

LOGISTICS AND TRANSPORTATION INDUSTRY ANALYSIS

Prepared for:

**Northeast Pennsylvania Logistics and Transportation
Industry Partnership**

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INTRODUCTION

This logistics and transportation industry analysis is the product of a contract between the Wadley-Donovan Group (WDG) and the Luzerne/Schuylkill Workforce Investment Board, Inc. to assess the strengths, weaknesses, opportunities, and threats for logistics and transportation operations in a twelve-county region that comprises Northeast Pennsylvania, with an emphasis on a core area of four counties. The twelve-county area consists of Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming Counties, while the core area is defined by Luzerne, Lackawanna, Monroe, and Schuylkill Counties.

Due to the significant growth of logistics and transportation firms in Northeast Pennsylvania over the past few years, the region has seen a large number of transportation related career opportunities become available, and these opportunities require technical and advanced skills. The Northeast Pennsylvania Logistics and Transportation Partnership (LTIP) was created to formalize the process of developing these technical skills to better align economic and workforce development programs to meet the needs of businesses, the career goals of workers, and to attract and retain quality employers in the region. Formation of the LTIP is applauded, and it will serve as a vital focal point for employers, educators, workforce developers, and the economic development community.

This analysis uses data obtained through a survey of key transportation, distribution, and logistics industry companies (jointly identified by WDG and LTIP); interviews with representative employers, educators, real estate executives, and workforce investment boards; a review of key statistical and other secondary-source information; and an examination of current industry and cluster literature pertaining to the logistics and transportation industry. The customized employer survey gathered information from the region's employers regarding the availability, quality, and cost of labor in the region, the quality of the region's training resources, and future labor demand. Information on the cost of operating distribution operations in competing locations was obtained from interviews with commercial realtors, utility representatives, and tax officials. Edison Electric Institute and other published data were utilized in the analysis.

In addition, an outbound freight cost analysis was conducted to measure the relative costs of outbound freight from three locations in the core area (Wilkes-Barre, Stroudsburg, and Pottsville), versus three locations selected as representative competing locations (Hightstown, NJ, Middletown, NY, and Harrisburg, PA). The analysis is based on representative LTL (less than truckload) and TL (truck load) rates (with typical discounts), applied to shipment characteristics and patterns agreed to by WDG and LTIP, for shipments from the six selected locations to 20 U.S. destinations and two Canadian destinations (Montreal and Toronto). The parameters used in this analysis are representative of a regional distribution center serving a multi-state region that includes the Northeast and Middle Atlantic states, the District of Columbia, New England, Ontario, Quebec, Ohio, West Virginia, eastern portions of the Midwest and a portion of Kentucky.

This authorized study required independent research to review the labor market resources of the twelve-county Northeast Pennsylvania region from the perspective of a locationally active company. For this study, WDG:

- Confidentially interviewed seven transportation, distribution, and logistics-related employers.
- Interviewed seven key influencers, including educators, workforce investment boards, and industrial developers.
- Distributed an employer survey to 83 transportation, distribution, and logistics firms located in the region. Five employers declined participation in the survey. A total of 28 employers returned the questionnaire, for a 33.7% return rate.
- Prepared and reviewed statistical data on key location factors for the twelve-county Northeast Pennsylvania region; each of the twelve counties in the region; Pennsylvania; the U.S.; and three 30-minute-commute-zone nodes. The commute nodes are located at Schuylkill Highridge

Business Park (near Pottsville, Schuylkill County), Arcadia North Business Park (near Mount Pocono, Monroe County), and CenterPoint Commerce & Trade Park East (near Pittston, Luzerne County). Research sources include, but are not limited to, U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Department of Education, Official Airlines Guide, Inc., City and County Extra Data Book, National Association of Home Builders, and Pennsylvania, New York and New Jersey Departments of Economic Development. Environmental Systems Research Institute Business Information Solutions (ESRIBIS), Inc. – a leading demographic data vendor – was used for 2000, 2005 and 2010 demographic, occupational, and related data estimates and projections. Real estate-related sources included: Bill Jones, Mericle Real Estate Services-Wilkes-Barre, PA; Bob Sticht and Tom Kurczow, Grubb and Ellis Company-Edison, NJ Office; LoopNet.com; Black's Guide; and Marshall Valuation Services – Marshall and Swift. Exhibits containing the gathered data are presented in Appendix C.

The findings presented herein are those of WDG only. We have examined the region from a corporate perspective and our own knowledge of economic development programs across the U.S., coupled with our extensive experience in target industry identification and analysis. WDG's principal findings and conclusions are recapped in the Executive Summary, followed by a presentation of findings on the key study components.

The Wadley-Donovan Group is the nation's largest and oldest independent economic development and corporate location consulting firm. Wadley-Donovan GrowthTech is the economic-development consulting unit of the firm, providing real-world, results-oriented products based upon the actual needs of locating companies. Economic development clients are guided in directions that give them the highest return on their investments and in their development and marketing initiatives. WDG's economic development practice provides expertise to workforce and economic development agencies and utilities in sales and marketing, strategic planning, database development, overall product development and assessment. Clients have included Eastern Idaho; Orange County and Orlando, FL; Tampa; Tulsa; Rochester, NY; Buffalo, NY; Memphis; Asheville, NC; Richmond, VA; Tallahassee; Jackson, TN; Central Nebraska; and the states of Delaware, Maryland, New Jersey, Iowa, Kansas, Kentucky, Arkansas, Wisconsin, Wyoming, Oregon, and Washington. Wadley-Donovan-Gutshaw Consulting (WDGC) is WDG's corporate location consulting unit. WDGC's clients include many of the nation's leading companies. Each unit has an international practice.

EXECUTIVE SUMMARY

This logistics and transportation industry analysis is for the twelve-county Northeast Pennsylvania region encompassing Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming Counties, with an emphasis on a core area of four counties (e.g., Luzerne, Lackawanna, Monroe, and Schuylkill Counties). This four-county core area is emphasized because it contains the region's largest population and workforce resources, best interstate highway access to major shipping destination points, and largest building and site inventory. The analysis was conducted for the LTIP, which was created by the Luzerne/Schuylkill Workforce Investment Board, Inc., in partnership with the Lackawanna, Pocono, and Northern Tier Workforce Investment Boards. The Greater Wilkes-Barre Chamber of Business and Industry assists in the coordination of activities for the LTIP. Other partners include the Greater Pittston Chamber of Commerce; ReDCo Group Workforce Investment Networks, Penn State Wilkes-Barre, Hazleton, and Schuylkill campuses; and Luzerne County Community College, and industry representatives.

Data for this analysis was obtained from a combination of primary sources, including employer surveys and interviews with employers, educators, workforce investment boards, and other agencies involved in labor training, recruitment, and development. Secondary data from government, private, and proprietary sources were also used. WDG's analysis is from the perspective of a company seeking a location for a transportation, distribution, or logistics-related operation. The issues addressed in this analysis are the principal topics of concern to relocating and expanding companies. WDG also reviewed two reports completed recently for the LTIP, including: *The Career Ladder Model for the Northeastern Pennsylvania Logistics and Transportation Industry Partnership* prepared by Georgia Egan, M. Ed., Workforce Development Consultant, Luzerne County Community College; and *The Training Needs Assessment of the Logistics and Transportation Industry of Northeast Pennsylvania* prepared by Karl M. Kapp, Ed. D. CFPIM, CIRM, Assistant Director – Institute for Interactive Technologies, Professor – Instructional Technology, Bloomsburg University.

Geography and Population

The twelve-county Northeast Pennsylvania region is situated in the northeast quadrant of the Commonwealth of Pennsylvania, and is shown in the context of the northeast United States in Figure 1, and in context of the eastern portion of the Commonwealth of Pennsylvania in Figure 2. The four-county core area is also highlighted in Figure 2.

The twelve-county Northeast Pennsylvania region is served by five interstate highway systems, including I-81, I-476, I-80, I-380, I-84, and I-86. Interstate 81 connects the region to Binghamton, NY and Hagerstown, MD. Interstate 476 (the Northeast Extension of the Pennsylvania Turnpike) links the region to Allentown and Philadelphia to the south. Interstate 80 provides access to New Jersey and Ohio, and I-380 links Scranton to I-80. Interstate 84 connects the region to southern New York and Connecticut. U.S. State route 17 (a portion of future I-86) crosses the New York-Pennsylvania border in Bradford County, and provides access to Binghamton and western New York State. The Scranton and Wilkes-Barre area is generally within a two-hour drive of Philadelphia, a 2-1/2-hour drive of New York City, a 3-1/2-hour drive of Baltimore, and a four-hour drive of Washington, DC.

