

**NORTHWEST PENNSYLVANIA
AS A LOCATION FOR THE
FABRICATED METALS INDUSTRY**



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Introduction

This report, **Northwest Pennsylvania as a Location for the Fabricated (fab) Metals Industry**, identifies business costs and conditions associated with the development of a new fab metals manufacturing facility in Northwest Pennsylvania (NW PA). Fab metals is long standing, dominant and traditional industry in the region.

The report compares cost in Northwest Pennsylvania versus select global locations, including:

- Chicago
- Detroit
- Philadelphia, PA
- Cleveland, OH
- Buffalo, NY

Costs are drawn from a hypothetical fab metals 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:

- 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 fab metals 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 commercial/industrial space over the last seven years.

Project Model

Metal Fabrication Facility

Purpose: The machining, cutting, drilling, punching and other fabrication of metals to be used for major equipment manufacturers and parts to serve the North American marketplace with a focus on distribution from the East.

Hours of Operation: 3 shifts; 7 days per week

Labor:

- 90- total
- 5- managerial/engineering
- 5- clerical
- 5- technical; CAD design
- 30- skilled workers: welders
- 30- semiskilled: machine operators (CNC)
- 15- unskilled: machine helpers, laborers

Utilities: Electric Power- Demand: 900KW;
Energy: 500,000 kWh/month (average)

Building: 75,000 square feet, 65,000 of manufacturing space; 10,000 square feet of office space

Land: 20 level acres in a planned industrial park fully developed.

Investment: Land & Building: \$4-\$6 million; M&E: \$4 million; Inventory: \$3 million; estimate sales (first year): \$8 million.

Other Critical Factors: Good access to reasonably priced skilled workforce; reliable and economic electric power supply; access to good supplier and customer network; good technical college with flexibility in training, affordable housing.

NW PA as a Location for the Fab Metals Industry

FAB METALS PROJECT

FIRST YEAR OPERATING COSTS

Labor Costs	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
<i>Managers</i>						
Number	2	2	2	2	2	2
Annual Salary	\$78,700	\$90,847	\$95,162	\$90,410	\$85,857	\$87,149
<i>Engineering</i>						
Number	3	3	3	3	3	3
Annual Salary	\$42,198	\$49,009	\$51,165	\$49,217	\$46,787	\$46,918
Total Managerial/Engineering Salary	\$283,994	\$328,721	\$343,819	\$328,471	\$312,075	\$315,052
<i>Sales</i>						
Number	2	2	2	2	2	2
Annual Salary	\$29,490	\$35,387	\$37,281	\$35,996	\$33,924	\$33,615
<i>Clerical</i>						
Number	3	3	3	3	3	3
Annual Salary	\$18,502	\$21,954	\$22,497	\$22,001	\$20,829	\$20,835
Total Sales/Clerical Salary	\$114,486	\$136,636	\$142,053	\$137,995	\$130,335	\$129,735
<i>Skilled CAD Design</i>						
Number	5	5	5	5	5	5
Annual Salary	\$27,031	\$31,611	\$32,762	\$31,855	\$30,261	\$30,274
<i>Skilled Welders</i>						
Number	30	30	30	30	30	30
Annual Salary	\$25,741	\$29,999	\$31,652	\$30,344	\$28,827	\$28,818
Total Skilled Salary	\$907,385	\$1,058,025	\$1,113,370	\$1,069,595	\$1,016,115	\$1,015,910
<i>Semi-Skilled Machine Operators</i>						
Number	30	30	30	30	30	30
Annual Salary	\$21,021	\$24,525	\$25,754	\$24,812	\$23,577	\$23,561
Total Salary	\$630,630	\$735,750	\$772,620	\$744,360	\$707,310	\$706,830
<i>Unskilled Laborers</i>						
Number	15	15	15	15	15	15
Annual Salary	\$16,678	\$19,174	\$19,664	\$19,226	\$18,279	\$18,279
Total Salary	\$250,170	\$287,610	\$294,960	\$288,390	\$274,185	\$274,185
Total Annual Salary Costs	\$1,944,869	\$2,267,030	\$2,374,168	\$2,289,557	\$2,174,732	\$2,173,578
Fringe Benefits						
	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Medical @ 15 %	\$328,000	\$382,011	\$400,023	\$385,322	\$366,003	\$366,257
Disability @ .133 %	\$2,908	\$3,387	\$3,547	\$3,417	\$3,245	\$3,247
FICA @ 7.5 %	\$164,000	\$191,006	\$200,012	\$192,661	\$183,002	\$183,128
Life @ .5 %	\$10,933	\$12,734	\$13,334	\$12,844	\$12,200	\$12,209
Unemployment Ins. Rate	3.75%	3.10%	2.70%	3.75%	2.70%	4.00%
UI Cost	\$27,014	\$25,110	\$23,085	\$27,014	\$21,870	\$30,600
Workers Comp Rate-Plant (per \$100)	\$2.90	\$4.36	\$6.14	\$3.78	\$5.50	\$7.01
Worker Comp Rate-Office (per \$100)	\$0.47	\$0.30	\$0.23	\$0.47	\$0.50	\$0.40
Workers Compensation Cost	\$46,475	\$79,605	\$116,917	\$70,760	\$97,000	\$122,543
Fringe Benefit Load Factor	29.79%	30.61%	31.88%	30.22%	44.88%	32.32%
Total Annual Fringe Benefits Costs	\$579,331	\$693,852	\$756,918	\$692,017	\$976,008	\$702,528

