

Economic Contribution of Terra Community College

*Analysis of Investment Effectiveness
and Economic Growth*

Volume 2: Detailed Results

by

Entry Level of Education,
Gender, and Ethnicity

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INTRODUCTION

The purpose of this volume is to present results of the economic impact analysis in detail by gender, ethnicity, and level of education. It is kept as a separate volume intended for limited distribution only, however, because this effort is not about gender and ethnicity differences *per se*. The study is about the overall economic impacts generated by community and technical colleges. As such, the Main Report and short Executive Summary both present results without reference to gender and ethnicity differences.

We feel, nevertheless, that it is important to present all results for the sake of completeness, not just consolidated ones, so long as users remain prudent in their use and distribution. Results should not be used, for example, to further any political agendas. Other studies about gender and ethnicity differences address such questions better and in greater detail. Our intent is simply to provide college presidents with pertinent information should specific questions arise.

On the data entry side, gender and ethnicity are important variables that help characterize the student body profile. We collect profile data and link it to national and state statistical databases which are already broken out by gender and ethnic differences. The student body profile, to a large extent, drives the magnitude of results which are presented in detail in this volume and in a consolidated fashion in the Main Report and Executive Summary. Literature references for databases and parameters are listed in the Main Volume and in conjunction with summary tables in this volume.

DETAILED TABLES

TABLE 1: HIGHER EARNINGS

Statistics indicate that earnings are highly correlated with education. As education milestones are achieved, students move into higher levels of average earnings. Higher earnings (also known as *private benefits*) of students are summarized in **Table 1**. Note that these are aggregate figures reflecting cumulative achievements of *all* students in each category. The total in the last column also appears in **Table 3.2** of Volume 1: Main Report.

Table 1: Higher Annual Earnings Based on Achievements, Aggregate¹

| | MALE | | FEMALE | | TOTAL |
|---------------------------|--------------------|------------------|--------------------|------------------|--------------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$672,667 | \$61,470 | \$435,165 | \$48,776 | \$1,218,078 |
| HS/GED equivalent | \$205,610 | \$18,789 | \$132,995 | \$14,907 | \$372,300 |
| One year post HS or less | \$1,231,666 | \$112,553 | \$1,034,350 | \$115,936 | \$2,494,505 |
| Two years post HS or less | \$1,266,307 | \$115,718 | \$1,109,845 | \$124,398 | \$2,616,268 |
| > Associate Degree | \$37,043 | \$3,385 | \$33,081 | \$3,708 | \$77,217 |
| TOTAL | \$3,413,292 | \$311,915 | \$2,745,436 | \$307,725 | \$6,778,368 |

1. Numbers reflect aggregate totals for all students in each category.

Source: Adapted from U.S. Census Bureau, Housing and Household Economic Statistics Division; U.S. Census Bureau, Income Surveys Branch/HHES Division, "Median for 4-Person Families, by State" (October 2003); U.S. Census Bureau, Table P-3. Race and Hispanic Origin of People by Mean Income and Sex: 1947 to 2000 (September 2002); U.S. Census Bureau, Table P-18. Educational Attainment—People 25 Years Old and Over by Mean Income and Sex: 1991 to 2000 (September 2002).

TABLES 2 – 7: REDUCED MEDICAL COSTS

In general, statistics show a positive correlation between higher education and improved health habits. The following tables show calculated reductions in medical costs as a function of adding higher education, linked to the gender and ethnicity profile of the student body. Again, note that these are aggregate figures reflecting the entire student body as a whole (not individually).

The improved health of students generates savings in three measurable ways: 1) lower absenteeism from work (**Tables 2 and 3**); 2) reduced smoking (**Tables 4 and 5**), and; 3) reduced alcohol abuse (**Tables 6 and 7**). Aggregated data reappear in **Table 3.4** of the Main Report.

Table 2: Number of Days Reduced Absenteeism per Year, Aggregate^{1,2}

| | MALE | | FEMALE | | TOTAL |
|---------------------------|------------|-----------|------------|-----------|--------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | 87 | 13 | 198 | 24 | 322 |
| HS/GED equivalent | <10 | <10 | 15 | <10 | 24 |
| One year post HS or less | 87 | 13 | 249 | 31 | 380 |
| Two years post HS or less | 65 | <10 | 177 | 22 | 274 |
| > Associate Degree | <10 | <10 | <10 | <10 | <10 |
| TOTAL | 247 | 37 | 643 | 79 | 1,007 |

1. Numbers may not add due to rounding.

2. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from Bureau of Labor Statistics, Current Population Survey, Table 46. Absences from work of employed full-time wage and salary workers by age and sex; U.S. Census Bureau, Table P-3. Race and Hispanic Origin of People by Mean Income and Sex: 1947 to 2000.

Table 3: Employer Savings from Reduced Absenteeism per Year, Aggregate¹

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|----------------|-----------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$8,862 | \$1,043 | \$11,400 | \$1,341 | \$22,646 |
| HS/GED equivalent | \$853 | \$100 | \$1,099 | \$129 | \$2,182 |
| One year post HS or less | \$12,198 | \$1,435 | \$20,057 | \$2,360 | \$36,049 |
| Two years post HS or less | \$10,450 | \$1,229 | \$17,030 | \$2,004 | \$30,713 |
| > Associate Degree | \$307 | \$36 | \$508 | \$60 | \$910 |
| TOTAL | \$32,669 | \$3,843 | \$50,094 | \$5,893 | \$92,500 |

1. Lost income based on the implicit assumption that the typical work year comprises 260 full-work days.

Source: Adapted from data supplied by Bureau of Labor Statistics and U.S. Census Bureau. See also Table 2.