The region's position along interstate highways, its proximity to New Jersey and New York State, and its access to all of Pennsylvania provide excellent opportunities for distribution centers serving those areas. It is also well positioned to serve a broader region including New England and parts of Ontario and Quebec, Ohio, Maryland, the District of Columbia, Delaware, Virginia, West Virginia, and parts of Michigan, Indiana, and Kentucky. A facility positioned in Northeast Pennsylvania represents a cost effective location to serve this region. (Refer to Figure 3)

**FIGURE 1
PENN'S NORTHEAST STUDY AREA IN THE CONTEXT OF THE NORTHEAST UNITED STATES**



**FIGURE 2
PENN'S NORTHEAST STUDY AREA IN THE CONTEXT OF EASTERN PENNSYLVANIA/
WESTERN NEW YORK/NEW JERSEY**

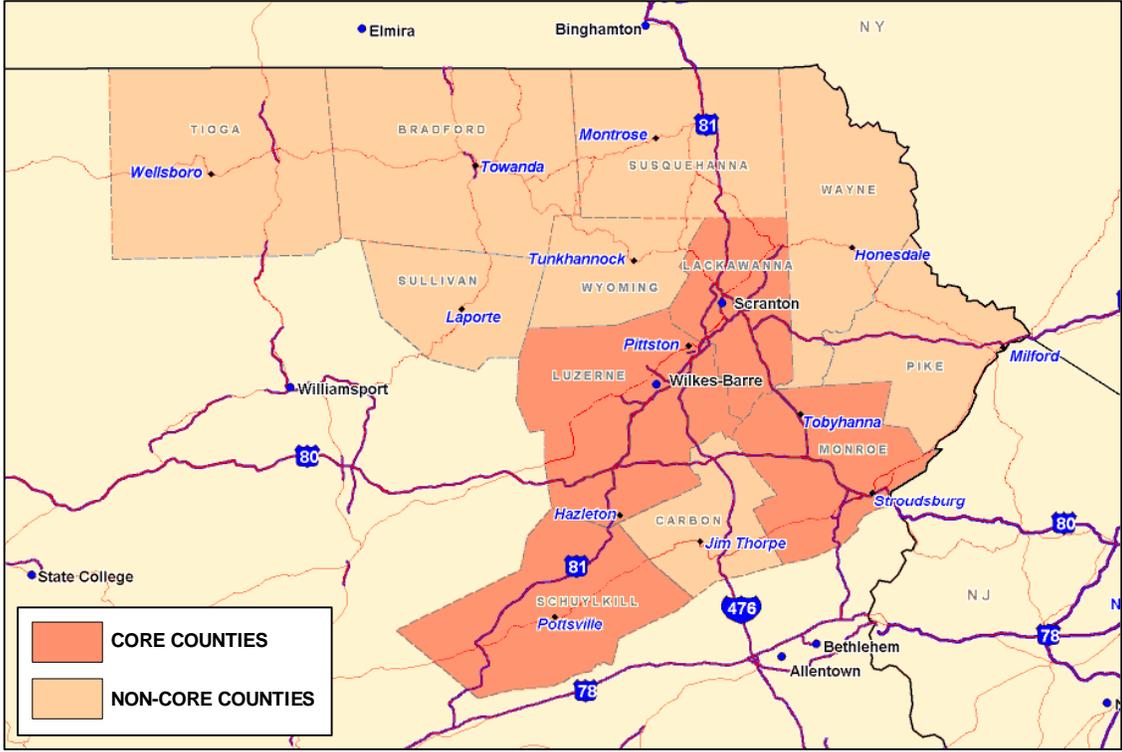
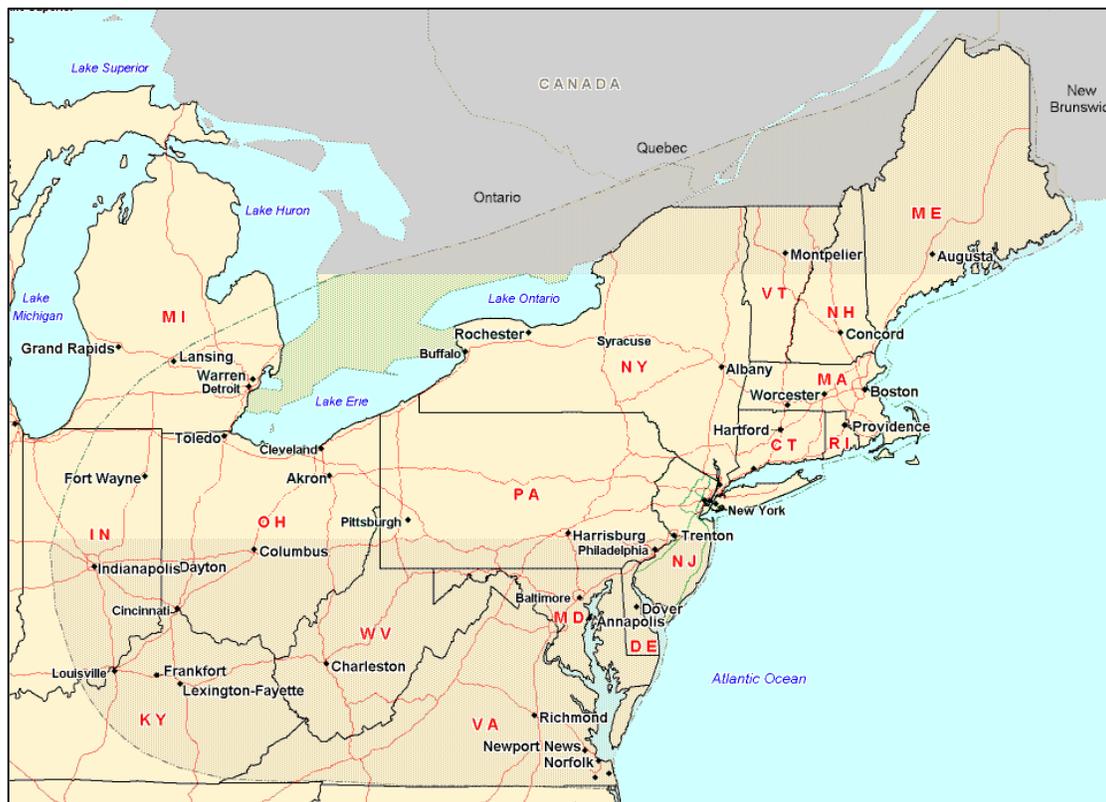


FIGURE 3
APPROXIMATE REGION SERVED BY DISTRIBUTION CENTERS IN NORTHEAST PENNSYLVANIA



The twelve-county study region is large (approximately 150 miles from east-to-west, and 105 miles distance north-to-south) and contains a blend of urban, suburban, and rural sectors, with a population of about 1,176,600. Luzerne County is the largest county in the region in terms of population, with 315,165 residents. Lackawanna County has the second-highest estimated population, with 210,735 residents. The third- and fourth-largest counties in the region are Monroe County and Schuylkill County, with 158,083 and 149,665 residents, respectively. The remaining eight counties range in size from Sullivan County (5,967 residents) to Bradford County (62,577 residents).

The twelve-county region's population growth over the next five years is forecasted at 1.3% (15,442 net residents), which is below the Pennsylvania average of 1.7%, and well below the national rate (6.4%). Three of the four largest counties in the region (e.g., Lackawanna, Luzerne, and Schuylkill Counties) are projected to decline in population between 2005 and 2010, as are five of the eight counties outside the core area (e.g., Susquehanna, Bradford, Tioga, Carbon, and Sullivan Counties). Population declines in these eight counties are offset by growth in Pike County (14.3%), Monroe County (11.3%), Wayne County (2.6%), and Wyoming County (0.7%)

Between 2005 and 2010, the net population of the four-county core area is projected to grow by 27,138 residents. High growth in Monroe and Pike Counties (exceeding U.S. and Pennsylvania averages) will occur across all age groups, including the 20-to-34-year age group, which bodes well for present and future workforce resources in those two counties.

Workforce

In twelve months there will be a very high demand for heavy-truck drivers in the 12-county region. WDG asked employers in the region to estimate the number of specific positions they would need to fill in twelve month's time. Survey respondents reported a need for 1,011 heavy-truck drivers, 306

warehouse associates/warehouse clerks, and 200 hand packers and packagers. There is also a need for forklift operators and diesel mechanics. Survey respondents also report that second- and third-shift workers and seasonal workers are also in demand.

Surveyed transportation and distribution-related employers report that the level of basic skills seen among job applicants is satisfactory in four skills criteria and unsatisfactory in three criteria. While overall basic skills, reading comprehension, verbal communication/comprehension, and team and cooperative skills are considered satisfactory, surveyed employers report that applicants' written communication, math, thinking, and judgment/problem-solving skills are at unsatisfactory levels. Among existing employees, however, work ethic and productivity levels are reportedly good to very good. Surveyed firms report acceptable levels of employee turnover and absenteeism.

The LTIP, along with the secondary and post-secondary educational institutions within the region, must respond to the region's labor demand and supply imbalance, as well as the need to improve workforce quality. Surveyed employers have very limited experience working with the region's educational institutions for general and customized training programs, and for apprenticeships, internships, and co-ops. Employers should also develop stronger relationships with local educational institutions to become aware of existing programs, and to encourage program changes that more effectively meet employers' needs.

In 2005, the twelve-county Northeast Pennsylvania region had a civilian labor force of 585,980, which expanded by 4.9% between 2000 and 2005, more rapidly than Pennsylvania (3.4%) and the U.S. (4.7%). The civilian labor force expanded in all twelve of the region's counties between 2000 and 2005, with highest rates of growth in Pike County (17.8%), Monroe County (12.3%), Wayne County (9.5%), and Bradford County (8.0%). The civilian labor force also grew in Susquehanna, Tioga, Carbon, and Sullivan Counties, exceeding the U.S. average (4.7%).

As of November 2006, the twelve-county Northeast Pennsylvania region had an overall unemployment rate of 4.7%, which is above the Pennsylvania and U.S. averages of 4.4% and 4.5%, respectively. Six of the twelve counties had unemployment rates above the national norm, including Luzerne County 4.9%, Schuylkill County (5.3%), Tioga County (4.7%), Carbon County (5.1%), Pike County (4.6%), and Sullivan County (4.6%). Unemployment rates, meanwhile, in Monroe and Lackawanna Counties were at parity with the national average (4.5%). The remaining four counties in the twelve-county region had unemployment rates lower than 4.4%.

The region's economy is evolving from a consumer-manufacturing base to one based on service, niche manufacturing, and distribution. Employment in manufacturing, mining and utilities declined between 2000 and 2005; however, other industry sectors expanded, including services (e.g., administration/support/waste management; education; finance and insurance; health care; and professional/scientific/technical) and transportation and warehousing.

The transportation and warehousing industry is emerging as one of the twelve-county region's growth engines. The industry sector employs 4.7% of the twelve-county Northeast Pennsylvania region's total employment, which exceeds the Pennsylvania average (4.4%), and the U.S. average (4.0%). Between 2000 and 2005, the industry's employment grew by 9.5% within the region, exceeding U.S. and state averages by a considerable margin.

The region also contains a strong base of manufacturing operations, which employs 13.9% of the region's total employment – higher than the Pennsylvania average (12.5%) and the U.S. average (10.9%). Other dominant employment sectors in the region are healthcare/social assistance, retail trade, and utilities.

