

**NORTHWEST PENNSYLVANIA  
AS A LOCATION FOR A  
DISTRIBUTION CENTER (DC)**

*PREPARED FOR THE:*  
**Northwest Commission**

*PREPARED BY:*

**Carter**  **Burgess**

January 2005

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## **Introduction**

This report, **Northwest Pennsylvania as a Location for a Distribution Center (DC)**, identifies business costs and conditions associated with the development of a new DC operation in Northwest Pennsylvania (NW PA). The warehouse/distribution industry has had, by far, the largest number of new locations of any industry in recent years in the northeast region of the U.S.

The report compares costs and conditions in Northwest Pennsylvania versus select locations, including:

- Pittsburgh, PA
- Cleveland, OH
- Buffalo, NY

Costs are drawn from a hypothetical DC project (see model description on page 4), which was based on actual site selection experience. Key site location cost factors are examined in this report including:

- Freight
- Salary and wages
- Fringe benefits
- Build-to-suit
- Select taxes
- Electric power, and
- Cost of living

The cost comparison spreadsheet follows on pages 5-7. Costs were derived from actual field research in Northwest Pennsylvania and telephone research on competitor communities. The latest available data was used for all cost comparisons. In addition, other regional conditions related to the DC industry are examined.

Carter & Burgess, Inc. is a world-renowned architecture/engineering, real estate and site selection firm based in Fort Worth, Texas and with offices nation-wide. The firm has located and designed over 100,000,000 square feet of DC space in recent years.

*Project Model*  
**Retail Product Distribution Center (DC)**

**Purpose:** Distribution of goods to retail stores in major consumer markets of the Northeast.

**Hours of Operation:** 3 shift 7 days per week

**Labor:**                   **450 total**  
7 - managerial/engineering  
28 - clerical/sales  
15 - maintenance mechanics  
200 - material handlers  
100 - warehouse laborers  
100 - semi-truck drivers

**Utilities:** Electric Power-     Demand: 1,800 KW;  
  Energy: 1,000,000 KwH/month (average)

**Building:** 750,000 square feet; 725,000 warehouse; 25,000 square feet of office/shop space.

**Land:** 75 level acres in a fully improved industrial area.

**Investment:** machinery and equipment (M&E) - \$18,750,000; inventory - \$37,500,000; land & building - \$25,000,000.

**Freight:**     Inbound: based on average miles and rates from suppliers via 50% TL (average 400 miles) and 50% rail (average 800 miles).  
                  Outbound: Product classification - 70; 12,000,000 units/year; weight per unit – 10 lbs.; 40% TL, 33% LTL, 20% rail, 7% small parcel.

**Other Critical Factors:** Good access to reasonably priced workforce; reliable and economic electric power supply; good flexible training programs, good quality of life, access to rail for possible future use.

## NW PA as a Location for a Distribution Center (DC)

### FIRST YEAR OPERATING COSTS

<b>Labor Costs</b> (450 total positions)	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
<i>Managers</i>				
Number	2	2	2	2
Annual Salary	\$76,017	\$81,054	\$82,887	\$84,410
<i>Engineers</i>				
Number	5	5	5	5
Annual Salary	\$43,871	\$47,451	\$48,831	\$49,462
Total Managerial/Engineering Salary	\$371,389	\$399,363	\$409,929	\$416,130
<i>Sales</i>				
Number	8	8	8	8
Annual Salary	\$29,490	\$35,996	\$33,924	\$33,615
<i>Clerical</i>				
Number	20	20	20	20
Annual Salary	\$18,595	\$20,423	\$20,751	\$20,820
Total Sales/Clerical Salary	\$607,820	\$696,428	\$686,412	\$685,320
<i>Maintenance Mechanics</i>				
Number	15	15	15	15
Annual Salary	\$24,794	\$27,163	\$27,740	\$27,669
<i>Material Handlers</i>				
Number	200	200	200	200
Annual Salary	\$17,750	\$19,172	\$19,571	\$19,534
Total MM/MH Salary	\$3,921,910	\$4,241,845	\$4,330,300	\$4,321,835
<i>Truck Drivers</i>				
Number	100	100	100	100
Annual Salary	\$23,247	\$25,382	\$26,045	\$25,948
Total Salary	\$2,324,700	\$2,538,200	\$2,604,500	\$2,594,800
<i>Unskilled Laborers</i>				
Number	100	100	100	100
Annual Salary	\$16,114	\$17,243	\$17,551	\$17,534
Total Salary	\$1,611,400	\$1,724,300	\$1,755,100	\$1,753,400
<b>Total Annual Salary Costs</b>	<b><u>\$8,509,701</u></b>	<b><u>\$9,248,224</u></b>	<b><u>\$9,425,143</u></b>	<b><u>\$9,404,817</u></b>

<b>Fringe Benefits</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Medical @ 20%	\$1,701,940	\$1,849,645	\$1,885,029	\$1,880,963
Disability @ .133 %	\$11,318	\$12,300	\$12,535	\$12,508
FICA @ 7.5 %	\$638,228	\$693,617	\$706,886	\$705,361
Life @ .5 %	\$42,549	\$46,241	\$47,126	\$47,024
Unemployment Ins. Rate	3.75%	3.75%	2.70%	4.00%
UI Cost	\$135,072	\$135,072	\$109,350	\$153,000
Workers Comp Rate-Plant (per \$100)	\$2.90	\$2.90	\$5.50	\$7.01
Worker Comp Rate-Office (per \$100)	\$0.47	\$0.47	\$0.50	\$0.40
Workers Compensation Cost	\$232,485	\$251,776	\$483,426	\$612,175
Fringe Benefit Load Factor	32.45%	32.32%	34.42%	35.64%
<b>Total Annual Fringe Benefits Costs</b>	<b><u>\$2,761,591</u></b>	<b><u>\$2,988,651</u></b>	<b><u>\$3,244,352</u></b>	<b><u>\$3,351,500</u></b>

