



## ***2016 Comparative Distribution/Warehousing Site Selection Operating Costs Analysis***

In the 2016 site selection analysis, completed by The Boyd Company, Princeton, NJ, major operating costs scaled to a representative 250-worker distribution warehouse were presented for a series of 20 regional locations in the U.S and Canada

The study focused on current and emerging centres of distribution and warehousing activity.

Annual operating cost totals were ranked in a summary chart (below) and range from a high of \$21.3 million in the Meadowlands/Northern New Jersey Region to a low of \$13.4 billion 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 Boyd analysis focused on those key geographically-variable cost elements considered to be most pivotal within the warehouse site selection process.

All costs, in the analysis, are in U.S. dollars at an exchange rate of .7500. Warehouse operating costs were scaled to a hypothetical 500,000 sq. ft. facility employing 250 hourly workers and shipping over-the-road to a Northeast U.S. and Eastern Canada regional market.

The analysis provides an independent and authoritative point of reference for the assessment of comparative operating cost levels in each of the surveyed locations. The format of the cost exhibits will allow a further tailoring of warehouse specifications, shipping patterns and staffing levels to reflect alternate scales of operation and market reach of the hypothetical warehouse facility.

**Total Annual Operating Cost Ranking**

DISTRIBUTION WAREHOUSING	
TOTAL GEOGRAPHICALLY-VARIABLE OPERATING COST RANKING: NATIONAL	
Distribution Warehouse Location	Total Annual Operating Costs
Meadowlands/Northern NJ Region	\$21,322,480
Cranbury/Central NJ Region	\$20,663,653
Stoughton/Southeast MA Region	\$20,154,292
Bridgeport/Southern NJ Region	\$19,787,526
Springfield/Central MA Region	\$19,747,214
Worcester/Southeast MA Region	\$19,737,262
Danbury/Southern CT Region	\$19,165,711
Pittsfield/Western MA Region	\$19,079,941
Newburgh/Hudson Valley NY Region	\$18,699,489
Windsor/Northern CT Region	\$18,561,154
Lehigh Valley Region PA Region	\$18,484,896
Camp Hill/Central PA Region	\$18,473,104
Syracuse/Upstate New York	\$18,462,136
Schenectady/Upstate NY Region	\$18,400,406
Pittsburgh/Western PA Region	\$18,131,187
York/Southeast PA Region	\$18,024,334
Concord/Southern NH Region	\$17,933,749
Hagerstown/Western MD Region	\$17,318,301
Dover/Central DE Region	\$16,963,894
Eastern Ontario Region	\$13,346,431

<b>Comparative Annual Operating Cost Simulation Summary – select regions</b>						
	Highest Cost Location					Lowest Cost Location
	Meadowlands /Northern NJ Region	Stoughton/ Southeast MA Region	Syracuse/ Upstate NY	York/ Southeast PA Region	Dover/ Central DE Region	Eastern Ontario Region
Nonexempt Labour:						
Weighted Average Hourly Earnings	\$20.53	\$19.40	\$18.43	\$17.71	\$17.49	\$14.33

Annual Base Payroll Costs	\$9,772,280	\$9,234,400	\$8,772,680	\$8,429,960	\$8,325,240	\$6,821,080
Fringe Benefits	\$3,615,744	\$3,416,728	\$3,245,892	\$3,119,085	\$3,080,339	\$1,296,005
Total Annual Labour Costs	\$13,388,024	\$12,651,128	\$12,018,572	\$11,549,045	\$11,405,579	\$8,117,085
Electric Power Costs	\$609,600	\$601,692	\$297,708	\$478,644	\$548,160	\$384,000
Amortization Costs	\$4,510,897	\$4,153,078	\$3,423,984	\$3,472,895	\$3,548,715	\$1,228,613
Property and Sales Tax Costs	\$2,116,604	\$1,984,767	\$1,839,815	\$1,485,725	\$384,274	\$2,469,852
Shipping Costs	\$697,355	\$763,627	\$882,057	\$1,038,025	\$1,077,166	\$1,212,641
<b>Total Annual Geographically-Variable Operating Costs</b>	<b>\$21,322,480</b>	<b>\$20,154,292</b>	<b>\$18,462,136</b>	<b>\$18,024,334</b>	<b>\$16,963,894</b>	<b>\$13,412,191</b>

Notes: Includes all major geographically-variable operating costs. Start-up and relocation costs not considered.

### ***Comparative Nonexempt Labor Costs***

Annual costs for hourly labor, including material handling, order filling, clerical, maintenance and selected other typical warehouse functions, are below.

Costs are based on a representative mix of job descriptions for the model 250-worker distribution warehouse.

Comparative labor costs for management 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 Costs***

Annual costs reflect industrial rate schedules of the respective utilities serving each of the 20 surveyed areas.

### ***Comparative Land Acquisition and Construction Costs***

Included are the comparative costs for the purchase of industrially-zoned land and the construction of new warehousing space in each of the 20 surveyed locations.

### ***Comparative Ad Valorem and Sales Tax Costs***

In addition to the comparative ad valorem (property) tax costs in each of the 20 surveyed sites scaled to the land and building specifications of the model warehouse, also

presented are comparative local and state sales tax costs based on a fixed annual purchase of warehouse supplies, furnishings, equipment, and other taxable goods.

### ***Comparative Shipping Costs***

Transportation costs from each of the 20 surveyed sites to a designated Northeast U.S. and Eastern Canadian regional market are referenced. Comparative costs reflect over-the-road shipments in truckload lots.

*Source: The Boyd Company, Inc. Location Consultants, Princeton, NJ, 2016*