NW PA as a Location for the Fab Metals Industry

FAB METALS PROJECT (CONT)

Build to Suit Costs	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Square Feet Office	10,000	10,000	10,000	10,000	10,000	10,000
Square Feet Manufacturing	65,000	65,000	65,000	65,000	65,000	65,000
Total Square Feet Required	50,000	50,000	50,000	50,000	50,000	50,000
Cost per Square Foot of Office	\$80.00	\$75.00	\$100.00	\$95.00	\$85.00	\$75.00
Cost per Square Foot of Mfg.	\$45.00	\$37.00	\$60.00	\$45.00	\$35.00	\$40.00
Total Building Cost	\$3,725,000	\$3,155,000	\$4,900,000	\$3,875,000	\$3,125,000	\$3,350,000
Land Costs	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Cost per Acre	\$15,000	\$135,907	\$120,000	\$75,000	\$84,942	\$65,000
Acres Required	20	20	20	20	20	20
Total Land Cost	\$300,000	\$2,718,140	\$2,400,000	\$1,500,000	\$1,698,840	\$1,300,000
Total Building & Land Cost	\$4,025,000	\$5,873,140	\$7,300,000	\$5,375,000	\$4,823,840	\$4,650,000
Annual Payment (@ 6%, 15 yrs)	<u>\$414,425</u>	<u>\$604,715</u>	<u>\$751,628</u>	<u>\$553,425</u>	<u>\$496,676</u>	<u>\$478,777</u>
Property Tax Costs	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Value of Real Estate	\$4,025,000	\$5,873,140	\$7,300,000	\$5,375,000	\$4,823,840	\$4,650,000
Assessment Ratio	100%	33%	50%	100%	35%	100%
Property Tax Rate	41.84	7.93	2.4	3.552	91.90	50.00
Real Estate Taxes	\$168,406	\$155,231	\$87,600	\$190,920	\$155,159	\$232,500
Machinery & Equipment Value	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
Personal Property Tax Rate	\$0	\$0	\$0.00	\$0	91.90	\$0
Personal Property Tax	\$0	\$0	\$0	\$0	\$80,413	\$0
Value of Inventory	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Inventory Tax Rate	\$0	\$0	\$0	\$0	91.90	\$0
Inventory Tax	\$0	\$0	\$0	\$0	\$55,140	\$0
Total Annual Property Taxes	<u>\$168,406</u>	<u>\$155,231</u>	<u>\$87,600</u>	<u>\$190,920</u>	<u>\$290,711</u>	<u>\$232,500</u>
Corporate Income Taxes	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Adjusted State Taxable Income	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
State Tax Rate	9.90%	7.30%	1.90%	9.90%	8.00%	7.50%
Federal Tax Rate	35.00%	35.00%	35.00%	35.00%	35.00%	35.00%
Total Corporate Income Taxes	\$2,245,000	\$2,115,000	\$1,845,000	\$2,245,000	\$2,150,000	\$2,125,000
Electric Power Costs	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
KW Demand	900	900	900	900	900	900
Kwh/Month Usage	500000	500000	500000	500000	500000	500000
Cost/Kwh	\$0.0358	\$0.069	\$0.0847	\$0.0742	\$0.0842	\$0.1136
Total Annual Electric Power Cost	<u>\$214,620</u>	<u>\$415,800</u>	<u>\$508,200</u>	<u>\$445,200</u>	<u>\$505,200</u>	<u>\$681,600</u>
Potential Incentives	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Tax Credits/Tax Abatements	\$792,000	\$150,000	\$87,000		\$200,000	\$230,000
Training	\$495,000	\$180,000	\$100,000	\$405,000	\$180,000	\$216,000
Total Incentives	<u>\$1,287,000</u>	<u>\$330,000</u>	<u>\$187,000</u>	<u>\$405,000</u>	<u>\$380,000</u>	<u>\$446,000</u>