## NW PA as a Location for a Distribution Center (DC)

### DC PROJECT (CONT)

<b>Build to Suit Costs</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Square Feet Office	25,000	25,000	25,000	25,000
Square Feet Warehouse	725,000	725,000	725,000	725,000
Total Square Feet Required	750,000	750,000	750,000	750,000
Cost per Square Foot of Office	\$70.00	\$85.00	\$75.00	\$65.00
Cost per Square Foot of WH	\$20.00	\$30.00	\$25.00	\$18.00
Total Building Cost	\$16,250,000	\$23,875,000	\$20,000,000	\$14,675,000
<b>Land Costs</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Cost per Acre	\$10,000	\$54,450	\$76,230	\$47,916
Acres Required	75	75	75	75
Total Land Cost	\$750,000	\$4,083,750	\$5,717,250	\$3,593,700
Total Building & Land Cost	\$17,000,000	\$27,958,750	\$25,717,250	\$18,268,700
<u>Annual Payment (@ 6%, 15 yrs)</u>	<u>\$1,750,367</u>	<u>\$2,878,710</u>	<u>\$2,647,919</u>	<u>\$1,880,996</u>
<b>Property Tax Costs</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Value of Real Estate	\$17,000,000	\$27,958,750	\$25,717,250	\$18,268,700
Assessment Ratio	100%	100%	35%	100%
Property Tax Rate	41.84	5.4	91.90	50.00
Real Estate Taxes	\$711,280	\$1,509,773	\$827,195	\$913,435
Machinery & Equipment Value	\$18,750,000	\$18,750,000	\$18,750,000	\$18,750,000
Personal Property Tax Rate	\$0	\$0	91.90	\$0
Personal Property Tax	\$0	\$0	\$419,294	\$0
Value of Inventory	\$37,500,000	\$37,500,000	\$37,500,000	\$37,500,000
Inventory Tax Rate	\$0	\$0	91.90	\$0
Inventory Tax	\$0	\$0	\$144,743	\$0
<u>Total Annual Property Taxes</u>	<u>\$711,280</u>	<u>\$1,509,773</u>	<u>\$1,391,232</u>	<u>\$913,435</u>
<b>Corporate Income Taxes</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Adjusted State Taxable Income	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
State Tax Rate	9.90%	9.90%	8.00%	7.50%
State Subtotal	\$495,000	\$495,000	\$400,000	\$375,000
Federal Tax Rate	35.00%	35.00%	35.00%	35.00%
Federal Subtotal	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000
Total Corporate Income Taxes	<u>\$2,245,000</u>	<u>\$2,245,000</u>	<u>\$2,150,000</u>	<u>\$2,125,000</u>
<b>Electric Power Costs</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
KW Demand	1800	1800	1800	1800
KwH/Month Usage	1000000	1000000	1000000	1000000
Cost/KwH	\$0.0358	\$0.0652	\$0.0842	\$0.1136
<u>Total Annual Electric Power Cost</u>	<u>\$429,240</u>	<u>\$782,400</u>	<u>\$1,010,400</u>	<u>\$1,363,200</u>
<b>Freight Costs (see freight model)</b>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
Inbound	\$5,487,493	\$5,333,731	\$5,276,599	\$5,739,297
Outbound	\$17,590,528	\$18,375,036	\$19,973,423	\$18,968,896
<u>Total</u>	<u>\$23,078,021</u>	<u>\$23,708,767</u>	<u>\$25,250,022</u>	<u>\$24,708,193</u>

**NW PA as a Location for a Distribution Center (DC)**

**DC PROJECT (CONT)**

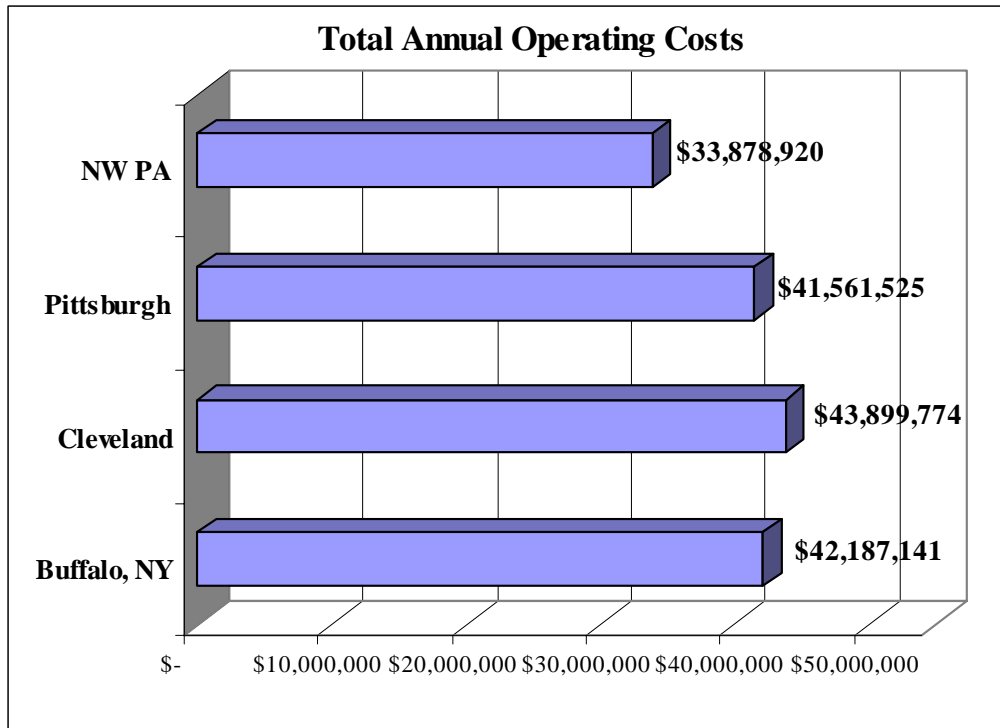
<i>Potential Incentives</i>	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
<i>Tax Credits</i>	\$2,600,000	\$0	\$419,294	\$600,000
<i>Tax Abatements</i>	\$1,206,280	\$0	\$0	\$0
<i>Training</i>	\$1,800,000	\$1,800,000	\$800,000	\$960,000
<u><i>Total Incentives</i></u>	<u>\$5,606,280</u>	<u>\$1,800,000</u>	<u>\$1,219,294</u>	<u>\$1,560,000</u>

