



# **Economic Contribution of Contra Costa Community College District**

*Analysis of Investment Effectiveness  
and Economic Growth*

## **Volume 2: Detailed Results**

by

**Entry Level of Education,**

**Gender, and Ethnicity**

## 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.

Note that results are presented according to four main groups: White Male, Non-White Male, White Female, and Non-White Female. Non-Whites include African-American, Asian/Pacific Islander, Hispanic, Native American, Other Non-White, and Unknown race/ethnic groups.

## 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 3.1** of Volume 1: Main Report.

Table 1. Higher Annual Earnings Based on Achievements, Aggregate<sup>1</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$5,783,268	\$7,649,973	\$3,497,952	\$6,665,012	\$23,596,205
HS/GED equivalent	\$1,832,323	\$2,424,188	\$1,108,814	\$2,113,098	\$7,478,423
One year post HS or less	\$16,906,155	\$17,390,711	\$15,887,527	\$22,381,273	\$72,565,666
Two years post HS or less	\$8,486,761	\$8,745,494	\$8,401,115	\$11,791,976	\$37,425,346
> Associate Degree	\$314,758	\$552,357	\$424,088	\$916,231	\$2,207,434
<b>Total</b>	<b>\$33,323,265</b>	<b>\$36,762,724</b>	<b>\$29,319,496</b>	<b>\$43,867,590</b>	<b>\$143,273,074</b>

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 3.1** of the Main Report.

Table 2. Number of Days Reduced Absenteeism per Year, Aggregate<sup>1,2</sup>

	Male		Female		Reduced Absenteeism
	White	Non-White	White	Non-White	
< HS/GED	505	1,103	1,046	2,248	4,902
HS/GED equivalent	40	86	82	177	385
One year post HS or less	806	1,369	2,525	4,019	8,720
Two years post HS or less	313	531	942	1,489	3,274
> Associate Degree	10	28	38	92	167
<b>Total</b>	<b>1,674</b>	<b>3,117</b>	<b>4,633</b>	<b>8,024</b>	<b>17,448</b>

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, Aggregate<sup>1</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$88,774	\$150,815	\$106,188	\$214,877	\$560,655
HS/GED equivalent	\$8,937	\$15,186	\$10,645	\$21,545	\$56,314
One year post HS or less	\$195,152	\$258,064	\$358,229	\$536,729	\$1,348,173
Two years post HS or less	\$86,217	\$113,957	\$159,067	\$236,806	\$596,047
> Associate Degree	\$3,066	\$6,911	\$7,619	\$17,482	\$35,079
<b>Total</b>	<b>\$382,147</b>	<b>\$544,933</b>	<b>\$641,748</b>	<b>\$1,027,440</b>	<b>\$2,596,268</b>

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, Aggregate<sup>1</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	19	33	17	19	89
HS/GED equivalent	1	2	1	1	6
One year post HS or less	127	170	123	108	528
Two years post HS or less	42	56	41	39	178
> Associate Degree	36	83	48	75	241
<b>Total</b>	<b>225</b>	<b>345</b>	<b>230</b>	<b>242</b>	<b>1,042</b>

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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$58,355	\$100,455	\$50,775	\$57,027	\$266,612
HS/GED equivalent	\$3,912	\$6,741	\$3,414	\$3,900	\$17,967
One year post HS or less	\$380,357	\$511,426	\$368,030	\$324,232	\$1,584,046
Two years post HS or less	\$125,145	\$168,428	\$123,671	\$116,474	\$533,718
> Associate Degree	\$107,532	\$248,106	\$143,250	\$225,074	\$723,961
<b>Total</b>	<b>\$675,301</b>	<b>\$1,035,157</b>	<b>\$689,140</b>	<b>\$726,707</b>	<b>\$3,126,304</b>

**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<sup>1,2</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	5	8	3	5	21
HS/GED equivalent	0	1	0	0	1
One year post HS or less	33	44	24	31	131
Two years post HS or less	12	16	8	11	47
> Associate Degree	3	7	3	5	18
<b>Total</b>	<b>53</b>	<b>75</b>	<b>39</b>	<b>53</b>	<b>219</b>

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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$31,779	\$54,616	\$23,807	\$38,324	\$148,526
HS/GED equivalent	\$2,195	\$3,767	\$1,595	\$2,607	\$10,165
One year post HS or less	\$229,526	\$305,221	\$170,587	\$214,020	\$919,355
Two years post HS or less	\$86,273	\$113,584	\$56,477	\$75,101	\$331,435
> Associate Degree	\$22,107	\$49,418	\$17,532	\$37,653	\$126,710
<b>Total</b>	<b>\$371,881</b>	<b>\$526,606</b>	<b>\$269,998</b>	<b>\$367,705</b>	<b>\$1,536,190</b>

**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). The implication is, as people achieve higher education levels, they are statistically less likely to commit crimes. 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 3.1 of the Main Report.

