

California Secure Choice Retirement Savings Investment Board

Contribution and Escalation Analysis

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Submitted by AKF Consulting Group



Table of Contents

	<u>Page Number</u>
Assumptions	3
Summary of Results	4 - 5
Base Case: Assuming 3% net investment return	
Scenario 1	6
Scenario 2	7
Scenario 3	8
Sensitivity 1: Assuming 5% net investment return	
Scenario 1	9
Scenario 2	10
Scenario 3	11
Sensitivity 2: Assuming 6.5% net investment return	
Scenario 1	12
Scenario 2	13
Scenario 3	14

Assumptions



General Assumptions	
Net Annual Investment Return	
Base Case 1	3%
Sensitivity 1	5%
Sensitivity 2	6.5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario Specific Assumptions	
Scenario 1	
Beginning Default Contribution	3%
Annual Escalation	1%
Maximum Default Contribution	8%
Scenario 2	
Beginning Default Contribution	5%
Annual Escalation	0.5%
Maximum Default Contribution	8%
Scenario 3	
Beginning Default Contribution	5%
Annual Escalation	1%
Maximum Default Contribution	8%

Summary of Results



Comparison of Overall Results: Base Case - Assuming 3% Net Investment Return			
	Scenario 1	Scenario 2	Scenario 3
	3% Default 1% Escalation	5% Default 0.5% Escalation	5% Default 1% Escalation
Payroll Contributions	\$116,340.12	\$117,697.54	\$119,088.54
Earnings	\$95,219.35	\$98,282.61	\$101,107.14
Total Funds Available At Retirement	\$211,559.46	\$215,980.15	\$220,195.68
Contributions as % of Total Funds	54.99%	54.49%	54.08%
Contributions compared to Scenario 1	--	\$1,357.42	\$2,748.42
Earnings compared to Scenario 1	--	\$3,063.26	\$5,887.80
Funds Available Compared to 1	--	\$4,420.69	\$8,636.22
		2.09%	4.08%

Comparison of Overall Results: Sensitivity 1 - Assuming 5% Net Investment Return			
	Scenario 1	Scenario 2	Scenario 3
	3% Default 1% Escalation	5% Default 0.5% Escalation	5% Default 1% Escalation
Payroll Contributions	\$116,340.12	\$117,697.54	\$119,088.54
Earnings	\$214,917.39	\$223,088.06	\$230,375.91
Total Funds Available At Retirement	\$331,257.51	\$340,785.60	\$349,464.45
Contributions as % of Total Funds	35.12%	34.54%	34.08%
Contributions compared to Scenario 1	--	\$1,357.42	\$2,748.42
Earnings compared to Scenario 1	--	\$8,170.66	\$15,458.52
Funds Available Compared to 1	--	\$9,528.09	\$18,206.94
		2.88%	5.50%

Comparison of Overall Results: Sensitivity 2 - Assuming 6.5% Net Investment Return			
	Scenario 1	Scenario 2	Scenario 3
	3% Default 1% Escalation	5% Default 0.5% Escalation	5% Default 1% Escalation
Payroll Contributions	\$116,340.12	\$117,697.54	\$119,088.54
Earnings	\$357,804.01	\$373,233.19	\$386,631.14
Total Funds Available At Retirement	\$474,144.13	\$490,930.73	\$505,719.68
Contributions as % of Total Funds	24.54%	23.97%	23.55%
Contributions compared to Scenario 1	--	\$1,357.42	\$2,748.42
Earnings compared to Scenario 1	--	\$15,429.17	\$28,827.12
Funds Available Compared to 1	--	\$16,786.60	\$31,575.54
		3.54%	6.66%

Summary of Results, continued



Annual Payroll Contributions				
Age	Year	Scenario 1	Scenario 2	Scenario 3
25	1	\$900.00	\$1,500.00	\$1,500.00
26	2	\$1,212.00	\$1,666.50	\$1,818.00
27	3	\$1,530.15	\$1,836.18	\$2,142.21
28	4	\$1,854.54	\$2,009.09	\$2,472.72
29	5	\$2,185.27	\$2,185.27	\$2,497.45
30	6	\$2,522.42	\$2,364.77	\$2,522.42
31	7	\$2,547.65	\$2,547.65	\$2,547.65
32 to 65	8 to 41	identical across Scenarios		

Monthly Payroll Contributions				
Age	Year	Scenario 1	Scenario 2	Scenario 3
25	1	\$75.00	\$125.00	\$125.00
26	2	\$101.00	\$138.88	\$151.50
27	3	\$127.51	\$153.02	\$178.52
28	4	\$154.55	\$167.42	\$206.06
29	5	\$182.11	\$182.11	\$208.12
30	6	\$210.20	\$197.06	\$210.20
31	7	\$212.30	\$212.30	\$212.30
32 to 65	8 to 41	identical across Scenarios		