**TOTALS**

	<b>NW PA</b>	<b>Pittsburgh, PA</b>	<b>Cleveland, OH</b>	<b>Buffalo, NY</b>
<b>Annual Operating Costs</b>	<b>\$33,878,920</b>	<b>\$41,561,525</b>	<b>\$43,899,774</b>	<b>\$42,187,141</b>
<i>\$ greater than NW PA</i>		\$7,682,605	\$10,020,854	\$8,308,221
<i>% greater than NW PA</i>		22.7%	29.6%	24.5%

### Total Project Operating Costs

Northwest Pennsylvania is the low cost locale for this DC project. More than \$10 million per year could be saved by locating this project in Northwest Pennsylvania versus the highest cost area, which is Cleveland.



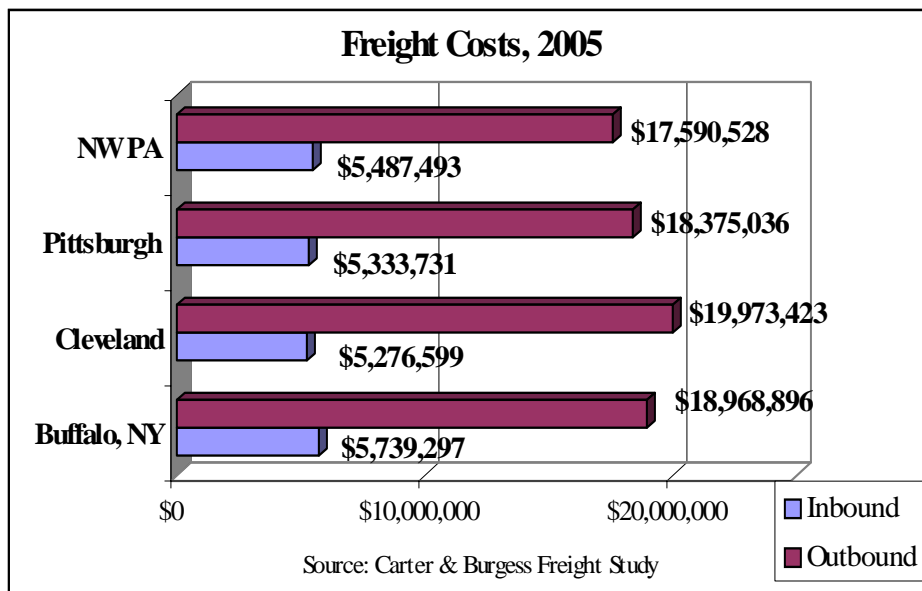
**NW PA as a Location for a Distribution Center (DC)**

**Freight**

Freight costs represent the largest annual operating cost item for this project, up to 58%. A separate, detailed freight report is available and can be used as a reference.

Consumer products will be shipped outbound from this DC to major consumer centers within a 400-mile radius of the DC site via a combination of full truckload trailers (TL), less than truckload trailers (LTL) and small parcel resources. Inbound freight is based on the average miles from suppliers and uses an average freight rate per mode.

NW PA is the low cost freight location versus the other cities.