Table 4: Fewer Smokers, Aggregate¹

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------|---------------|-----------|---------------|-----------|
| | White | Non-White | White | Non-White | |
| < HS/GED | <10 | <10 | <10 | <10 | <10 |
| HS/GED equivalent | <10 | <10 | <10 | <10 | <10 |
| One year post HS or less | 11 | <10 | <10 | <10 | 23 |
| Two years post HS or less | <10 | <10 | <10 | <10 | 14 |
| > Associate Degree | <10 | <10 | <10 | <10 | 10 |
| TOTAL | 25 | <10 | 23 | <10 | 53 |

1. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from Centers for Disease Control and Prevention, National Center for Health Statistics, Table 60. Current cigarette smoking by persons 18 years of age and over in *Health, United States, 2004* (Hyattsville, MD, 2004); National Center for Health Statistics, Table 61: Age-adjusted prevalence of current cigarette smoking, in *Health, United States, 2004* (Hyattsville, MD, 2004); Questionnaire supplements: hypertension (1974), smoking (1979), alcohol and health practices (1983), health promotion and disease prevention (1985, 1990-91), cancer control and cancer epidemiology (1992), and year 2000 objectives (1993-95). Data starting in 1997 obtained from the family core and sample adult questionnaires.

Table 5: Medical Savings from Reduced Smoking per Year, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|----------------|-----------------|----------------|------------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$8,893 | \$1,060 | \$7,990 | \$522 | \$18,465 |
| HS/GED equivalent | \$573 | \$68 | \$516 | \$34 | \$1,192 |
| One year post HS or less | \$32,456 | \$3,880 | \$29,436 | \$2,036 | \$67,807 |
| Two years post HS or less | \$19,695 | \$2,364 | \$18,097 | \$1,357 | \$41,512 |
| > Associate Degree | \$14,654 | \$1,765 | \$13,623 | \$1,097 | \$31,139 |
| TOTAL | \$76,270 | \$9,137 | \$69,662 | \$5,045 | \$160,115 |

Source: Adapted from Centers for Disease Control and Prevention, Table 2: Annual smoking-attributable economic costs for adults and infants - United States, 1995-1999, in "Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs - United States, 1995-1999" (*MMWR Weekly* 51(4), April 12, 2002): 300-3. See also Table 4.

Table 6: Fewer Alcohol Abusers, Aggregate^{1,2}

| | MALE | | FEMALE | | TOTAL |
|---------------------------|---------------|---------------|---------------|---------------|-----------|
| | White | Non-White | White | Non-White | |
| < HS/GED | <10 | <10 | <10 | <10 | <10 |
| HS/GED equivalent | <10 | <10 | <10 | <10 | <10 |
| One year post HS or less | <10 | <10 | <10 | <10 | <10 |
| Two years post HS or less | <10 | <10 | <10 | <10 | <10 |
| > Associate Degree | <10 | <10 | <10 | <10 | <10 |
| TOTAL | <10 | <10 | <10 | <10 | 13 |

1. Numbers may not add due to rounding.

2. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from National Institute of Alcohol Abuse and Alcoholism, Percent reporting alcohol use in the past year by age group and demographic characteristics: NHSDA, 1994-97 (August 1999); National Institute on Drug Abuse and the National Institute of Alcohol and Alcoholism, *The Economic Costs of Alcohol and Drug Abuse in the United States - 1992* (Bethesda, MD: Department of Health and Human Services, National Institute of Health, May 1998); Thomas Nephew and others, eds., *Surveillance Report #55: Apparent Per Capita Alcohol Consumption: National, State and Regional Trends, 1977-98* (Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, 2000).

Table 7: Medical Savings from Reduced Alcohol Abuse per Year, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|----------------|-----------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$5,666 | \$674 | \$4,387 | \$410 | \$11,138 |
| HS/GED equivalent | \$377 | \$45 | \$282 | \$27 | \$731 |
| One year post HS or less | \$22,934 | \$2,713 | \$15,975 | \$1,573 | \$43,195 |
| Two years post HS or less | \$16,075 | \$1,885 | \$9,664 | \$1,022 | \$28,647 |
| > Associate Degree | \$3,527 | \$412 | \$1,952 | \$215 | \$6,106 |
| TOTAL | \$48,579 | \$5,728 | \$32,261 | \$3,247 | \$89,816 |

Source: Adapted from National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism, *The Economic Costs of Alcohol and Drug Abuse in the United States, 1992* (Bethesda, MD: Department of Health and Human Services, National Institute of Health, May 1998). See also Table 6.

TABLES 8 – 11: REDUCED INCARCERATION COSTS

Tables 8 through 11 relate probabilities of incarceration to education levels – incarceration drops on a sliding scale as education levels rise (linked to the gender and ethnicity profile of the student body). As above, note that results are aggregated – they are not on an individual basis.