The region's economic transition has generated company closures and downsizings. Within the four-county core area alone, company closures and downsizings between 2000 and 2006 in all industry sectors generated a loss of over 15,700 jobs affecting more than 120 firms. Luzerne County was hardest hit, with the loss of nearly 8,500 jobs during the period. Lackawanna County lost 5,083 jobs due

to 32 company closures and 12 company layoffs over the last seven years. The transportation, distribution, and logistics industry was impacted by these events. In 2003, Lord & Taylor furloughed approximately 125 warehouse associates from its distribution center in Wilkes-Barre, and Consolidated Freightways closed their Luzerne County operation in 2002, affecting 1,351 workers. The transitional economy is generating workforce resources which can be utilized by new and expanding companies.

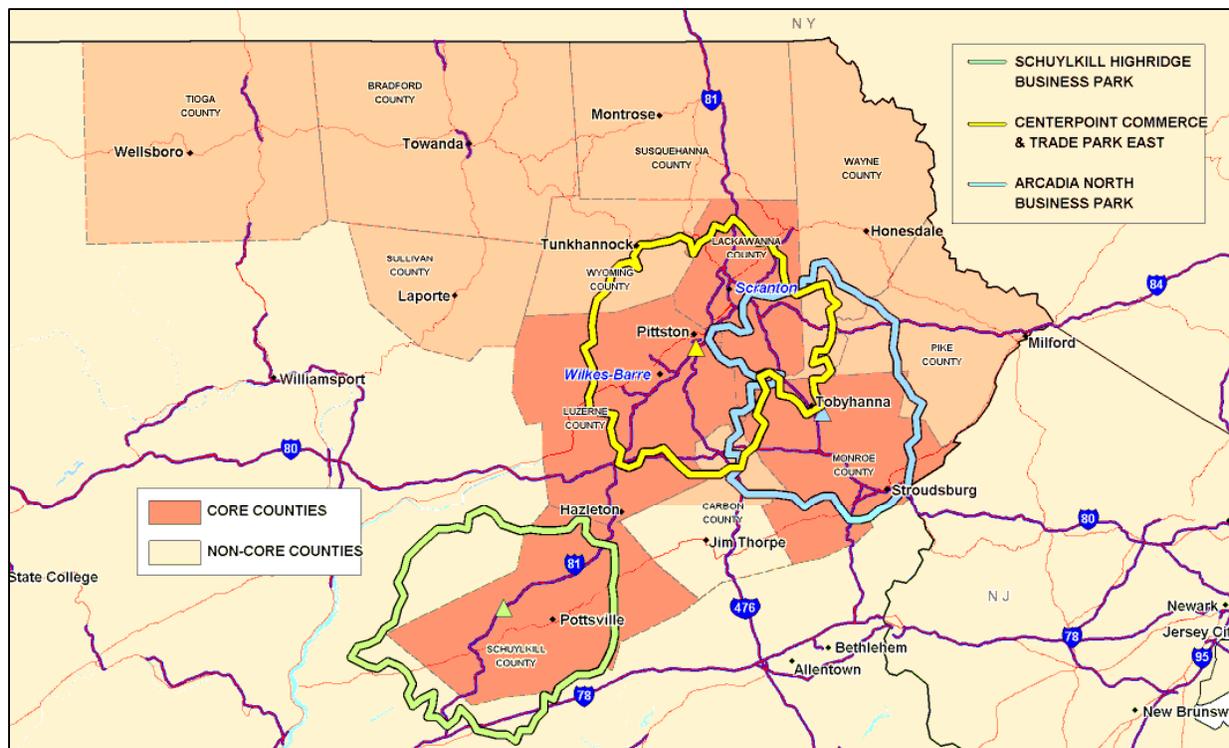
Real Estate

The LTIP identified three properties/locations as representative points-of-opportunity to accommodate mid-to-large warehouse/distribution operations in the four-county core area. These locations were selected as proxy sites due to their present availability for development, their location near other sites, their location close to population and workforce concentrations, and their prime positioning on the interstate highway system. The three points-of-opportunity and their corresponding 30-minute commute zones are identified below, and displayed in Figure 4.

- Schuylkill Highridge Business Park (near Pottsville in Schuylkill County)
- Arcadia North Business Park (near Mount Pocono in Monroe County)
- CenterPoint Commerce and Trade Park East (near Pittston in Luzerne County)

These three properties are representative of the sites in the region that are suitable for distribution centers and serve as proxy locations for a comparative cost and workforce analysis of the region. Notably, there are at least 30 buildings and sites in the four-county core area suitable for warehouse/distribution operations. WDG's survey of available properties indicates there are more sites available in Northeast Pennsylvania's core area than in the competing locations (e.g., Harrisburg, Hightstown, and Middletown).

FIGURE 4
30-MINUTE COMMUTE ZONES FROM LTIP-SELECTED "POINTS-OF-INTEREST"



Operating and Freight Costs

Operating Costs

Operating costs for warehouse and distribution operations at the three representative sites compare favorably against operating costs in three competitor locations selected by LTIP: Harrisburg, PA; Hightstown, NJ (Exit 8 on the New Jersey Turnpike); and Middletown, NY. The Wilkes-Barre and Pottsville sites offer the overall lowest cost environments of all the sites studied, followed by Stroudsburg and Harrisburg. The three Northeast Pennsylvania sites and Harrisburg offer considerably lower relative operating costs than Middletown and Hightstown. Table 1 presents the relative rankings of the six locations for the major cost categories (e.g., labor, zoned and fully-serviced land, construction, occupancy, electric power, and natural gas).

TABLE 1
OPERATING COST COMPARISON – RELATIVE RANKINGS*
1=lowest cost; 6=highest cost

Cost Factor	Wilkes-Barre PA	Pottsville PA	Harrisburg PA	Stroudsburg PA	Middletown NY	Hightstown NJ
Labor Cost Index	1	2	3	4	5	6
Land Cost Zoned and Fully Served	2	1	4	4	2	6
Construction Cost - Good Class C Warehouse/Distribution	2	4	1	2	6	5
Occupancy (base rent, utilities, operations/maintenance, property taxes)	2	1	3	4	5	6
Electric Power Cost	2	2	1	2	5	6
Natural Gas Cost	3	2	3	3	1	6

* Rankings based upon WDG's comparative analysis of costs, by factor, among the six locations.

Freight Costs

The outbound freight cost assessment measured and compared the relative costs of shipping outbound freight from the three representative locations in the four-county core area (e.g., Pottsville, Stroudsburg, and Wilkes-Barre) and the three competitor locations (e.g., Hightstown, Middletown, and Harrisburg) to 20 locations in 17 states, plus Toronto and Montreal in Canada. (See Figure 5 on page 59).

Using representative shipping assumptions based on local company experiences (class 85 rates, population density based distribution, combined TL and LTL shipments-assuming 1.5 billion pounds TL and 19.6 million pounds LTL per year), Stroudsburg offers the lowest cost-origin location, followed by Hightstown, Wilkes-Barre, Middletown, Pottsville, and Harrisburg. Using the project-established parameters, shipping from Stroudsburg has an annual cost savings of \$1.075 million over Harrisburg, the highest cost shipping location. The total costs and cost differentials resulting from the outbound freight cost assessment are presented in Table 2. The detailed analysis and a full definition of the parameters used are presented in the *Outbound Freight Cost Assessment* section of this report and in Appendix E.

TABLE 2
TOTAL COSTS AND COST DIFFERENTIALS – SIX ORIGIN LOCATIONS

Origin Location	Annual Outbound Freight Cost			Annual Differential vs. Low-Cost Origin Point	
	LTL Shipments	TL Shipments	Total Cost	Cost Penalty	Percentage
Stroudsburg, PA	\$1,816,446	\$30,092,192	\$31,908,638	\$0	100%
Hightstown, NJ	\$1,876,600	\$30,271,332	\$32,147,932	\$239,294	101%
Wilkes-Barre, PA	\$1,849,481	\$30,589,728	\$32,439,209	\$530,571	102%
Middletown, NY	\$1,966,332	\$30,663,516	\$32,629,848	\$721,210	102%
Pottsville, PA	\$1,844,778	\$30,840,836	\$32,685,614	\$776,976	102%
Harrisburg, PA	\$1,865,992	\$31,117,788	\$32,983,780	\$1,075,141	103%

Combined Costs

An abbreviated cost analysis to highlight the relative cost differentials among the six locations is presented in Table 3. A comprehensive cost analysis is not presented, as it would be misleading to operations that do not match the parameters used in the model. The analysis demonstrates, however, that Wilkes-Barre and Pottsville offer a distinct cost advantage, assuming the parameters used. Stroudsburg and Harrisburg annual costs are \$2.65 million and \$3.05 million higher, respectively to Wilkes-Barre the lowest cost location. Annual costs in Middletown and Hightstown are dramatically higher versus Wilkes-Barre, at \$5.21 million and \$7.20 million, respectively. Labor costs in Wilkes-Barre and Pottsville are lower than in the competitor locations, and it is these labor-cost differentials that are major contributors to the operating-cost savings at these locations.

TABLE 3
ABBREVIATED COST COMPARISON – ESTIMATED ANNUAL COSTS

Factor	Wilkes-Barre PA	Pottsville PA	Stroudsburg PA	Harrisburg PA	Middletown NY	Hightstown NJ
Lease Cost*	\$5,400,000	\$5,200,000	\$5,950,000	\$5,750,000	\$7,000,000	\$8,000,000
Wage Cost**	\$29,254,400	\$29,485,600	\$31,885,600	\$31,406,400	\$32,674,400	\$34,145,600
Shipping Cost***	\$32,439,209	\$32,685,614	\$31,908,638	\$32,983,780	\$32,629,848	\$32,147,932
Total:	\$67,093,609	\$67,371,214	\$69,744,238	\$70,140,180	\$72,304,248	\$74,293,532
Differential to Lowest Cost Location:	\$0	\$277,605	\$2,650,629	\$3,046,571	\$5,210,639	\$7,199,923

* Gross lease cost for 1,000,000 square feet of distribution/warehouse space.

