



COMPARATIVE
FOOD & BEVERAGE INDUSTRY
OPERATING COSTS

The Boyd Company, Inc.
Location Consultants
Princeton, NJ



TABLE OF CONTENTS

**COMPARATIVE OPERATING COST ANALYSIS: EXECUTIVE
SUMMARY AND NOTES** 1
INTRODUCTION 2
COMPARATIVE LOCATIONS..... 2
LABOR COSTS 3
COMPARATIVE ELECTRIC POWER AND NATURAL GAS COSTS 3
COMPARATIVE LAND ACQUISITION AND CONSTRUCTION COSTS 3
COMPARATIVE AD VALOREM AND SALES TAX COSTS 4
TOTAL ANNUAL OPERATING COST RANKINGS 4
ABOUT BOYD 5

COMPARATIVE OPERATING COST ANALYSIS I:6
EXHIBIT I: A COMPARATIVE ANNUAL OPERATING COST
SIMULATION SUMMARY 7
EXHIBIT II: COMPARATIVE ANNUAL LABOR COSTS 8
EXHIBIT III: ANNUAL ELECTRIC POWER AND NATURAL GAS COSTS 9
EXHIBIT IV: PLANT CONSTRUCTION & AMORTIZATION COSTS 10
EXHIBIT V: AD VALOREM & SALES TAX COSTS 11

COMPARATIVE OPERATING COST ANALYSIS II:12
EXHIBIT I: A COMPARATIVE ANNUAL OPERATING COST
SIMULATION SUMMARY 13
EXHIBIT II: COMPARATIVE ANNUAL LABOR COSTS 14
EXHIBIT III: ANNUAL ELECTRIC POWER AND NATURAL GAS COSTS 15
EXHIBIT IV: PLANT CONSTRUCTION & AMORTIZATION COSTS 16
EXHIBIT V: AD VALOREM & SALES TAX COSTS 17

COMPARATIVE OPERATING COST ANALYSIS III:18
EXHIBIT I: A COMPARATIVE ANNUAL OPERATING COST
SIMULATION SUMMARY 19
EXHIBIT II: COMPARATIVE ANNUAL LABOR COSTS 20
EXHIBIT III: ANNUAL ELECTRIC POWER AND NATURAL GAS COSTS 21
EXHIBIT IV: PLANT CONSTRUCTION & AMORTIZATION COSTS 22
EXHIBIT V: AD VALOREM & SALES TAX COSTS 23

**COMPARATIVE OPERATING COST ANALYSIS:
EXECUTIVE SUMMARY AND NOTES**

Introduction

In the following analysis, major operating costs scaled to a representative food & beverage processing plant are presented for a series of 24 regions in the U.S. and Canada. Findings are summarized in Exhibit I and show total annual operating costs ranging from a high of \$45.7 million in the San Francisco/Bay Area Region of California to a low of \$ 30.2 million in the Eastern Ontario Region of Canada.

Annual operating costs were projected solely for comparative purposes, with only major geographically-variable factors being considered. Those costs not varying significantly with geography, including relocation and start-up expenses, were not considered. The independent Boyd analysis focuses on those key geographically-variable cost elements considered to be most pivotal to the corporate site selection process.

Overall costs were scaled to a hypothetical 300,000 sq. ft. food processing facility employing 500 workers. The format of the cost exhibits will allow the tailoring of cost data and facility specifications to reflect alternate scales of operation and staffing. Geographically-variable operating cost differentials are based on the second quarter of 2016. All costs are in U.S. dollars at an exchange rate of .7500.

Food Processing

The analysis has been structured to be a relevant cost-comparison tool for a broad segment of the over \$2 trillion North American food processing industry, including companies engaged in such sectors as bakery products, snack foods, energy bars, confectionery products, frozen prepared foods, beverage

processing, flavoring extracts and other miscellaneous food preparations and kindred products.

Comparative Food Processing Plant Locations

For purposes of comparative economic analysis, major geographically-variable operating costs have been projected for the following series of North American regions housing significant concentrations of food and beverage industry operations.

- Fairfield/Northern CA Region
- Los Angeles/Southern CA Region
- Modesto/Central Valley CA Region
- Salinas/Monterey Bay CA Region
- San Francisco/Bay Area CA Region
- Miami-Fort Lauderdale/South Florida Region
- Twin Falls/Southern ID Region
- Chicago IL Region
- Portland/Southern Maine Region
- Baltimore/Central MD Region
- Minneapolis/St. Paul MN Region
- Omaha/Eastern Nebraska Region
- Henderson/Southern Nevada Region
- Camden/Southern NJ Region
- Brooklyn/Long Island NY Region
- Rochester/Upstate NY Region
- Cincinnati/Southern OH Region
- Eastern Ontario Region
- Allentown/Lehigh Valley PA Region
- Harrisburg/Lebanon Valley PA Region
- Scranton/Northeast PA Region
- Cleveland/East Tennessee Region
- Dallas/North Texas Region
- Tri-Cities/Southeast WA Region

Comparative Labor Costs

Annual costs for labor, including direct and indirect production workers, are presented in Exhibit II. Costs are based on a representative mix of 15 job titles

for the model 500-worker plant. Comparative labor costs for management staff were not included as these costs would tend not to vary as significantly by geography, but rather by individual company compensation practices. Fringe benefit costs are included as a percent of annual base payroll costs and are assumed to include all statutory benefits, pay for time not worked and company-sponsored benefits.

Comparative Electric Power and Natural Gas Costs

Comparative annual costs for electric power and natural gas are presented in Exhibit III. Annual electric costs are based on industrial rate schedules for large power users in each of the 24 surveyed locations.

Comparative Land Acquisition and Construction Costs

Exhibit IV presents comparative costs for the purchase of industrially-zoned land and the construction of new manufacturing facilities in each of the surveyed regions.