Table 8. Fewer Incarcerated, Aggregate<sup>1,2</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	17	39	0	8	64
HS/GED equivalent	1	3	0	1	4
One year post HS or less	75	187	1	39	301
Two years post HS or less	15	57	0	11	83
> Associate Degree	2	22	0	4	29
<b>Total</b>	<b>110</b>	<b>307</b>	<b>1</b>	<b>63</b>	<b>481</b>

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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$118,021	\$268,527	\$1,444	\$58,705	\$446,698
HS/GED equivalent	\$6,982	\$17,744	\$85	\$3,769	\$28,581
One year post HS or less	\$519,426	\$1,298,987	\$6,992	\$270,939	\$2,096,346
Two years post HS or less	\$102,277	\$400,003	\$1,388	\$74,020	\$577,689
> Associate Degree	\$16,554	\$152,763	\$299	\$31,183	\$200,799
<b>Total</b>	<b>\$763,261</b>	<b>\$2,138,026</b>	<b>\$10,209</b>	<b>\$438,616</b>	<b>\$3,350,112</b>

**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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$37,856	\$86,131	\$463	\$18,830	\$143,280
HS/GED equivalent	\$2,240	\$5,692	\$27	\$1,209	\$9,168
One year post HS or less	\$166,608	\$416,656	\$2,243	\$86,905	\$672,413
Two years post HS or less	\$32,806	\$128,303	\$445	\$23,742	\$185,296
> Associate Degree	\$5,310	\$49,000	\$96	\$10,002	\$64,407
<b>Total</b>	<b>\$244,820</b>	<b>\$685,782</b>	<b>\$3,275</b>	<b>\$140,688</b>	<b>\$1,074,564</b>

**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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$81,357	\$144,126	\$575	\$22,022	\$248,081
HS/GED equivalent	\$6,196	\$12,261	\$43	\$1,803	\$20,304
One year post HS or less	\$493,387	\$960,703	\$3,893	\$142,018	\$1,600,001
Two years post HS or less	\$110,712	\$337,130	\$920	\$46,204	\$494,966
> Associate Degree	\$20,525	\$147,476	\$237	\$23,286	\$191,525
<b>Total</b>	<b>\$712,177</b>	<b>\$1,601,696</b>	<b>\$5,669</b>	<b>\$235,334</b>	<b>\$2,554,876</b>

**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 3.1** of the Main Report.

Table 12. Fewer People on Welfare, Aggregate<sup>1,2</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	14	54	29	125	223
HS/GED equivalent	1	3	2	8	14
One year post HS or less	68	203	156	490	916
Two years post HS or less	15	44	35	108	202
> Associate Degree	3	13	8	39	63
<b>Total</b>	<b>101</b>	<b>318</b>	<b>230</b>	<b>769</b>	<b>1,418</b>

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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$24,310	\$92,956	\$50,540	\$214,478	\$382,285
HS/GED equivalent	\$1,480	\$5,661	\$3,078	\$13,064	\$23,284
One year post HS or less	\$116,619	\$347,820	\$266,964	\$840,732	\$1,572,135
Two years post HS or less	\$25,712	\$76,300	\$59,414	\$185,146	\$346,572
> Associate Degree	\$4,519	\$22,927	\$13,903	\$66,903	\$108,252
<b>Total</b>	<b>\$172,640</b>	<b>\$545,664</b>	<b>\$393,900</b>	<b>\$1,320,324</b>	<b>\$2,432,528</b>

**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<sup>1,2</sup>

	Male		Female		Total
	White	Non-White	White	Non-White	
< HS/GED	4	12	5	16	37
HS/GED equivalent	0	1	0	1	2
One year post HS or less	23	62	34	84	204
Two years post HS or less	7	15	10	22	54
> Associate Degree	6	22	11	38	77
<b>Total</b>	<b>41</b>	<b>112</b>	<b>61</b>	<b>161</b>	<b>375</b>