** Employing 800 workers at the un-weighted average wage/salary of ten warehouse/distribution-related occupations.

*** Based on Outbound Freight Cost Assessment.

Key Assets

Following are the key identified assets of the four-county core region:

- The twelve-county Northeast Pennsylvania region is served by five interstate highway systems.** The region's positioning along interstate highways and its strategic location proximate to northeastern states, Atlantic seaports, New England, Canada, and Ohio is attractive to warehouse, distribution, and logistics operations.
- The area offers opportunities for transportation, distribution and logistics companies and is a strong alternative to Harrisburg, the Lehigh Valley, New Jersey, and New York, where inventories are depleting and costs are more expensive.** The availability and cost of sites and buildings in the four-county core area is a competitive advantage.
- The region's economy is going through a transition from a consumer product based manufacturing economy to a niche-manufacturing and a service economy, and the transportation sector is expanding more rapidly than the nation.** There were 86 company closures and 38 company downsizings between 2000 and the present, impacting over 15,700 workers. This transitional energy has generated workforce resources that can be an asset to existing companies and new prospects. Meanwhile, the educational community and workforce training providers represent an important resource to guide the workforce through this transition to meet the labor needs of employers.
- The region offers a diversified cluster of warehouse, distribution, and logistics operations with an existing base of industry knowledge and skills.** WDG and the LTIP have identified over 80 transportation-related operations in or near the four-county core area within these clusters. Companies with regional distribution center operations employing 500 or more workers in the four-county core area include Kane Warehousing (1,000), Wal-Mart (two DC operations – 1,700 total), T.J. Maxx (1,250), Sears Logistics Services (750), Lowe's Corporation (600), Wegmans Food Markets (510), Liz Claiborne (500), and Harper Collins Publishing (500).

5. **The twelve-county region continues to house a strong base of manufacturing operations, and some workers from these operations have experience in product warehousing and shipping/receiving or possess transferable skills.** Manufacturing employs 13.9% of the region's total employment, comparing higher than Pennsylvania (12.5%) and the U.S. (10.9%). Many of these manufacturing firms have distribution functions.
6. **The twelve-county region contained 1,176,569 residents in 2005, which is projected to expand by 15,442 net residents by 2010.** The region's population is shifting. Eight of the twelve counties in the region, including Lackawanna, Luzerne, and Schuylkill, are projected to decline in population; however, their decline will be offset by the growth in Pike, Monroe, Wayne and Wyoming Counties, which will expand by 27,138 net residents by 2010.
7. **For 2005, the twelve-county region's overall unemployment rate was 5.5%, which is higher than the averages for Pennsylvania (5.0%) and the nation (5.1%).** All of the four core area counties had average area unemployment rates higher than the national norm. Unemployed workers, especially those with manufacturing experience, may be suitable for training/retraining to fill the needs of transportation, distribution, and logistics operations.
8. **The civilian labor force in the twelve-county Northeast Pennsylvania region has been expanding more rapidly than the Pennsylvania and national averages.** This labor force contains a significant number of residents who commute outside the area for work. According to U.S. Census Bureau data for 2000, nearly 18,000 Monroe County residents commuted to jobs in New York, New Jersey, or Connecticut. Because of the long commute times from Northeast Pennsylvania to New Jersey and New York (two-hours or more each way), many commuters might prefer to work in the region, representing a potentially hidden labor supply resource. Additionally there are regional residents who commute to jobs in the Lehigh Valley (i.e., the Allentown-Bethlehem-Easton area) who also represent a potential workforce for area employers.
9. **The civilian labor force within the 30-minute commute zones associated with each of the three LTIP identified sites (e.g., Schuylkill Highridge, Arcadia North, and CenterPoint Commerce and Trade Park East) is growing.** Additionally, unemployment rates in the three commute zones exceed the regional average, an advantage for expanding or new operations seeking available workers.
10. **There are higher proportions of area residents employed in occupations and skills useful to the region's transportation/warehouse-sector employers.** Compared to Pennsylvania and national averages, there are larger concentrations of workers in the region employed in building/grounds cleaning/maintenance, installation/maintenance/repair, production, and transportation/material moving occupations. These workers offer a potential for training and retraining to meet the needs of transportation, distribution and logistics employers.
11. **Surveyed employers report satisfactory-to-good availability of a variety of skills needed by the transportation sector.** Occupations reportedly available in the region include material-moving workers, general laborers, and freight, stock and material movers (hand). A variety of office skills are also available. Eleven of the 26 occupations (42%) for which sufficient data was received in the WDG employer survey can be recruited satisfactorily or better.
12. **Employers rate the level of basic skills as seen among job applicants as acceptable in four criteria.** Satisfactory ratings were received for overall basic skills, reading comprehension, verbal communication/comprehension, and team and cooperative skills.
13. **Surveyed employers report satisfactory work ethic and productivity levels among employees.** Employers are satisfied with their employees' work ethic, productivity, productivity compared to other company sites, willingness to work overtime, and punctuality.

14. **Interviewed and surveyed transportation and distribution-related employers do not see substance abuse as a major problem among job applicants.** For-cause drug testing and job applicant testing are common practices in the region, and failures are considered atypical.
15. **Average earnings in the twelve-county region are below Pennsylvania and national averages.** The region's overall median employee earnings are 71% of the national average, and 74% of the Pennsylvania average.
16. **Commercial Drivers License (CDL) training is offered at Lackawanna College, Lehigh Carbon Community College, Luzerne County Community College, and Northampton Community College.** Smith and Solomon (a private and well-regarded driver training provider) also provides CDL and Hazmat training within the region.
17. **Auto and diesel mechanics certification courses are offered at Johnson College in Scranton, and auto mechanics courses are offered at Luzerne County Community College, and Northampton Community College.** Automotive and diesel mechanics courses are also provided for high school students and adults at a number of career and technology centers/institutes in the region. Diesel technology courses are specifically offered at Career Technical Center of Lackawanna County, Hazleton Area Career Center, Monroe Career and Technical Center, Northern Tier Career Center, and Wilkes-Barre Area Vocational & Technical School.
18. **Penn State–Main Campus offers a comprehensive program in Supply Chain and Information Systems that ranges from non-degree coursework up to the PhD level.** The program, which is within the business school, accepts 300 students annually. The program currently contains 500 undergraduate students, 30 MBA students, and 14 PhD students. The faculty includes seven full-time instructors and 19 research faculty. The program description notes 100% student placement. *U.S. News and World Report* ranks the quality of Penn State's undergraduate-level supply chain program as the fifth best in the U.S., and the graduate-level supply chain program as the seventh best in the U.S.
19. **Surveyed employers are pleased with the quality of graduates from the region's post-secondary institutions.** The survey responses show there is a good overall perception among the region's transportation/distribution/logistics employers about many of the region's two-year, four-year, and graduate post-secondary institutions. The twelve-county region contains six two-year schools and 13 four-year and graduate post-secondary institutions. These schools graduate students with degrees relevant to the transportation industry, including information technology, diesel mechanics and management.
20. **The four-county core area offers a good selection of existing buildings and ready to go fully served sites for warehouse and distribution operations, representing an advantage for the region.** There are 15 vacant sites and 15 buildings providing opportunities for big-box, mid-size, or small operations.
21. **Pennsylvania offers a variety of incentive programs for new and expanding industries, as well as for upgrading employer skills.** The KOZ, KOEZ, and LERTA programs can significantly reduce the cost of doing business in Pennsylvania through exemptions, deductions, abatements, and credits of state and local taxes, state sales and use tax, and Corporate Net Income tax. Warehouse and distribution operations are also able to take advantage of the Job Creation Tax Credit program which provides a \$1,000 tax credit per full-time job, per year, for three years, provided that employees earn an average hourly rate of at least 150% of the federal minimum wage excluding benefits. The Job Ready PA initiative has provided \$400,000 in grant funding to the Northeast Pennsylvania region in the logistics, distribution, and transportation sectors which has already been used for 43 training projects at 30 companies (assisting over 800 workers).

Key Challenges

Following are the key identified challenges of the four-county core region:

1. **The area has been attracting distribution centers and the industry is growing; however, this expansion has resulted in a significant demand for truck drivers, diesel mechanics, forklift drivers, and warehouse workers.** Among the 28 companies responding to the WDG employer survey, the occupations in greatest current demand are warehouse associates/warehouse clerks (256 needed), and hand packers and packagers (87 needed).
 - According to employers responding to the survey, over the next twelve months the greatest demand will be for heavy-truck drivers (1,011 needed), followed by warehouse associates/warehouse clerks (306 needed), hand packers and packagers (200 needed), freight, stock and material movers-hand (54 needed), general laborers (52 needed), and forklift operators (47 needed).
2. **The twelve-county region's median age is higher than state and national averages.** The median age of the twelve-county region is 41.6 years, compared to Pennsylvania (39.5 years) and the U.S. (36.3 years). Monroe County has the lowest median age in the region (39.3 years), resulting from the high concentration of residents 19 years old and younger. In the future, there will be an increasing need to rely on regional (multi-county) labor resources, attracting younger residents to jobs in the transportation industry, and in-migration.
3. **Surveyed employers rated five occupations as having borderline availability.** Dispatchers, first line supervisors, warehouse associates/warehouse clerks, forklift drivers, and conveyor operators and tenders are recruitable, but with some difficulty. Employees can be found, but openings may not be filled quickly. These five occupations represent 19% of the 26 occupations in the survey.
4. **Surveyed employers rated ten occupations as difficult to staff, with fair to poor availability.** Recruiting difficulties are reported for the following occupations: database administrators; transportation, storage and distribution managers; traffic/logistics managers; hand packers and packagers; tractor-trailer truck drivers; inventory control/shipping and receiving clerks; heavy-truck drivers; light- or delivery-service truck drivers; truck mechanics; and diesel mechanics. These ten occupations represent 38% of the 26 occupations in the survey.
5. **Seasonal workers and applicants willing to work the third shift were also reported as difficult to recruit by surveyed employers.** The availability of second-shift workers, meanwhile, was reported by surveyed employers to be somewhat difficult to staff. As a particular challenge, several of these occupations are those in the highest demand now and will be over the next 12 months.
6. **Surveyed employers report that the level of written communication, math, and thinking and judgement (problem solving) skills among job applicants is satisfactory to fair.** Math skills were the most frequently mentioned applicant shortfall, followed by writing, English, and computer skills.
7. **Employers infrequently or rarely use the area's educational institutions for training, apprenticeship, or co-op programs.** Despite the high ratings given by area employers on the quality of graduates from local post-secondary institutions and area high schools and vocational/technical programs, employers have very limited experience working with the region's institutions for general and customized training programs. This response is similar to WDG's experiences in most of its other location evaluations.
8. **Employers report that they are generally able to recruit professional and managerial talent from outside the region.** A well perceived quality of life and availability of suitable and

affordable housing among candidates are important factors in recruiting talent to the area. However, the limited availability of job opportunities for following spouses is noted as an inhibitor to relocation efforts.