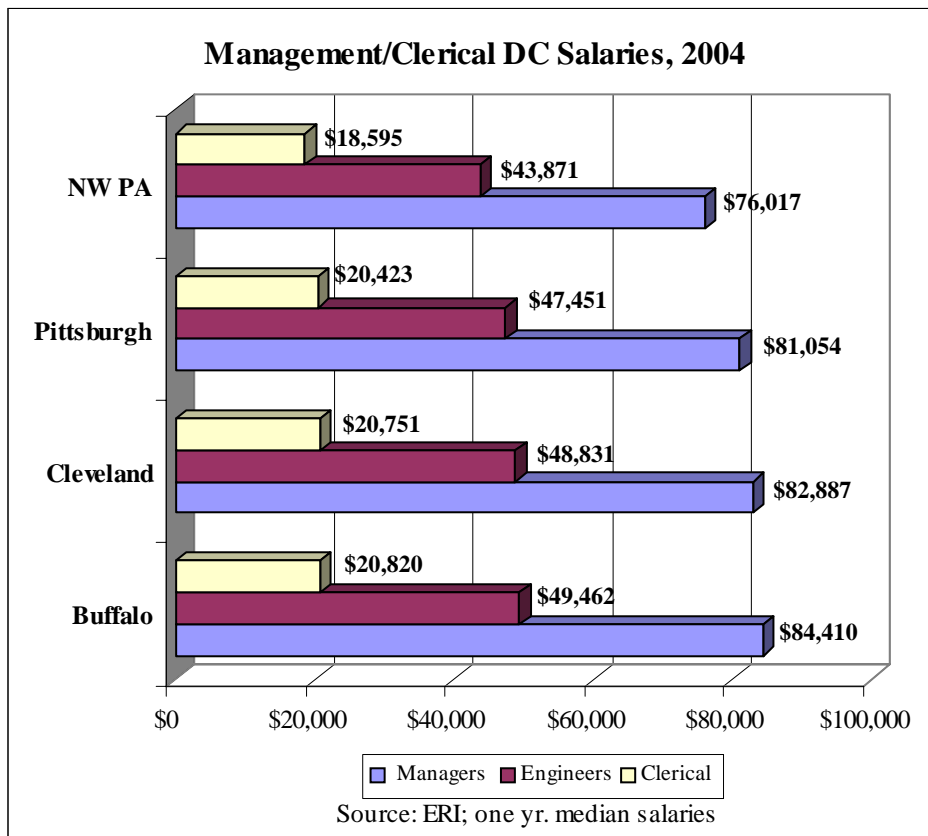
**Labor**

**Wages/Salaries and Fringe Benefits**

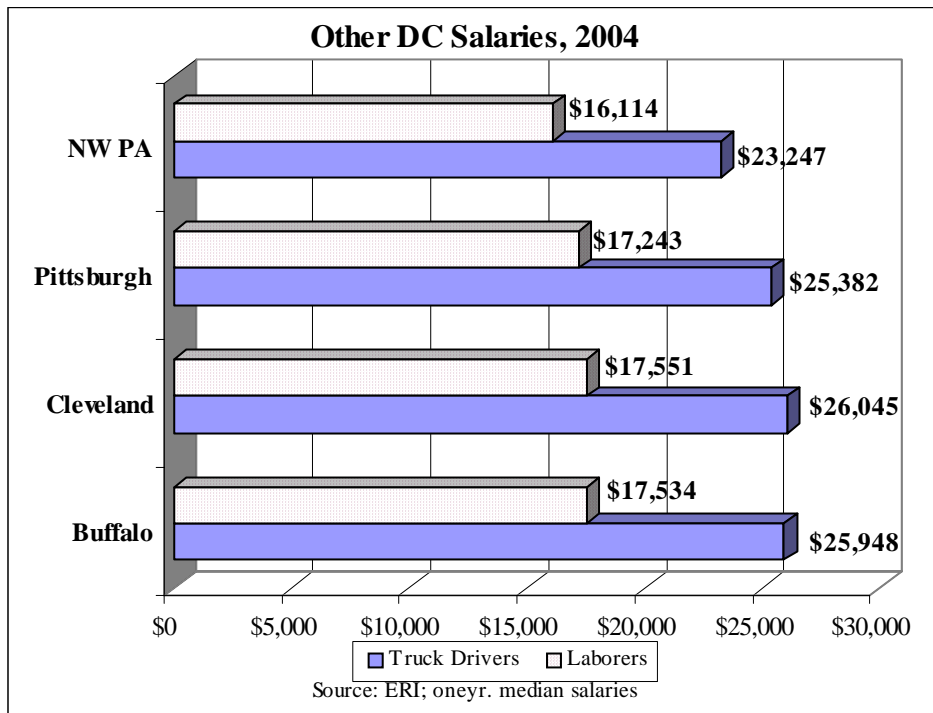
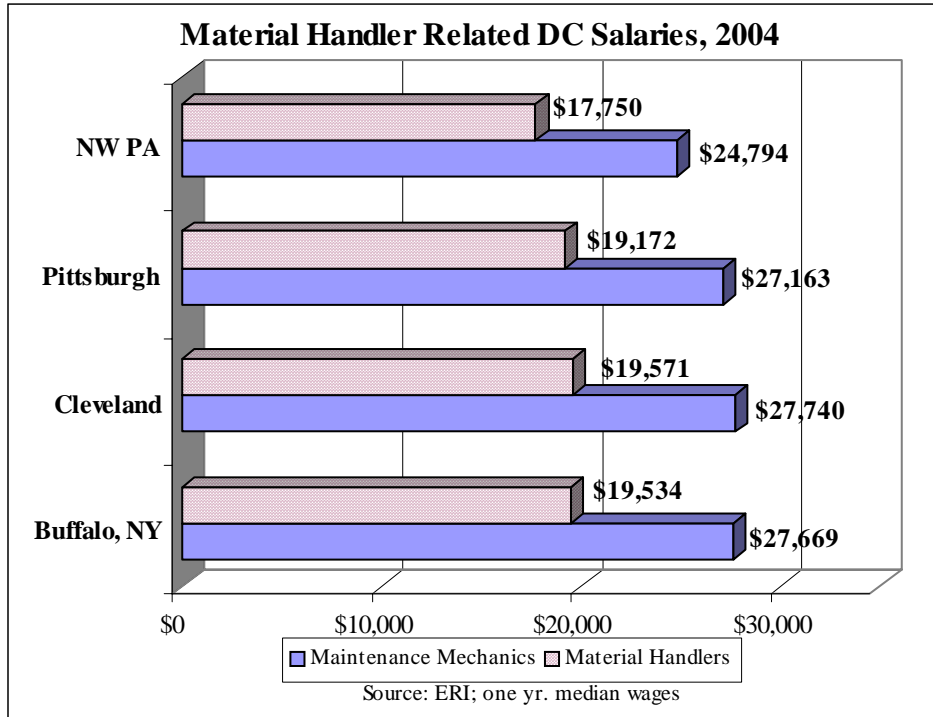
Wage/salary and fringe benefit costs represent over 20% of the total operating costs for this project (before incentives), depending on the location. This is the second largest annual cost factor.