Scenario 1 Analysis: Assuming 3% Net Investment Return



General Assumptions	
Net Annual Investment Return	3%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	3%
	Year 2	4%
	Year 3	5%
	Year 4	6%
	Year 5	7%
	Year 6+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$900.00	\$900.00	\$13.50	\$913.50
26	2	\$913.50	\$1,212.00	\$2,125.50	\$45.59	\$2,171.09
27	3	\$2,171.09	\$1,530.15	\$3,701.24	\$88.08	\$3,789.32
28	4	\$3,789.32	\$1,854.54	\$5,643.86	\$141.50	\$5,785.36
29	5	\$5,785.36	\$2,185.27	\$7,970.63	\$206.34	\$8,176.97
30	6	\$8,176.97	\$2,522.42	\$10,699.39	\$283.15	\$10,982.54
31	7	\$10,982.54	\$2,547.65	\$13,530.19	\$367.69	\$13,897.88
32	8	\$13,897.88	\$2,573.12	\$16,471.00	\$455.53	\$16,926.53
33	9	\$16,926.53	\$2,598.86	\$19,525.39	\$546.78	\$20,072.17
34	10	\$20,072.17	\$2,624.84	\$22,697.01	\$641.54	\$23,338.55
35	11	\$23,338.55	\$2,651.09	\$25,989.64	\$739.92	\$26,729.57
36	12	\$26,729.57	\$2,677.60	\$29,407.17	\$842.05	\$30,249.22
37	13	\$30,249.22	\$2,704.38	\$32,953.60	\$948.04	\$33,901.65
38	14	\$33,901.65	\$2,731.42	\$36,633.07	\$1,058.02	\$37,691.09
39	15	\$37,691.09	\$2,758.74	\$40,449.83	\$1,172.11	\$41,621.94
40	16	\$41,621.94	\$2,786.33	\$44,408.27	\$1,290.45	\$45,698.72
41	17	\$45,698.72	\$2,814.19	\$48,512.91	\$1,413.17	\$49,926.08
42	18	\$49,926.08	\$2,842.33	\$52,768.41	\$1,540.42	\$54,308.83
43	19	\$54,308.83	\$2,870.75	\$57,179.59	\$1,672.33	\$58,851.91
44	20	\$58,851.91	\$2,899.46	\$61,751.37	\$1,809.05	\$63,560.42
45	21	\$63,560.42	\$2,928.46	\$66,488.88	\$1,950.74	\$68,439.62
46	22	\$68,439.62	\$2,957.74	\$71,397.36	\$2,097.55	\$73,494.91
47	23	\$73,494.91	\$2,987.32	\$76,482.23	\$2,249.66	\$78,731.89
48	24	\$78,731.89	\$3,017.19	\$81,749.08	\$2,407.21	\$84,156.29
49	25	\$84,156.29	\$3,047.36	\$87,203.66	\$2,570.40	\$89,774.06
50	26	\$89,774.06	\$3,077.84	\$92,851.89	\$2,739.39	\$95,591.28
51	27	\$95,591.28	\$3,108.62	\$98,699.90	\$2,914.37	\$101,614.27
52	28	\$101,614.27	\$3,139.70	\$104,753.97	\$3,095.52	\$107,849.49
53	29	\$107,849.49	\$3,171.10	\$111,020.59	\$3,283.05	\$114,303.64
54	30	\$114,303.64	\$3,202.81	\$117,506.45	\$3,477.15	\$120,983.60
55	31	\$120,983.60	\$3,234.84	\$124,218.44	\$3,678.03	\$127,896.47
56	32	\$127,896.47	\$3,267.19	\$131,163.65	\$3,885.90	\$135,049.56
57	33	\$135,049.56	\$3,299.86	\$138,349.41	\$4,100.98	\$142,450.40
58	34	\$142,450.40	\$3,332.86	\$145,783.25	\$4,323.50	\$150,106.76
59	35	\$150,106.76	\$3,366.18	\$153,472.94	\$4,553.70	\$158,026.64
60	36	\$158,026.64	\$3,399.85	\$161,426.49	\$4,791.80	\$166,218.28
61	37	\$166,218.28	\$3,433.85	\$169,652.13	\$5,038.06	\$174,690.18
62	38	\$174,690.18	\$3,468.18	\$178,158.37	\$5,292.73	\$183,451.10
63	39	\$183,451.10	\$3,502.87	\$186,953.96	\$5,556.08	\$192,510.04
64	40	\$192,510.04	\$3,537.89	\$196,047.93	\$5,828.37	\$201,876.30
65	41	\$201,876.30	\$3,573.27	\$205,449.57	\$6,109.89	\$211,559.46
			\$116,340.12		\$95,219.35	