9. **24 of the 40 public high schools in the core area meet the requirements of the No Child Left Behind Act; however, 16 high schools are not currently in compliance.** Of the 16 high schools not meeting Adequate Yearly Progress measures, six are in a Warning status; three schools are designated as School Improvement I; three schools are designated as School Improvement II; and three schools are designated as Corrective Action I.

Conclusions

WDG's key conclusions are:

1. **Northeast Pennsylvania offers a good environment for logistics and transportation employers.** Well-recognized firms such as Caterpillar, T. J. Maxx, Sears Logistics Center, and Kane Warehousing, Wal-Mart, Wegman's, and Lowes have located and/or expanded in the region. The region offers:
 - Excellent transportation access to a multi-state regional market;
 - Strong land and building availability; and
 - Competitive operating costs versus Harrisburg, the Lehigh Valley, New Jersey, and Middletown, New York.
2. **Northeast Pennsylvania is transitioning from a consumer-product-manufacturing base to a service, niche manufacturing, and distribution base, and the growth in transportation and logistics operations is part of the economic transition.** While there have been closures and downsizings in some of the region's long-standing industries, the transportation industry has grown.
3. **According to surveyed logistics and transportation employers, there is a current imbalance between the demand and supply of workers, and the tight supply of truck drivers, warehouse workers, and diesel mechanics will continue over the next twelve months.**
4. **The LTIP will be needed to respond to the needs of Northeast Pennsylvania logistics and transportation employers, and to create an environment conducive to the expansion of existing operations and the attraction of new operations.** The LTIP received a Training Needs Assessment report and a Career Ladder Model report pertaining to the region's logistics and transportation industry workforce. These assessments coincided with WDG's findings regarding a disconnect between employers and educators, which requires collective action to ensure that employer needs are being addressed.

Recommendations

WDG's recommendations are summarized below.

1. **The success of the Career Ladder Model implementation requires close collaboration among local employers, secondary and post-secondary schools, workforce-investment boards, one-stop career centers, and chambers of commerce.** LTIP is strongly encouraged to strengthen the transportation and logistics industry consortium to evaluate and implement the recommendations and best practices outlined in the Training Needs Assessment and Career Ladder Model (see the Recommendations section of this report for specific program elements).
2. **WDG has outlined a marketing plan and specific recommendations to target an internal and external audience.** Internal audiences include the workforce within the twelve-county

Northeast Pennsylvania region, and existing logistics and transportation employers. External audiences include the workforce and the logistics and transportation companies outside the region that may be recruited to the Northeast Pennsylvania region.

3. **WDG recommends that LTIP continue to develop and expand its website dedicated to logistics and transportation.** The website should be aimed at the internal and external audiences, with links directing each type of user to the appropriate content. The employee recruiting section of the website should be available in Spanish and English.
4. **The LTIP should fund the design and production of two short videos focused on the region's logistics and transportation industry.** The videos should be produced in both English and Spanish, and should be available as a link on the LTIP website. The videos should be used for career promotional efforts and employee recruiting, and can be featured in a number of venues, including: regional TV advertising spots, mall kiosks, movie trailers, sports venues, job fairs, WIB offices, etc.
 - One video should be targeted to high school and middle school students, introducing them to the industry and the diverse career opportunities available.
 - A second video should be targeted to not-employed, underemployed, and employed residents age 18 and older, featuring the career opportunities available in logistics and transportation, and the skills training/retraining programs and assistance that are presently available.
 - Description of jobs in the industry should be included along with testimonials from employees about their jobs.
5. **Transportation, distribution, and logistics employers should make a special effort to recruit workers from the Hispanic community.** Recruitment might be enhanced by the following efforts:
 - Employer offered recruiting bonuses for all qualified referrals.
 - Employers with bilingual supervisors (English/Spanish or other appropriate languages such as Polish) and provide training materials in Spanish and other appropriated languages.
 - English-as-a-second-language (ESL) programs offered during company time, or as paid after-hours programs.
 - The LTIP may consider supporting a bilingual liaison to assist area employers. Assistance may be provided to companies unable to afford an in-house, bilingual, human-resource officer or supervisor to assist with special recruiting or training needs.
6. **Human resource managers at the region's logistics and transportation firms are encouraged to examine and implement best practices on managing workers and meeting worker expectations.** Competition for warehouse and distribution workers and drivers has increased in the region, and WDG-surveyed employers rate applicant skills in written communications, math, and thinking and judgment/problem solving as unsatisfactory.
 - Employers should consider providing in-house remedial training to workers demonstrating strong potential, but who may be lacking in certain trainable skills. Training programs in specific areas (such as math, measurement, written/oral communication, and life skills) may be offered to employees demonstrating a good attitude and work ethic, but who may be lacking in specific skillsets.
 - Implementation of a skills-ladder concept along with supporting training would improve workers' skills and job satisfaction – leading to possible reductions in attrition. For example, Kane Warehousing has initiated its own labor-training program (Kane College) to bolster the skill levels of its existing workers. Classes are conducted in a variety of subject areas, including technical and leadership skills.

7. **The LTIP's current focus on workforce training and prospect attraction in the trucking, commuter bus, and warehouse and distribution sectors should be expanded to include rail, passenger air, air freight, freight forwarding, local bus, customs brokerage, and other related operations.** The transportation sector covers a large variety of activities, and the internal and external marketing approach should target a broader spectrum of transportation-industry employers. There may be other types of operations with similar or related labor and workforce needs in the region. For example:
- The LTIP should examine the air cargo potential at the Scranton/Wilkes-Barre airport, to determine whether there is potential to expand air-cargo services, or aircraft maintenance, repair, or overhaul operations.
 - Mechanics may also be needed at the Steamtown National Historic Site and other specialized operations.
 - City bus systems may need diesel mechanics.
8. **Truck stops within the region can serve as a workforce-recruiting tool.** The LTIP may be able to work with the owners or managers of truck stops within the region to ensure that these operations provide first-class trucker and visitor accommodations. The truck-stop owners and managers should be included in the Partnership program as allies. The provision of clean and modern accommodations with top-of-the-line truck-driver conveniences and services would call drivers' attention to the area and would contribute to the region as a transportation center. Promotional literature and the video could be made available to introduce the region's quality of life, housing availability, job availability, and wage information, among other regional attributes. Travelers through the region may have an interest in locating in Northeast Pennsylvania.
- Possible shopping linkages to Cabella's and other major retailers (such as those at the Crossings) for truck drivers traveling through the area might be investigated by those retailers (e.g. special product pickup or shopping services at the area's truck stops).

OVERVIEW OF THE LOGISTICS, DISTRIBUTION, AND TRANSPORTATION INDUSTRY

Industry Description

The Northeast Pennsylvania Logistics and Transportation Industry Partnership (LTIP) wishes to attract, nurture, and grow logistics, distribution, and transportation operations in its twelve-county region. NAICS codes relevant either directly or tangentially to these targeted operations consist of the following sectors: Air Transportation (NAICS Code 481); Rail Transportation (NAICS Code 482); Truck Transportation (NAICS Code 484); Transit and Ground Passenger Transportation (NAICS Code 485); Scenic and Sightseeing Transportation (NAICS Code 487); Support Activities for Transportation (NAICS Code 488); and Warehousing and Storage (NAICS Code 493). Automotive Repair and Maintenance (NAICS Code 8111) is also included. These NAICS designations contain industries providing transportation of passengers and cargo, warehousing and storage of goods, scenic and sightseeing transportation, and support activities related to modes of transportation.

The logistics, distribution, and transportation industry is large, and LTIP is focused on a portion of it. Activities of current interest to the Partnership include truck transportation, bus transportation, freight transportation arrangement, and warehousing and storage. The LTIP target sectors among the broad industry groups discussed below are indicated with a diamond (♦).

The full definitions of, and activities within, the transportation industry are detailed below.

Air Transportation – NAICS Code 481

This industry group comprises operations that provide air transportation of passengers and/or cargo using aircraft such as airplanes and helicopters. Some small ground transportation companies have diversified into offering airfreight services using their own fleets to meet the unique needs of their customers.

Table 4 lists the industry sectors and NAICS code numbers for activities contained within the air-transportation-industry group.

**TABLE 4
INDUSTRY SECTOR DEFINITIONS – NAICS Code 481**

Industry Sectors	NAICS Code
Scheduled Passenger Air Transportation	481111
Scheduled Freight Air Transportation	481112
Nonscheduled Chartered Passenger Air Transportation	481211
Nonscheduled Chartered Freight Air Transportation	481212
Other Nonscheduled Air Transportation	481219

Rail Transportation – NAICS Code 482

This industry group comprises operations that provide rail transportation of passengers and/or cargo using railroad rolling stock. The railroads in this subsector primarily operate either on networks, with physical facilities, labor force, and equipment spread over an extensive geographic area, or over a short distance on a local rail line.