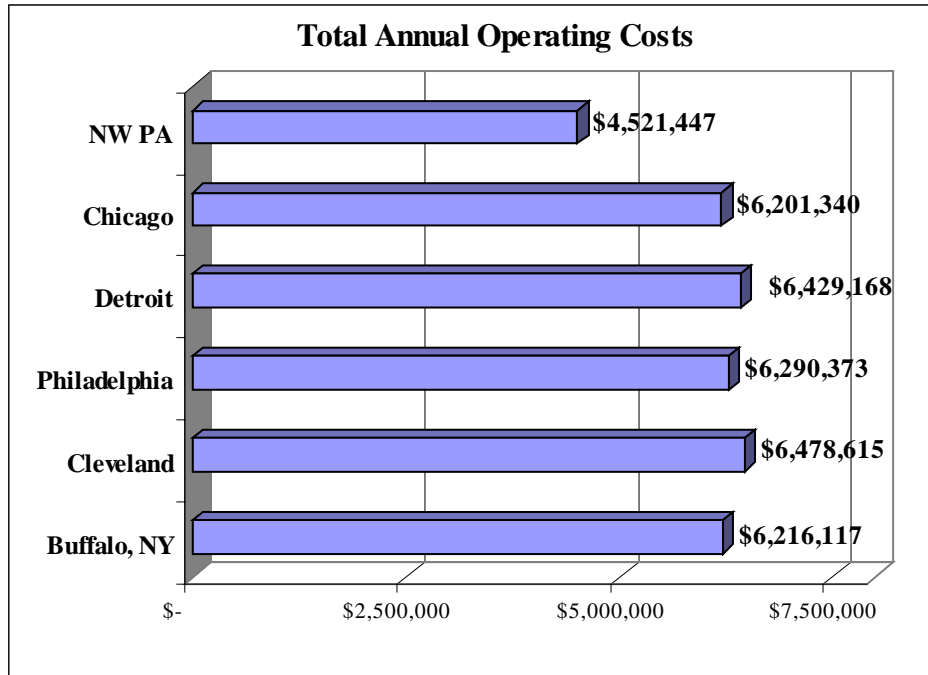
NW PA as a Location for the Fab Metals Industry

FAB METALS PROJECT (CONT)

TOTALS	NW PA	Chicago	Detroit	Philadelphia	Cleveland	Buffalo, NY
Annual Operating Costs	\$4,521,447	\$6,201,340	\$6,429,168	\$6,290,373	\$6,478,615	\$6,216,117
<i>\$ greater than NW PA</i>		\$1,679,893	\$1,907,721	\$1,768,926	\$1,957,168	\$1,694,670
<i>% greater than NW PA</i>		37.2%	42.2%	39.1%	43.3%	37.5%

Total Project Operating Costs

Northwest Pennsylvania is the low cost locale for this fab metals project. Almost \$2 million per year could be saved by locating this project in Northwest Pennsylvania versus the highest cost area, Cleveland.