Wages and salaries are used in the model are for median salary range positions with one year experience. All wages come from our national data resource, Economic Research Institute (ERI), and actual on-site fieldwork.

Northwest Pennsylvania has the lowest overall labor costs of the five competing areas. Over \$900,000 would be saved in wages alone annually by locating this project in Northwest Pennsylvania instead of the highest cost locale, which is Cleveland. The following compares wages by select categories:

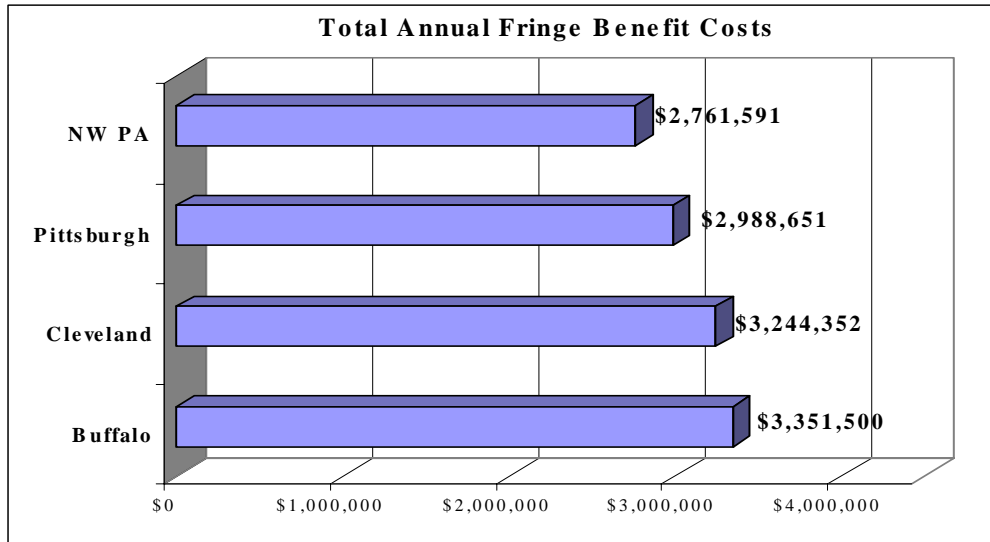


NW PA as a Location for a Distribution Center (DC)



## NW PA as a Location for a Distribution Center (DC)

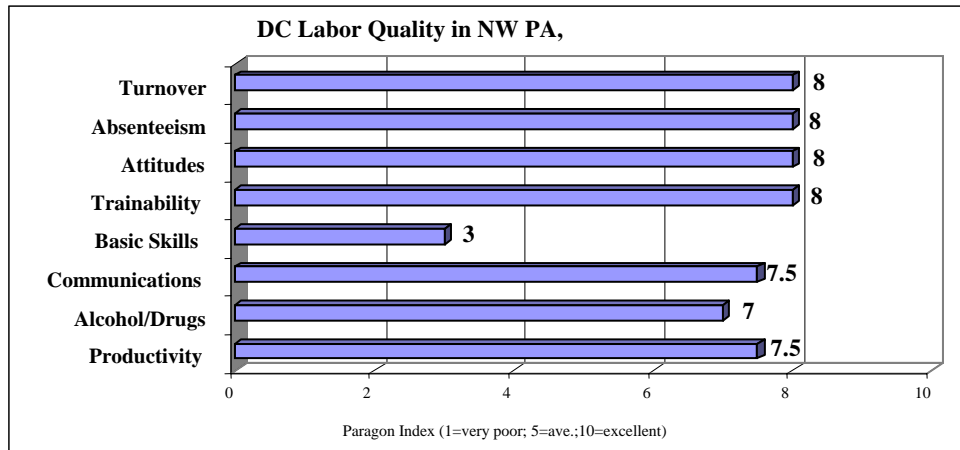
NW Pennsylvania has the lowest fringe benefit load. Fringe benefits measured include medical, disability, FICA, life insurance, unemployment insurance, and workers compensation.



## Labor Availability & Quality in NW Pennsylvania

Good labor availability and quality are critically important to the success of a project. We have compared both availability and quality in the region using our unique *Paragon Index*. The index factors on a 1 (very poor) to 10 (excellent) point scale (5 is average). The index takes our results of our fieldwork interviews and measures the combined opinions of company decision-makers. The resulting index is a very realistic way of comparing communities on an “apples to apples” basis.