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

	Annual Costs, Male		Annual Costs, Female		Total
	White	Non-White	White	Non-White	
< HS/GED	\$4,278	\$15,033	\$5,889	\$19,554	\$44,754
HS/GED equivalent	\$288	\$1,002	\$393	\$1,304	\$2,987
One year post HS or less	\$28,181	\$74,858	\$41,792	\$102,031	\$246,862
Two years post HS or less	\$9,039	\$18,175	\$12,100	\$26,538	\$65,853
> Associate Degree	\$7,875	\$26,342	\$13,794	\$45,787	\$93,798
<b>Total</b>	<b>\$49,662</b>	<b>\$135,411</b>	<b>\$73,969</b>	<b>\$195,213</b>	<b>\$454,255</b>

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 3.1 of the Main Report. Weighted averages in Tables 17 are reproduced in Table 3.2.

Table 16. Summary of Annual Impacts

	Male		Female		Total
	White	Non-White	White	Non-White	
Higher earnings	\$33,323,265	\$36,762,724	\$29,319,496	\$43,867,590	\$143,273,074
Absenteeism Savings	\$382,147	\$544,933	\$641,748	\$1,027,440	\$2,596,268
Medical Cost Savings	\$1,047,182	\$1,561,762	\$959,138	\$1,094,412	\$4,662,494
Incarceration Savings	\$763,261	\$2,138,026	\$10,209	\$438,616	\$3,350,112
Crime Victim Savings	\$244,820	\$685,782	\$3,275	\$140,688	\$1,074,564
Add Prod. (fewer incarceration.)	\$712,177	\$1,601,696	\$5,669	\$235,334	\$2,554,876
Welfare Savings	\$172,640	\$545,664	\$393,900	\$1,320,324	\$2,432,528
Unemployment Savings	\$49,662	\$135,411	\$73,969	\$195,213	\$454,255
<b>Total</b>	<b>\$36,695,153</b>	<b>\$43,975,998</b>	<b>\$31,407,403</b>	<b>\$48,319,616</b>	<b>\$160,398,171</b>

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	\$ 250	\$ 202	\$ 183	\$ 177	\$ 198
Absenteeism Savings	\$ 3	\$ 3	\$ 4	\$ 4	\$ 4
Medical Cost Savings	\$ 8	\$ 9	\$ 6	\$ 4	\$ 6
Incarceration Savings	\$ 6	\$ 12	\$ 0	\$ 2	\$ 5
Crime Victim Savings	\$ 2	\$ 4	\$ 0	\$ 1	\$ 1
Add Prod. (fewer incarceration.)	\$ 5	\$ 9	\$ 0	\$ 1	\$ 4
Welfare Savings	\$ 1	\$ 3	\$ 2	\$ 5	\$ 3
Unemployment Savings	\$ 0	\$ 1	\$ 0	\$ 1	\$ 1
<b>Total</b>	<b>\$ 275</b>	<b>\$ 242</b>	<b>\$ 196</b>	<b>\$ 195</b>	<b>\$ 222</b>

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	\$ 3,024	\$ 2,445	\$ 2,216	\$ 2,142	\$ 2,397
Absenteeism Savings	\$ 35	\$ 36	\$ 49	\$ 50	\$ 43
Medical Cost Savings	\$ 95	\$ 104	\$ 73	\$ 53	\$ 78
Incarceration Savings	\$ 69	\$ 142	\$ 1	\$ 21	\$ 56
Crime Victim Savings	\$ 22	\$ 46	\$ 0	\$ 7	\$ 18
Add Prod. (fewer incarceration.)	\$ 65	\$ 107	\$ 0	\$ 11	\$ 43
Welfare Savings	\$ 16	\$ 36	\$ 30	\$ 64	\$ 41
Unemployment Savings	\$ 5	\$ 9	\$ 6	\$ 10	\$ 8
<b>Total</b>	<b>\$ 3,330</b>	<b>\$ 2,925</b>	<b>\$ 2,374</b>	<b>\$ 2,359</b>	<b>\$ 2,684</b>