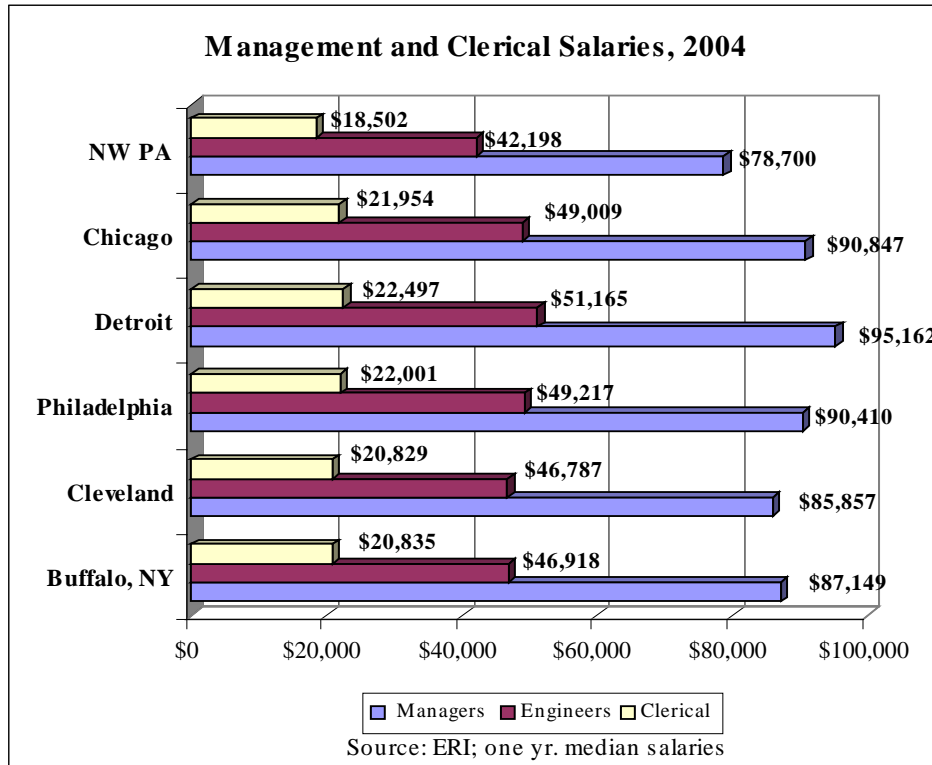
Labor

Wages/Salaries and Fringe Benefits

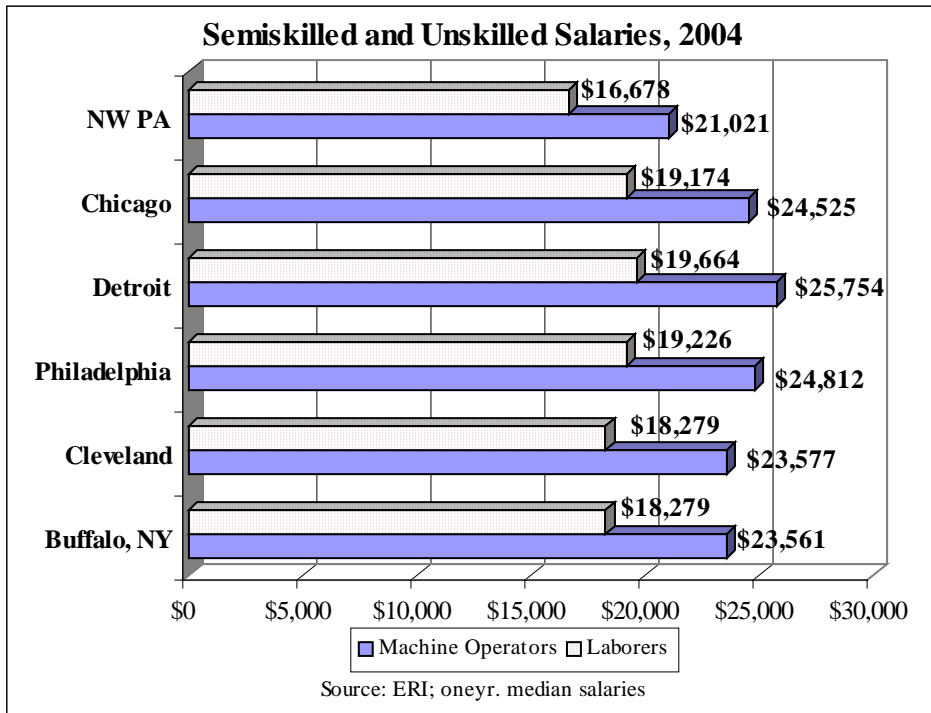
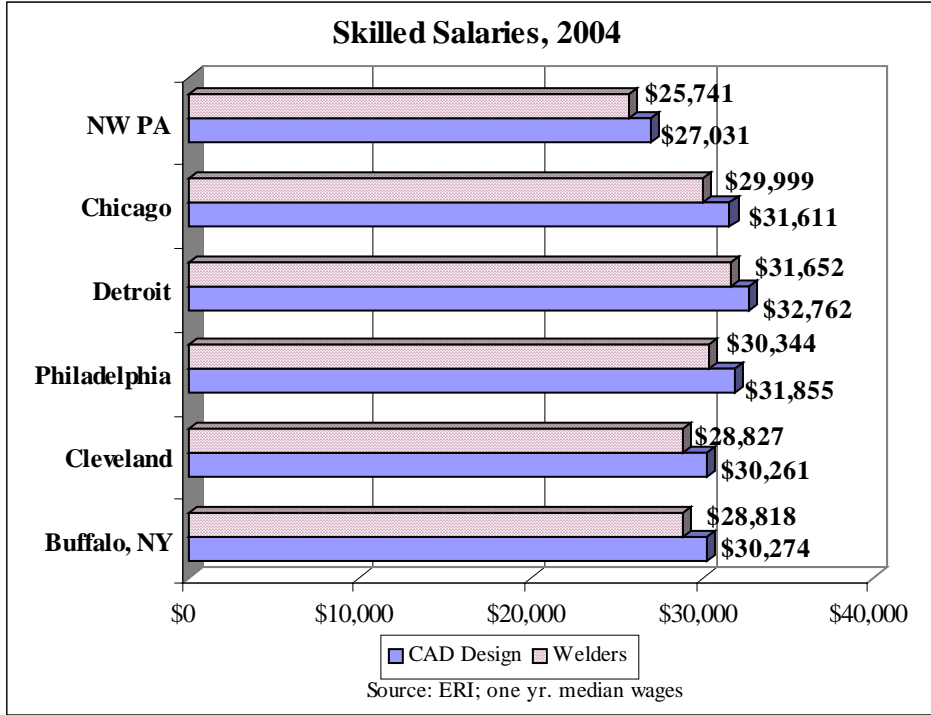
Wage/salary and fringe benefit costs represent up to 60% of the total operating costs for this project (before incentives), depending on the location. This is the largest single cost factor.

Wages and salaries 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 \$400,000 would be saved in wage costs annually alone by locating this project in Northwest Pennsylvania instead of Detroit, the highest wage locale.



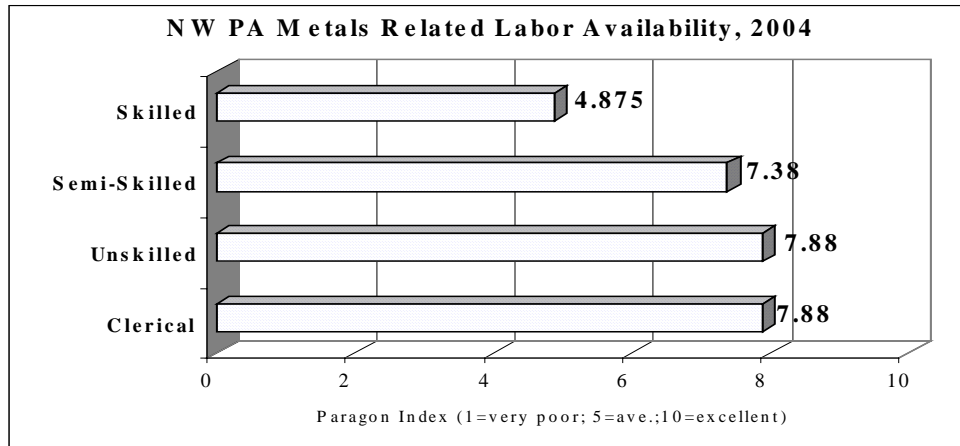
NW PA as a Location for the Fab Metals Industry