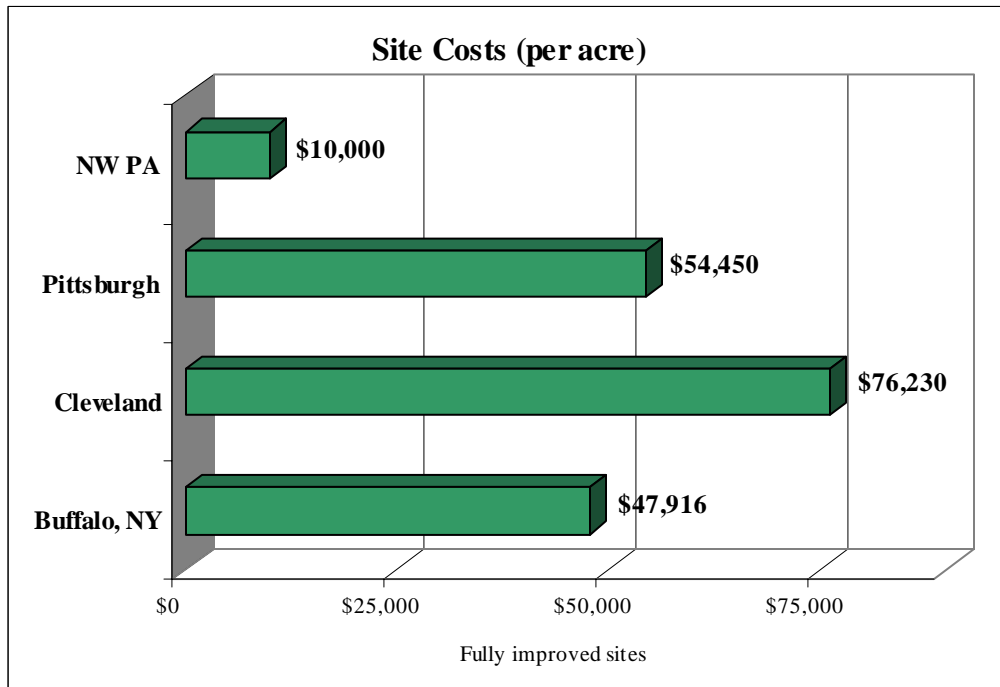
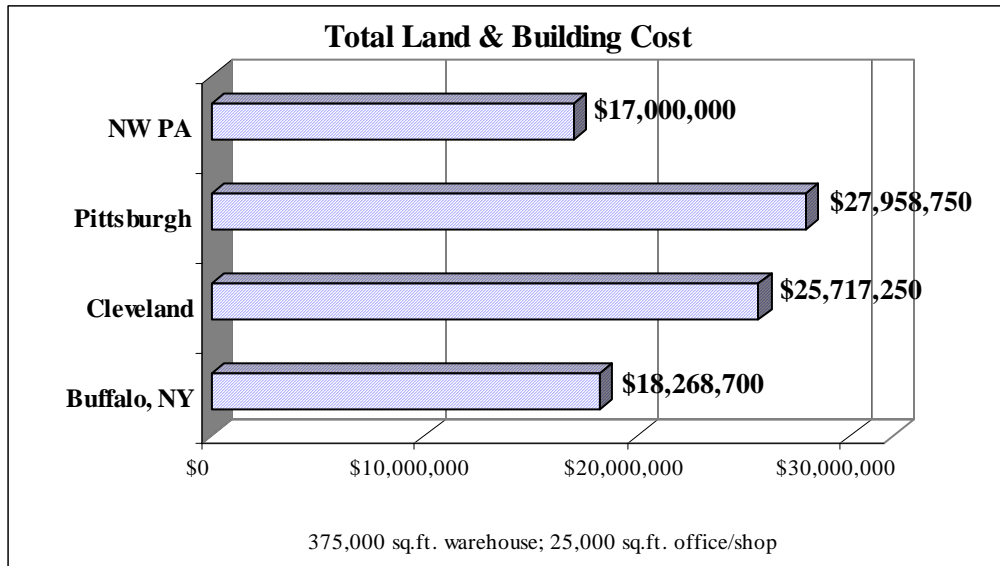
- Unskilled warehouse worker availability is rated good to excellent. Driver and some skilled positions are difficult to fill.
- All labor quality factors are rated good to very good, except basic skills (see chart).



### Build-to-Suit Costs

Annual building and site costs represent approximately 7% of total annual operating costs in the model (this cost is amortized).

Northwest Pennsylvania building related costs are low primarily due to the low cost of prime industrial sites and lower construction costs.



## Taxes

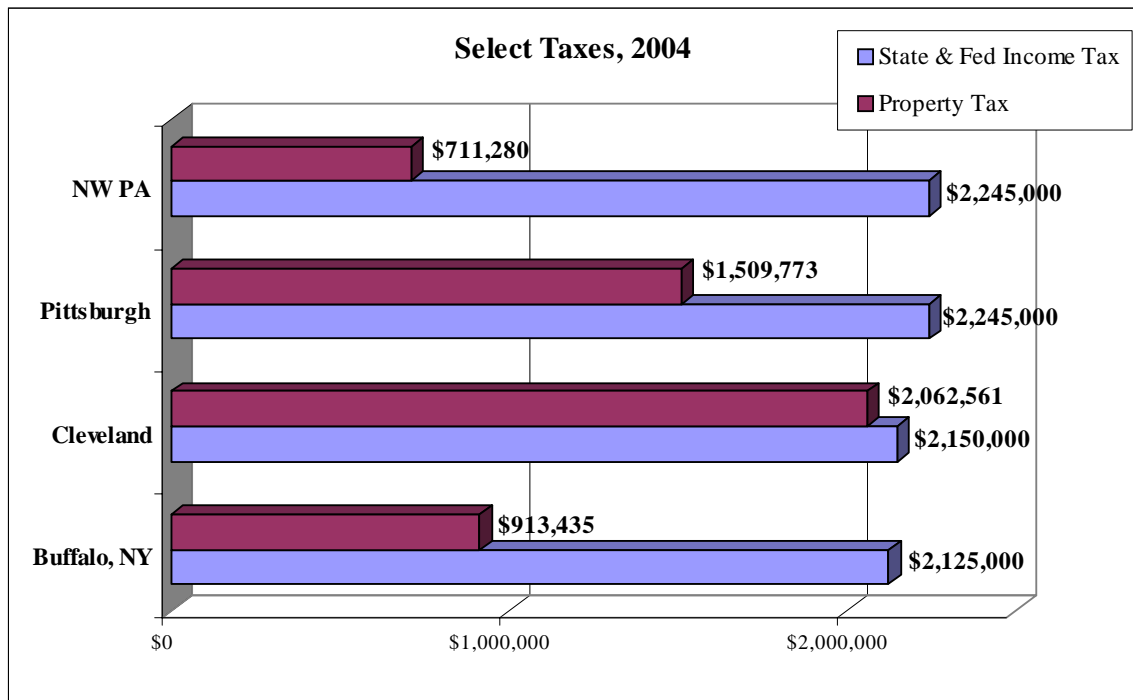
### Property Taxes

Property taxes consist of real estate and personal property taxes, which may include taxes on machinery and equipment. They represent approximately 3% of the annual operating costs.