Table 5 lists the industry sectors and NAICS code numbers for activities contained within the rail-transportation-industry group.

**TABLE 5
INDUSTRY SECTOR DEFINITIONS – NAICS Code 481**

Industry Sectors	NAICS Code
Line-Haul Railroads	482111
Short Line Railroads	482112

◆Truck Transportation – NAICS Code 484

This industry group comprises operations that provide over-the-road transportation of cargo using motor vehicles such as trucks and tractor-trailers. The subsector is divided into general freight trucking and specialized freight trucking. General freight transportation establishments handle a wide variety of general commodities, generally palletized, and transported in a container or van trailer. Specialized freight transportation is the transportation of cargo that, because of size, weight, shape, or other inherent characteristics, require specialized equipment for transportation.

Table 6 lists the industry sectors and NAICS code numbers for activities contained within the truck-transportation-industry group.

**TABLE 6
INDUSTRY SECTOR DEFINITIONS – NAICS Code 484**

Industry Sectors	NAICS Code
◆General Freight Trucking, Local	484110
◆General Freight Trucking, Long-Distance, Truckload	484121
◆General Freight Trucking, Long-Distance, Less-Than-Truckload	484122
Used Household and Office Goods Moving	484210
◆Specialized Freight (except Used Goods) Trucking, Local	484220
◆Specialized Freight (except Used Goods) Trucking, Long-Distance	484230

◆Transit and Ground Passenger Transportation – NAICS Code 485

This industry group includes a variety of scheduled and nonscheduled passenger transportation activities, such as urban transit systems, chartered bus, school bus, and interurban bus transportation and taxis. These activities are distinguished based primarily on such production-process factors as vehicle types, routes, and schedules.

Table 7 lists the industry sectors and NAICS code numbers for activities contained within the transit and ground-passenger-transportation-industry group.

**TABLE 7
INDUSTRY SECTOR DEFINITIONS – NAICS Code 485**

Industry Sectors	NAICS Code
Mixed Mode Transit Systems	485111
Commuter Rail Systems	485112
◆Bus and other Motor Vehicle Transit Systems	485113
Other Urban Transit Systems	485119
◆Interurban and Rural Bus Transportation	485210
Taxi Service	485310
Limousine Service	485320
School and Employee Bus Transportation	485410
Charter Bus Industry	485510
Special Needs Transportation	485991
All Other Transit and Ground Passenger Transportation	485999

Scenic and Sightseeing Transportation – NAICS Code 487

Industries in this subsector utilize transportation equipment to provide recreation and entertainment. These activities do not emphasize efficient transportation; rather, such activities often use obsolete vehicles, such as steam trains, to provide some extra ambience. The activities are local in nature, usually involving a same-day return to the point of departure.

Table 8 lists the industry sectors and NAICS code numbers for activities contained within the scenic-and-sightseeing-transportation-industry group.

**TABLE 8
INDUSTRY SECTOR DEFINITIONS – NAICS Code 487**

Industry Sectors	NAICS Code
Scenic and Sightseeing Transportation, Land	487110
Scenic and Sightseeing Transportation, Water	487210
Scenic and Sightseeing Transportation, Other	487990

◆Support Activity for Transportation – NAICS Code 488

This industry group comprises operations that provide services which support transportation. These services may be provided to transportation carrier establishments or to the general public. This subsector includes a wide array of establishments, including air-traffic-control services, marine cargo handling, and motor vehicle towing.

Table 9 lists the industry sectors and NAICS code numbers for activities contained within the support-activity-for-transportation industry group.

**TABLE 9
INDUSTRY SECTOR DEFINITIONS – NAICS Code 488**

Industry Sectors	NAICS Code
Air Traffic Control	488111
Other Airport Operations	488119
Other Support Activities for Air Transportation	488190
Support Activities for Rail Transportation	488210
Port and Harbor Operations	488310
Marine Cargo Handling	488320
Navigational Services to Shippers	488330
Other Support Activity for Water Transportation	488390
Motor Vehicle Towing	488410
Other Support Activity for Road Transportation	488490
◆Freight Transportation Arrangement	488510
Packing and Crating	488991
All Other Support Activities for Transportation	488999

◆Warehousing and Storage – NAICS Code 493

This industry group comprises operations that are primarily engaged in operating warehousing and storage facilities for general merchandise, refrigerated goods, and other warehouse products. They do not sell the goods they handle. These establishments take responsibility for storing the goods and keeping them secure. They may also provide a range of services—often referred to as logistics services—related to the distribution of goods. Logistics services can include labeling, breaking bulk, inventory control and management, light assembly, order entry and fulfillment, packaging, pick and pack, price marking and ticketing, and transportation arrangement. However, establishments in this industry group always provide warehousing or storage services in addition to any logistics services. Furthermore, the warehousing or storage of goods must be more than incidental to the performance of services.

Table 10 lists the industry sectors and NAICS code numbers for activities contained within the warehousing and storage industry group.

**TABLE 10
INDUSTRY SECTOR DEFINITIONS – NAICS Code 493**

Industry Sectors	NAICS Code
◆General Warehousing and Storage	493110
◆Refrigerated Warehousing and Storage	493120
Farm Product Warehousing and Storage	493130
◆Other Warehousing and Storage	493190

Automotive Repair and Maintenance – NAICS Code 8111

This industry group comprises operations involved in providing repair and maintenance services for automotive vehicles such as passenger cars, trucks (including diesel tractor-trailer trucks), and vans, and all trailers. Establishments in this industry group employ mechanics with specialized technical skills to diagnose and repair the mechanical and electrical systems for automotive vehicles, repair automotive interiors, and paint or repair automotive exteriors.

Table 11 lists the industry sectors and NAICS code numbers for activities contained within the automotive repair and maintenance industry group.

**TABLE 11
INDUSTRY SECTOR DEFINITIONS – NAICS Code 8111**

Industry Sectors	NAICS Code
General Automotive Repair	811111
Automotive Exhaust System Repair	811112
Automotive Transmission Repair	811113
Other Automotive Mechanical and Electrical Repair and Maintenance	811119
Automotive Body, Pain, and Interior Repair and Maintenance	811121
Automotive Glass Replacement Shops	811122
Automotive Oil Change and Lubrication Shops	811191

Transportation, Distribution and Logistics Industry Trends

Between 1999 and 2004, there has been a dramatic increase for the nation and Pennsylvania in the number of people employed and the number of operations in the warehousing and storage (NAICS Code 493) industry component. Excepting in the air transportation and scenic transportation industries, where employment declined, the other sectors within the logistics, distribution, and transportation industry also grew in employment and the number of firms during the five-year period, although less dramatically. (Refer to Table 12).

The following trends occurred among the four LTIP targeted sectors:

- In the warehousing and storage industry (NAICS code 493), the nation gained nearly 450,000 net jobs between 1999 and 2004, for a 347.2% increase. Pennsylvania had a net gain of nearly 27,350 jobs, representing a 347.5% increase.
 - Over the five-year period, the number of establishments expanded by 138.9% (325 establishments) for Pennsylvania, and 91.5% (6,361 establishments) for the nation.
- The support activities for transportation industry sector (NAICS Code 488) also expanded in Pennsylvania and the nation, growing by 39.8% (4,000 net jobs) and 19.7% (86,700 net jobs), respectively.
 - The net number of establishments in the U.S. grew by nearly 4,100 (13.0%), and in Pennsylvania, the net number of establishments expanded by over 100 (13.0%).
- Pennsylvania and the nation expanded employment in the truck transportation industry (NAICS Code 484), growing net employment by 1,687 and 44,280 jobs, respectively.
 - Over the five-year period, the number of net establishments increased by 10.1% (392 operations) for Pennsylvania, and 4.8% (5,177 operations) for the U.S.
- Employment in the transit and ground passenger transportation industry (NAICS Code 485) expanded by 18.9% in Pennsylvania and 8.4% nationally.
 - The number of firms also expanded in Pennsylvania and the nation, by 6.9% and 5.4%, respectively.

The trends among the non-targeted sectors are:

- For the automotive repair and maintenance industry (NAICS Code 8111), over 3,200 net jobs were created in Pennsylvania over the five-year period, representing a 9.8% increase. The nation gained over 61,900 jobs, a 7.3% increase.
 - The number of Pennsylvania and U.S. establishments increased by 13.0%, for an increase of just over 100 and nearly 4,100, respectively.
- Between 1999 and 2004, net employment in the air transportation industry (NAICS Code 481) declined by 16.1% nationally, for a decrease of over 93,750 jobs. Pennsylvania lost just over 200 jobs during the period.
 - While the net number of jobs declined for Pennsylvania and the nation, the net number of establishments increased by 437 in the U.S., and Pennsylvania gained a total of two operations.
- The scenic and sightseeing transportation industry (NAICS Code 487) in Pennsylvania employed less than 1,000 workers in 2004 in 55 firms (up from 41 firms in 1999).
- Employment and establishment data is not presently available for the rail transportation industry (NAICS Code 482).