**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 **Table 3.6** 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	\$46,336	\$6,764	\$2,596	\$236	\$4,662	\$280	\$3,350	\$2,680	\$1,075	\$0	\$2,555	\$562	\$2,433	\$389	\$454	\$0
1	\$53,695	\$7,838	\$2,591	\$236	\$4,638	\$278	\$3,333	\$2,666	\$1,069	\$0	\$2,549	\$561	\$2,420	\$387	\$451	\$0
2	\$93,248	\$13,612	\$2,585	\$235	\$4,614	\$277	\$3,315	\$2,652	\$1,063	\$0	\$2,544	\$559	\$2,407	\$385	\$448	\$0
3	\$103,476	\$15,105	\$2,579	\$235	\$4,590	\$275	\$3,298	\$2,639	\$1,058	\$0	\$2,538	\$558	\$2,395	\$383	\$445	\$0
4	\$114,295	\$16,685	\$2,573	\$234	\$4,566	\$274	\$3,281	\$2,625	\$1,052	\$0	\$2,532	\$557	\$2,382	\$381	\$441	\$0
5	\$125,687	\$18,348	\$2,568	\$234	\$4,543	\$273	\$3,264	\$2,611	\$1,047	\$0	\$2,527	\$556	\$2,370	\$379	\$438	\$0
6	\$137,626	\$20,091	\$2,562	\$233	\$4,519	\$271	\$3,247	\$2,598	\$1,042	\$0	\$2,521	\$554	\$2,358	\$377	\$435	\$0
7	\$150,080	\$21,909	\$2,556	\$233	\$4,496	\$270	\$3,230	\$2,584	\$1,036	\$0	\$2,516	\$553	\$2,346	\$375	\$432	\$0
8	\$163,011	\$23,796	\$2,551	\$232	\$4,472	\$268	\$3,214	\$2,571	\$1,031	\$0	\$2,510	\$552	\$2,333	\$373	\$429	\$0
9	\$176,375	\$25,747	\$2,545	\$232	\$4,449	\$267	\$3,197	\$2,557	\$1,025	\$0	\$2,505	\$551	\$2,321	\$371	\$426	\$0
10	\$190,118	\$27,753	\$2,540	\$231	\$4,426	\$266	\$3,180	\$2,544	\$1,020	\$0	\$2,499	\$550	\$2,309	\$369	\$423	\$0
11	\$204,183	\$29,807	\$2,534	\$231	\$4,403	\$264	\$3,164	\$2,531	\$1,015	\$0	\$2,494	\$548	\$2,297	\$368	\$420	\$0
12	\$218,506	\$31,898	\$2,528	\$230	\$4,380	\$263	\$3,147	\$2,518	\$1,010	\$0	\$2,488	\$547	\$2,285	\$366	\$417	\$0
13	\$233,017	\$34,016	\$2,523	\$230	\$4,358	\$261	\$3,131	\$2,505	\$1,004	\$0	\$2,483	\$546	\$2,273	\$364	\$414	\$0
14	\$247,641	\$36,151	\$2,517	\$229	\$4,335	\$260	\$3,115	\$2,492	\$999	\$0	\$2,477	\$545	\$2,262	\$362	\$411	\$0
15	\$262,298	\$38,290	\$2,512	\$229	\$4,312	\$259	\$3,099	\$2,479	\$994	\$0	\$2,472	\$544	\$2,250	\$360	\$408	\$0
16	\$276,904	\$40,423	\$2,506	\$228	\$4,290	\$257	\$3,082	\$2,466	\$989	\$0	\$2,466	\$542	\$2,238	\$358	\$405	\$0
17	\$291,374	\$42,535	\$2,501	\$228	\$4,268	\$256	\$3,066	\$2,453	\$984	\$0	\$2,461	\$541	\$2,227	\$356	\$402	\$0
18	\$305,617	\$44,614	\$2,495	\$227	\$4,246	\$255	\$3,051	\$2,440	\$978	\$0	\$2,455	\$540	\$2,215	\$354	\$399	\$0
19	\$319,544	\$46,647	\$2,490	\$227	\$4,224	\$253	\$3,035	\$2,428	\$973	\$0	\$2,450	\$539	\$2,204	\$353	\$396	\$0
20	\$333,063	\$48,621	\$2,484	\$226	\$4,202	\$252	\$3,019	\$2,415	\$968	\$0	\$2,445	\$538	\$2,192	\$351	\$393	\$0
21	\$346,084	\$50,521	\$2,479	\$226	\$4,180	\$251	\$3,003	\$2,403	\$963	\$0	\$2,439	\$536	\$2,181	\$349	\$391	\$0
