

ANALYSIS FOR THE LOCATION OF A PLASTIC MOLDING FACILITY

Stanislaus County California Compared with Regional Alternatives

Prepared by the

Stanislaus Economic Development & Workforce Alliance

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Model Assumptions

This report compares some of the major cost factors associated with operating a plastic molding facility in various western U.S. locations. A hypothetical plastic plant project is used as a standard for comparison. Largely following the format of earlier work conducted by ESI Corp Strategic Planning for Stanislaus County California, the assumptions are as follows:

Hours of Operation: Weekdays, three shifts per day.

Labor: 90 employees in various management, clerical and production positions.

Utilities: Electric demand at 1,200 kW and 600,000 kWh per month

Production Facility: New construction, 100,000 square feet.

Land: Eight acres in an industrial park setting.

Machinery and Equipment: \$5 million investment.

Summary of Findings

Operating cost estimates were produced for 15 locations, including three separate sites in Stanislaus County, California. The Stanislaus locations demonstrated a very competitive cost structure, particularly as compared with the San Francisco Bay alternative. Nevertheless, Stanislaus provides convenient access to Bay Area markets. Indicated annual outlay savings varied from 18%-to-23% versus those of the nearby Oakland metro area. Operating expenses were generally within the range of those found in the Nevada areas examined and were highly competitive with other alternative western locations as well.