TABLE 12
STATE AND NATIONAL INDUSTRY CHARACTERISTICS, 1999-2004
 Source: U.S. Department of Commerce, County Business Patterns

NAICS Code/Title	Employment			Establishments		
	1999	2004	% chg	1999	2004	% chg
481-Air Transportation						
Pennsylvania	20,636	20,431	-1.0%	146	148	1.4%
U.S.	582,838	489,073	-16.1%	5,285	5,722	8.3%
482-Rail Transportation						
Pennsylvania	n/a	n/a	-	n/a	n/a	-
U.S.	n/a	n/a	-	n/a	n/a	-
484-Truck Transportation						
Pennsylvania	59,883	61,570	2.8%	3,898	4,290	10.1%
U.S.	1,384,178	1,428,458	3.2%	108,749	113,926	4.8%
485-Transit and Ground Passenger Transportation						
Pennsylvania	26,921	32,008	18.9%	1,045	1,117	6.9%
U.S.	370,022	401,034	8.4%	16,254	17,132	5.4%
487-Scenic and Sightseeing Transportation						
Pennsylvania	500-999	500-999	-	1,045	1,117	6.9%
U.S.	22,877	22,075	-3.5%	2,267	2,651	16.9%
488-Support Activities for Transportation						
Pennsylvania	10,062	14,068	39.8%	798	902	13.0%
U.S.	440,175	526,873	19.7%	31,392	35,486	13.0%
493-Warehousing and Storage						
Pennsylvania	7,867	35,208	347.5%	234	559	138.9%
U.S.	128,606	575,177	347.2%	6,954	13,315	91.5%
8111-Automotive Repair and Maintenance						
Pennsylvania	32,967	36,185	9.8%	7,561	7,674	1.5%
U.S.	842,606	904,516	7.3%	164,898	166,332	0.9%

♦ Industry sectors targeted by LTIP

As reported in Plunkett Research, Ltd.'s *Transportation, Supply Chain & Logistics Industry Trends*, the transportation sector employs about 22 million Americans and accounts for about \$1.4 trillion in revenue. According to U.S. Department of Transportation estimates, total freight shipment volumes in the U.S. are projected to increase by 70% between 1998 and 2020.

Most products in today's marketplace are the result of a global effort. The need to ship massive amounts of goods globally, and across long distances, creates a demand for logistics companies able to monitor, organize, and control the vast supply chain. The key to making such globalized manufacturing systems work is modern supply-chain technology – the use of specialized software and

networks in a coordinated effort to design, manufacture, ship, assemble, and distribute components and completed products. These systems have led to efficiencies in shipping timing and costs.

The information age, with its introduction of sophisticated databases that can track inventory levels and shipments on a global basis via the Internet, has created vast transport and logistics efficiencies. As a result, supply-chain technology has been one of the fastest growing segments in the information field. Additionally, the rapid adoption of outsourcing has led many companies that find shipping to be vital to their businesses to turn to logistics services providers for all manner of shipping support, including warehousing and distribution services.

To prevent shipping mishaps and manage day-to-day supply issues, companies hire supply-chain managers and utilize advanced data systems, or outsource all of the supply-chain services. Third-party logistics companies (3PL's) are taking on a vital role in the supply chain, by providing a seamless link between freight services, inventory management, warehousing, and distribution. Transportation managers determine the most viable mode of transport (by train, truck, boat, plane, or a combination thereof). Supply-chain-management software designers have developed software that can track and/or allow communication between the different components of the supply chain.

The number of major logistics-services firms worldwide has grown to more than 1,000, despite a rash of mergers between 1999 and 2001. Since the early 1990's, the logistics-services industry has expanded by approximately 20% annually, and it is expected to continue to expand at this rate into the foreseeable future. In the U.S., more than 80% of the 100 largest companies were using 3PL services. The total market in the U.S. for outsourced logistics and warehouse services is currently in the range of \$100 billion per year.

Trucks have become the standard means of transporting goods all over the world, and in the U.S. they serve the entire country, aided by the vast interstate highway system. Trucks have steadily taken market share from trains as the preferred method of long-haul cargo shipment, and trains are basically the only other vehicle with which they currently compete. Trains and trucks, nevertheless, can work together effectively and efficiently. Trains are able to operate at a low cost per ton-mile, and these lower costs have led to the development of intermodal shipping – the placement of movable containers of freight on trains (and/or ships) for part of the journey. The containers are then moved on and off of flat bed trucks as needed for highway transport. Trains are now operating on a more dependable schedule, enabling trucking firms to increase the use of long-haul rail services.

Technology breakthroughs, such as radio frequency identification (RFID) and personal digital assistants (PDA's), have led to greater efficiencies in inventory management. Trucks can also be outfitted with on-site telematics—software, wireless communications, and convenience features—that enable drivers to check email and online services for weather patterns, dispatching instructions and information, and driving directions merely by voicing commands to the computerized system.

RFID technology involves the placement of microchips in product packaging, combined with the use of special sensors on shelves that alert a central inventory management system as to product purchases and the need to restock inventory, communicating via wireless means. Powerful software, along with wireless bar-code readers, RFID tags, and wireless PDA's, can monitor and track the movement of each and every item. These systems, if fully implemented, would be able to track every item from the factory, to the freight container, to the shipping line, to the warehouse, to the store, to the consumer. Truck drivers, armed with current weather and traffic conditions, accurate dispatching instructions, and updated drivers logbooks, can make effective time-management decisions, increasing shipping efficiencies.

Changes in technology, however, require that warehouse operators and associates, as well as truck drivers and dispatchers, acquire the necessary skills to function in a changing environment. Meanwhile, large numbers of experienced drivers are changing professions or retiring, while there are not enough young people ready or wanting to take their places, resulting in a severe dearth in qualified truck drivers.

OVERVIEW OF THE LOGISTICS, DISTRIBUTION, AND TRANSPORTATION INDUSTRY IN NORTHEAST PENNSYLVANIA

Transportation, Distribution, and Logistics Employers

There are 86 identified employers with transportation, distribution, and logistics operations in the four-county core area. Aside from Tobyhanna Army Depot, which contains a variety of electronics-related occupations, the largest warehouse/distribution operation in the core area is Keystone Automotive, with 1,400 employees. Companies with transportation, distribution, and logistics operations employing 500 or more workers in the four-county core area include Kane Warehousing (1,000), Wal-Mart (two DC operations—1,700 total), T.J. Maxx (1,250), Sears Logistics Services (750), Lowe's Corporation (600), Wegman's Food Markets (510), Liz Claiborne (500), and Harper Collins Publishing (500).

Table 13 presents the roster of transportation, distribution, and logistics firms in/near the four-county core area (ranked by known employment size), as well as large manufacturing firms that have warehousing or shipping/receiving components.

TABLE 13
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS EMPLOYERS IN THE CORE AREA
Sources: Penn's Northeast

Company Name	County	Description	Total Empl
Tobyhanna Army Depot	Monroe	Military Equipment Repair	4,400
Keystone Automotive	Luzerne	Auto Parts	1,400
Pride Mobility Products Corporation	Luzerne	Home Healthcare Equipment Mfg	1,262
T. J. Maxx	Luzerne	Garments	1,250
Kane Warehousing	Lackawanna, Wyoming & Susquehanna	3PL-Variou Distribution	1,000
Wal-Mart	Monroe	Supplies Stores in PA, NY, NJ	1,000
Sears Logistics Services	Schuylkill & Luzerne	Retail Products	750
Wal-Mart MPDC	Schuylkill	General Merchandise	700
Lockheed Martin Missiles	Lackawanna	Lazer Guided Equipment Mfg	660
Lowe's Companies	Schuylkill	Home Products	600
TRL	Luzerne	3PL - Various Distribution	580
Wegman's Food Markets	Schuylkill	Supermarket Products	510
Liz Claiborne	Monroe	Apparel, Accessories	500
Harper Collins Publishing	Lackawanna	Books	500
Fabri-Kal	Luzerne	Thermoformed Plastic	356
Office Max	Schuylkill	Office Supplies	350
Big Lots	Schuylkill	General Merchandise	340
Bradley Caldwell	Luzerne	Hardware/Farm & Pet Supplies	338
Ocean Logistics (Supermarket Services)	Lackawanna	Supermarket Products	313
The Penguin Group	Luzerne	Books	310
Lord & Taylor	Luzerne	Retail Clothing	261
Michael's Handcrafts	Luzerne	Handcraft Products	225
National Book Co.	Lackawanna	Books	207
Frank Martz Group Company	Luzerne	Motor Coach Transportation	201
Schoeneman Beauty Supplies	Schuylkill	Health and Beauty Aids	200
Evans Delivery Company, Inc.	Schuylkill	3PL - Various Distribution	200
Atecco, Inc. (Mrs. T's Pierogies)	Schuylkill	National Distribution Company	200
Dollar Tree Stores	Columbia	Supplies for Stores	185
UPS Supply Chain Solutions	Lackawanna	Accounting Center	155
Alexandria Moldings	Luzerne	Wood Moldings	150
Forbo Linoleum	Luzerne	Floor Coverings	140
Valley Distributing & Storage Company	Luzerne & Lackawanna	3PL-Variou Distribution	135
Romark Logistics	Luzerne	3PL-Food Products	125
Office Depot	Luzerne	Office Supplies	105