Northwest Pennsylvania property taxes are modest compared to the other cities since there is no tax assessed on M&E or inventories. Other NW PA taxes will be zeroed out if this project will be located in a Keystone Opportunity Zone (KOZ).

### Corporate Income Taxes

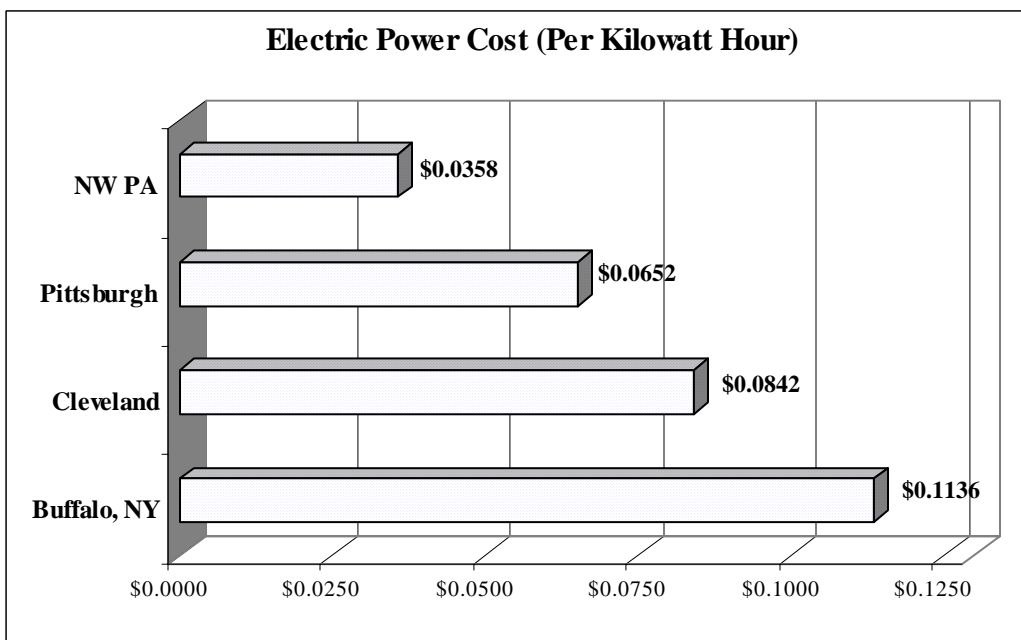
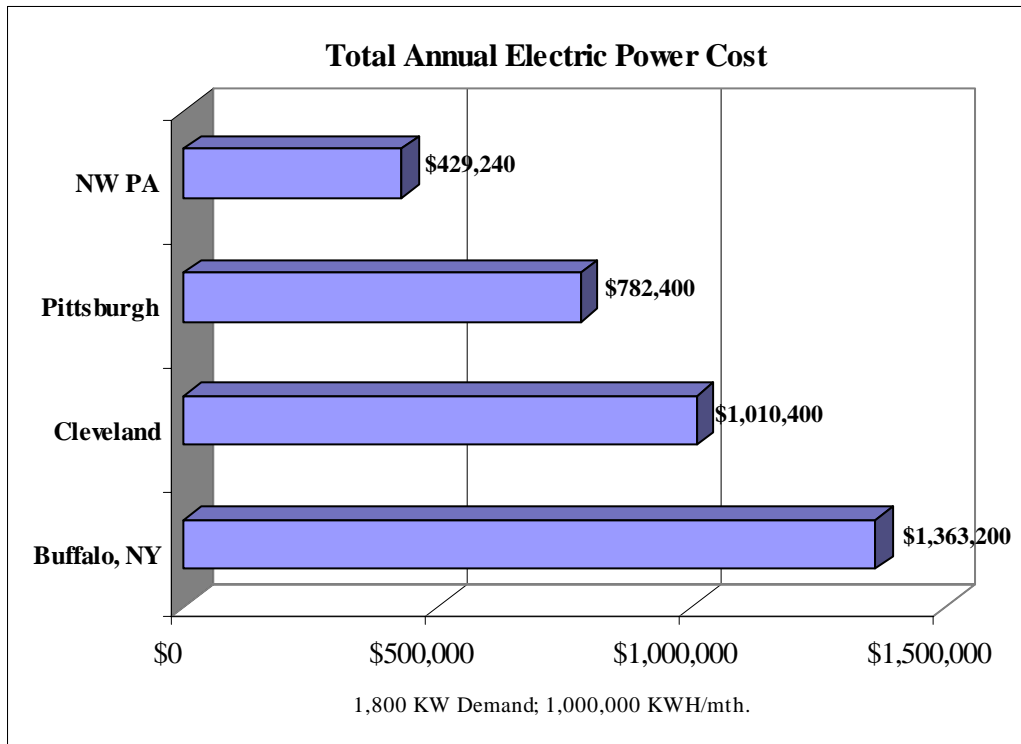
Pennsylvania's state income tax rate is 9.90%, the highest of the domestic cities. However, the NW PA taxes will be zeroed out if this project will be located in a Keystone Opportunity Zone (KOZ).