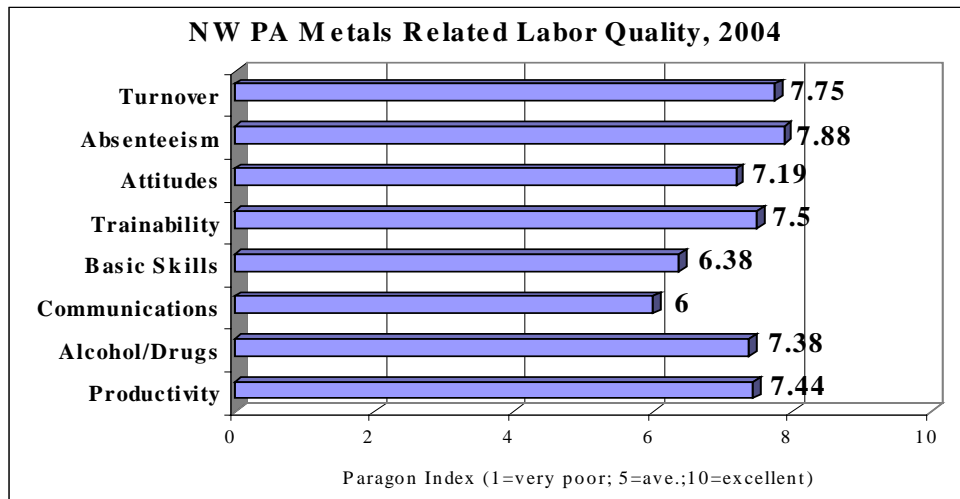
Labor Availability & Quality in NW Pennsylvania

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.

Semi-skilled, unskilled and clerical availability is good.



Most labor quality factors are rated good.



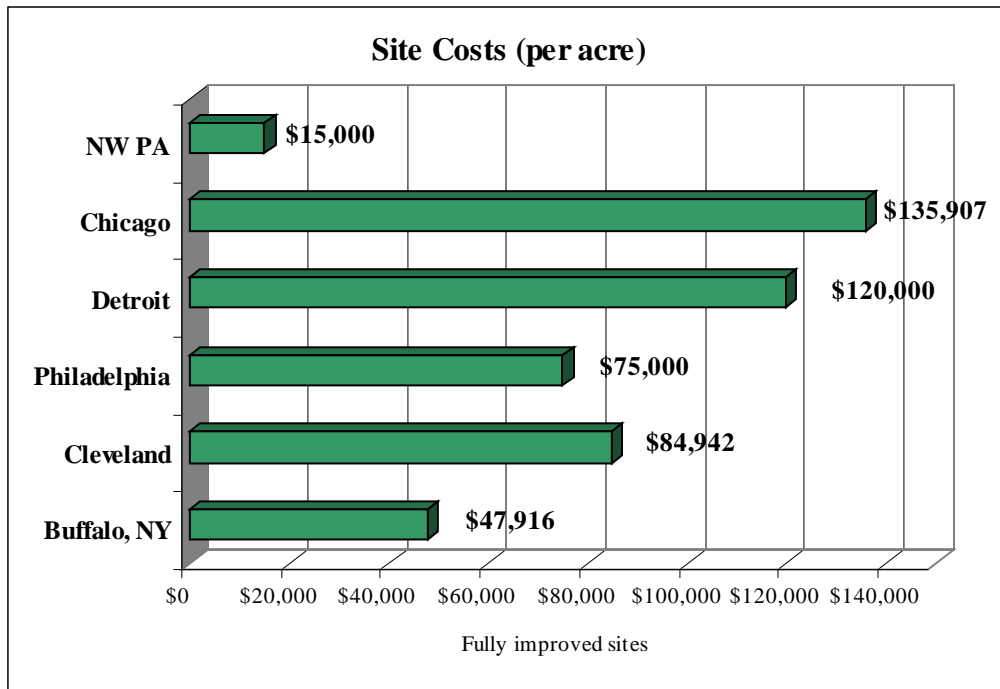
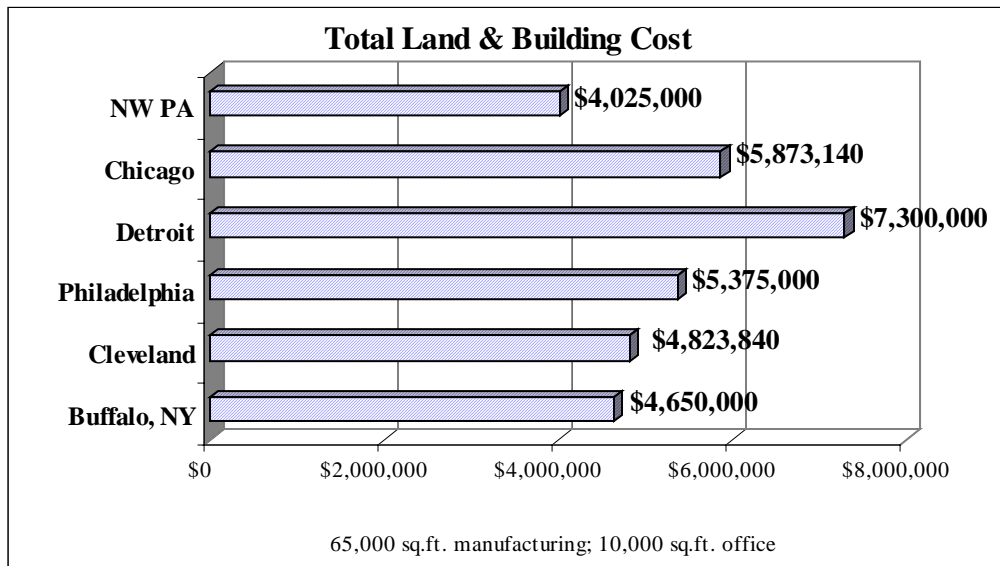
Here is what regional plastics employers had to say about quality:

