

# Economic Benefit of Eastland County G.E.D. Study Program

2005

Central District 8

## Summary

Does going to school pay off for an individual? Most people think so and the U.S. Census quantifies the size of the payoff.

The purpose of this paper is to provide an estimate of the anticipated economic benefits as a result of the 64 individuals who have completed the Eastland County G.E.D. Study Program.

From March 1999 until the present, TCE Cooperative Extension, Eastland County has provided the oversight for a G.E.D. Study Program. Based upon information for the 64 individuals who completed this program and passed the G.E.D. test, the projected additional work-life earnings are \$19.54 million. So, does going to school pay off? Indicators are that the program is a highly effective alternative to upgrade the educational level of a segment of the population. Going to school pays off when people chose to gain more education, thus becoming more employable and earning higher incomes. More productive employees benefit personally and concurrently contribute more to the local, state and national economies.

## Background

G.E.D. Study Classes were formed as a result of a series of Job Skill Workshops held in 1998 which revealed that 50% of the participants did not have a high school diploma. This fact showed the need for classes to help adults prepare to pass the G.E.D. test thus opening that "first door" to employment. Adults in the community may take the classes free of charge. Topics of study include the five test areas: writing, science, math, social studies and literature. Each student had an individual study plan determined by pre-testing. Classes were held in Cisco, Rising Star, and Eastland during the past five years.

Community support has been the secret to success for the G.E.D. study classes. TCE communicated



the need in establishing classes to the public. State and local staff also obtained funding from grants to purchase resources and computers. Locally, TCE's relationships with civic organizations, churches and organizations help provide facilities, childcare, scholarships, material resources, etc. A G.E.D. Task Force made up of community leaders, tutors, and TCE meet to provide overall guidance for the program.

Four volunteer tutors, two paid tutors and the CEA-FCS provide leadership to the classes. Of the 348 adults who have participated in the study classes over the five year period, 64 passed the G.E.D.

A formal graduation ceremony is held annually to recognize the graduates and their families as well as interpreting this valuable program to local officials.



## Methodology

The authors used methodology similar to that reported in the US Census Bureau publication "The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings." Though the details of the methodology are in the Census publication, highlights include:

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Educational programs of Texas Cooperative Extension are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

1. An individual's work-life earnings are the sum of each year's earnings over that person's work-life. In this study report, "synthetic" estimates of work-life earnings were created by using the working population's 1-year annual earnings and summing age-specific average earnings for people ages 25 through 64 years. The resulting totals represent what individuals with the same educational level would expect to earn on average in 1999 dollars, in a hypothetical 40-year working life.

2. Assumptions include:

- a. Current cross-section earnings are representative of the pattern of future earnings.
- b. Average earnings of individuals in each age group have been based on all members within an age group without regard to work history, past performance, or other factors which may affect pay.
- c. The estimates do not account for future productivity gains in the economy.
- d. The estimates assume uninterrupted labor force participation from age 25 to 64.
- e. The estimates do not include many factors that affect earnings, e.g., continuity of employment, individual effort and motivation, occupation, marital status, area of residence, local job availability, and non-cash and fringe benefits.

3. The computational procedure from the Census publication was a guide for the economic impact estimated in this paper. The major departure was to calculate the additional lifetime earnings for each of the 64 individuals who successfully completed the G.E.D. Due to the absence of the necessary Eastland County earnings data, Table 1 of the Census publication (Appendix A) provided the earnings data for the following subgroups. Table 1 does not contain adjustments for sex, race, Hispanic origin, or work experience.

Criteria in making the individual calculations included:

- a. Adjusting the estimates of work-life earnings for the individual's age.
- b. Earnings of individuals in the 'Employed' subcategory were based upon the 'full-time year-round workers' who are 'high school graduate.'
- c. Earnings of individuals in the 'In School' subcategory were based upon the 'full-time year-round workers' with 'some college.'

- d. Earnings of individuals in the 'Job Upgrade' subcategory were based upon the 'full-time year-round workers' with 'some college.'
- e. Earnings of individuals in the 'Moved' subcategory were based upon the 'full-time year-round workers' who are 'high school graduate' and the sum for that subcategory is adjusted by 0.85 (the ratio of 'high school graduate all workers' to 'high school graduate full-time year-round workers').
- f. Earnings of individuals in the 'Not Working' subcategory were based upon the 'all workers' who are 'high school graduate.'

## Results

The following table contains a summary by category of the 64 individuals who successfully completed the G.E.D. 39 of the individuals are either 'Employed,' 'in School/employed' or employed in a 'Job Upgrade.' Of the 5 who are 'Not Working,' two are 'stay at home moms' and one is over age 65. The remaining 20 could not be contacted because they have moved from the community or their whereabouts are unknown. The U.S. society is mobile and characterized by those who move to improve their economic status. It is reasonable to expect that the majority of those who could not be contacted are contributing to the economy, wherever they may reside.

Based upon information for the 64 individuals who completed this program and passed the G.E.D. test, the projected additional work-life earnings are \$19.54 million and are distributed as shown in the table. Relative to the nominal cost of the G.E.D. program, it is highly effective in upgrading the educational level of a segment of the population. Those who chose to gain more education become more employable, earn higher incomes, and contribute to the economic development of the community.