Comparative Ad Valorem and Sales Tax Costs

Exhibit V presents comparative ad valorem (property) tax costs in each of the 24 surveyed locations scaled to the land and building specifications of the model plant. Also presented in this exhibit are representative local and state sales tax costs based on a fixed annual purchase of taxable supplies furnishings and other taxable goods associated with the plant.

Total Annual Operating Cost Rankings

Taken from summary Exhibit I are overall annual cost rankings of the 24 surveyed regions.

TOTAL GEOGRAPHICALLY-VARIABLE OPERATING COST RANKING: NATIONAL	
Regions	Total Annual Operating Costs
San Francisco/Bay Area Region	\$45,731,290
Brooklyn/Long Island Region	\$45,379,307
Salinas/Monterey Bay Region	\$44,169,431
Rochester/Upstate NY Region	\$44,111,146
Los Angeles/Southern CA Region	\$43,872,776
Fairfield/Northern CA Region	\$43,293,859
Camden/Southern NJ Region	\$43,082,181
Minneapolis/St. Paul Region	\$42,855,465
Chicago Region	\$42,393,578
Modesto/Central Valley Region	\$41,783,008
Harrisburg/Lebanon Valley Region	\$40,370,682
Allentown/Lehigh Valley Region	\$40,213,410
Baltimore/Central MD Region	\$39,521,972
Cincinnati/Southern OH Region	\$38,687,906
Scranton/Northeast PA Region	\$38,464,154
Henderson/Southern NV Region	\$38,263,490
Omaha/Eastern NE Region	\$37,761,399
Dallas/North TX Region	\$37,607,053
Twin Falls/Southern ID Region	\$37,547,104
Miami/South Florida Region	\$37,414,004
Tri-Cities/Southeast WA Region	\$37,303,884
Portland/Southern ME Region	\$37,269,826
Cleveland/East TN Region	\$36,467,050
Eastern Ontario Region	\$30,211,263

About Boyd

Devoted exclusively to corporate mobility, The Boyd Company is recognized as the nation's premier authority in comparative business cost analysis. Founded in

1975, Boyd (www.theboydcompany.com) provides independent site selection counsel to leading U.S. and overseas corporations. Boyd clients in the food & beverage industry include PepsiCo, Nestle, Michael Foods, Gerber Products, Frito-Lay, Godiva Chocolatier and other *Fortune 500* companies both in and out of the food sector.

COMPARATIVE OPERATING COST ANALYSIS I

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES I - EXHIBIT I								
COMPARATIVE ANNUAL OPERATING COST SIMULATION SUMMARY(1)								
	Fairfield/ Northern CA Region	Los Angeles/ Southern CA Region	Modesto/ Central Valley Region	Salinas/ Monterey Bay Region	San Francisco/ Bay Area Region	Miami/ South Florida Region	Twin Falls/ Southern ID Region	Chicago Region
Nonexempt Labor (2)								
Weighted Average Hourly Earnings	\$28.55	\$28.99	\$27.69	\$29.16	\$30.02	\$24.54	\$25.21	\$27.95
Annual Base Payroll Costs	\$27,179,600	\$27,598,480	\$26,360,880	\$27,760,320	\$28,579,040	\$23,362,080	\$23,999,920	\$26,608,400
Fringe Benefits	\$10,056,452	\$10,211,438	\$9,753,526	\$10,271,318	\$10,574,245	\$8,643,970	\$8,879,970	\$9,845,108
Total Annual Labor Costs	\$37,236,052	\$37,809,918	\$36,114,406	\$38,031,638	\$39,153,285	\$32,006,050	\$32,879,890	\$36,453,508
Electric Power Costs (3)	\$1,026,660	\$901,512	\$1,026,660	\$1,026,660	\$1,026,660	\$531,864	\$442,488	\$449,304
Natural Gas Power Costs (4)	\$396,000	\$396,000	\$396,000	\$396,000	\$396,000	\$381,600	\$324,600	\$247,800
Amortization Costs (5)	\$3,213,164	\$3,241,464	\$2,922,705	\$3,234,532	\$3,523,808	\$2,862,436	\$2,585,225	\$3,059,681
Property and Sales Tax Costs (6)	\$1,421,983	\$1,523,882	\$1,323,237	\$1,480,601	\$1,631,537	\$1,632,054	\$1,314,901	\$2,183,285
Total Annual Geographically-Variable Operating Costs	\$43,293,859	\$43,872,776	\$41,783,008	\$44,169,431	\$45,731,290	\$37,414,004	\$37,547,104	\$42,393,578
NOTES:								
(1) Includes all major geographically-variable operating costs. Start-up and relocation costs not considered.								
(2) See Exhibit II.								
(3) See Exhibit III.								
(4) See Exhibit III.								
(5) See Exhibit IV.								
(6) See Exhibit V.								