Scenario 2 Analysis: Assuming 3% Net Investment Return



General Assumptions	
Net Annual Investment Return	3%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	5.5%
	Year 3	6.0%
	Year 4	6.5%
	Year 5	7.0%
	Year 6	7.5%
	Year 7+	8.0%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$22.50	\$1,522.50
26	2	\$1,522.50	\$1,666.50	\$3,189.00	\$70.67	\$3,259.67
27	3	\$3,259.67	\$1,836.18	\$5,095.85	\$125.33	\$5,221.19
28	4	\$5,221.19	\$2,009.09	\$7,230.27	\$186.77	\$7,417.04
29	5	\$7,417.04	\$2,185.27	\$9,602.31	\$255.29	\$9,857.60
30	6	\$9,857.60	\$2,364.77	\$12,222.38	\$331.20	\$12,553.58
31	7	\$12,553.58	\$2,547.65	\$15,101.22	\$414.82	\$15,516.05
32	8	\$15,516.05	\$2,731.12	\$18,089.17	\$504.08	\$18,593.25
33	9	\$18,593.25	\$2,598.86	\$21,192.10	\$596.78	\$21,788.89
34	10	\$21,788.89	\$2,624.84	\$24,413.73	\$693.04	\$25,106.77
35	11	\$25,106.77	\$2,651.09	\$27,757.86	\$792.97	\$28,550.83
36	12	\$28,550.83	\$2,677.60	\$31,228.44	\$896.69	\$32,125.12
37	13	\$32,125.12	\$2,704.38	\$34,829.50	\$1,004.32	\$35,833.82
38	14	\$35,833.82	\$2,731.42	\$38,565.25	\$1,115.99	\$39,681.23
39	15	\$39,681.23	\$2,758.74	\$42,439.97	\$1,231.82	\$43,671.79
40	16	\$43,671.79	\$2,786.33	\$46,458.12	\$1,351.95	\$47,810.06
41	17	\$47,810.06	\$2,814.19	\$50,624.25	\$1,476.51	\$52,100.77
42	18	\$52,100.77	\$2,842.33	\$54,943.10	\$1,605.66	\$56,548.76
43	19	\$56,548.76	\$2,870.75	\$59,419.51	\$1,739.52	\$61,159.03
44	20	\$61,159.03	\$2,899.46	\$64,058.50	\$1,878.26	\$65,936.76
45	21	\$65,936.76	\$2,928.46	\$68,865.21	\$2,022.03	\$70,887.24
46	22	\$70,887.24	\$2,957.74	\$73,844.99	\$2,170.98	\$76,015.97
47	23	\$76,015.97	\$2,987.32	\$79,003.29	\$2,325.29	\$81,328.58
48	24	\$81,328.58	\$3,017.19	\$84,345.77	\$2,485.12	\$86,830.88
49	25	\$86,830.88	\$3,047.36	\$89,878.25	\$2,650.64	\$92,528.88
50	26	\$92,528.88	\$3,077.84	\$95,606.72	\$2,822.03	\$98,428.75
51	27	\$98,428.75	\$3,108.62	\$101,537.37	\$2,999.49	\$104,536.86
52	28	\$104,536.86	\$3,139.70	\$107,676.56	\$3,183.20	\$110,859.76
53	29	\$110,859.76	\$3,171.10	\$114,030.86	\$3,373.36	\$117,404.22
54	30	\$117,404.22	\$3,202.81	\$120,607.03	\$3,570.17	\$124,177.20
55	31	\$124,177.20	\$3,234.84	\$127,412.04	\$3,773.84	\$131,185.87
56	32	\$131,185.87	\$3,267.19	\$134,453.06	\$3,984.58	\$138,437.64
57	33	\$138,437.64	\$3,299.86	\$141,737.50	\$4,202.63	\$145,940.13
58	34	\$145,940.13	\$3,332.86	\$149,272.98	\$4,428.20	\$153,701.18
59	35	\$153,701.18	\$3,366.18	\$157,067.37	\$4,661.53	\$161,728.89
60	36	\$161,728.89	\$3,399.85	\$165,128.74	\$4,902.86	\$170,031.61
61	37	\$170,031.61	\$3,433.85	\$173,465.45	\$5,152.46	\$178,617.91
62	38	\$178,617.91	\$3,468.18	\$182,086.09	\$5,410.56	\$187,496.65
63	39	\$187,496.65	\$3,502.87	\$190,999.52	\$5,677.44	\$196,676.96
64	40	\$196,676.96	\$3,537.89	\$200,214.85	\$5,953.38	\$206,168.23
65	41	\$206,168.23	\$3,573.27	\$209,741.50	\$6,238.65	\$215,980.15
			\$117,697.54		\$98,282.61	

Scenario 3 Analysis: Assuming 3% Net Investment Return



General Assumptions	
Net Annual Investment Return	3%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	6%
	Year 3	7%
	Year 4+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$22.50	\$1,522.50
26	2	\$1,522.50	\$1,818.00	\$3,340.50	\$72.95	\$3,413.45
27	3	\$3,413.45	\$2,142.21	\$5,555.66	\$134.54	\$5,690.19
28	4	\$5,690.19	\$2,472.72	\$8,162.91	\$207.80	\$8,370.71
29	5	\$8,370.71	\$2,497.45	\$10,868.16	\$288.58	\$11,156.74
30	6	\$11,156.74	\$2,522.42	\$13,679.17	\$372.54	\$14,051.71
31	7	\$14,051.71	\$2,547.65	\$16,599.35	\$459.77	\$17,059.12
32	8	\$17,059.12	\$2,573.12	\$19,632.25	\$550.37	\$20,182.62
33	9	\$20,182.62	\$2,598.86	\$22,781.47	\$644.46	\$23,425.93
34	10	\$23,425.93	\$2,624.84	\$26,050.78	\$742.15	\$26,792.93
35	11	\$26,792.93	\$2,651.09	\$29,444.02	\$843.55	\$30,287.58
36	12	\$30,287.58	\$2,677.60	\$32,965.18	\$948.79	\$33,913.97
37	13	\$33,913.97	\$2,704.38	\$36,618.35	\$1,057.98	\$37,676.34
38	14	\$37,676.34	\$2,731.42	\$40,407.76	\$1,171.26	\$41,579.02
39	15	\$41,579.02	\$2,758.74	\$44,337.76	\$1,288.75	\$45,626.51
40	16	\$45,626.51	\$2,786.33	\$48,412.84	\$1,410.59	\$49,823.43
41	17	\$49,823.43	\$2,814.19	\$52,637.62	\$1,536.92	\$54,174.53
42	18	\$54,174.53	\$2,842.33	\$57,016.86	\$1,667.87	\$58,684.73
43	19	\$58,684.73	\$2,870.75	\$61,555.49	\$1,803.60	\$63,359.09
44	20	\$63,359.09	\$2,899.46	\$66,258.55	\$1,944.26	\$68,202.82
45	21	\$68,202.82	\$2,928.46	\$71,131.27	\$2,090.01	\$73,221.28
46	22	\$73,221.28	\$2,957.74	\$76,179.02	\$2,241.00	\$78,420.03
47	23	\$78,420.03	\$2,987.32	\$81,407.35	\$2,397.41	\$83,804.76
48	24	\$83,804.76	\$3,017.19	\$86,821.95	\$2,559.40	\$89,381.35
49	25	\$89,381.35	\$3,047.36	\$92,428.71	\$2,727.15	\$95,155.86
50	26	\$95,155.86	\$3,077.84	\$98,233.70	\$2,900.84	\$101,134.54
51	27	\$101,134.54	\$3,108.62	\$104,243.16	\$3,080.67	\$107,323.82
52	28	\$107,323.82	\$3,139.70	\$110,463.53	\$3,266.81	\$113,730.34
53	29	\$113,730.34	\$3,171.10	\$116,901.43	\$3,459.48	\$120,360.91
54	30	\$120,360.91	\$3,202.81	\$123,563.72	\$3,658.87	\$127,222.59
55	31	\$127,222.59	\$3,234.84	\$130,457.43	\$3,865.20	\$134,322.63
56	32	\$134,322.63	\$3,267.19	\$137,589.81	\$4,078.69	\$141,668.50
57	33	\$141,668.50	\$3,299.86	\$144,968.36	\$4,299.55	\$149,267.91
58	34	\$149,267.91	\$3,332.86	\$152,600.77	\$4,528.03	\$157,128.80
59	35	\$157,128.80	\$3,366.18	\$160,494.98	\$4,764.36	\$165,259.34
60	36	\$165,259.34	\$3,399.85	\$168,659.18	\$5,008.78	\$173,667.96
61	37	\$173,667.96	\$3,433.85	\$177,101.81	\$5,261.55	\$182,363.35
62	38	\$182,363.35	\$3,468.18	\$185,831.54	\$5,522.92	\$191,354.46
63	39	\$191,354.46	\$3,502.87	\$194,857.33	\$5,793.18	\$200,650.50
64	40	\$200,650.50	\$3,537.89	\$204,188.40	\$6,072.58	\$210,260.98
65	41	\$210,260.98	\$3,573.27	\$213,834.25	\$6,361.43	\$220,195.68
			\$119,088.54		\$101,107.14	

