

## **Cost-Benefit Analysis - CSU degree vs. high school degree income in CA**

The Cost-Benefit analysis (CBA) performed shows that the cost of getting a California State University (CSU) bachelors degree will benefit a Californian woman and men's potential income in the long run. Although men earn more than women on average, the results are still the same where the education is worth the costs.

### Assumptions used for the CBA

- The 2000 US Census was used for all parts of the CBA.
- The United States overall mean incomes of men and women for the ages of 18 – 20 were used. The CA median incomes by education and sex for the ages of 18 – 20 could not be found. The CA men and women's median income by education and sex ages of 21 – 65 are used.
- The cost of going to a CSU is on average of \$14,765 per year. Average taken from the costs of Commuting from Home (\$11,179), Living in Campus Housing (\$16,146) and Living Away from Home/Off Campus (\$16,970).

### California Men

After performing the CBA of California men's earnings in the 2000 US Census, it was apparent that a college education was worth the present value costs in the long run. The projected costs are the potential median or mean income a male college student could make minus the \$5,000 college earning plus the average CSU yearly cost. The total present value of net earnings differential of CA men ages 18 to 65 was \$101,140. The total present value of costs was \$88,069. The benefit/cost ratio is 1.15 showing that the CBA performed passed the admissibility criterion. The net present value of a college degree is \$13,070. With the net present value of a college degree being over zero and the benefit/cost ratio being over one, the overall worth of going to a CSU will benefit CA men in the future.

### California Women

After performing the CBA of California women's earnings in the 2000 US Census, it was apparent that a college education was worth the present value costs in the long run. The projected costs are the potential median or mean income a female college student could make minus the \$5,000 college earning plus the average CSU yearly cost. The total present value of net earnings differential of CA women ages 18 to 65 was \$84,579. The total present value of costs was \$78,640. The benefit/cost ratio is 1.08 showing that the CBA performed passed the admissibility criterion. The net present value of a college degree is \$5,938. With the net present value of a college degree being over zero and the benefit/cost ratio being over one, the overall worth of going to a CSU will benefit CA women in the future. Although the CA women's present value net earnings \$16,561 less than men, their benefits still outweigh their costs.

It is to CA men and women's benefit to get a bachelors degree. The benefits overall outweighs the costs.

**California Males High School Grad and College Degree Cost Benefit Analysis of year 2000 Census**

Time Period	Age	Projected Cost***	HS grad earning*	College Degree Earnings*	Earning Differential	Net Earning Difference	Discount Factor	Present Value of Net Earning Differential	Present Value of Costs
0	18**	\$24,766	\$15,001	\$5,000	-\$10,001	-\$7,001	1.00	-\$7,001	\$24,766
1	19**	\$21,238	\$15,001	\$5,000	-\$10,001	-\$7,001	0.93	-\$6,482	\$19,665
2	20**	\$21,238	\$15,001	\$5,000	-\$10,001	-\$7,001	0.86	-\$6,002	\$18,208
3	21**	\$32,035	\$20,292	\$5,000	-\$15,292	-\$10,704	0.79	-\$8,497	\$25,430
4	22	\$0	\$20,292	\$32,725	\$12,433	\$8,703	0.74	\$6,397	\$0
5	23	\$0	\$20,292	\$32,725	\$12,433	\$8,703	0.68	\$5,923	\$0
6	24	\$0	\$20,292	\$32,725	\$12,433	\$8,703	0.63	\$5,484	\$0
7	25	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.58	\$7,614	\$0
8	26	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.54	\$7,050	\$0
9	27	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.50	\$6,528	\$0
10	28	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.46	\$6,044	\$0
11	29	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.43	\$5,596	\$0
12	30	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.40	\$5,182	\$0
13	31	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.37	\$4,798	\$0
14	32	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.34	\$4,443	\$0
15	33	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.32	\$4,113	\$0
16	34	\$0	\$28,869	\$47,510	\$18,641	\$13,049	0.29	\$3,809	\$0
17	35	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.27	\$4,805	\$0
18	36	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.25	\$4,449	\$0
19	37	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.23	\$4,120	\$0
20	38	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.21	\$3,814	\$0
21	39	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.20	\$3,532	\$0
22	40	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.18	\$3,270	\$0
23	41	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.17	\$3,028	\$0
24	42	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.16	\$2,804	\$0
25	43	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.15	\$2,596	\$0
26	44	\$0	\$37,001	\$62,399	\$25,398	\$17,779	0.14	\$2,404	\$0
27	45	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.13	\$2,021	\$0
28	46	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.12	\$1,871	\$0
29	47	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.11	\$1,733	\$0
30	48	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.10	\$1,604	\$0
31	49	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.09	\$1,485	\$0
32	50	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.09	\$1,375	\$0
33	51	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.08	\$1,274	\$0
34	52	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.07	\$1,179	\$0
35	53	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.07	\$1,092	\$0
36	54	\$0	\$38,658	\$61,720	\$23,062	\$16,143	0.06	\$1,011	\$0
37	55	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.06	\$871	\$0
38	56	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.05	\$806	\$0
39	57	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.05	\$747	\$0
40	58	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.05	\$691	\$0
41	59	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.04	\$640	\$0
42	60	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.04	\$593	\$0
43	61	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.04	\$549	\$0
44	62	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.03	\$508	\$0
45	63	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.03	\$471	\$0
46	64	\$0	\$39,803	\$61,261	\$21,458	\$15,021	0.03	\$436	\$0
47	65	\$0	\$31,348	\$50,628	\$19,280	\$13,496	0.03	\$362	\$0
<b>Sum</b>								<b>\$101,140</b>	<b>\$88,069</b>

Benefit/Cost Ratio = \$101,140/\$88,069 =	1.15
Net Present Value = \$101,140 - \$88,069 =	\$13,070