Plastic Molding Facility Employment Costs

	Stanislaus 1	Stanislaus 2	Stanislaus 3	Anaheim	Bakersfield	Fresno	Las Vegas	Los Angeles	Oakland	Portland	Reno	Riverside	Sacramento	San Diego	Seattle
Labor Costs															
General Manager (SOC 111021)															
Number of Employees	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Median Annual Wage	\$87,180	\$87,180	\$87,180	\$99,450	\$79,380	\$78,510	\$91,890	\$97,290	\$102,350	\$86,160	\$84,610	\$84,330	\$91,150	\$95,720	\$116,870
Subtotal Cost	\$87,180	\$87,180	\$87,180	\$99,450	\$79,380	\$78,510	\$91,890	\$97,290	\$102,350	\$86,160	\$84,610	\$84,330	\$91,150	\$95,720	\$116,870
Mechanical Engineer (SOC 172141)															
Number of Employees	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Median Annual Wage	\$60,230	\$60,230	\$60,230	\$71,190	\$85,220	\$53,710	\$71,970	\$73,740	\$86,300	\$71,110	\$64,780	\$63,980	\$71,750	\$75,800	\$74,220
Subtotal Cost	\$180,690	\$180,690	\$180,690	\$213,570	\$255,660	\$161,130	\$215,910	\$221,220	\$258,900	\$213,330	\$194,340	\$191,940	\$215,250	\$227,400	\$222,660
Clerical (SOC 439061)															
Number of Employees	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Median Annual Wage	\$21,750	\$21,750	\$21,750	\$25,940	\$22,900	\$23,160	\$23,030	\$23,390	\$28,760	\$26,080	\$23,290	\$23,070	\$28,010	\$24,320	\$27,350
Subtotal Cost	\$130,500	\$130,500	\$130,500	\$155,640	\$137,400	\$138,960	\$138,180	\$140,340	\$172,560	\$156,480	\$139,740	\$138,420	\$168,060	\$145,920	\$164,100
Industrial Mechanic (SOC 499041)															
Number of Employees	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Median Annual Wage	\$42,970	\$42,970	\$42,970	\$41,250	\$36,160	\$38,370	\$43,050	\$41,900	\$52,990	\$42,580	\$36,330	\$44,750	\$46,830	\$42,510	\$50,910
Subtotal Cost	\$128,910	\$128,910	\$128,910	\$123,750	\$108,480	\$115,110	\$129,150	\$125,700	\$158,970	\$127,740	\$108,990	\$134,250	\$140,490	\$127,530	\$152,730
First-Line Supervisor (SOC 511011)															
Number of Employees	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Median Annual Wage	\$44,000	\$44,000	\$44,000	\$45,840	\$49,180	\$42,210	\$45,780	\$42,740	\$51,460	\$48,370	\$43,050	\$42,560	\$45,740	\$45,530	\$54,320
Subtotal Cost	\$132,000	\$132,000	\$132,000	\$137,520	\$147,540	\$126,630	\$137,340	\$128,220	\$154,380	\$145,110	\$129,150	\$127,680	\$137,220	\$136,590	\$162,960
Machine Operator (SOC 514021)															
Number of Employees	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
Median Annual Wage	\$29,930	\$29,930	\$29,930	\$22,870	\$28,640	\$26,453	\$23,750	\$21,910	\$37,030	\$26,080	\$25,980	\$22,670	\$25,087	\$23,130	\$33,440
Subtotal Cost	\$1,765,870	\$1,765,870	\$1,765,870	\$1,349,330	\$1,689,760	\$1,560,727	\$1,401,250	\$1,292,690	\$2,184,770	\$1,538,720	\$1,532,820	\$1,337,530	\$1,480,133	\$1,364,670	\$1,972,960
Molding/Coremaking (SOC 514072)															
Number of Employees	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Median Annual Wage	\$35,770	\$35,770	\$35,770	\$20,080	\$21,370	\$20,300	\$18,470	\$20,430	\$25,870	\$29,040	\$20,660	\$20,640	\$22,200	\$21,810	\$26,620
Subtotal Cost	\$107,310	\$107,310	\$107,310	\$60,240	\$64,110	\$60,900	\$55,410	\$61,290	\$77,610	\$87,120	\$61,980	\$61,920	\$66,600	\$65,430	\$79,860
Laborer (SOC 537062)															
Number of Employees	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Median Annual Wage	\$19,710	\$19,710	\$19,710	\$19,140	\$20,250	\$18,100	\$22,310	\$18,180	\$23,550	\$22,890	\$21,860	\$19,900	\$21,150	\$19,350	\$22,220
Subtotal Cost	\$236,520	\$236,520	\$236,520	\$229,680	\$243,000	\$217,200	\$267,720	\$218,160	\$282,600	\$274,680	\$262,320	\$238,800	\$253,800	\$232,200	\$266,640
Total Annual Salary Cost	\$2,768,980	\$2,768,980	\$2,768,980	\$2,369,180	\$2,725,330	\$2,459,167	\$2,436,850	\$2,284,910	\$3,392,140	\$2,629,340	\$2,513,950	\$2,314,870	\$2,552,703	\$2,395,460	\$3,138,780

Salaries are based on median annual wage data from the Bureau of Labor Statistics for May 2005. California Employment Development Department figures used where BLS data is unavailable.

Wage data is derived at the metro area (or MSA) in which each city is located.

Metro areas utilized include: Modesto, Santa Ana-Anaheim-Irvine, Bakersfield, Fresno, Las Vegas-Paradise, Los Angeles-Long Beach-Glendale, Oakland-Fremont-Hayward, Portland-Vancouver-Beaverton, Reno-Sparks, Riverside-San Bernardino-Ontario,

Sacramento-Arden-Arcade-Roseville, San Diego-Carlsbad-San Marcos and Seattle-Tacoma-Bellevue.