Scenario 1 Analysis: Assuming 5% Net Investment Return



General Assumptions	
Net Annual Investment Return	5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	3%
	Year 2	4%
	Year 3	5%
	Year 4	6%
	Year 5	7%
	Year 6+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$900.00	\$900.00	\$22.50	\$922.50
26	2	\$922.50	\$1,212.00	\$2,134.50	\$76.43	\$2,210.93
27	3	\$2,210.93	\$1,530.15	\$3,741.08	\$148.80	\$3,889.88
28	4	\$3,889.88	\$1,854.54	\$5,744.42	\$240.86	\$5,985.27
29	5	\$5,985.27	\$2,185.27	\$8,170.54	\$353.90	\$8,524.44
30	6	\$8,524.44	\$2,522.42	\$11,046.86	\$489.28	\$11,536.14
31	7	\$11,536.14	\$2,547.65	\$14,083.79	\$640.50	\$14,724.29
32	8	\$14,724.29	\$2,573.12	\$17,297.42	\$800.54	\$18,097.96
33	9	\$18,097.96	\$2,598.86	\$20,696.81	\$969.87	\$21,666.68
34	10	\$21,666.68	\$2,624.84	\$24,291.53	\$1,148.96	\$25,440.48
35	11	\$25,440.48	\$2,651.09	\$28,091.58	\$1,338.30	\$29,429.88
36	12	\$29,429.88	\$2,677.60	\$32,107.48	\$1,538.43	\$33,645.92
37	13	\$33,645.92	\$2,704.38	\$36,350.30	\$1,749.91	\$38,100.20
38	14	\$38,100.20	\$2,731.42	\$40,831.63	\$1,973.30	\$42,804.92
39	15	\$42,804.92	\$2,758.74	\$45,563.66	\$2,209.21	\$47,772.87
40	16	\$47,772.87	\$2,786.33	\$50,559.20	\$2,458.30	\$53,017.50
41	17	\$53,017.50	\$2,814.19	\$55,831.69	\$2,721.23	\$58,552.92
42	18	\$58,552.92	\$2,842.33	\$61,395.25	\$2,998.70	\$64,393.96
43	19	\$64,393.96	\$2,870.75	\$67,264.71	\$3,291.47	\$70,556.18
44	20	\$70,556.18	\$2,899.46	\$73,455.64	\$3,600.30	\$77,055.93
45	21	\$77,055.93	\$2,928.46	\$79,984.39	\$3,926.01	\$83,910.40
46	22	\$83,910.40	\$2,957.74	\$86,868.14	\$4,269.46	\$91,137.60
47	23	\$91,137.60	\$2,987.32	\$94,124.92	\$4,631.56	\$98,756.48
48	24	\$98,756.48	\$3,017.19	\$101,773.67	\$5,013.25	\$106,786.93
49	25	\$106,786.93	\$3,047.36	\$109,834.29	\$5,415.53	\$115,249.82
50	26	\$115,249.82	\$3,077.84	\$118,327.66	\$5,839.44	\$124,167.09
51	27	\$124,167.09	\$3,108.62	\$127,275.71	\$6,286.07	\$133,561.78
52	28	\$133,561.78	\$3,139.70	\$136,701.48	\$6,756.58	\$143,458.06
53	29	\$143,458.06	\$3,171.10	\$146,629.16	\$7,252.18	\$153,881.34
54	30	\$153,881.34	\$3,202.81	\$157,084.15	\$7,774.14	\$164,858.29
55	31	\$164,858.29	\$3,234.84	\$168,093.13	\$8,323.79	\$176,416.91
56	32	\$176,416.91	\$3,267.19	\$179,684.10	\$8,902.53	\$188,586.62
57	33	\$188,586.62	\$3,299.86	\$191,886.48	\$9,511.83	\$201,398.31
58	34	\$201,398.31	\$3,332.86	\$204,731.16	\$10,153.24	\$214,884.40
59	35	\$214,884.40	\$3,366.18	\$218,250.59	\$10,828.37	\$229,078.96
60	36	\$229,078.96	\$3,399.85	\$232,478.81	\$11,538.94	\$244,017.75
61	37	\$244,017.75	\$3,433.85	\$247,451.60	\$12,286.73	\$259,738.33
62	38	\$259,738.33	\$3,468.18	\$263,206.51	\$13,073.62	\$276,280.13
63	39	\$276,280.13	\$3,502.87	\$279,783.00	\$13,901.58	\$293,684.58
64	40	\$293,684.58	\$3,537.89	\$297,222.47	\$14,772.68	\$311,995.15
65	41	\$311,995.15	\$3,573.27	\$315,568.42	\$15,689.09	\$331,257.51
			\$116,340.12		\$214,917.39	