We identify three types of crime-related expenses: 1) incarceration, including prosecution, imprisonment, and reform (Tables 8 and 9); 2) victim costs (Table 10), and; 3) productivity gained as a result of time spent working rather than in jail or prison (Table 11). Aggregated data are also presented in Table 3.4 of the Main Report.

Table 8: Fewer Incarcerated, Aggregate^{1,2}

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------|---------------|---------------|---------------|-----------|
| | White | Non-White | White | Non-White | |
| < HS/GED | <10 | <10 | <10 | <10 | <10 |
| HS/GED equivalent | <10 | <10 | <10 | <10 | <10 |
| One year post HS or less | <10 | <10 | <10 | <10 | <10 |
| Two years post HS or less | <10 | <10 | <10 | <10 | <10 |
| > Associate Degree | <10 | <10 | <10 | <10 | <10 |
| TOTAL | 12 | <10 | <10 | <10 | 15 |

1. Numbers may not add due to rounding.

2. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from Allen J. Beck and Paige M. Harrison, *Prisoners in 2000* (Washington, D.C.: U.S. Department of Justice, August 2001); National Center for Education Statistics, *Literacy Behind Prison Walls* (Washington, D.C.: U.S. Department of Education, October 1994); National Institute for Literacy, *Correctional Educational Facts*; Sandra Kerka, *Prison Literacy Programs*. ERIC Digest No. 159; Stephen J. Steurer, Linda Smith, and Alice Tracy, “Three State Recidivism Study” (Lanham, MD: Correctional Education Association, September 2001); Thomas P. Bonczar and Alan J. Beck, *Lifetime Likelihood of Going to State or Federal Prison* (Washington, D.C.: U.S. Department of Justice, March 1997); U.S. Census Bureau, Table 1. Educational Attainment of the Population 15 Years and Over, by Age, Sex, Race, and Hispanic Origin in *Educational Attainment in the United States March 2000* (December 2000).

Table 9: Annual Savings from Reduced Incarceration, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|-----------------|----------------|----------------|------------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$17,973 | \$2,824 | \$227 | \$536 | \$21,560 |
| HS/GED equivalent | \$1,019 | \$179 | \$13 | \$33 | \$1,244 |
| One year post HS or less | \$44,152 | \$9,815 | \$557 | \$1,693 | \$56,217 |
| Two years post HS or less | \$15,378 | \$5,562 | \$194 | \$840 | \$21,974 |
| > Associate Degree | \$2,247 | \$1,083 | \$28 | \$151 | \$3,510 |
| TOTAL | \$80,769 | \$19,463 | \$1,020 | \$3,253 | \$104,505 |

Source: Adapted from U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics Bulletin, Table 1 in “Justice Expenditures and Employment in the United States, 2001” (May 2004). Paige M. Harrison and Allan J. Beck, “Number of persons held in state or federal prison or in local jails, 1995-2004” (Bureau of Justice Statistics, National Prisoner Statistics, April 24, 2005); Timothy Hughes, et al, “State prison admissions 2001: Sentence length by offense and admission type” (Bureau of Justice Statistics, National Corrections Reporting Program 2001, May 7, 2004); Bureau of Justice Statistics, Survey of Inmates in Local Jails, 2002, “Length of sentence and time expected to be served of inmates sentenced to jail, by offense, 2002” (July 5, 2004).

Table 10: Annual Crime Victim Savings, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|----------------|--------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$5,765 | \$906 | \$73 | \$172 | \$6,916 |
| HS/GED equivalent | \$327 | \$58 | \$4 | \$11 | \$399 |
| One year post HS or less | \$14,162 | \$3,148 | \$179 | \$543 | \$18,032 |
| Two years post HS or less | \$4,933 | \$1,784 | \$62 | \$269 | \$7,048 |
| > Associate Degree | \$721 | \$347 | \$9 | \$49 | \$1,126 |
| TOTAL | \$25,907 | \$6,243 | \$327 | \$1,044 | \$33,520 |

Source: Adapted from D. A. Anderson, "The Aggregate Burden of Crime" (*Journal of Law and Economics* XLII 2, October 1999): 611-642; Ted R. Miller, Mark A. Cohen, and Brian Wiersema, *Victim Costs and Consequences: A New Look* (Washington, D.C.: U.S. Department of Justice, National Institute of Justice, January 1996). See also Table 8.

Table 11: Annual Productivity Gained, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|-----------------|----------------|--------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$7,222 | \$881 | \$51 | \$115 | \$8,270 |
| HS/GED equivalent | \$520 | \$71 | \$4 | \$9 | \$604 |
| One year post HS or less | \$24,212 | \$4,181 | \$176 | \$510 | \$29,079 |
| Two years post HS or less | \$9,683 | \$2,720 | \$73 | \$303 | \$12,780 |
| > Associate Degree | \$1,633 | \$611 | \$13 | \$66 | \$2,323 |
| TOTAL | \$43,271 | \$8,465 | \$317 | \$1,003 | \$53,055 |

Source: Adapted from Correctional Education Association, National Center for Education Statistics, U.S. Census Bureau, and U.S. Department of Justice. See also Table 8.