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES I - EXHIBIT II COMPARATIVE ANNUAL LABOR COSTS									
		Fairfield/ Northern CA	Los Angeles/ Southern CA	Modesto/ Central Valley	Salinas/ Monterey Bay	San Francisco/ Bay Area	Miami/ South Florida	Twin Falls/ Southern ID	Chicago
JOB TITLES	Number of Workers	Region	Region	Region	Region	Region	Region	Region	Region
Sanitation	15	\$16.14	\$16.39	\$15.65	\$16.48	\$16.97	\$13.87	\$14.25	\$15.80
General Helper	50	\$20.22	\$20.53	\$19.61	\$20.65	\$21.26	\$17.38	\$17.85	\$19.79
Material Handler	40	\$23.58	\$23.94	\$22.86	\$24.08	\$24.79	\$20.26	\$20.82	\$23.08
Ingredient Stock Clerk	45	\$21.84	\$22.18	\$21.18	\$22.30	\$22.97	\$18.77	\$19.28	\$21.38
Conveyor Operator	35	\$26.62	\$27.03	\$25.81	\$27.18	\$27.99	\$22.88	\$23.50	\$26.06
Batchmaker	50	\$30.02	\$30.49	\$29.11	\$30.65	\$31.57	\$25.80	\$26.51	\$29.39
Spinning Machine Operator	40	\$34.05	\$34.58	\$33.02	\$34.77	\$35.80	\$29.26	\$30.06	\$33.33
Sorter and Assembler	55	\$22.19	\$22.53	\$21.52	\$22.66	\$23.33	\$19.07	\$19.59	\$21.72
Production Inspector	35	\$36.11	\$36.66	\$35.01	\$36.87	\$37.96	\$31.03	\$31.88	\$35.34
Filling/Packaging Machine Operator	40	\$38.15	\$38.74	\$36.99	\$38.96	\$40.11	\$32.79	\$33.68	\$37.35
Label Machine Operator	35	\$32.88	\$33.39	\$31.89	\$33.58	\$34.57	\$28.26	\$29.03	\$32.19
Quality Control	15	\$39.21	\$39.82	\$38.02	\$40.04	\$41.23	\$33.70	\$34.62	\$38.38
Food Technician	25	\$35.66	\$36.21	\$34.58	\$36.41	\$37.50	\$30.65	\$31.49	\$34.91
Sanitation Technician	15	\$33.58	\$34.10	\$32.56	\$34.29	\$35.31	\$28.86	\$29.65	\$32.88
Maintenance Mechanic	5	\$31.64	\$32.13	\$30.68	\$32.31	\$33.27	\$27.19	\$27.94	\$30.98
Total Workers	500								
Weighted Average Hourly Earnings (1)		\$28.55	\$28.99	\$27.69	\$29.16	\$30.02	\$24.54	\$25.21	\$27.95
Total Annual Base Payroll Costs (2)		\$27,179,600	\$27,598,480	\$26,360,880	\$27,760,320	\$28,579,040	\$23,362,080	\$23,999,920	\$26,608,400
Fringe Benefits (3)		\$10,056,452	\$10,211,438	\$9,753,526	\$10,271,318	\$10,574,245	\$8,643,970	\$8,879,970	\$9,845,108
Total Annual Labor Costs		\$37,236,052	\$37,809,918	\$36,114,406	\$38,031,638	\$39,153,285	\$32,006,050	\$32,879,890	\$36,453,508
NOTES:									
(1) For mature plant in third year of operation based on current wage rates and benefit practices. Comparative labor costs reflect field research, Boyd food industry sources, and 2016 comparative Boyd BizCosts® wage data placing plant in competitive hiring position in each labor market area. Job titles reflect a representative mix of key direct and indirect job functions for a 500-worker production facility.									
(2) Assumes 1,904 hours worked per year per employee based on 12 paid holidays and a two-week vacation for mature plant.									
(3) Based on an estimated 37 percent of total annual base payroll costs. Costs include all statutory benefits, pay for time not worked and company-sponsored benefits.									

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES I - EXHIBIT III					
ANNUAL ELECTRIC POWER COST COMPARISONS					
Location	Electric Utility Company	Annual Electric Power Cost (1)	Annual Cost Per kWh (cents)	Annual Natural Gas Cost (2)	Total Annual Electric Power and Natural Gas Costs
Fairfield/Northern CA Region	Pacific Gas and Electric	\$1,026,660	13.16	\$396,000	\$1,422,660
Los Angeles/Southern CA Region	Southern California Edison	\$901,512	11.56	\$396,000	\$1,297,512
Modesto/Central Valley Region	Pacific Gas and Electric	\$1,026,660	13.16	\$396,000	\$1,422,660
Salinas/Monterey Bay Region	Pacific Gas and Electric	\$1,026,660	13.16	\$396,000	\$1,422,660
San Francisco/Bay Area Region	Pacific Gas and Electric	\$1,026,660	13.16	\$396,000	\$1,422,660
Miami/South Florida Region	Florida Power and Light	\$531,864	6.82	\$381,600	\$913,464
Twin Falls/Southern ID Region	Idaho Power	\$442,488	5.67	\$324,600	\$767,088
Chicago Region	Commonwealth Edison	\$449,304	5.76	\$247,800	\$697,104
NOTES:					
(1) Based on assumed monthly demand of 1,000 kW and 650,000 kWh monthly consumption. Annual costs reflect comparative industrial general service rates. No incentives or special discounts assumed.					
(2) Annual costs reflect an assumed monthly use of 50,000 therms of natural gas. Gas prices are based on latest monthly state averages for industrial-use gas.					