Scenario 2 Analysis: Assuming 5% Net Investment Return



General Assumptions	
Net Annual Investment Return	5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	5.5%
	Year 3	6.0%
	Year 4	6.5%
	Year 5	7.0%
	Year 6	7.5%
	Year 7+	8.0%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$37.50	\$1,537.50
26	2	\$1,537.50	\$1,666.50	\$3,204.00	\$118.54	\$3,322.54
27	3	\$3,322.54	\$1,836.18	\$5,158.72	\$212.03	\$5,370.75
28	4	\$5,370.75	\$2,009.09	\$7,379.84	\$318.76	\$7,698.60
29	5	\$7,698.60	\$2,185.27	\$9,883.87	\$439.56	\$10,323.43
30	6	\$10,323.43	\$2,364.77	\$12,688.20	\$575.29	\$13,263.49
31	7	\$13,263.49	\$2,547.65	\$15,811.14	\$726.87	\$16,538.01
32	8	\$16,538.01	\$2,731.12	\$19,111.13	\$891.23	\$20,002.36
33	9	\$20,002.36	\$2,598.86	\$22,601.22	\$1,065.09	\$23,666.31
34	10	\$23,666.31	\$2,624.84	\$26,291.15	\$1,248.94	\$27,540.09
35	11	\$27,540.09	\$2,651.09	\$30,191.18	\$1,443.28	\$31,634.46
36	12	\$31,634.46	\$2,677.60	\$34,312.07	\$1,648.66	\$35,960.73
37	13	\$35,960.73	\$2,704.38	\$38,665.11	\$1,865.65	\$40,530.76
38	14	\$40,530.76	\$2,731.42	\$43,262.18	\$2,094.82	\$45,357.00
39	15	\$45,357.00	\$2,758.74	\$48,115.74	\$2,336.82	\$50,452.56
40	16	\$50,452.56	\$2,786.33	\$53,238.89	\$2,592.29	\$55,831.17
41	17	\$55,831.17	\$2,814.19	\$58,645.36	\$2,861.91	\$61,507.27
42	18	\$61,507.27	\$2,842.33	\$64,349.61	\$3,146.42	\$67,496.03
43	19	\$67,496.03	\$2,870.75	\$70,366.78	\$3,446.57	\$73,813.35
44	20	\$73,813.35	\$2,899.46	\$76,712.81	\$3,763.15	\$80,475.97
45	21	\$80,475.97	\$2,928.46	\$83,404.42	\$4,097.01	\$87,501.43
46	22	\$87,501.43	\$2,957.74	\$90,459.17	\$4,449.02	\$94,908.19
47	23	\$94,908.19	\$2,987.32	\$97,895.51	\$4,820.09	\$102,715.60
48	24	\$102,715.60	\$3,017.19	\$105,732.79	\$5,211.21	\$110,944.00
49	25	\$110,944.00	\$3,047.36	\$113,991.36	\$5,623.38	\$119,614.75
50	26	\$119,614.75	\$3,077.84	\$122,692.58	\$6,057.68	\$128,750.27
51	27	\$128,750.27	\$3,108.62	\$131,858.88	\$6,515.23	\$138,374.11
52	28	\$138,374.11	\$3,139.70	\$141,513.81	\$6,997.20	\$148,511.01
53	29	\$148,511.01	\$3,171.10	\$151,682.11	\$7,504.83	\$159,186.94
54	30	\$159,186.94	\$3,202.81	\$162,389.75	\$8,039.42	\$170,429.16
55	31	\$170,429.16	\$3,234.84	\$173,664.00	\$8,602.33	\$182,266.33
56	32	\$182,266.33	\$3,267.19	\$185,533.52	\$9,195.00	\$194,728.51
57	33	\$194,728.51	\$3,299.86	\$198,028.37	\$9,818.92	\$207,847.29
58	34	\$207,847.29	\$3,332.86	\$211,180.15	\$10,475.69	\$221,655.83
59	35	\$221,655.83	\$3,366.18	\$225,022.02	\$11,166.95	\$236,188.96
60	36	\$236,188.96	\$3,399.85	\$239,588.81	\$11,894.44	\$251,483.26
61	37	\$251,483.26	\$3,433.85	\$254,917.10	\$12,660.01	\$267,577.11
62	38	\$267,577.11	\$3,468.18	\$271,045.29	\$13,465.56	\$284,510.85
63	39	\$284,510.85	\$3,502.87	\$288,013.72	\$14,313.11	\$302,326.83
64	40	\$302,326.83	\$3,537.89	\$305,864.73	\$15,204.79	\$321,069.52
65	41	\$321,069.52	\$3,573.27	\$324,642.79	\$16,142.81	\$340,785.60
			\$117,697.54		\$223,088.06	