- *The workforce has good attitudes.*
- *The people are very trainable with terrific attitudes.*
- *They are hard working and will work as long as needed...*

Build-to-Suit Costs

Annual building and site costs represent approximately 10% of total annual operating costs in the model (this cost is amortized).

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



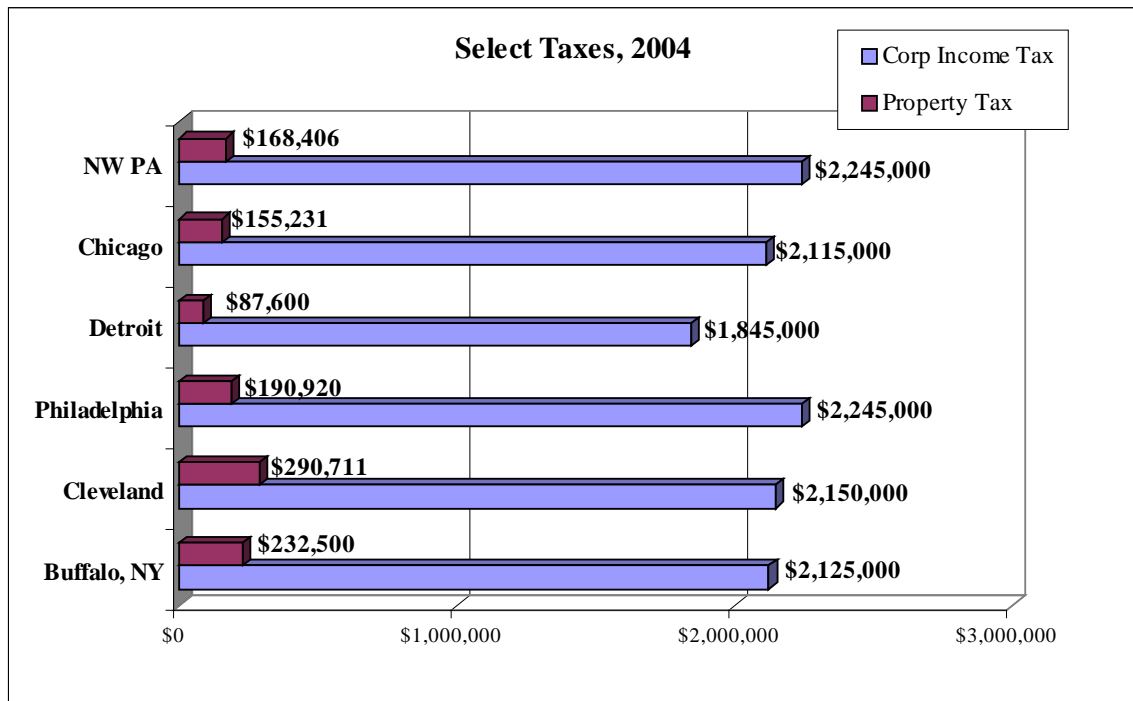
Taxes

Property Taxes

Property taxes consist of real estate and personal property taxes, which may include taxes on machinery and equipment. Northwest Pennsylvania property taxes are modest compared to Boston and the European cities and will be zeroed out since this project will be located in a Keystone Opportunity Zone (KOZ).