22	\$358,519	\$52,337	\$2,473	\$225	\$4,158	\$249	\$2,988	\$2,390	\$958	\$0	\$2,434	\$535	\$2,169	\$347	\$388	\$0
23	\$370,280	\$54,054	\$2,468	\$225	\$4,137	\$248	\$2,972	\$2,378	\$953	\$0	\$2,428	\$534	\$2,158	\$345	\$385	\$0
24	\$381,285	\$55,660	\$2,462	\$224	\$4,115	\$247	\$2,957	\$2,365	\$948	\$0	\$2,423	\$533	\$2,147	\$344	\$382	\$0
25	\$391,456	\$57,145	\$2,457	\$224	\$4,094	\$246	\$2,941	\$2,353	\$943	\$0	\$2,418	\$532	\$2,136	\$342	\$379	\$0
26	\$400,720	\$58,497	\$2,451	\$223	\$4,072	\$244	\$2,926	\$2,341	\$939	\$0	\$2,412	\$530	\$2,125	\$340	\$377	\$0
27	\$409,010	\$59,707	\$2,446	\$223	\$4,051	\$243	\$2,911	\$2,329	\$934	\$0	\$2,407	\$529	\$2,114	\$338	\$374	\$0
28	\$416,267	\$60,767	\$2,441	\$222	\$4,030	\$242	\$2,896	\$2,317	\$929	\$0	\$2,402	\$528	\$2,103	\$336	\$371	\$0
29	\$422,438	\$61,668	\$2,435	\$222	\$4,009	\$241	\$2,881	\$2,305	\$924	\$0	\$2,396	\$527	\$2,092	\$335	\$369	\$0
30	\$427,482	\$62,404	\$2,430	\$221	\$3,989	\$239	\$2,866	\$2,293	\$919	\$0	\$2,391	\$526	\$2,081	\$333	\$366	\$0
31	\$431,362	\$62,970	\$2,425	\$221	\$3,968	\$238	\$2,851	\$2,281	\$914	\$0	\$2,386	\$525	\$2,070	\$331	\$363	\$0
32	\$434,055	\$63,363	\$2,419	\$220	\$3,947	\$237	\$2,836	\$2,269	\$910	\$0	\$2,381	\$524	\$2,059	\$330	\$361	\$0
33	\$435,545	\$63,581	\$2,414	\$220	\$3,927	\$236	\$2,822	\$2,257	\$905	\$0	\$2,375	\$522	\$2,049	\$328	\$358	\$0
34	\$435,825	\$63,622	\$2,409	\$219	\$3,906	\$234	\$2,807	\$2,245	\$900	\$0	\$2,370	\$521	\$2,038	\$326	\$356	\$0
35	\$434,900	\$63,487	\$2,403	\$219	\$3,886	\$233	\$2,792	\$2,234	\$896	\$0	\$2,365	\$520	\$2,027	\$324	\$353	\$0
36	\$432,784	\$63,178	\$2,398	\$218	\$3,866	\$232	\$2,778	\$2,222	\$891	\$0	\$2,360	\$519	\$2,017	\$323	\$351	\$0
37	\$429,500	\$62,698	\$2,393	\$218	\$3,846	\$231	\$2,763	\$2,211	\$886	\$0	\$2,355	\$518	\$2,007	\$321	\$348	\$0
0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>PV</b>	<b>\$4,764,707</b>	<b>\$695,553</b>	<b>\$50,723</b>	<b>\$4,616</b>	<b>\$87,466</b>	<b>\$5,248</b>	<b>\$62,846</b>	<b>\$50,277</b>	<b>\$20,158</b>	<b>\$0</b>	<b>\$49,915</b>	<b>\$10,976</b>	<b>\$45,633</b>	<b>\$7,301</b>	<b>\$8,299</b>	<b>\$0</b>
<b>Net Alt Ed<sup>1</sup></b>	<b>(\$1,651,789)</b>	<b>(\$241,128)</b>	<b>(\$17,584)</b>	<b>(\$1,600)</b>	<b>(\$30,322)</b>	<b>(\$1,819)</b>	<b>(\$21,787)</b>	<b>(\$17,430)</b>	<b>(\$6,988)</b>	<b>\$0</b>	<b>(\$17,304)</b>	<b>(\$3,805)</b>	<b>(\$15,820)</b>	<b>(\$2,531)</b>	<b>(\$2,877)</b>	<b>\$0</b>
<b>PV Net Benefits</b>	<b>\$3,112,918</b>	<b>\$454,424</b>	<b>\$33,139</b>	<b>\$3,016</b>	<b>\$57,144</b>	<b>\$3,429</b>	<b>\$41,059</b>	<b>\$32,847</b>	<b>\$13,170</b>	<b>\$0</b>	<b>\$32,611</b>	<b>\$7,171</b>	<b>\$29,813</b>	<b>\$4,770</b>	<b>\$5,422</b>	<b>\$0</b>

