
|----------------------------|-----------------|-----------------------|---------------------------------|---|---|--------------------|
| GRADUATES: ASSOCIATES | 983 | \$ 1,925 | \$ 2,887 | \$ 4,811 | \$24,057 | \$12,028 |
| GRADUATES: CERTIFICATES | 442 | \$ 1,425 | \$ 2,137 | \$ 3,561 | \$17,807 | \$8,903 |
| | | | =Average tax per group*1.5 | =Average tax per group +Avg Tax Revenue with multiplier | =PV(disc rate,years ,-Avg Tax Revenue with multiplier | =PV of revenue* .5 |
| Discount rate | 0% | | Funded amount | 50% | | |
| Years of Earnings | 5 | | Multiplier | 1.5 | | |

Allocation Methodology

| group | Total Graduates | Funded Amount | Total Funding | Allocation Percent |
|----------------------------|-----------------|---------------|--------------------------------|---------------------|
| GRADUATES: ASSOCIATES | 983 | \$12,028 | \$11,823,798 | 39% |
| GRADUATES: CERTIFICATES | 442 | \$8,903 | \$3,935,282 | 13% |
| | | | =funded amount*total graduates | \$30,533,560 |

Allocation Methodology

The new funding model was approved by the legislature and used in the allocations for the current biennium

Issues

- **Transfer students**
- **Dual credit students**
- **New campus**

- **Formula Funding Information:**
 - <http://www.thecb.state.tx.us/index.cfm?objectid=4EA741D3-C76D-FBC5-04F664C233E8802B>

QUESTIONS?

Contact Information

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