Scenario 3 Analysis: Assuming 5% Net Investment Return



General Assumptions	
Net Annual Investment Return	5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	6%
	Year 3	7%
	Year 4+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$37.50	\$1,537.50
26	2	\$1,537.50	\$1,818.00	\$3,355.50	\$122.33	\$3,477.83
27	3	\$3,477.83	\$2,142.21	\$5,620.04	\$227.45	\$5,847.48
28	4	\$5,847.48	\$2,472.72	\$8,320.20	\$354.19	\$8,674.40
29	5	\$8,674.40	\$2,497.45	\$11,171.85	\$496.16	\$11,668.00
30	6	\$11,668.00	\$2,522.42	\$14,190.43	\$646.46	\$14,836.89
31	7	\$14,836.89	\$2,547.65	\$17,384.53	\$805.54	\$18,190.07
32	8	\$18,190.07	\$2,573.12	\$20,763.20	\$973.83	\$21,737.03
33	9	\$21,737.03	\$2,598.86	\$24,335.88	\$1,151.82	\$25,487.71
34	10	\$25,487.71	\$2,624.84	\$28,112.55	\$1,340.01	\$29,452.56
35	11	\$29,452.56	\$2,651.09	\$32,103.65	\$1,538.91	\$33,642.56
36	12	\$33,642.56	\$2,677.60	\$36,320.16	\$1,749.07	\$38,069.23
37	13	\$38,069.23	\$2,704.38	\$40,773.61	\$1,971.07	\$42,744.68
38	14	\$42,744.68	\$2,731.42	\$45,476.10	\$2,205.52	\$47,681.62
39	15	\$47,681.62	\$2,758.74	\$50,440.36	\$2,453.05	\$52,893.41
40	16	\$52,893.41	\$2,786.33	\$55,679.73	\$2,714.33	\$58,394.06
41	17	\$58,394.06	\$2,814.19	\$61,208.25	\$2,990.06	\$64,198.31
42	18	\$64,198.31	\$2,842.33	\$67,040.64	\$3,280.97	\$70,321.61
43	19	\$70,321.61	\$2,870.75	\$73,192.37	\$3,587.85	\$76,780.22
44	20	\$76,780.22	\$2,899.46	\$79,679.68	\$3,911.50	\$83,591.18
45	21	\$83,591.18	\$2,928.46	\$86,519.63	\$4,252.77	\$90,772.40
46	22	\$90,772.40	\$2,957.74	\$93,730.14	\$4,612.56	\$98,342.71
47	23	\$98,342.71	\$2,987.32	\$101,330.02	\$4,991.82	\$106,321.84
48	24	\$106,321.84	\$3,017.19	\$109,339.03	\$5,391.52	\$114,730.56
49	25	\$114,730.56	\$3,047.36	\$117,777.92	\$5,812.71	\$123,590.63
50	26	\$123,590.63	\$3,077.84	\$126,668.47	\$6,256.48	\$132,924.95
51	27	\$132,924.95	\$3,108.62	\$136,033.56	\$6,723.96	\$142,757.52
52	28	\$142,757.52	\$3,139.70	\$145,897.22	\$7,216.37	\$153,113.59
53	29	\$153,113.59	\$3,171.10	\$156,284.69	\$7,734.96	\$164,019.65
54	30	\$164,019.65	\$3,202.81	\$167,222.46	\$8,281.05	\$175,503.51
55	31	\$175,503.51	\$3,234.84	\$178,738.35	\$8,856.05	\$187,594.39
56	32	\$187,594.39	\$3,267.19	\$190,861.58	\$9,461.40	\$200,322.98
57	33	\$200,322.98	\$3,299.86	\$203,622.84	\$10,098.65	\$213,721.48
58	34	\$213,721.48	\$3,332.86	\$217,054.34	\$10,769.40	\$227,823.73
59	35	\$227,823.73	\$3,366.18	\$231,189.92	\$11,475.34	\$242,665.26
60	36	\$242,665.26	\$3,399.85	\$246,065.11	\$12,218.26	\$258,283.37
61	37	\$258,283.37	\$3,433.85	\$261,717.21	\$13,000.01	\$274,717.23
62	38	\$274,717.23	\$3,468.18	\$278,185.41	\$13,822.57	\$292,007.98
63	39	\$292,007.98	\$3,502.87	\$295,510.84	\$14,687.97	\$310,198.81
64	40	\$310,198.81	\$3,537.89	\$313,736.71	\$15,598.39	\$329,335.09
65	41	\$329,335.09	\$3,573.27	\$332,908.37	\$16,556.09	\$349,464.45
			\$119,088.54		\$230,375.91	

Scenario 1 Analysis: Assuming 6.5% Net Investment Return



General Assumptions	
Net Annual Investment Return	6.5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	3%
	Year 2	4%
	Year 3	5%
	Year 4	6%
	Year 5	7%
	Year 6+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$900.00	\$900.00	\$29.25	\$929.25
26	2	\$929.25	\$1,212.00	\$2,141.25	\$99.79	\$2,241.04
27	3	\$2,241.04	\$1,530.15	\$3,771.19	\$195.40	\$3,966.59
28	4	\$3,966.59	\$1,854.54	\$5,821.13	\$318.10	\$6,139.23
29	5	\$6,139.23	\$2,185.27	\$8,324.50	\$470.07	\$8,794.57
30	6	\$8,794.57	\$2,522.42	\$11,317.00	\$653.63	\$11,970.62
31	7	\$11,970.62	\$2,547.65	\$14,518.27	\$860.89	\$15,379.16
32	8	\$15,379.16	\$2,573.12	\$17,952.28	\$1,083.27	\$19,035.56
33	9	\$19,035.56	\$2,598.86	\$21,634.41	\$1,321.77	\$22,956.19
34	10	\$22,956.19	\$2,624.84	\$25,581.03	\$1,577.46	\$27,158.49
35	11	\$27,158.49	\$2,651.09	\$29,809.58	\$1,851.46	\$31,661.04
36	12	\$31,661.04	\$2,677.60	\$34,338.65	\$2,144.99	\$36,483.64
37	13	\$36,483.64	\$2,704.38	\$39,188.02	\$2,459.33	\$41,647.35
38	14	\$41,647.35	\$2,731.42	\$44,378.77	\$2,795.85	\$47,174.62
39	15	\$47,174.62	\$2,758.74	\$49,933.36	\$3,156.01	\$53,089.37
40	16	\$53,089.37	\$2,786.33	\$55,875.69	\$3,541.36	\$59,417.06
41	17	\$59,417.06	\$2,814.19	\$62,231.25	\$3,953.57	\$66,184.82
42	18	\$66,184.82	\$2,842.33	\$69,027.15	\$4,394.39	\$73,421.54
43	19	\$73,421.54	\$2,870.75	\$76,292.29	\$4,865.70	\$81,157.99
44	20	\$81,157.99	\$2,899.46	\$84,057.45	\$5,369.50	\$89,426.95
45	21	\$89,426.95	\$2,928.46	\$92,355.41	\$5,907.93	\$98,263.34
46	22	\$98,263.34	\$2,957.74	\$101,221.08	\$6,483.24	\$107,704.32
47	23	\$107,704.32	\$2,987.32	\$110,691.64	\$7,097.87	\$117,789.51
48	24	\$117,789.51	\$3,017.19	\$120,806.70	\$7,754.38	\$128,561.07
49	25	\$128,561.07	\$3,047.36	\$131,608.44	\$8,455.51	\$140,063.95
50	26	\$140,063.95	\$3,077.84	\$143,141.78	\$9,204.19	\$152,345.97
51	27	\$152,345.97	\$3,108.62	\$155,454.58	\$10,003.52	\$165,458.10
52	28	\$165,458.10	\$3,139.70	\$168,597.80	\$10,856.82	\$179,454.62
53	29	\$179,454.62	\$3,171.10	\$182,625.72	\$11,767.61	\$194,393.33
54	30	\$194,393.33	\$3,202.81	\$197,596.14	\$12,739.66	\$210,335.80
55	31	\$210,335.80	\$3,234.84	\$213,570.63	\$13,776.96	\$227,347.59
56	32	\$227,347.59	\$3,267.19	\$230,614.78	\$14,883.78	\$245,498.56
57	33	\$245,498.56	\$3,299.86	\$248,798.41	\$16,064.65	\$264,863.07
58	34	\$264,863.07	\$3,332.86	\$268,195.92	\$17,324.42	\$285,520.34
59	35	\$285,520.34	\$3,366.18	\$288,886.52	\$18,668.22	\$307,554.75
60	36	\$307,554.75	\$3,399.85	\$310,954.59	\$20,101.55	\$331,056.15
61	37	\$331,056.15	\$3,433.85	\$334,489.99	\$21,630.25	\$356,120.24
62	38	\$356,120.24	\$3,468.18	\$359,588.43	\$23,260.53	\$382,848.96
63	39	\$382,848.96	\$3,502.87	\$386,351.82	\$24,999.03	\$411,350.85
64	40	\$411,350.85	\$3,537.89	\$414,888.74	\$26,852.79	\$441,741.53
65	41	\$441,741.53	\$3,573.27	\$445,314.80	\$28,829.33	\$474,144.13
			\$116,340.12		\$357,804.01	