## Utilities

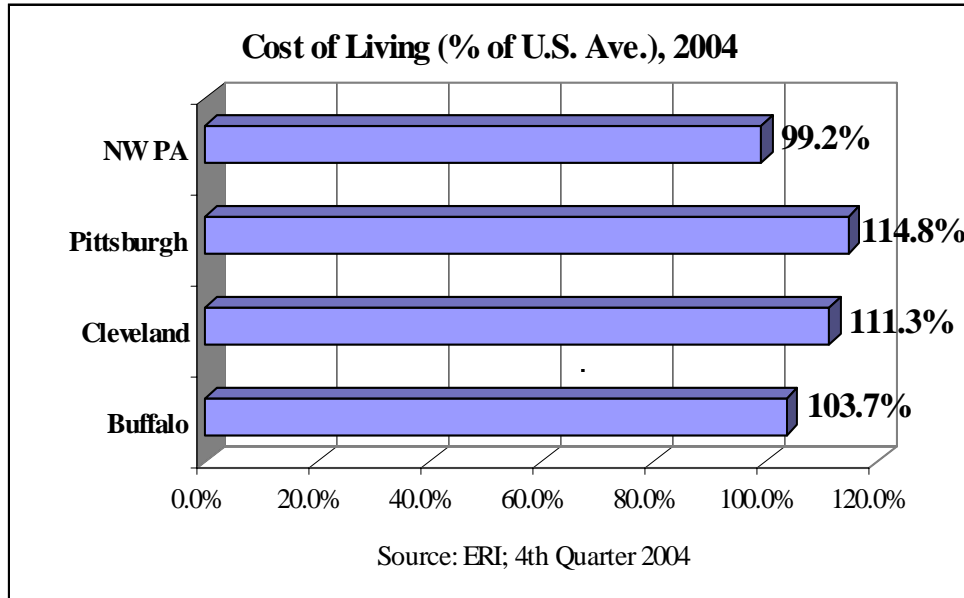
### Electric Power

Power costs represent approximately 2% of total operating costs. NW PA has the lowest electric power rates due to attractive incentive rates.



### Cost of Living

The cost of living will influence relocation of key personnel to the project city. It should be relatively easy to sell employees on NW PA's lower costs, the only comparison area under the U.S. average.



## The DC Industry in Northwest Pennsylvania

### Description

The warehouse/distribution (DC) sector was one of the few bright spots during this last recent recession and has boomed during the current recovery. Locations/expansions have been driven by consumer demand for retail products. The sector had far and away the most expansions/locations of any sector in 2003 in the region (PA, NY, OH), over 300.

Regional DC types include general merchandise (i.e. Wal-Mart/Target), grain, building materials, automotive supplies, foods/beverages (requiring refrigeration space), printing supplies, and boxes/containers.

Warehouse/distribution falls under a number of NAICS codes, including 421 & 422 wholesale distribution, 484 truck transportation, 488 transportation support, 492 couriers and 493 warehouse/distribution.

### Key Site Selection Needs (by priority)

1. Access to market/transportation costs
2. Labor costs
3. Labor availability (key positions: material handlers, forklift drivers; truck drivers)
4. Electric power costs
5. Access to Interstate highways (within 15 miles)
6. Large sites (50 to 250 acres)
7. Rail service for select operations
8. Incentives to offset large capital investment and training

Key Labor Positions: Forklift Driver; Material Handler; and Truck Driver

### NW PA Site Location Ratings for DC

NW PA rates very high, with all scores being good (8) to excellent (10). Scoring was done by multiplying the importance weight for the target by the community rating.

<b>Target Rating: DC</b>	<u>Weight</u>	<u>NW PA Rating</u>	<u>Total</u>
1. Access to market/transportation costs	10	10	100
2. Labor Costs	10	10	100
3. Labor Availability	9	8	72
4. Electric Power Costs	8	8	64
5. Interstate Highway (within 15 miles)	8	10	80
6. Rail access	7	8	56
7. Large Sites (50-250 acres)	7	10	70
8. Incentives	7	10	70
9. Recent Regional Locations	5	10	50

## NW PA as a Location for a Distribution Center (DC)

### NW PA Strengths

- Excellent market access, labor costs, Interstate access, large sites, incentives and recent location/expansions.
- Good labor availability, electric power rates, rail access.

### NW PA Weaknesses

- None

## Incentives

**The Northwest Commission can facilitate excellent incentive packages to qualified DC businesses.** Major programs include:

- **Keystone Opportunity Zones (KOZ):** Keystone Opportunity Zones represent the boldest, most forward-thinking economic development program in the nation. Through credits, waivers, and comprehensive deductions, total taxes on economic activity in Keystone Opportunity Zones are reduced to almost zero. And these tax abatements remain in effect through 2013. The Northwest Pennsylvania region has numerous designated zones.
- **Customized Training Programs:** The third largest program in the nation, the Customized Job Training program is responsive to employer needs by providing grant funds for specialized job training to existing or newly-hired employers.
- **Guaranteed Free Training Program:** Through the Workforce and Economic Development Network of Pennsylvania (WEDnetPA), qualified companies may receive free job training for basic entry-level skills and advanced information technology skills for their employees. Pennsylvania is the first state to offer advanced technology and business training online.
- **R&D Tax Credits** – Corporate income tax reductions for firms investing in research and development.

## Northwest Pennsylvania's Strengths for DC Firms

- **The low cost area versus all comparison cities.**
- Excellent proximity and accessibility to regional consumer markets.
- Competitive wage rates and excellent availability of labor.
- Good site and build-to-suit opportunities.
- Very reasonable and reliable electric power rates.
- Great financial and training incentives to help firms with startup and expansion.
- Outstanding professional resources that are ready, willing and able to assist firms.
- Reasonable cost of living.

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