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<u>Subcategory</u>	<u>Number</u>	<u>Additional Lifetime Earnings</u>
Employed	23	\$5,448,959
In School	10	\$5,384,015
Job Upgrade	6	\$2,718,223
Moved	4	\$771,942
Not Working	5	\$874,576
Phone # Inaccurate	16	\$4,340,974
Total Additional Lifetime Earnings	64	\$19,538,689

## Acknowledgments

Texas Cooperative Extension of Eastland County acknowledges the following:

Volunteer tutors – Lois Marshall, Brooksie Hodges, Kathy Swift, Fred Tucker, Pat Deitiker, Phyllis and Ron Graham, Larry and Judy Smith, Edith Bibb, Betty Fisher, Phyllis Tipping, and volunteers who were compensated include Mike and Debbie Parsons, and Carol Naegele

Organizations providing grant funds include Big Country Adult Education Cooperative, West Central Texas Workforce Development Board, Wal-Mart,

Facilities, childcare service, scholarships and material resources were : First Baptist Church, Eastland, First United Methodist Church and First Presbyterian Church, Cisco,

Eastland Economic Development Board, Cisco Civic League, Hillside Village (Cisco Public Housing Authority), Eastland Memorial Hospital, Extension Education Association, Eastland Civic League, and Eastland Lion's Club

In addition to these individuals and organizations, numerous others have supported this program through encouragement and resources. This assistance has allowed the many individuals to participate in the G.E.D. program, with 64 successfully completing the program.

## References

\*Day, Jennifer C. and Eric C. Newburger. The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings. U.S. Department of Commerce, July 2002.

## APPENDIX A

Table 1.

### Synthetic Estimates of Work-Life Earnings by Educational Attainment, Work Experience, and Age, Based on 1997-1999 Work Experience

(Numbers in 1999 dollars)

Work experience and age	Not high school graduate	High school graduate	Some college	Associate's degree	Bachelor's degree	Master's degree	Professional degree	Doctoral degree
<b>ALL WORKERS</b>								
<b>Work-life estimate.....</b>	<b>766,951</b>	<b>1,037,759</b>	<b>1,267,803</b>	<b>1,331,201</b>	<b>1,838,432</b>	<b>2,127,947</b>	<b>4,015,613</b>	<b>3,105,793</b>
90-percent confidence interval (±) . . .	18,998	11,594	22,553	36,334	29,007	52,134	218,750	161,514
Average earnings								
Total.....	18,894	25,909	31,192	33,020	45,394	54,537	99,253	81,430
25 to 29 years.....	15,346	20,975	22,871	25,403	33,031	37,211	42,662	47,457
30 to 34 years.....	17,238	24,282	28,164	29,642	41,417	47,080	65,355	61,159
35 to 39 years.....	18,311	25,633	30,747	32,347	46,532	58,179	104,366	79,221
40 to 44 years.....	19,426	27,696	33,663	36,143	49,724	55,577	102,191	82,947
45 to 49 years.....	19,230	27,936	34,457	35,784	50,322	59,379	109,435	87,146
50 to 54 years.....	21,514	27,942	36,725	37,671	54,419	58,897	98,787	88,590
55 to 59 years.....	21,716	27,643	35,838	37,827	50,981	58,848	127,745	89,769
60 to 64 years.....	20,610	25,446	31,096	31,423	41,259	50,423	152,581	84,870
<b>FULL-TIME, YEAR-ROUND WORKERS</b>								
<b>Work-life estimate.....</b>	<b>950,097</b>	<b>1,226,575</b>	<b>1,494,989</b>	<b>1,563,702</b>	<b>2,140,864</b>	<b>2,463,059</b>	<b>4,411,542</b>	<b>3,440,001</b>
90-percent confidence interval (±) . . .	25,797	14,583	29,240	46,903	35,559	69,948	249,680	198,575
Average earnings								
Total.....	23,420	30,436	36,758	38,216	52,231	62,295	109,551	89,433
25 to 29 years.....	19,280	24,977	28,186	29,349	38,118	43,614	49,162	60,023
30 to 34 years.....	21,599	28,754	33,068	33,977	47,356	53,240	73,775	65,339
35 to 39 years.....	22,480	29,998	36,616	37,631	53,519	66,606	114,998	82,763
40 to 44 years.....	23,800	31,968	38,970	42,147	56,226	62,361	110,316	89,948
45 to 49 years.....	23,259	32,043	39,134	40,032	57,281	66,971	116,835	93,800
50 to 54 years.....	25,780	32,223	41,564	42,913	61,324	64,605	107,726	99,821
55 to 59 years.....	26,918	32,781	42,380	44,083	60,437	67,622	137,035	96,873
60 to 64 years.....	26,904	32,570	39,080	42,609	53,911	67,592	172,461	99,434

† This figure added to or subtracted from the estimate provides the 90-percent confidence interval.

Note: Average earnings based on means.

Source: U.S. Census Bureau, Current Population Surveys, March 1998, 1999, and 2000.