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES I - EXHIBIT IV								
PLANT CONSTRUCTION AND AMORTIZATION COSTS								
	Fairfield/ Northern CA Region	Los Angeles/ Southern CA Region	Modesto/ Central Valley Region	Salinas/ Monterey Bay Region	San Francisco/ Bay Area Region	Miami/ South Florida Region	Twin Falls/ Southern ID Region	Chicago Region
Site Acquisition: No. of Acres	30	30	30	30	30	30	30	30
Cost per Acre (1)	\$267,500	\$325,000	\$121,500	\$289,500	\$396,500	\$267,500	\$63,500	\$163,500
Site Improvement Cost (2)	--	--	--	--	--	--	--	--
Total Land Cost	\$8,025,000	\$9,750,000	\$3,645,000	\$8,685,000	\$11,895,000	\$8,025,000	\$1,905,000	\$4,905,000
Construction Cost (3)	\$28,445,361	\$27,217,728	\$27,720,638	\$28,160,907	\$30,034,846	\$22,281,424	\$23,529,532	\$28,867,950
Machinery and Equipment	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000
Total Project Investment	\$56,470,361	\$56,967,728	\$51,365,638	\$56,845,907	\$61,929,846	\$50,306,424	\$45,434,532	\$53,772,950
Project Amortization								
Cost of Funds (Interest)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Payment Factor (4)	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569
Total Annual Amortization Cost	\$3,213,164	\$3,241,464	\$2,922,705	\$3,234,532	\$3,523,808	\$2,862,436	\$2,585,225	\$3,059,681
NOTES:								
(1)	Boyd estimate only. Actual negotiated costs would vary by site specifics, including location, access, visibility, etc. Costs reflect fully serviced industrially-zoned land within a controlled industrial park setting.							
(2)	Land preparation costs limited to normal grading and held constant for purposes of analysis.							
(3)	Based on construction of fully equipped 300,000 sq. ft. industrial building. Geographic differentials in building costs are based on latest BizCosts® construction cost index data for the second quarter of 2016.							
(4)	Assumes 25-year level amortization payments at 3.0 percent.							

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES I - EXHIBIT V								
AD VALOREM AND SALES TAX COSTS								
	Fairfield/ Northern CA Region	Los Angeles/ Southern CA Region	Modesto/ Central Valley Region	Salinas/ Monterey Bay Region	San Francisco/ Bay Area Region	Miami/ South Florida Region	Twin Falls/ Southern ID Region	Chicago Region
Real Property Tax Cost								
Land Cost (1)	\$8,025,000	\$9,750,000	\$3,645,000	\$8,685,000	\$11,895,000	\$8,025,000	\$1,905,000	\$4,905,000
Building Cost (2)	\$28,445,361	\$27,217,728	\$27,720,638	\$28,160,907	\$30,034,846	\$22,281,424	\$23,529,532	\$28,867,950
Total	\$36,470,361	\$36,967,728	\$31,365,638	\$36,845,907	\$41,929,846	\$30,306,424	\$25,434,532	\$33,772,950
Effective Tax Rate	\$9.00	\$10.79	\$11.78	\$9.21	\$10.59	\$24.98	\$22.21	\$30.41
Real Property Tax Cost (3)	\$328,233	\$398,882	\$369,487	\$339,351	\$444,037	\$757,054	\$564,901	\$1,027,035
Sales Tax Cost								
Taxable Goods Purchases	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Sales Tax Rate (Percent)	8.75	9.00	7.63	9.13	9.50	7.00	6.00	9.25
Total Annual Sales Tax Cost (4)	\$1,093,750	\$1,125,000	\$953,750	\$1,141,250	\$1,187,500	\$875,000	\$750,000	\$1,156,250
Total Annual Ad Valorem and Sales Tax Costs	\$1,421,983	\$1,523,882	\$1,323,237	\$1,480,601	\$1,631,537	\$1,632,054	\$1,314,901	\$2,183,285
NOTES:								
(1) See Exhibit IV.								
(2) See Exhibit IV.								
(3) Based on nominal real property tax rate and assessment practices at each location based on \$1,000 of valuation. Petitions for abatements and lower assessments not considered. Effective tax rates are considered representative property tax levy amounts. Actual rates will vary based on alternate municipal, school, fire and special assessment districts within each surveyed locations.								
(4) Based on prevailing local and state sales tax levies on taxable purchases of supplies, furnishings, equipment and other taxable goods.								

COMPARATIVE OPERATING COST ANALYSIS II

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES II - EXHIBIT I										
COMPARATIVE ANNUAL OPERATING COST SIMULATION SUMMARY(1)										
	Portland/ Southern ME Region	Baltimore/ Central MD Region	Minneapolis/ St. Paul Region	Omaha/ Eastern NE Region	Henderson/ Southern NV Region	Camden/ Southern NJ Region	Brooklyn/ Long Island Region	Rochester/ Upstate NY Region		
Nonexempt Labor (2)										
Weighted Average Hourly Earnings	\$24.73	\$26.36	\$28.02	\$25.30	\$25.25	\$28.23	\$29.07	\$29.44		
Annual Base Payroll Costs	\$23,542,960	\$25,094,720	\$26,675,040	\$24,085,600	\$24,038,000	\$26,874,960	\$27,674,640	\$28,026,880		
Fringe Benefits	\$8,710,895	\$9,285,046	\$9,869,765	\$8,911,672	\$8,894,060	\$9,943,735	\$10,239,617	\$10,369,946		
Total Annual Labor Costs	\$32,253,855	\$34,379,766	\$36,544,805	\$32,997,272	\$32,932,060	\$36,818,695	\$37,914,257	\$38,396,826		
Electric Power Costs (3)	\$840,276	\$860,328	\$567,432	\$546,780	\$591,156	\$832,488	\$1,240,428	\$642,264		
Natural Gas Power Costs (4)	\$507,600	\$502,200	\$258,600	\$267,000	\$391,200	\$438,600	\$389,400	\$389,400		
Amortization Costs (5)	\$2,537,969	\$2,637,533	\$3,082,378	\$2,568,695	\$2,968,153	\$3,075,017	\$3,712,908	\$2,761,287		
Property and Sales Tax Costs (6)	\$1,130,126	\$1,142,145	\$2,402,250	\$1,381,652	\$1,380,921	\$1,917,381	\$2,122,314	\$1,921,369		
Total Annual Geographically- Variable Operating Costs	\$37,269,826	\$39,521,972	\$42,855,465	\$37,761,399	\$38,263,490	\$43,082,181	\$45,379,307	\$44,111,146		
NOTES:										
(1) Includes all major geographically-variable operating costs. Start-up and relocation costs not considered.										
(2) See Exhibit II.										
(3) See Exhibit III.										
(4) See Exhibit III.										
(5) See Exhibit IV.										
(6) See Exhibit V.										