TABLES 12 – 15: REDUCED WELFARE AND UNEMPLOYMENT

Higher education is statistically associated with lower welfare and unemployment. The higher the education level, the less likely it is for an individual to apply for welfare and/or unemployment assistance (as above, these data are linked to the gender and ethnicity profile of the student body). Results reflect the student body as a whole and are dependent on the cumulative achievements of students and their education level at the end of the analysis year.

Social savings received from reduced welfare are shown in **Tables 12** and **13**, and savings received from reduced unemployment are shown in **Tables 14** and **15**.

Aggregated numbers also appear in **Table 3.4** of the Main Report.

Table 12: Fewer People on Welfare, Aggregate^{1,2}

| | MALE | | FEMALE | | TOTAL |
|---------------------------|---------------|---------------|-----------|---------------|-----------|
| | White | Non-White | White | Non-White | |
| < HS/GED | <10 | <10 | <10 | <10 | <10 |
| HS/GED equivalent | <10 | <10 | <10 | <10 | <10 |
| One year post HS or less | <10 | <10 | 11 | <10 | 19 |
| Two years post HS or less | <10 | <10 | <10 | <10 | <10 |
| > Associate Degree | <10 | <10 | <10 | <10 | <10 |
| TOTAL | <10 | <10 | 21 | <10 | 36 |

1. Numbers may not add due to rounding.

2. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from Committee on Ways and Means, *2000 Ways and Means Green Book*, 17th ed. (Washington D.C.: U.S. House of Representatives, October 2000); Health Care Financing Administration, *A Profile of Medicaid: Chartbook 2000* (Washington, D.C.: U.S. Department of Health and Human Services, September 2000); Robert Rector, *Means-Tested Welfare Spending: Past and Future Growth* (Heritage Foundation, March 2001); Social Security Bulletin, *Annual Statistical Supplement, 2000* (December 2002); Temporary Assistance for Needy Families (TANF) Program, Table 12: Percent distribution of TANF adult recipients by race and Table 17: Percent distribution of TANF adult recipients by educational level in "*Characteristics and Financial Circumstances of TANF Recipients*" (Washington D.C.: U.S. Department of Health and Human Services, May 1999); U.S. Census Bureau, Population Division, Table ST-EST2002-01 - State Population Estimates (December 2002).

Table 13: Annual Community Welfare Savings, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|----------------|----------------|-----------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$1,965 | \$520 | \$5,880 | \$1,557 | \$9,922 |
| HS/GED equivalent | \$115 | \$30 | \$343 | \$91 | \$579 |
| One year post HS or less | \$5,265 | \$1,394 | \$15,753 | \$4,171 | \$26,584 |
| Two years post HS or less | \$2,072 | \$549 | \$6,199 | \$1,642 | \$10,462 |
| > Associate Degree | \$326 | \$86 | \$975 | \$258 | \$1,645 |
| TOTAL | \$9,743 | \$2,580 | \$29,151 | \$7,719 | \$49,193 |

Source: Adapted from Social Security Online, Annual Statistical Supplement, 2004, Table 9.G2: Average monthly number of families and recipients of Temporary Assistance for Needy Families and total amount of assistance, by state or other area, 2003; U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, 2003 Data Compendium; U.S. Department of Health and Human Services, Indicators of Welfare Dependence: Annual Report to Congress, 2003.

Table 14: Fewer People on Unemployment, Aggregate^{1,2}

| | MALE | | FEMALE | | TOTAL |
|---------------------------|---------------|---------------|---------------|---------------|-----------|
| | White | Non-White | White | Non-White | |
| < HS/GED | <10 | <10 | <10 | <10 | <10 |
| HS/GED equivalent | <10 | <10 | <10 | <10 | <10 |
| One year post HS or less | <10 | <10 | <10 | <10 | <10 |
| Two years post HS or less | <10 | <10 | <10 | <10 | <10 |
| > Associate Degree | <10 | <10 | <10 | <10 | <10 |
| TOTAL | <10 | <10 | <10 | <10 | 14 |

1. Numbers may not add due to rounding.

2. Results adjusted for out-migration, but not attrition over time. Out-of-state attrition applied in Table 19.

Source: Adapted from U.S. Department of Labor, Bureau of Labor Statistics, Current Population Survey.

Table 15: Annual Unemployment Savings, Aggregate

| | MALE | | FEMALE | | TOTAL |
|---------------------------|----------------|----------------|----------------|----------------|-----------------|
| | White | Non-White | White | Non-White | |
| < HS/GED | \$650 | \$158 | \$925 | \$179 | \$1,912 |
| HS/GED equivalent | \$42 | \$10 | \$59 | \$11 | \$123 |
| One year post HS or less | \$2,399 | \$566 | \$3,334 | \$639 | \$6,939 |
| Two years post HS or less | \$1,421 | \$254 | \$1,764 | \$306 | \$3,745 |
| > Associate Degree | \$1,071 | \$187 | \$1,309 | \$223 | \$2,789 |
| TOTAL | \$5,582 | \$1,176 | \$7,391 | \$1,357 | \$15,507 |

Source: Adapted from U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Data

TABLES 16 – 18: SUMMARY TABLES

Summary tables show aggregate totals of all values presented in **Tables 1** through **15** (**Table 16**), as well as annualized values per CHE (**Table 17**) and per student (**Table 18**). Numbers in the last column of **Table 16** also appear in **Table 3.4** of the Main Report. Weighted averages in **Tables 17** are reproduced in **Table 3.9**.