Scenario 2 Analysis: Assuming 6.5% Net Investment Return



General Assumptions	
Net Annual Investment Return	6.5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	5.5%
	Year 3	6.0%
	Year 4	6.5%
	Year 5	7.0%
	Year 6	7.5%
	Year 7+	8.0%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$48.75	\$1,548.75
26	2	\$1,548.75	\$1,666.50	\$3,215.25	\$154.83	\$3,370.08
27	3	\$3,370.08	\$1,836.18	\$5,206.26	\$278.73	\$5,484.99
28	4	\$5,484.99	\$2,009.09	\$7,494.08	\$421.82	\$7,915.90
29	5	\$7,915.90	\$2,185.27	\$10,101.17	\$585.55	\$10,686.72
30	6	\$10,686.72	\$2,364.77	\$13,051.49	\$771.49	\$13,822.99
31	7	\$13,822.99	\$2,547.65	\$16,370.63	\$981.29	\$17,351.93
32	8	\$17,351.93	\$2,731.12	\$19,925.05	\$1,211.50	\$21,136.55
33	9	\$21,136.55	\$2,598.86	\$23,735.41	\$1,458.34	\$25,193.75
34	10	\$25,193.75	\$2,624.84	\$27,818.59	\$1,722.90	\$29,541.49
35	11	\$29,541.49	\$2,651.09	\$32,192.59	\$2,006.36	\$34,198.94
36	12	\$34,198.94	\$2,677.60	\$36,876.55	\$2,309.95	\$39,186.50
37	13	\$39,186.50	\$2,704.38	\$41,890.88	\$2,635.01	\$44,525.90
38	14	\$44,525.90	\$2,731.42	\$47,257.32	\$2,982.95	\$50,240.28
39	15	\$50,240.28	\$2,758.74	\$52,999.01	\$3,355.28	\$56,354.29
40	16	\$56,354.29	\$2,786.33	\$59,140.62	\$3,753.58	\$62,894.20
41	17	\$62,894.20	\$2,814.19	\$65,708.39	\$4,179.58	\$69,887.97
42	18	\$69,887.97	\$2,842.33	\$72,730.30	\$4,635.09	\$77,365.40
43	19	\$77,365.40	\$2,870.75	\$80,236.15	\$5,122.05	\$85,358.20
44	20	\$85,358.20	\$2,899.46	\$88,257.66	\$5,642.52	\$93,900.18
45	21	\$93,900.18	\$2,928.46	\$96,828.64	\$6,198.69	\$103,027.32
46	22	\$103,027.32	\$2,957.74	\$105,985.06	\$6,792.90	\$112,777.96
47	23	\$112,777.96	\$2,987.32	\$115,765.28	\$7,427.66	\$123,192.94
48	24	\$123,192.94	\$3,017.19	\$126,210.13	\$8,105.60	\$134,315.73
49	25	\$134,315.73	\$3,047.36	\$137,363.09	\$8,829.56	\$146,192.65
50	26	\$146,192.65	\$3,077.84	\$149,270.49	\$9,602.55	\$158,873.04
51	27	\$158,873.04	\$3,108.62	\$161,981.66	\$10,427.78	\$172,409.44
52	28	\$172,409.44	\$3,139.70	\$175,549.14	\$11,308.65	\$186,857.79
53	29	\$186,857.79	\$3,171.10	\$190,028.89	\$12,248.82	\$202,277.71
54	30	\$202,277.71	\$3,202.81	\$205,480.52	\$13,252.14	\$218,732.66
55	31	\$218,732.66	\$3,234.84	\$221,967.50	\$14,322.75	\$236,290.25
56	32	\$236,290.25	\$3,267.19	\$239,557.44	\$15,465.05	\$255,022.49
57	33	\$255,022.49	\$3,299.86	\$258,322.34	\$16,683.71	\$275,006.05
58	34	\$275,006.05	\$3,332.86	\$278,338.91	\$17,983.71	\$296,322.62
59	35	\$296,322.62	\$3,366.18	\$299,688.80	\$19,370.37	\$319,059.17
60	36	\$319,059.17	\$3,399.85	\$322,459.02	\$20,849.34	\$343,308.36
61	37	\$343,308.36	\$3,433.85	\$346,742.21	\$22,426.64	\$369,168.85
62	38	\$369,168.85	\$3,468.18	\$372,637.03	\$24,108.69	\$396,745.72
63	39	\$396,745.72	\$3,502.87	\$400,248.59	\$25,902.32	\$426,150.91
64	40	\$426,150.91	\$3,537.89	\$429,688.80	\$27,814.79	\$457,503.59
65	41	\$457,503.59	\$3,573.27	\$461,076.86	\$29,853.86	\$490,930.73
			\$117,697.54		\$373,233.19	