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES II - EXHIBIT II									
COMPARATIVE ANNUAL LABOR COSTS									
		Portland/ Southern ME	Baltimore/ Central MD	Minneapolis/ St. Paul	Omaha/ Eastern NE	Henderson/ Southern NV	Camden/ Southern NJ	Brooklyn/ Long Island	Rochester/ Upstate NY
JOB TITLES	Number of Workers	Region	Region	Region	Region	Region	Region	Region	Region
Sanitation	15	\$13.98	\$14.90	\$15.84	\$14.30	\$14.27	\$15.96	\$16.43	\$16.64
General Helper	50	\$17.51	\$18.67	\$19.84	\$17.92	\$17.88	\$19.99	\$20.58	\$20.85
Material Handler	40	\$20.42	\$21.77	\$23.14	\$20.89	\$20.85	\$23.32	\$24.00	\$24.31
Ingredient Stock Clerk	45	\$18.92	\$20.16	\$21.44	\$19.35	\$19.31	\$21.60	\$22.23	\$22.52
Conveyor Operator	35	\$23.06	\$24.58	\$26.13	\$23.59	\$23.54	\$26.32	\$27.10	\$27.45
Batchmaker	50	\$26.00	\$27.72	\$29.46	\$26.60	\$26.54	\$29.69	\$30.56	\$30.95
Spinning Machine Operator	40	\$29.49	\$31.43	\$33.42	\$30.17	\$30.11	\$33.67	\$34.66	\$35.11
Sorter and Assembler	55	\$19.22	\$20.49	\$21.78	\$19.66	\$19.62	\$21.94	\$22.59	\$22.88
Production Inspector	35	\$31.27	\$33.33	\$35.43	\$31.99	\$31.92	\$35.70	\$36.75	\$37.22
Filling/Packaging Machine Operator	40	\$33.05	\$35.22	\$37.44	\$33.80	\$33.73	\$37.73	\$38.84	\$39.33
Label Machine Operator	35	\$28.48	\$30.36	\$32.27	\$29.13	\$29.07	\$32.52	\$33.47	\$33.90
Quality Control	15	\$33.96	\$36.20	\$38.48	\$34.74	\$34.67	\$38.77	\$39.92	\$40.43
Food Technician	25	\$30.89	\$32.92	\$35.00	\$31.60	\$31.53	\$35.26	\$36.30	\$36.77
Sanitation Technician	15	\$29.09	\$31.00	\$32.96	\$29.76	\$29.69	\$33.21	\$34.19	\$34.62
Maintenance Mechanic	5	\$27.41	\$29.21	\$31.06	\$28.04	\$27.98	\$31.29	\$32.21	\$32.62
Total Workers	500								
Weighted Average Hourly Earnings (1)		\$24.73	\$26.36	\$28.02	\$25.30	\$25.25	\$28.23	\$29.07	\$29.44
Total Annual Base Payroll Costs (2)		\$23,542,960	\$25,094,720	\$26,675,040	\$24,085,600	\$24,038,000	\$26,874,960	\$27,674,640	\$28,026,880
Fringe Benefits (3)		\$8,710,895	\$9,285,046	\$9,869,765	\$8,911,672	\$8,894,060	\$9,943,735	\$10,239,617	\$10,369,946
Total Annual Labor Costs		\$32,253,855	\$34,379,766	\$36,544,805	\$32,997,272	\$32,932,060	\$36,818,695	\$37,914,257	\$38,396,826
NOTES:									
(1) For mature plant in third year of operation based on current wage rates and benefit practices. Comparative labor costs reflect field research, Boyd food industry sources, and comparative Boyd BizCosts® wage data placing plant in competitive hiring position in each labor market area. Job titles reflect a representative mix of key direct and indirect job functions for a 500-worker production facility.									
(2) Assumes 1,904 hours worked per year per employee based on 12 paid holidays and a two-week vacation for mature plant.									
(3) Based on an estimated 37 percent of total annual base payroll costs. Costs include all statutory benefits, pay for time not worked and company-sponsored benefits.									

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES II - EXHIBIT III					
ANNUAL ELECTRIC POWER COST COMPARISONS					
Location	Electric Utility Company	Annual Electric Power Cost (1)	Annual Cost Per kWh (cents)	Annual Natural Gas Cost (2)	Total Annual Electric Power and Natural Gas Costs
Portland/Southern ME Region	Central Maine Power	\$840,276	10.77	\$507,600	\$1,347,876
Baltimore/Central MD Region	Baltimore Gas and Electric	\$860,328	11.03	\$502,200	\$1,362,528
Minneapolis/St. Paul Region	Northern States Power	\$567,432	7.27	\$258,600	\$826,032
Omaha/Eastern NE Region	Omaha Public Power	\$546,780	7.01	\$267,000	\$813,780
Henderson/Southern NV Region	Nevada Power	\$591,156	7.58	\$391,200	\$982,356
Camden/Southern NJ Region	PSE&G	\$832,488	10.67	\$438,600	\$1,271,088
Brooklyn/Long Island Region	Consolidated Edison	\$1,240,428	15.90	\$389,400	\$1,629,828
Rochester/Upstate NY Region	Rochester Gas & Electric	\$642,264	8.23	\$389,400	\$1,031,664
NOTES:					
(1) Based on assumed monthly demand of 1,000 kW and 650,000 kWh monthly consumption. Annual costs reflect comparative industrial general service rates. No incentives or special discounts assumed.					
(2) Annual costs reflect an assumed monthly use of 50,000 therms of natural gas. Gas prices are based on latest monthly state averages for industrial-use gas.					