Corporate Income Taxes

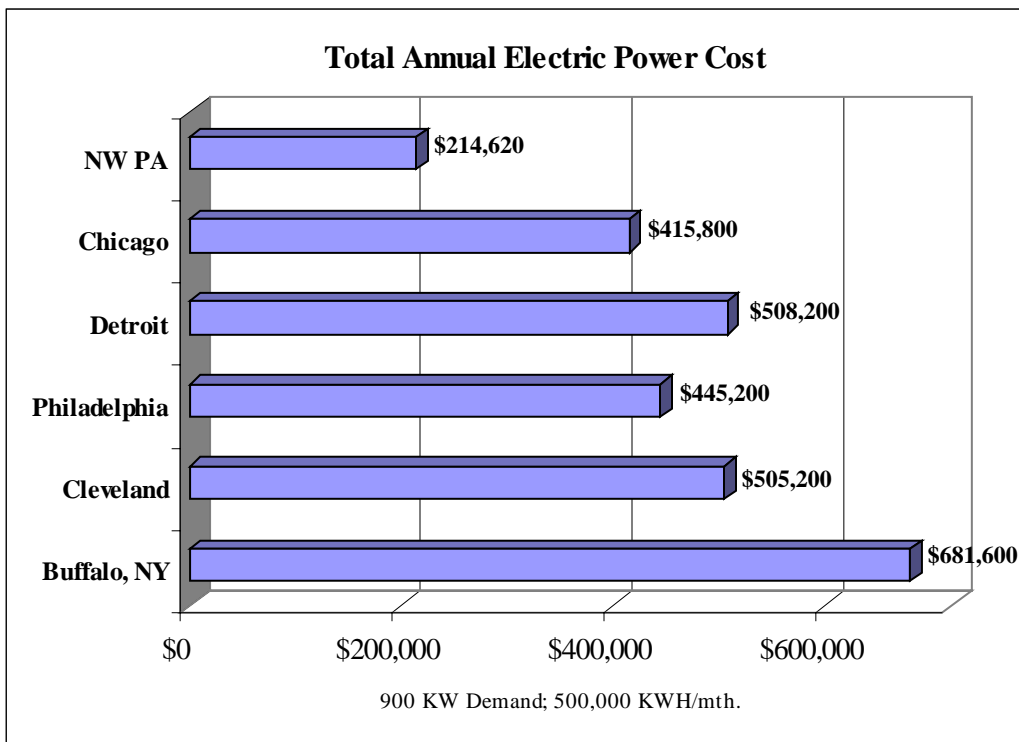
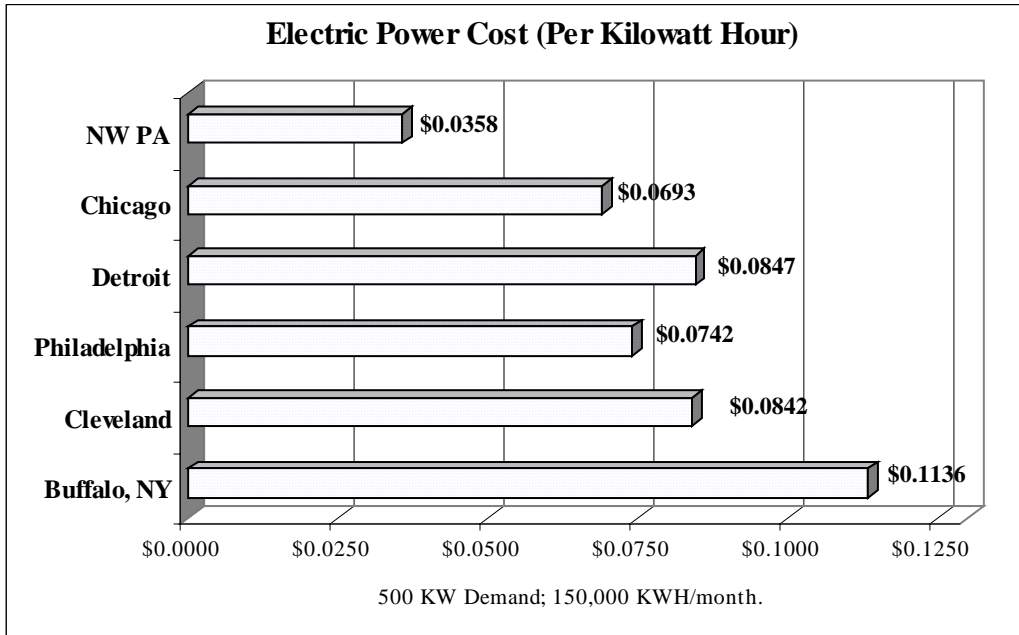
Pennsylvania's state income tax rate is 9.90%, the highest of the comparison cities. However, the NW PA rate will be zeroed out since this project will be located in a Keystone Opportunity Zone (KOZ).