	Stanislaus 1	Stanislaus 2	Stanislaus 3	Anaheim	Bakersfield	Fresno	Las Vegas	Los Angeles	Oakland	Portland	Reno	Riverside	Sacramento	San Diego	Seattle
Fringe Benefits															
Medical/Dental @ 15%	\$415,347	\$415,347	\$415,347	\$355,377	\$408,800	\$368,875	\$365,528	\$342,737	\$508,821	\$394,401	\$377,093	\$347,231	\$382,905	\$359,319	\$470,817
FICA and Medicare @ 7.65%	\$211,827	\$211,827	\$211,827	\$180,917	\$208,488	\$188,126	\$186,419	\$174,604	\$258,993	\$201,145	\$192,317	\$177,088	\$195,282	\$183,158	\$238,711
Life @ 0.75%	\$20,767	\$20,767	\$20,767	\$17,769	\$20,440	\$18,444	\$18,276	\$17,137	\$25,441	\$19,720	\$18,855	\$17,362	\$19,145	\$17,966	\$23,541
UI Rate	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.4%	3.0%	3.4%	3.0%	3.0%	3.4%	3.4%	3.4%	1.6%
Unemployment Insurance Cost	\$21,420	\$21,420	\$21,420	\$21,420	\$21,420	\$21,420	\$63,251	\$21,420	\$21,420	\$70,362	\$63,279	\$21,420	\$21,420	\$21,420	\$128,730
Workers' Comp Rate - Plant	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	5.00%	9.00%	9.00%	5.00%	5.00%	9.00%	9.00%	9.00%	4.44%
Workers' Comp Rate - Office	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.50%	0.50%	0.25%	0.40%	0.50%	0.50%	0.50%	0.60%
Workers' Comp Cost	\$230,488	\$230,488	\$230,488	\$191,288	\$226,637	\$202,623	\$111,259	\$185,443	\$281,925	\$119,942	\$115,377	\$189,405	\$207,710	\$195,052	\$128,573
Other Fees Rate	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.00%	0.10%	0.10%	0.10%	0.10%	0.00%
Other Fees Cost	\$630	\$630	\$630	\$630	\$630	\$630	\$0	\$630	\$630	\$16,875	\$0	\$630	\$630	\$630	\$0
Fringe Benefit Load Factor	32.52%	32.52%	32.52%	32.39%	32.53%	32.54%	30.56%	32.47%	32.35%	31.28%	30.51%	32.53%	32.40%	32.46%	31.55%
Total Annual Fringe Benefits Cost	\$900,479	\$900,479	\$900,479	\$767,401	\$886,414	\$800,118	\$744,733	\$741,971	\$1,097,231	\$822,444	\$766,921	\$753,134	\$827,093	\$777,545	\$990,372

Unemployment Insurance rates apply up to a set amount of pay, as follows: California, \$7,000; Nevada, \$24,000; Oregon \$28,000; Washington, \$30,900. Washington rate is estimated.

Workers' Comp rate for Stanislaus is based on company responses. The rate for Las Vegas and Reno is based on a figure published by the Nevada Commission on Economic Development. Washington based on \$0.74 per hour in plant and \$0.12 per hour in office.

Other Fees includes: California Employment Training Tax applies to the first \$7,000 in annual wages; Portland TriMet Tax applies to all wages.