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES II - EXHIBIT IV									
PLANT CONSTRUCTION AND AMORTIZATION COSTS									
	Portland/ Southern ME Region	Baltimore/ Central MD Region	Minneapolis/ St. Paul Region	Omaha/ Eastern NE Region	Henderson/ Southern NV Region	Camden/ Southern NJ Region	Brooklyn/ Long Island Region	Rochester/ Upstate NY Region	
Site Acquisition: No. of Acres	30	30	30	30	30	30	30	30	
Cost per Acre (1)	\$53,500	\$98,500	\$171,500	\$71,500	\$189,500	\$210,500	\$389,500	\$81,500	
Site Improvement Cost (2)	--	--	--	--	--	--	--	--	
Total Land Cost	\$1,605,000	\$2,955,000	\$5,145,000	\$2,145,000	\$5,685,000	\$6,315,000	\$11,685,000	\$2,445,000	
Construction Cost (3)	\$22,999,022	\$23,398,826	\$29,026,846	\$22,999,022	\$26,479,373	\$27,727,481	\$33,568,218	\$26,083,762	
Machinery and Equipment	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	
Total Project Investment	\$44,604,022	\$46,353,826	\$54,171,846	\$45,144,022	\$52,164,373	\$54,042,481	\$65,253,218	\$48,528,762	
Project Amortization									
Cost of Funds (Interest)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Payment Factor (4)	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	
Total Annual Amortization Cost	\$2,537,969	\$2,637,533	\$3,082,378	\$2,568,695	\$2,968,153	\$3,075,017	\$3,712,908	\$2,761,287	
NOTES:									
(1) Boyd estimate only. Actual negotiated costs would vary by site specifics, including location, access, visibility, etc. Costs reflect fully serviced industrially-zoned land within a controlled industrial park setting.									
(2) Land preparation costs limited to normal grading and held constant for purposes of analysis.									
(3) Based on construction of fully equipped 300,000 sq. ft. industrial building. Geographic differentials in building costs are based on latest BizCosts® construction cost index data for the second quarter of 2016.									
(4) Assumes 25-year level amortization payments at 3.0 percent.									

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES II - EXHIBIT V								
AD VALOREM AND SALES TAX COSTS								
	Portland/ Southern ME Region	Baltimore/ Central MD Region	Minneapolis/ St. Paul Region	Omaha/ Eastern NE Region	Henderson/ Southern NV Region	Camden/ Southern NJ Region	Brooklyn/ Long Island Region	Rochester/ Upstate NY Region
Real Property Tax Cost								
Land Cost (1)	\$1,605,000	\$2,955,000	\$5,145,000	\$2,145,000	\$5,685,000	\$6,315,000	\$11,685,000	\$2,445,000
Building Cost (2)	\$22,999,022	\$23,398,826	\$29,026,846	\$22,999,022	\$26,479,373	\$27,727,481	\$33,568,218	\$26,083,762
Total	\$24,604,022	\$26,353,826	\$34,171,846	\$25,144,022	\$32,164,373	\$34,042,481	\$45,253,218	\$28,528,762
Effective Tax Rate	\$17.99	\$14.88	\$41.84	\$20.15	\$11.26	\$30.62	\$22.37	\$29.01
Real Property Tax Cost (3)	\$442,626	\$392,145	\$1,429,750	\$506,652	\$362,171	\$1,042,381	\$1,012,314	\$827,619
Sales Tax Cost								
Taxable Goods Purchases	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Sales Tax Rate (Percent)	5.50	6.00	7.78	7.00	8.15	7.00	8.88	8.75
Total Annual Sales Tax Cost (4)	\$687,500	\$750,000	\$972,500	\$875,000	\$1,018,750	\$875,000	\$1,110,000	\$1,093,750
Total Annual Ad Valorem and Sales Tax Costs	\$1,130,126	\$1,142,145	\$2,402,250	\$1,381,652	\$1,380,921	\$1,917,381	\$2,122,314	\$1,921,369
NOTES:								
(1) See Exhibit IV.								
(2) See Exhibit IV.								
(3) Based on nominal real property tax rate and assessment practices at each location based on \$1,000 of valuation. Petitions for abatements and lower assessments not considered. Effective tax rates are considered representative property tax levy amounts. Actual rates will vary based on alternate municipal, school, fire and special assessment districts within each surveyed locations.								
(4) Based on prevailing local and state sales tax levies on taxable purchases of supplies, furnishings, equipment and other taxable goods.								

COMPARATIVE OPERATING COST ANALYSIS III

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES III - EXHIBIT I									
COMPARATIVE ANNUAL OPERATING COST SIMULATION SUMMARY(1)									
	Cincinnati/ Southern OH Region	Eastern Ontario Region	Allentown/ Lehigh Valley Region	Harrisburg/ Lebanon Valley Region	Scranton/ Northeast PA Region	Cleveland/ East TN Region	Dallas/ North Texas Region	Tri Cities/ Southeast WA Region	
Nonexempt Labor (2)									
Weighted Average Hourly Earnings	\$25.87	\$21.16	\$26.45	\$26.73	\$25.43	\$24.38	\$25.21	\$24.95	
Annual Base Payroll Costs	\$24,628,240	\$20,144,320	\$25,180,400	\$25,446,960	\$24,209,360	\$23,209,760	\$23,999,920	\$23,752,400	
Fringe Benefits	\$9,112,449	\$3,827,421	\$9,316,748	\$9,415,375	\$8,957,463	\$8,587,611	\$8,879,970	\$8,788,388	
Total Annual Labor Costs	\$33,740,689	\$23,971,741	\$34,497,148	\$34,862,335	\$33,166,823	\$31,797,371	\$32,879,890	\$32,540,788	
Electric Power Costs (3)	\$565,056	\$517,428	\$725,688	\$725,688	\$725,688	\$481,608	\$457,332	\$393,120	
Natural Gas Power Costs (4)	\$318,600	\$292,783	\$454,800	\$454,800	\$454,800	\$271,200	\$144,000	\$438,600	
Amortization Costs (5)	\$2,641,762	\$2,751,969	\$2,872,097	\$2,773,965	\$2,653,368	\$2,373,331	\$2,521,318	\$2,607,349	
Property and Sales Tax Costs (6)	\$1,421,799	\$2,677,342	\$1,663,677	\$1,553,894	\$1,463,475	\$1,543,540	\$1,604,513	\$1,324,027	
Total Annual Geographically-Variable Operating Costs	\$38,687,906	\$30,211,263	\$40,213,410	\$40,370,682	\$38,464,154	\$36,467,050	\$37,607,053	\$37,303,884	
NOTES:									
(1) Includes all major geographically-variable operating costs. Start-up and relocation costs not considered.									
(2) See Exhibit II.									
(3) See Exhibit III.									
(4) See Exhibit III.									
(5) See Exhibit IV.									
(6) See Exhibit V.									