Utilities

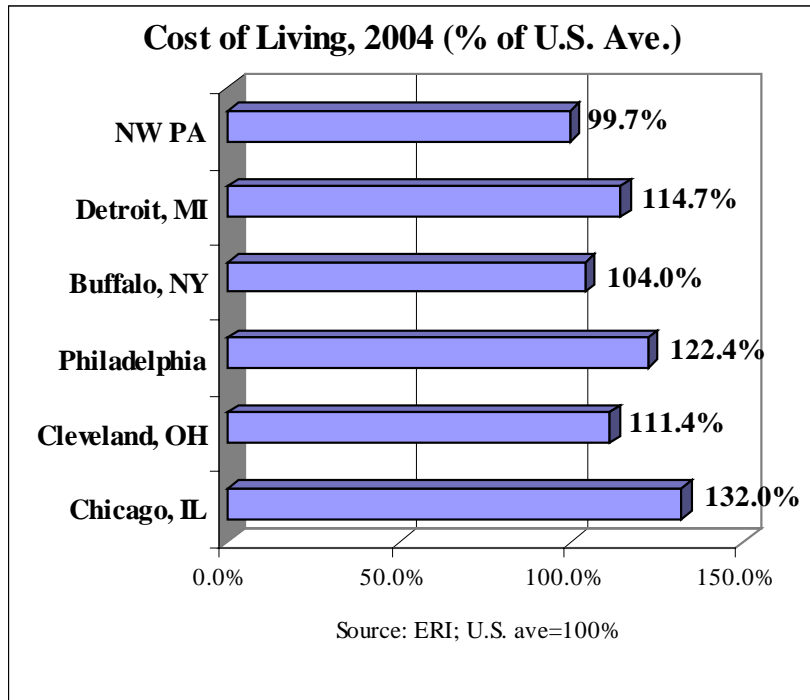
Electric Power

Power costs are a relatively minor cost in this model, anywhere from 2-5% 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 personal 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.



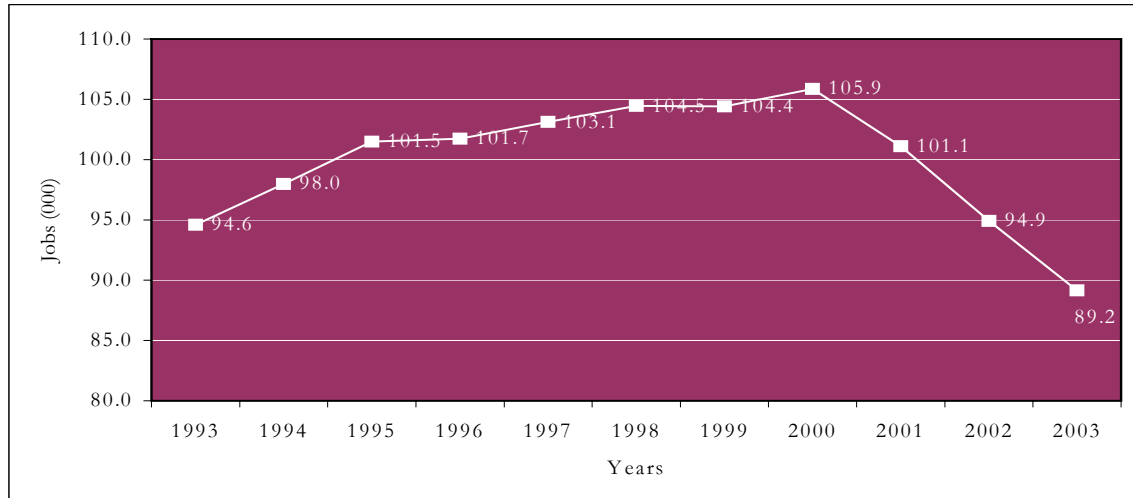
The Fab Metals Industry in Northwest Pennsylvania

Trends and Issues

The region's leading strengths in Fabricated Metals parallel its general manufacturing strengths, which includes favorable access to markets and suppliers, an experienced manufacturing workforce, and special supplier advantages offered by the region's precision tool and die industry. There are a number of pluses:

1. The area's strong manufacturing history and work ethic.
2. A central location to major industrial markets in the East and Midwest.
3. Local manufacturers' experience in building tools and dies for machinery manufacturing.
4. Interstate highway access afforded by I-80, I-90, and I-79 is a plus for worker commuting and travel time to both suppliers and customers.
5. The general training strengths found at PMI, Penn State, Erie, Edinboro University of Pennsylvania, and Clarion University are advantages for developing the businesses in this sector.

Employment has been declining in the state's Fabricated Metals Industry since 2000. Since its 2000 peak, nearly 17,000 jobs have been lost in the sector, which has historically been a strong industry for Pennsylvania.



According to D&B iMarketplace data, NW Pennsylvania has 317 Fabricated Metals firms that employ 12, 788 people. The industry is well represented in the region now and has favorably growth prospects for those specialized producers of innovative products. International trade will important to these companies' future growth.

NW Pennsylvania Fabricated Metals Sector, (NAICS 332), 2003

NW Penn County	Firms	Jobs
Clarion, PA	5	180
Crawford, PA	41	1,683
Erie, PA	138	4,430
Forest, PA	1	100
Lawrence, PA	43	1,026
Mercer, PA	51	4,018
Venango, PA	13	135
Warren, PA	25	1,216
Totals	317	12,788

Incentives Offered in NW PA

The Northwest Commission can facilitate excellent incentive packages to qualified fab metals 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 Fab Metals Firms

- **The low cost area versus all comparison cities.**
- Excellent proximity to regional markets.
- Good presence of fab metals operations.
- Outstanding educational and training resources.
- Good site and build-to-suit opportunities
- 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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