Table 16: Summary of Annual Impacts

| | MALE | | FEMALE | | TOTAL |
|----------------------------------|--------------------|------------------|--------------------|------------------|--------------------|
| | White | Non-White | White | Non-White | |
| Higher earnings | \$3,413,292 | \$311,915 | \$2,745,436 | \$307,725 | \$6,778,368 |
| Absenteeism Savings | \$32,669 | \$3,843 | \$50,094 | \$5,893 | \$92,500 |
| Medical Cost Savings | \$124,850 | \$14,865 | \$101,923 | \$8,293 | \$249,930 |
| Incarceration Savings | \$80,769 | \$19,463 | \$1,020 | \$3,253 | \$104,505 |
| Crime Victim Savings | \$25,907 | \$6,243 | \$327 | \$1,044 | \$33,520 |
| Add Prod. (fewer incarceration.) | \$43,271 | \$8,465 | \$317 | \$1,003 | \$53,055 |
| Welfare Savings | \$9,743 | \$2,580 | \$29,151 | \$7,719 | \$49,193 |
| Unemployment Savings | \$5,582 | \$1,176 | \$7,391 | \$1,357 | \$15,507 |
| TOTAL | \$3,736,083 | \$368,550 | \$2,935,659 | \$336,287 | \$7,376,579 |

Source: See Tables 1 through 15.

Table 17: Annual Impacts per Credit Hour Equivalent

| | MALE | | FEMALE | | WEIGHTED AVERAGE |
|----------------------------------|---------------|---------------|---------------|---------------|------------------|
| | White | Non-White | White | Non-White | |
| Higher earnings | \$ 198 | \$ 154 | \$ 141 | \$ 135 | \$ 166 |
| Absenteeism Savings | \$ 2 | \$ 2 | \$ 3 | \$ 3 | \$ 2 |
| Medical Cost Savings | \$ 7 | \$ 7 | \$ 5 | \$ 4 | \$ 6 |
| Incarceration Savings | \$ 5 | \$ 10 | \$ 0 | \$ 1 | \$ 3 |
| Crime Victim Savings | \$ 2 | \$ 3 | \$ 0 | \$ 0 | \$ 1 |
| Add Prod. (fewer incarceration.) | \$ 3 | \$ 4 | \$ 0 | \$ 0 | \$ 1 |
| Welfare Savings | \$ 1 | \$ 1 | \$ 2 | \$ 3 | \$ 1 |
| Unemployment Savings | \$ 0 | \$ 1 | \$ 0 | \$ 1 | \$ 0 |
| TOTAL | \$ 217 | \$ 182 | \$ 151 | \$ 147 | \$ 180 |

Source: See Table 2.4 in Volume 1: Main Report and Table 16 in this report.

Table 18: Annual Impacts per Student

| | MALE | | FEMALE | | WEIGHTED AVERAGE |
|----------------------------------|-----------------|-----------------|-----------------|-----------------|---------------------|
| | White | Non-White | White | Non-White | |
| Higher earnings | \$ 2,619 | \$ 2,034 | \$ 1,868 | \$ 1,780 | \$ 2,187 |
| Absenteeism Savings | \$ 25 | \$ 25 | \$ 34 | \$ 34 | \$ 30 |
| Medical Cost Savings | \$ 96 | \$ 97 | \$ 69 | \$ 48 | \$ 81 |
| Incarceration Savings | \$ 62 | \$ 127 | \$ 1 | \$ 19 | \$ 34 |
| Crime Victim Savings | \$ 20 | \$ 41 | \$ 0 | \$ 6 | \$ 11 |
| Add Prod. (fewer incarceration.) | \$ 33 | \$ 55 | \$ 0 | \$ 6 | \$ 17 |
| Welfare Savings | \$ 7 | \$ 17 | \$ 20 | \$ 45 | \$ 16 |
| Unemployment Savings | \$ 4 | \$ 8 | \$ 5 | \$ 8 | \$ 5 |
| TOTAL | \$ 2,867 | \$ 2,404 | \$ 1,998 | \$ 1,945 | \$ 2,380 |

Source: See Table 2.3 in Volume 1: Main Report and Table 16 in this report.

TABLES 19 – 20: TAXPAYER PERSPECTIVES

Tables 19 and **20** in this report are particularly important. They provide data needed for computing investment analysis results in **Tables 3.4** to **3.7** in the Main Report —broad and narrow taxpayer perspectives. In **Table 19**, every other column (higher taxes and avoided cost columns) provides data needed for the narrow taxpayer perspective. Remaining columns provide data needed for the broad taxpayer perspective. **Table 20** provides detailed calculations on labor and non-labor income added to the regional economy as a result of higher student earnings. Total income growth figures feed into the first column of **Table 19**.