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES III - EXHIBIT II COMPARATIVE ANNUAL LABOR COSTS									
		Cincinnati/ Southern OH Region	Eastern Ontario Region	Allentown/ Lehigh Valley Region	Harrisburg/ Lebanon Valley Region	Scranton/ Northeast PA Region	Cleveland/ East TN Region	Dallas/ North Texas Region	Tri Cities/ Southeast WA Region
JOB TITLES	Number of Workers								
Sanitation	15	\$14.63	\$11.97	\$14.96	\$15.12	\$14.38	\$13.79	\$14.26	\$14.11
General Helper	50	\$18.29	\$14.96	\$18.70	\$18.90	\$17.98	\$17.24	\$17.83	\$17.64
Material Handler	40	\$21.36	\$17.48	\$21.84	\$22.08	\$20.99	\$20.13	\$20.82	\$20.60
Ingredient Stock Clerk	45	\$19.75	\$16.16	\$20.20	\$20.41	\$19.41	\$18.62	\$19.25	\$19.05
Conveyor Operator	35	\$24.14	\$19.75	\$24.68	\$24.95	\$23.73	\$22.75	\$23.53	\$23.28
Batchmaker	50	\$27.21	\$22.26	\$27.83	\$28.12	\$26.75	\$25.65	\$26.52	\$26.24
Spinning Machine Operator	40	\$30.87	\$25.26	\$31.57	\$31.90	\$30.34	\$29.10	\$30.09	\$29.77
Sorter and Assembler	55	\$20.04	\$16.40	\$20.50	\$20.71	\$19.70	\$18.89	\$19.54	\$19.33
Production Inspector	35	\$32.77	\$26.81	\$33.51	\$33.87	\$32.21	\$30.89	\$31.94	\$31.61
Filling/Packaging Machine Operator	40	\$34.53	\$28.25	\$35.31	\$35.68	\$33.94	\$32.54	\$33.65	\$33.30
Label Machine Operator	35	\$29.85	\$24.42	\$30.52	\$30.84	\$29.34	\$28.13	\$29.09	\$28.78
Quality Control	15	\$35.55	\$29.09	\$36.35	\$36.74	\$34.94	\$33.51	\$34.65	\$34.29
Food Technician	25	\$32.33	\$26.45	\$33.06	\$33.42	\$31.78	\$30.48	\$31.51	\$31.18
Sanitation Technician	15	\$30.43	\$24.90	\$31.12	\$31.45	\$29.91	\$28.68	\$29.66	\$29.35
Maintenance Mechanic	5	\$28.67	\$23.46	\$29.32	\$29.64	\$28.18	\$27.03	\$27.95	\$27.66
Total Workers	500								
Weighted Average Hourly Earnings (1)		\$25.87	\$21.16	\$26.45	\$26.73	\$25.43	\$24.38	\$25.21	\$24.95
Total Annual Base Payroll Costs (2)		\$24,628,240	\$20,144,320	\$25,180,400	\$25,446,960	\$24,209,360	\$23,209,760	\$23,999,920	\$23,752,400
Fringe Benefits (3)		\$9,112,449	\$3,827,421	\$9,316,748	\$9,415,375	\$8,957,463	\$8,587,611	\$8,879,970	\$8,788,388
Total Annual Labor Costs		\$33,740,689	\$23,971,741	\$34,497,148	\$34,862,335	\$33,166,823	\$31,797,371	\$32,879,890	\$32,540,788
NOTES:									
(1) For mature plant in third year of operation based on current wage rates and benefit practices. Comparative labor costs reflect field research, Boyd food industry sources, and comparative Boyd BizCosts® wage data placing plant in competitive hiring position in each labor market area. Job titles reflect a representative mix of key direct and indirect job functions for a 500-worker production facility.									
(2) Assumes 1,904 hours worked per year per employee based on 12 paid holidays and a two-week vacation for mature plant.									
(3) Based on an estimated 37 percent of total annual base payroll costs for U.S. locations. Eastern Ontario assumes a rate of 19 percent. Costs include all statutory benefits, pay for time not worked and company-sponsored benefits.									