Plastic Molding Facility Property Related Outlays

	Stanislaus 1	Stanislaus 2	Stanislaus 3	Anaheim	Bakersfield	Fresno	Las Vegas	Los Angeles	Oakland	Portland	Reno	Riverside	Sacramento	San Diego	Seattle
Build to Suit Costs															
Facility Square Footage	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Cost per Square Foot	\$80.00	\$80.00	\$80.00	\$82.54	\$83.96	\$84.18	\$92.41	\$81.73	\$89.39	\$78.39	\$80.00	\$79.17	\$81.63	\$82.96	\$78.18
Total Building Cost	\$8,000,000	\$8,000,000	\$8,000,000	\$8,253,600	\$8,396,000	\$8,417,600	\$9,240,800	\$8,172,800	\$8,939,200	\$7,839,200	\$8,000,000	\$7,916,800	\$8,163,200	\$8,296,000	\$7,817,600
Land Costs															
Cost per Acre	\$190,000	\$196,000	\$175,000	\$1,180,000	\$160,000	\$160,000	\$825,000	\$1,600,000	\$540,000	\$225,000	\$145,000	\$410,000	\$240,000	\$350,000	\$205,000
Acres Required	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Total Land Cost	\$1,520,000	\$1,568,000	\$1,400,000	\$9,440,000	\$1,280,000	\$1,280,000	\$6,600,000	\$12,800,000	\$4,320,000	\$1,800,000	\$1,160,000	\$3,280,000	\$1,920,000	\$2,800,000	\$1,640,000
Total Property Costs															
Total Building and Land Cost	\$9,520,000	\$9,568,000	\$9,400,000	\$17,693,600	\$9,676,000	\$9,697,600	\$15,840,800	\$20,972,800	\$13,259,200	\$9,639,200	\$9,160,000	\$11,196,800	\$10,083,200	\$11,096,000	\$9,457,600
Annual Payment (@7.5%, 20 yrs)	\$933,838	\$938,546	\$922,067	\$1,735,604	\$949,140	\$951,259	\$1,553,859	\$2,057,268	\$1,300,624	\$945,530	\$898,524	\$1,098,319	\$989,083	\$1,088,431	\$927,717
Property Tax Assessment	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	35.00%	100.00%	100.00%	100.00%	35.00%	100.00%	100.00%	100.00%	100.00%
Property Tax Rate	1.06%	1.04%	1.08%	1.10%	1.10%	1.10%	3.00%	1.10%	1.10%	1.40%	3.00%	1.10%	1.10%	1.10%	1.20%
Real Estate Taxes	\$100,706	\$99,872	\$101,416	\$194,630	\$106,436	\$106,674	\$166,328	\$230,701	\$145,851	\$134,949	\$96,180	\$123,165	\$110,915	\$122,056	\$113,491
Machinery and Equipment Value	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Personal Property Assessment	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	35.00%	100.00%	100.00%	100.00%	35.00%	100.00%	100.00%	100.00%	100.00%
Personal Property Tax Rate	1.06%	1.04%	1.08%	1.10%	1.10%	1.10%	3.00%	1.10%	1.10%	1.40%	3.00%	1.10%	1.10%	1.10%	1.20%
Personal Property Tax	\$52,892	\$52,191	\$53,945	\$55,000	\$55,000	\$55,000	\$52,500	\$55,000	\$55,000	\$70,000	\$52,500	\$55,000	\$55,000	\$55,000	\$60,000
Total Annual Property Taxes	\$153,598	\$152,063	\$155,361	\$249,630	\$161,436	\$161,674	\$218,828	\$285,701	\$200,851	\$204,949	\$148,680	\$178,165	\$165,915	\$177,056	\$173,491

Construction costs are based on cost factors presented in the Historical Air Force Construction Cost Handbook and an adjustment factor for average pay levels in industrial construction.

Land cost figures are for industrial property situated in a business park. This data is primarily sourced from NAI Global and reflects the midpoint of a range.

Plastic Molding Facility Electricity Costs

	Stanislaus 1	Stanislaus 2	Stanislaus 3	Anaheim	Bakersfield	Fresno	Las Vegas	Los Angeles	Oakland	Portland	Reno	Riverside	Sacramento	San Diego	Seattle
Electric Power Costs															
kW Demand	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Monthly kWh	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000	600,000
Cost per kWh	\$0.069	\$0.076	\$0.122	\$0.123	\$0.119	\$0.119	\$0.082	\$0.123	\$0.119	\$0.087	\$0.104	\$0.090	\$0.081	\$0.105	\$0.054
Total Annual Electric Power Cost	\$496,800	\$547,200	\$878,400	\$885,600	\$856,800	\$856,800	\$590,400	\$885,600	\$856,800	\$626,400	\$748,800	\$648,000	\$583,200	\$756,000	\$388,800

Rates based on published tariff schedules in effect at July 2006. Costs are estimated. Actual rates will vary for a variety of factors.

Estimates assume: plant operating weekdays for 24-hours per day, secondary/bundled service, 90% average power factor, 5% savings through time of use optimization where applicable, not including special economic incentives.

Except for Stanislaus rates (which are based on specific locations) the estimated costs are based on the tariff schedule of the leading provider within each respective county in which the named city is located.