Table 19: Cumulative Impact Over Time (\$ Thousands)

| Year | INCOME | | HEALTH | | | | CRIME | | | | WELFARE/UNEMPLOYMENT | | | | | |
|---------------------------------|--------------------|-------------|-----------------|--------------|----------------|--------------|---------------|--------------|-----------------|-----------------|----------------------|-----------------|--------------|-----------------|--------------|-----|
| | Increase in Income | Added Taxes | Reduced Absent. | Avoided Cost | Medical Saving | Avoided Cost | Incarceration | Avoided Cost | Avoided Victims | Product. Gained | Avoided Cost | Reduced Welfare | Avoided Cost | Reduced Unempl. | Avoided Cost | |
| 0 | \$287 | \$36 | \$92 | \$12 | \$250 | \$15 | \$105 | \$84 | \$34 | \$0 | \$53 | \$10 | \$49 | \$8 | \$16 | \$0 |
| 1 | \$528 | \$66 | \$92 | \$12 | \$247 | \$15 | \$103 | \$83 | \$33 | \$0 | \$53 | \$10 | \$49 | \$8 | \$15 | \$0 |
| 2 | \$4,122 | \$513 | \$91 | \$12 | \$243 | \$15 | \$102 | \$81 | \$33 | \$0 | \$52 | \$10 | \$48 | \$8 | \$15 | \$0 |
| 3 | \$4,539 | \$564 | \$90 | \$12 | \$240 | \$14 | \$100 | \$80 | \$32 | \$0 | \$51 | \$10 | \$47 | \$8 | \$15 | \$0 |
| 4 | \$4,974 | \$618 | \$89 | \$12 | \$237 | \$14 | \$99 | \$79 | \$32 | \$0 | \$51 | \$9 | \$47 | \$7 | \$15 | \$0 |
| 5 | \$5,427 | \$675 | \$88 | \$12 | \$234 | \$14 | \$98 | \$78 | \$31 | \$0 | \$50 | \$9 | \$46 | \$7 | \$14 | \$0 |
| 6 | \$5,896 | \$733 | \$87 | \$12 | \$231 | \$14 | \$97 | \$77 | \$31 | \$0 | \$50 | \$9 | \$45 | \$7 | \$14 | \$0 |
| 7 | \$6,379 | \$793 | \$86 | \$11 | \$228 | \$14 | \$95 | \$76 | \$31 | \$0 | \$49 | \$9 | \$45 | \$7 | \$14 | \$0 |
| 8 | \$6,874 | \$855 | \$85 | \$11 | \$225 | \$14 | \$94 | \$75 | \$30 | \$0 | \$49 | \$9 | \$44 | \$7 | \$14 | \$0 |
| 9 | \$7,379 | \$917 | \$84 | \$11 | \$222 | \$13 | \$93 | \$74 | \$30 | \$0 | \$48 | \$9 | \$44 | \$7 | \$14 | \$0 |
| 10 | \$7,892 | \$981 | \$84 | \$11 | \$219 | \$13 | \$92 | \$73 | \$29 | \$0 | \$48 | \$9 | \$43 | \$7 | \$13 | \$0 |
| 11 | \$8,409 | \$1,046 | \$83 | \$11 | \$216 | \$13 | \$90 | \$72 | \$29 | \$0 | \$47 | \$9 | \$43 | \$7 | \$13 | \$0 |
| 12 | \$8,928 | \$1,110 | \$82 | \$11 | \$214 | \$13 | \$89 | \$71 | \$29 | \$0 | \$47 | \$9 | \$42 | \$7 | \$13 | \$0 |
| 13 | \$9,446 | \$1,175 | \$81 | \$11 | \$211 | \$13 | \$88 | \$71 | \$28 | \$0 | \$47 | \$9 | \$41 | \$7 | \$13 | \$0 |
| 14 | \$9,960 | \$1,238 | \$80 | \$11 | \$208 | \$12 | \$87 | \$70 | \$28 | \$0 | \$46 | \$9 | \$41 | \$7 | \$13 | \$0 |
| 15 | \$10,467 | \$1,301 | \$80 | \$11 | \$205 | \$12 | \$86 | \$69 | \$28 | \$0 | \$46 | \$8 | \$40 | \$6 | \$12 | \$0 |
| 16 | \$10,963 | \$1,363 | \$79 | \$10 | \$203 | \$12 | \$85 | \$68 | \$27 | \$0 | \$45 | \$8 | \$40 | \$6 | \$12 | \$0 |
| 17 | \$11,445 | \$1,423 | \$78 | \$10 | \$200 | \$12 | \$84 | \$67 | \$27 | \$0 | \$45 | \$8 | \$39 | \$6 | \$12 | \$0 |
| 18 | \$11,911 | \$1,481 | \$77 | \$10 | \$197 | \$12 | \$83 | \$66 | \$26 | \$0 | \$44 | \$8 | \$39 | \$6 | \$12 | \$0 |