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES III - EXHIBIT III					
ANNUAL ELECTRIC POWER COST COMPARISONS					
Location	Electric Utility Company	Annual Electric Power Cost (1)	Annual Cost Per kWh (cents)	Annual Natural Gas Cost (2)	Total Annual Electric Power and Natural Gas Costs
Cincinnati/Southern OH Region	Duke Energy	\$565,056	7.24	\$318,600	\$883,656
Eastern Ontario Region	Hydro One	\$517,428	6.63	\$292,783	\$810,211
Allentown/Lehigh Valley Region	Pennsylvania Power and Light	\$725,688	9.30	\$454,800	\$1,180,488
Harrisburg/Lebanon Valley Region	Pennsylvania Power and Light	\$725,688	9.30	\$454,800	\$1,180,488
Scranton/Northeast PA Region	Pennsylvania Power and Light	\$725,688	9.30	\$454,800	\$1,180,488
Cleveland/East TN Region	Cleveland Utilities	\$481,608	6.17	\$271,200	\$752,808
Dallas/North TX Region	Oncor Electric	\$457,332	5.86	\$144,000	\$601,332
Tri-Cities/Southeast WA Region	Benton PUD	\$393,120	5.04	\$438,600	\$831,720
NOTES:					
(1) Based on assumed monthly demand of 1,000 kW and 650,000 kWh monthly consumption. Annual costs reflect comparative industrial general service rates. No incentives or special discounts assumed.					
(2) Annual costs reflect an assumed monthly use of 50,000 therms of natural gas. Gas prices are based on latest monthly state averages for industrial-use gas.					

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES III - EXHIBIT IV PLANT CONSTRUCTION AND AMORTIZATION COSTS								
	Cincinnati/ Southern OH Region	Eastern Ontario Region	Allentown/ Lehigh Valley Region	Harrisburg/ Lebanon Valley Region	Scranton/ Northeast PA Region	Cleveland/ East TN Region	Dallas/ North Texas Region	Tri Cities/ Southeast WA Region
Site Acquisition: No. of Acres	30	30	30	30	30	30	30	30
Cost per Acre (1)	\$81,500	\$45,500	\$154,500	\$147,500	\$79,500	\$53,500	\$91,500	\$67,500
Site Improvement Cost (2)	--	--	--	--	--	--	--	--
Total Land Cost	\$2,445,000	\$1,365,000	\$4,635,000	\$4,425,000	\$2,385,000	\$1,605,000	\$2,745,000	\$2,025,000
Construction Cost (3)	\$23,983,156	\$27,000,000	\$25,841,223	\$24,326,578	\$24,247,130	\$20,105,563	\$21,566,388	\$23,798,357
Machinery and Equipment	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000
Total Project Investment	\$46,428,156	\$48,365,000	\$50,476,223	\$48,751,578	\$46,632,130	\$41,710,563	\$44,311,388	\$45,823,357
Project Amortization								
Cost of Funds (Interest)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Payment Factor (4)	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569	0.0569
Total Annual Amortization Cost	\$2,641,762	\$2,751,969	\$2,872,097	\$2,773,965	\$2,653,368	\$2,373,331	\$2,521,318	\$2,607,349
NOTES:								
(1) Boyd estimate only. Actual negotiated costs would vary by site specifics, including location, access, visibility, etc. Costs reflect fully serviced industrially-zoned land within a controlled industrial park setting.								
(2) Land preparation costs limited to normal grading and held constant for purposes of analysis.								
(3) Based on construction of fully equipped 300,000 sq. ft. industrial building. Geographic differentials in building costs are based on latest BizCosts® construction cost index data for the second quarter of 2016.								
(4) Assumes 25-year level amortization payments at 3.0 percent.								

**A COMPARATIVE OPERATING
COST ANALYSIS**

**FOOD & BEVERAGE PROCESSING
INDUSTRY SITE SELECTION**

SERIES III - EXHIBIT V AD VALOREM AND SALES TAX COSTS								
	Cincinnati/ Southern OH Region	Eastern Ontario Region	Allentown/ Lehigh Valley Region	Harrisburgh/ Lebanon Valley Region	Scranton/ Northeast PA Region	Cleveland/ East TN Region	Dallas/ North Texas Region	Tri Cities/ Southeast WA Region
Real Property Tax Cost								
Land Cost (1)	\$2,445,000	\$1,365,000	\$4,635,000	\$4,425,000	\$2,385,000	\$1,605,000	\$2,745,000	\$2,025,000
Building Cost (2)	\$23,983,156	\$27,000,000	\$25,841,223	\$24,326,578	\$24,247,130	\$20,105,563	\$21,566,388	\$23,798,357
Total	\$26,428,156	\$28,365,000	\$30,476,223	\$28,751,578	\$26,632,130	\$21,710,563	\$24,311,388	\$25,823,357
Effective Tax Rate	\$20.69	\$37.10	\$29.98	\$27.96	\$26.79	\$14.96	\$23.58	\$14.00
Real Property Tax Cost (3)	\$546,799	\$1,052,342	\$913,677	\$803,894	\$713,475	\$324,790	\$573,263	\$361,527
Sales Tax Cost								
Taxable Goods Purchases	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000	\$12,500,000
Sales Tax Rate (Percent)	7.00	13.00	6.00	6.00	6.00	9.75	8.25	7.70
Total Annual Sales Tax Cost (4)	\$875,000	\$1,625,000	\$750,000	\$750,000	\$750,000	\$1,218,750	\$1,031,250	\$962,500
Total Annual Ad Valorem and Sales Tax Costs	\$1,421,799	\$2,677,342	\$1,663,677	\$1,553,894	\$1,463,475	\$1,543,540	\$1,604,513	\$1,324,027
NOTES:								
(1) See Exhibit IV.								
(2) See Exhibit IV.								
(3) Based on nominal real property tax rate and assessment practices at each location based on \$1,000 of valuation. Petitions for abatements and lower assessments not considered. Effective tax rates are considered representative property tax levy amounts. Actual rates will vary based on alternate municipal, school, fire and special assessment districts within each surveyed locations.								
(4) Based on prevailing local and state sales tax levies on taxable purchases of supplies, furnishings, equipment and other taxable goods. The Ontario sales tax cost does not reflect certain input tax credits which are available to manufacturers.								