\* Information from 2000 US Census (<http://www.census.gov/hhes/www/income/earnings/call1camale.html>)

\*\* Information from 2000 US Census of male in entire country ([http://pubdb3.census.gov/macro/032000/perinc/new04\\_006.htm](http://pubdb3.census.gov/macro/032000/perinc/new04_006.htm))

\*\*\* Information of monetary cost of CSU education from CSU Mentor ([http://www.csumentor.edu/faq/finaid\\_costs.asp](http://www.csumentor.edu/faq/finaid_costs.asp))

-- Average taken from the costs of Commuting from Home (\$11,179), Living in Campus Housing (\$16,146) and Living Away from Home/Off Campus (\$16,970). Average per year = \$14,765

**California Females High School Grad and College Degree Cost Benefit Analysis of year 2000 Census**

Time Period	Age	Projected Cost***	HS grad earning*	College Degree Earnings*	Earning Differential	Net Earning Difference	Discount Factor	Present Value of Net Earning Differential	Present Value of Costs
0	18**	\$20,494	\$10,729	\$5,000	-\$5,729	-\$4,010	1.00	-\$4,010	\$20,494
1	19**	\$19,110	\$10,729	\$5,000	-\$5,729	-\$4,010	0.93	-\$3,713	\$17,694
2	20**	\$19,110	\$10,729	\$5,000	-\$5,729	-\$4,010	0.86	-\$3,438	\$16,384
3	21**	\$30,319	\$17,890	\$5,000	-\$12,890	-\$9,023	0.79	-\$7,163	\$24,068
4	22	\$0	\$17,890	\$29,041	\$11,151	\$7,806	0.74	\$5,737	\$0
5	23	\$0	\$17,890	\$29,041	\$11,151	\$7,806	0.68	\$5,312	\$0
6	24	\$0	\$17,890	\$29,041	\$11,151	\$7,806	0.63	\$4,919	\$0
7	25	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.58	\$5,956	\$0
8	26	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.54	\$5,515	\$0
9	27	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.50	\$5,106	\$0
10	28	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.46	\$4,728	\$0
11	29	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.43	\$4,378	\$0
12	30	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.40	\$4,053	\$0
13	31	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.37	\$3,753	\$0
14	32	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.34	\$3,475	\$0
15	33	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.32	\$3,218	\$0
16	34	\$0	\$23,501	\$38,083	\$14,582	\$10,207	0.29	\$2,979	\$0
17	35	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.27	\$3,684	\$0
18	36	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.25	\$3,412	\$0
19	37	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.23	\$3,159	\$0
20	38	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.21	\$2,925	\$0
21	39	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.20	\$2,708	\$0
22	40	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.18	\$2,508	\$0
23	41	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.17	\$2,322	\$0
24	42	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.16	\$2,150	\$0
25	43	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.15	\$1,991	\$0
26	44	\$0	\$27,168	\$46,643	\$19,475	\$13,633	0.14	\$1,843	\$0
27	45	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.13	\$1,593	\$0
28	46	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.12	\$1,475	\$0
29	47	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.11	\$1,366	\$0
30	48	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.10	\$1,265	\$0
31	49	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.09	\$1,171	\$0
32	50	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.09	\$1,084	\$0
33	51	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.08	\$1,004	\$0
34	52	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.07	\$930	\$0
35	53	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.07	\$861	\$0
36	54	\$0	\$28,761	\$46,943	\$18,182	\$12,727	0.06	\$797	\$0
37	55	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.06	\$733	\$0
38	56	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.05	\$679	\$0
39	57	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.05	\$629	\$0
40	58	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.05	\$582	\$0
41	59	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.04	\$539	\$0
42	60	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.04	\$499	\$0
43	61	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.04	\$462	\$0
44	62	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.03	\$428	\$0
45	63	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.03	\$396	\$0
46	64	\$0	\$28,319	\$46,387	\$18,068	\$12,648	0.03	\$367	\$0
47	65	\$0	\$24,677	\$35,884	\$11,207	\$7,845	0.03	\$211	\$0
<b>Sum</b>								<b>\$84,579</b>	<b>\$78,640</b>

Benefit/Cost Ratio = \$84,579/\$78,640 =	1.08
Net Present Value = \$84,579 - \$78,640 =	\$5,938

\* Information from 2000 US Census (<http://www.census.gov/hhes/www/income/earnings/call1cafemale.html>)

\*\* Information from 2000 US Census of female in entire country ([http://pubdb3.census.gov/macro/032000/perinc/new04\\_011.htm](http://pubdb3.census.gov/macro/032000/perinc/new04_011.htm))

\*\*\* Information of monetary cost of CSU education from CSU Mentor ([http://www.csumentor.edu/faq/finaid\\_costs.asp](http://www.csumentor.edu/faq/finaid_costs.asp))

-- Average taken from the costs of Commuting from Home (\$11,179), Living in Campus Housing (\$16,146) and Living Away from Home/Off Campus (\$16,970). Average per year = \$14,765

ESTIMATED AVERAGE 2006-2007 ACADEMIC YEAR EXPENSES			
	Commuting from home	Living in campus housing	Living away from home/off-campus
State University Fee*	\$2,520	\$2,520	\$2,520
Miscellaneous Fees	658	658	658
Books and Supplies	1,281	1,281	1,281
Meals and Housing	3,345**	8,529	9,071
Transportation	1,052**	941	1,095
Miscellaneous Personal	2,323**	2,217	2,345
<b>TOTAL</b>	<b>\$11,179</b>	<b>\$16,146</b>	<b>\$16,970</b>

**Average**  
\$14,765

[http://www.csumentor.edu/faq/finaid\\_costs.asp](http://www.csumentor.edu/faq/finaid_costs.asp)