| 19 | \$12,356 | \$1,536 | \$76 | \$10 | \$195 | \$12 | \$82 | \$65 | \$26 | \$0 | \$44 | \$8 | \$38 | \$6 | \$12 | \$0 |
| 20 | \$12,777 | \$1,589 | \$76 | \$10 | \$192 | \$12 | \$80 | \$64 | \$26 | \$0 | \$43 | \$8 | \$38 | \$6 | \$11 | \$0 |
| 21 | \$13,173 | \$1,638 | \$75 | \$10 | \$190 | \$11 | \$79 | \$64 | \$25 | \$0 | \$43 | \$8 | \$37 | \$6 | \$11 | \$0 |
| 22 | \$13,539 | \$1,683 | \$74 | \$10 | \$187 | \$11 | \$78 | \$63 | \$25 | \$0 | \$42 | \$8 | \$37 | \$6 | \$11 | \$0 |
| 23 | \$13,873 | \$1,725 | \$73 | \$10 | \$185 | \$11 | \$77 | \$62 | \$25 | \$0 | \$42 | \$8 | \$36 | \$6 | \$11 | \$0 |
| 24 | \$14,174 | \$1,762 | \$73 | \$10 | \$183 | \$11 | \$76 | \$61 | \$24 | \$0 | \$42 | \$8 | \$36 | \$6 | \$11 | \$0 |
| 25 | \$14,437 | \$1,795 | \$72 | \$10 | \$180 | \$11 | \$75 | \$60 | \$24 | \$0 | \$41 | \$8 | \$35 | \$6 | \$11 | \$0 |
| 26 | \$14,663 | \$1,823 | \$71 | \$9 | \$178 | \$11 | \$74 | \$59 | \$24 | \$0 | \$41 | \$8 | \$35 | \$6 | \$10 | \$0 |
| 27 | \$14,849 | \$1,846 | \$70 | \$9 | \$176 | \$11 | \$73 | \$59 | \$24 | \$0 | \$40 | \$8 | \$35 | \$6 | \$10 | \$0 |
| 28 | \$14,994 | \$1,864 | \$70 | \$9 | \$173 | \$10 | \$72 | \$58 | \$23 | \$0 | \$40 | \$7 | \$34 | \$5 | \$10 | \$0 |
| 29 | \$15,097 | \$1,877 | \$69 | \$9 | \$171 | \$10 | \$72 | \$57 | \$23 | \$0 | \$40 | \$7 | \$34 | \$5 | \$10 | \$0 |
| 30 | \$15,157 | \$1,885 | \$68 | \$9 | \$169 | \$10 | \$71 | \$56 | \$23 | \$0 | \$39 | \$7 | \$33 | \$5 | \$10 | \$0 |
| 31 | \$15,175 | \$1,887 | \$68 | \$9 | \$167 | \$10 | \$70 | \$56 | \$22 | \$0 | \$39 | \$7 | \$33 | \$5 | \$10 | \$0 |
| 32 | \$15,149 | \$1,884 | \$67 | \$9 | \$164 | \$10 | \$69 | \$55 | \$22 | \$0 | \$38 | \$7 | \$32 | \$5 | \$10 | \$0 |
| 33 | \$15,082 | \$1,875 | \$66 | \$9 | \$162 | \$10 | \$68 | \$54 | \$22 | \$0 | \$38 | \$7 | \$32 | \$5 | \$9 | \$0 |
| 34 | \$14,973 | \$1,862 | \$66 | \$9 | \$160 | \$10 | \$67 | \$54 | \$21 | \$0 | \$38 | \$7 | \$32 | \$5 | \$9 | \$0 |
| 35 | \$14,824 | \$1,843 | \$65 | \$9 | \$158 | \$9 | \$66 | \$53 | \$21 | \$0 | \$37 | \$7 | \$31 | \$5 | \$9 | \$0 |
| 36 | \$14,636 | \$1,820 | \$64 | \$9 | \$156 | \$9 | \$65 | \$52 | \$21 | \$0 | \$37 | \$7 | \$31 | \$5 | \$9 | \$0 |
| 37 | \$14,411 | \$1,792 | \$64 | \$8 | \$154 | \$9 | \$64 | \$52 | \$21 | \$0 | \$37 | \$7 | \$30 | \$5 | \$9 | \$0 |
| PV | \$180,595 | \$22,455 | \$1,627 | \$216 | \$4,232 | \$254 | \$1,770 | \$1,416 | \$568 | \$0 | \$933 | \$174 | \$833 | \$133 | \$256 | \$0 |
| Net Alt Ed¹ | (\$34,629) | (\$4,306) | (\$312) | (\$41) | (\$812) | (\$49) | (\$339) | (\$271) | (\$109) | \$0 | (\$179) | (\$33) | (\$160) | (\$26) | (\$49) | \$0 |
| Net Shutdown¹ | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| PV Net Benefits | \$145,966 | \$18,149 | \$1,315 | \$175 | \$3,421 | \$205 | \$1,430 | \$1,144 | \$459 | \$0 | \$754 | \$140 | \$673 | \$108 | \$207 | \$0 |