1. Refers to the alternative education variable. See Appendix 2 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 <sup>1</sup>	Net of Attrition	Indirect Labor Income	Non-Labor Income Growth	TOTAL Income Growth	% Reduction <sup>2</sup>	NET Income Growth
0	\$27,864	\$26,471	\$4,289	\$15,577	\$46,336	35%	\$30,272
1	\$32,344	\$30,675	\$4,970	\$18,050	\$53,695	35%	\$35,080
2	\$56,266	\$53,270	\$8,630	\$31,347	\$93,248	35%	\$60,921
3	\$62,545	\$59,114	\$9,577	\$34,785	\$103,476	35%	\$67,604
4	\$69,203	\$65,294	\$10,579	\$38,422	\$114,295	35%	\$74,672
5	\$76,230	\$71,802	\$11,633	\$42,252	\$125,687	35%	\$82,115
6	\$83,614	\$78,623	\$12,738	\$46,265	\$137,626	35%	\$89,915
7	\$91,337	\$85,737	\$13,891	\$50,452	\$150,080	35%	\$98,052
8	\$99,376	\$93,125	\$15,087	\$54,799	\$163,011	35%	\$106,500
9	\$107,707	\$100,759	\$16,324	\$59,291	\$176,375	35%	\$115,230
10	\$116,298	\$108,610	\$17,596	\$63,911	\$190,118	35%	\$124,209
11	\$125,116	\$116,645	\$18,898	\$68,640	\$204,183	35%	\$133,399
12	\$134,121	\$124,828	\$20,224	\$73,455	\$218,506	35%	\$142,756
13	\$143,273	\$133,117	\$21,567	\$78,333	\$233,017	35%	\$152,237
14	\$152,525	\$141,472	\$22,920	\$83,249	\$247,641	35%	\$161,791
15	\$161,829	\$149,845	\$24,277	\$88,176	\$262,298	35%	\$171,367
16	\$171,133	\$158,189	\$25,629	\$93,086	\$276,904	35%	\$180,909
17	\$180,384	\$166,455	\$26,968	\$97,950	\$291,374	35%	\$190,363
18	\$189,525	\$174,592	\$28,286	\$102,738	\$305,617	35%	\$199,668
19	\$198,501	\$182,548	\$29,575	\$107,420	\$319,544	35%	\$208,767
20	\$207,253	\$190,271	\$30,826	\$111,965	\$333,063	35%	\$217,599
21	\$215,724	\$197,710	\$32,032	\$116,342	\$346,084	35%	\$226,107
22	\$223,857	\$204,814	\$33,182	\$120,522	\$358,519	35%	\$234,230
23	\$231,597	\$211,533	\$34,271	\$124,476	\$370,280	35%	\$241,914
24	\$238,888	\$217,820	\$35,290	\$128,176	\$381,285	35%	\$249,104
25	\$245,681	\$223,630	\$36,231	\$131,595	\$391,456	35%	\$255,749
26	\$251,925	\$228,923	\$37,088	\$134,709	\$400,720	35%	\$261,802
27	\$257,577	\$233,659	\$37,856	\$137,496	\$409,010	35%	\$267,218
28	\$262,595	\$237,804	\$38,527	\$139,935	\$416,267	35%	\$271,959
29	\$266,945	\$241,330	\$39,099	\$142,010	\$422,438	35%	\$275,991
30	\$270,594	\$244,211	\$39,565	\$143,705	\$427,482	35%	\$279,286
31	\$273,517	\$246,428	\$39,925	\$145,010	\$431,362	35%	\$281,821
32	\$275,696	\$247,966	\$40,174	\$145,915	\$434,055	35%	\$283,580
33	\$277,115	\$248,817	\$40,312	\$146,416	\$435,545	35%	\$284,554
34	\$277,768	\$248,977	\$40,338	\$146,510	\$435,825	35%	\$284,737
35	\$277,653	\$248,449	\$40,252	\$146,199	\$434,900	35%	\$284,133
36	\$276,775	\$247,240	\$40,056	\$145,488	\$432,784	35%	\$282,750
37	\$275,145	\$245,364	\$39,752	\$144,384	\$429,500	35%	\$280,604
0	\$0	\$0	\$0	\$0	\$0	0%	\$0

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

2. Reduction factor determined by the alternative education variable. See Appendix 2 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.