Scenario 3 Analysis: Assuming 6.5% Net Investment Return



General Assumptions	
Net Annual Investment Return	6.5%
Starting Age	25
Age of Retirement	65
Starting Hourly Wage	\$15
Hours Worked Per Year	2000
Starting Annual Compensation	\$30,000
Increase in Annual Compensation	1.0%

Scenario-Specific Assumptions		
Default Contribution	Year 1	5%
	Year 2	6%
	Year 3	7%
	Year 4+	8%

Age	Year	Beginning Balance	Contributions	Net Balance	Net Investment	
					Return	Ending Balance
25	1	\$0.00	\$1,500.00	\$1,500.00	\$48.75	\$1,548.75
26	2	\$1,548.75	\$1,818.00	\$3,366.75	\$159.75	\$3,526.50
27	3	\$3,526.50	\$2,142.21	\$5,668.71	\$298.84	\$5,967.56
28	4	\$5,967.56	\$2,472.72	\$8,440.28	\$468.25	\$8,908.54
29	5	\$8,908.54	\$2,497.45	\$11,405.99	\$660.22	\$12,066.21
30	6	\$12,066.21	\$2,522.42	\$14,588.63	\$866.28	\$15,454.91
31	7	\$15,454.91	\$2,547.65	\$18,002.56	\$1,087.37	\$19,089.93
32	8	\$19,089.93	\$2,573.12	\$21,663.05	\$1,324.47	\$22,987.53
33	9	\$22,987.53	\$2,598.86	\$25,586.38	\$1,578.65	\$27,165.03
34	10	\$27,165.03	\$2,624.84	\$29,789.88	\$1,851.03	\$31,640.91
35	11	\$31,640.91	\$2,651.09	\$34,292.01	\$2,142.82	\$36,434.83
36	12	\$36,434.83	\$2,677.60	\$39,112.43	\$2,455.29	\$41,567.72
37	13	\$41,567.72	\$2,704.38	\$44,272.10	\$2,789.79	\$47,061.89
38	14	\$47,061.89	\$2,731.42	\$49,793.31	\$3,147.79	\$52,941.11
39	15	\$52,941.11	\$2,758.74	\$55,699.85	\$3,530.83	\$59,230.68
40	16	\$59,230.68	\$2,786.33	\$62,017.00	\$3,940.55	\$65,957.55
41	17	\$65,957.55	\$2,814.19	\$68,771.74	\$4,378.70	\$73,150.44
42	18	\$73,150.44	\$2,842.33	\$75,992.77	\$4,847.15	\$80,839.93
43	19	\$80,839.93	\$2,870.75	\$83,710.68	\$5,347.89	\$89,058.58
44	20	\$89,058.58	\$2,899.46	\$91,958.04	\$5,883.04	\$97,841.08
45	21	\$97,841.08	\$2,928.46	\$100,769.54	\$6,454.85	\$107,224.38
46	22	\$107,224.38	\$2,957.74	\$110,182.12	\$7,065.71	\$117,247.83
47	23	\$117,247.83	\$2,987.32	\$120,235.15	\$7,718.20	\$127,953.35
48	24	\$127,953.35	\$3,017.19	\$130,970.54	\$8,415.03	\$139,385.57
49	25	\$139,385.57	\$3,047.36	\$142,432.93	\$9,159.10	\$151,592.03
50	26	\$151,592.03	\$3,077.84	\$154,669.87	\$9,953.51	\$164,623.38
51	27	\$164,623.38	\$3,108.62	\$167,731.99	\$10,801.55	\$178,533.54
52	28	\$178,533.54	\$3,139.70	\$181,673.24	\$11,706.72	\$193,379.97
53	29	\$193,379.97	\$3,171.10	\$196,551.06	\$12,672.76	\$209,223.82
54	30	\$209,223.82	\$3,202.81	\$212,426.63	\$13,703.64	\$226,130.27
55	31	\$226,130.27	\$3,234.84	\$229,365.11	\$14,803.60	\$244,168.71
56	32	\$244,168.71	\$3,267.19	\$247,435.89	\$15,977.15	\$263,413.04
57	33	\$263,413.04	\$3,299.86	\$266,712.90	\$17,229.09	\$283,941.99
58	34	\$283,941.99	\$3,332.86	\$287,274.85	\$18,564.55	\$305,839.40
59	35	\$305,839.40	\$3,366.18	\$309,205.58	\$19,988.96	\$329,194.54
60	36	\$329,194.54	\$3,399.85	\$332,594.39	\$21,508.14	\$354,102.53
61	37	\$354,102.53	\$3,433.85	\$357,536.38	\$23,128.26	\$380,664.64
62	38	\$380,664.64	\$3,468.18	\$384,132.82	\$24,855.92	\$408,988.74
63	39	\$408,988.74	\$3,502.87	\$412,491.61	\$26,698.11	\$439,189.72
64	40	\$439,189.72	\$3,537.89	\$442,727.61	\$28,662.31	\$471,389.93
65	41	\$471,389.93	\$3,573.27	\$474,963.20	\$30,756.48	\$505,719.68
			\$119,088.54		\$386,631.14	