1. These refer to the alternative education variable ("Net Alt. Ed.") and shutdown point ("Shutdown"). See Appendices 2 and 3 in Volume 1: Main Report for more details.

Source: Adapted from data supplied by the U.S. Department of Commerce, Regional Economic Information System (CA and SA series). See also Tables 1 through 15.

Table 20: Income Calculations, Taxpayer Perspectives (\$ Thousands)

| Year | Labor Income Growth ¹ | Net of Attrition | Indirect Labor Income | Non-Labor Income Growth | TOTAL Income Growth | % Reduction ² | NET Income Growth |
|------|----------------------------------|------------------|-----------------------|-------------------------|---------------------|--------------------------|-------------------|
| 0 | \$182 | \$162 | \$30 | \$95 | \$287 | 19% | \$232 |
| 1 | \$338 | \$298 | \$55 | \$175 | \$528 | 19% | \$427 |
| 2 | \$2,662 | \$2,324 | \$432 | \$1,366 | \$4,122 | 19% | \$3,332 |
| 3 | \$2,959 | \$2,559 | \$476 | \$1,504 | \$4,539 | 19% | \$3,668 |
| 4 | \$3,274 | \$2,804 | \$522 | \$1,648 | \$4,974 | 19% | \$4,020 |
| 5 | \$3,607 | \$3,060 | \$569 | \$1,798 | \$5,427 | 19% | \$4,386 |
| 6 | \$3,956 | \$3,324 | \$618 | \$1,953 | \$5,896 | 19% | \$4,765 |
| 7 | \$4,321 | \$3,596 | \$669 | \$2,113 | \$6,379 | 19% | \$5,156 |
| 8 | \$4,702 | \$3,875 | \$721 | \$2,277 | \$6,874 | 19% | \$5,556 |
| 9 | \$5,096 | \$4,160 | \$774 | \$2,445 | \$7,379 | 19% | \$5,964 |
| 10 | \$5,502 | \$4,449 | \$828 | \$2,615 | \$7,892 | 19% | \$6,378 |
| 11 | \$5,919 | \$4,741 | \$882 | \$2,786 | \$8,409 | 19% | \$6,796 |
| 12 | \$6,345 | \$5,034 | \$936 | \$2,958 | \$8,928 | 19% | \$7,216 |
| 13 | \$6,778 | \$5,326 | \$991 | \$3,130 | \$9,446 | 19% | \$7,635 |
| 14 | \$7,216 | \$5,615 | \$1,045 | \$3,300 | \$9,960 | 19% | \$8,050 |
| 15 | \$7,656 | \$5,901 | \$1,098 | \$3,468 | \$10,467 | 19% | \$8,460 |
| 16 | \$8,096 | \$6,181 | \$1,150 | \$3,632 | \$10,963 | 19% | \$8,861 |
| 17 | \$8,534 | \$6,453 | \$1,201 | \$3,792 | \$11,445 | 19% | \$9,251 |
| 18 | \$8,967 | \$6,715 | \$1,249 | \$3,946 | \$11,911 | 19% | \$9,627 |
| 19 | \$9,391 | \$6,966 | \$1,296 | \$4,094 | \$12,356 | 19% | \$9,987 |
| 20 | \$9,805 | \$7,204 | \$1,340 | \$4,233 | \$12,777 | 19% | \$10,327 |
| 21 | \$10,206 | \$7,427 | \$1,382 | \$4,364 | \$13,173 | 19% | \$10,647 |
| 22 | \$10,591 | \$7,633 | \$1,420 | \$4,486 | \$13,539 | 19% | \$10,943 |
| 23 | \$10,957 | \$7,822 | \$1,455 | \$4,597 | \$13,873 | 19% | \$11,213 |
| 24 | \$11,302 | \$7,991 | \$1,487 | \$4,696 | \$14,174 | 19% | \$11,456 |
| 25 | \$11,623 | \$8,140 | \$1,514 | \$4,783 | \$14,437 | 19% | \$11,669 |
| 26 | \$11,919 | \$8,267 | \$1,538 | \$4,858 | \$14,663 | 19% | \$11,851 |
| 27 | \$12,186 | \$8,372 | \$1,558 | \$4,920 | \$14,849 | 19% | \$12,002 |
| 28 | \$12,424 | \$8,453 | \$1,573 | \$4,968 | \$14,994 | 19% | \$12,119 |
| 29 | \$12,629 | \$8,511 | \$1,584 | \$5,002 | \$15,097 | 19% | \$12,202 |
| 30 | \$12,802 | \$8,545 | \$1,590 | \$5,022 | \$15,157 | 19% | \$12,251 |
| 31 | \$12,940 | \$8,555 | \$1,592 | \$5,028 | \$15,175 | 19% | \$12,265 |
| 32 | \$13,043 | \$8,541 | \$1,589 | \$5,019 | \$15,149 | 19% | \$12,245 |
| 33 | \$13,111 | \$8,503 | \$1,582 | \$4,997 | \$15,082 | 19% | \$12,190 |
| 34 | \$13,141 | \$8,442 | \$1,571 | \$4,961 | \$14,973 | 19% | \$12,102 |
| 35 | \$13,136 | \$8,358 | \$1,555 | \$4,912 | \$14,824 | 19% | \$11,982 |
| 36 | \$13,094 | \$8,252 | \$1,535 | \$4,849 | \$14,636 | 19% | \$11,830 |
| 37 | \$13,017 | \$8,125 | \$1,512 | \$4,775 | \$14,411 | 19% | \$11,648 |

1. This column shows annual higher earnings achieved by the student body as a result of their education.

2. Reduction factors include the alternative education variable and shutdown variable used to estimate the level of education possible absent state and local government support. See Appendices 2 and 3 in Volume 1: Main Report for more information.

Source: Adapted from data supplied by the U.S. Department of Commerce, Regional Economic Information System (CA and SA series). See also Tables 1 through 15.