TABLE 13, CONTINUED
TRANSPORTATION, DISTRIBUTION, AND LOGISTICS EMPLOYERS IN THE CORE AREA
 Sources: Penn's Northeast

Company Name	County	Description	Total Empl
Kevin Ryman, Inc.	Luzerne	Trucking Company	100
Sears	Schuylkill	Appliances	100
E&B Giftware	Luzerne	Giftware	95
Top Notch Distributors	Wayne County	Wholesale architectural door hardware	95
Pitt Ohio Express, LLC	Luzerne	3PL - Various Distribution	93
Fanelli Warehousing & Distribution Center	Schuylkill	3PL-Miscellaneous	88
Penske Logistics	Luzerne	3PL-Variou s Distribution	80
Philips Lighting	Luzerne	Light Bulbs	75
Karchner Logistics	Luzerne	3PL-Variou s Distribution	60
Maytag	Lackawanna	Appliances	60
Mountain Productions	Luzerne	Multi-State Distribution Facility	59
Caterpillar	Lackawanna	Mazda Products	50
Preferred Food Service	Lackawanna	Food Wholesaler	50
Kane Steel	Schuylkill	Multi-State Distribution Facility	50
Econoco	Luzerne	Retail Fixtures	47
Calex Logistics	Luzerne & Lackawanna	3PL - Various Distribution	45
Sanofi Pasteur	Lackawanna	Pharmaceuticals	41
City Delivery Service, Inc.	Luzerne	Trucking Company	30
Mericle Logistics, LLC	Luzerne & Lackawanna	3PL-Variou s Distribution	25
NBTY - Nature's Bounty	Luzerne	Nutritional Supplements	25
Henningsen Cold Storage	Lackawanna	3PL-Food/Pharmaceuticals	20
Powerrail Distribution	Luzerne	Distribution Company	14
Antonini Radiator, Inc.	Schuylkill	Logistics Support	12
Weiler Corporation	Monroe	Miniature Brush Manufacturing	NA
F.D. Transport	Luzerne	Trucking Company	NA
Swoyer Construction	Luzerne	Construction Company -	NA
Wyoming Valley Airport	Luzerne	Airport	NA
Auto-Bus North-East Transfer Van Lines	Luzerne	Moving Company	NA
Cardinal Dedicated Logistics	Luzerne- 2 sites	3PL - Various Distribution	NA
North-East Transfer, Inc.	Luzerne	Trucking Company	NA
Fey International, Inc.	Luzerne	Trucking Company	NA
LeSaint Logistics Group of Pennsylvania	Luzerne	3PL - Various Distribution	NA
M.P.H. Transportation & Logistics	Luzerne	3PL - Various Distribution	NA
KRK Trucking	Schuylkill	3PL - Various Distribution	NA
Churnetski Transportation	Luzerne	School Bus and Automotive Servicing	NA
ARVI Transportation Co., Inc.	Luzerne	Long-Distance Trucking Company	NA
Roadway Express	Monroe	3PL - Various Distribution	NA
T.J. McGeehans Sales & Service	Luzerne	Diesel Services	NA
ABF Freight Systems, Inc.	Luzerne	3PL - Various Distribution	NA
LWR Time Ltd.	Luzerne	Watch Servicing and Distribution	NA
M. S. Carriers, Inc.	Luzerne	Trucking Company	NA
Roger Dubuis North America, Inc.	Luzerne	Watch Distribution	NA
Sid Harvey Industries	Luzerne	HVAC Wholesale Distribution	NA
TennOhio	Luzerne	Logistics Services	NA
Ward Trucking Corporation	Luzerne	General Freight Distribution	NA
Watkins Motor Lines	Luzerne	TL and LTL Distribution Services	NA
Latona Trucking	Luzerne	Excavation Contractor	NA
Luzerne & Susquehanna Railway Co.	Luzerne	Rail Services	NA

NA = Data not available.

Transportation, Distribution, and Logistics Industry Trends

According to ESRI, the twelve-county Northeast Pennsylvania region employed 26,009 workers in the transportation and warehousing industry in 2005, up from 23,746 workers in 2000, for an employment gain of 9.5%. Transportation and warehouse industry employment in the four-county core area (containing Luzerne, Lackawanna, Monroe, and Schuylkill Counties) was 17,881 in 2005, up from 16,580 workers in 2000, representing a 7.8% employment gain. (Refer to Exhibit C-3 in Appendix C).

Establishment data by NAICS code is only available through 2004. This data shows that during the five-year period between 1999 and 2004, the four-county core area experienced tremendous growth in the number of workers employed in NAICS Code 493 (Warehousing and Storage), expanding from 572 to 6,129 workers, for a nearly ten-fold gain. The number of establishments also increased, from 21 to 55 during the five-year period. All of the industry sectors for which data is available expanded in employment and establishments during the period, excepting air travel, which increased by just eleven net employees and declined by three establishments. No information is currently available for NAICS Code 482–Rail Transportation. (Refer to Table 14).

TABLE 14
FOUR-COUNTY CORE AREA, STATE, AND NATIONAL INDUSTRY CHARACTERISTICS, 1999-2004
 Source: U.S. Department of Commerce, County Business Patterns

NAICS Code/Title	Employment			Establishments		
	1999	2004	% chg	1999	2004	% chg
481-Air Transportation						
Four-County Core	80	91	13.8%	9	6	-33.3%
Pennsylvania	20,636	20,431	-1.0%	146	148	1.4%
U.S.	582,838	489,073	-16.1%	5,285	5,722	8.3%
482-Rail Transportation						
Four-County Core	n/a	n/a	-	n/a	n/a	-
Pennsylvania	n/a	n/a	-	n/a	n/a	-
U.S.	n/a	n/a	-	n/a	n/a	-
♦484-Truck Transportation						
Four-County Core	5,490	6,640	20.9%	342	355	3.8%
Pennsylvania	59,883	61,570	2.8%	3,898	4,290	10.1%
U.S.	1,384,178	1,428,458	3.2%	108,749	113,926	4.8%
♦485-Transit and Ground Passenger Transportation						
Four-County Core	1,710	2,394	40.0%	105	105	0.0%
Pennsylvania	26,921	32,008	18.9%	1,045	1,117	6.9%
U.S.	370,022	401,034	8.4%	16,254	17,132	5.4%
487-Scenic and Sightseeing Transportation						
Four-County Core	0	20	-	0	3	-
Pennsylvania	500-999	500-999	-	1,045	1,117	6.9%
U.S.	22,877	22,075	-3.5%	2,267	2,651	16.9%
♦488-Support Activities for Transportation						
Four-County Core	337	524	55.5%	32	51	59.4%
Pennsylvania	10,062	14,068	39.8%	798	902	13.0%
U.S.	440,175	526,873	19.7%	31,392	35,486	13.0%
♦493-Warehousing and Storage						
Four-County Core	572	6,129	971.5%	21	55	161.9%
Pennsylvania	7,867	35,208	347.5%	234	559	138.9%
U.S.	128,606	575,177	347.2%	6,954	13,315	91.5%
8111-Automotive Repair and Maintenance						
Four-County Core	2,064	2,121	2.8%	490	502	2.4%
Pennsylvania	32,967	36,185	9.8%	7,561	7,674	1.5%
U.S.	842,606	904,516	7.3%	164,898	166,332	0.9%

♦ Industry sectors targeted by LTIP

Company Downsizings and Closures

The impact of change on the area’s workforce from a traditional consumer-product-manufacturing base to one that is more technically, niche-, and service-focused has been dramatic. The four-county core area expanded in net distribution/transportation employment and establishments, particularly in LTIP’s four targeted activities of Warehousing and Storage (NAICS Code 493), Support Activities for Transportation (NAICS Code 488), Truck Transportation (NAICS Code 484), and Transit and Ground Passenger Transportation (NAICS Code 485). Automotive Repair and Maintenance (NAICS Code 8111) also showed significant employment growth.

The evolving economy also caused industry constriction. Between 2000 and 2006, company closures and layoffs in the four-county core area accounted for a loss of 15,734 jobs, affecting more than 120 firms in all industry sectors. As seen in Table 15 below, Luzerne County was hardest hit, with the loss of 8,460 jobs during the period. Lackawanna County lost 5,083 jobs due to 32 company closures and 12 employee layoffs over the nearly seven-year period.

**TABLE 15
CLOSURES/LAYOFFS BY CORE-AREA COUNTY – 2000 TO OCTOBER 2006**

Source: Penn’s Northeast; PA Department of Labor & Industry

County	# of Firm Closures	# of Firm Layoffs	# of impacted workers
Luzerne	40	20	8,460
Lackawanna	32	12	5,083
Monroe	8	2	891
Schuylkill	6	4	1,300
Total:	86	38	15,734

Several of the area’s largest manufacturing and service-sector firms were impacted by these recent closures and employee downsizings. However, many of the laid-off workers from these operations represent a potential labor resource for existing and new transportation and logistics companies seeking skilled workers. Closure and layoff activity also impacted transportation and distribution-related companies. In 2003, Lord & Taylor furloughed approximately 125 warehouse associates due to changes in the number of retail locations served by the warehouse. Consolidated Freightways closed their Luzerne County operation in 2002, impacting 1,351 workers. Table 16 identifies those activities (in all industry sectors) affecting 100 or more employees.

**TABLE 16
CLOSURES/LAYOFFS – 2000 TO OCTOBER 2006 AFFECTING 100 OR MORE EMPLOYEES**

Source: Penn’s Northeast; PA Department of Labor & Industry

Company Name	# of Employees affected by:		Year
	Closure	Layoff	
Luzerne County			
HealthNow New York (MedUs Services)	163		2006
Regency Thermographers	115		2005
Mercy Hospital		941	-
Weston Foods (Boboli Facility)	130		-
Techneglas, Inc.	670	85	2004
Luzerne County Courthouse	225		-
George Weston Bakeries		130	-
Allsteel	180		2003
Techneglas, Inc.		212	-
Lord & Taylor Distribution		125	-
Summit Manufacturing	140		2002
Consolidated Freightways	1,351		-
Mercy Health Care Center	106		-
Farley’s & Sathers Candy Company, Inc.	152		-
Convergys Call Center	400		2001
Flextronics Enclosures	116		-

TABLE 16, CONTINUED
CLOSURES/LAYOFFS – 2000 TO THE PRESENT AFFECTING 100 OR MORE EMPLOYEES
 Source: Penn's Northeast

Company Name	# of Employees affected by:		Year
	Closure	Layoff	
Luzerne County			
Shop Rite	180		-
General Foam (Buildings 1 & 2)	250		-
Chromatex (Building 1)	230		-
Blue Cross of NEPA		300	2000
Dorr Oliver	200		-
FCI Berg	300		-
Lackawanna County			
Alliance Capital Management	130		2004
Haband Company		103	2003
SJ Bailey & Sons, Inc.	175		-
Anemostat (Mesek, Inc.)	130		-
Dun & Bradstreet Corporation	102		2002
FutureCall LLC		204	-
RHM Teleservices, Inc.	110		-
WEA Manufacturing (CINRAM)		188	2001
Genalite	100		-
Old Forge Lamp Shade	100		-
Exide Technologies	306		-
FiNet	375		-
Thomson Consumer Electronics	1,100		-
Corning-Benton Park	600		-
Commonwealth Telephone Co.		150	2000
Monroe County			
Mack Printing Co / Cadmus Publications	184		2002
Cooper Industries	152		-
Ames Department Stores (2 stores)	125		-
Sales Plus	201		2001
Schuylkill County			
Tyco Plastics & Adhesives	142		2003
Sara Lee Underwear	460		-
Sara Lee Underwear (JE Morgan Knitting)		200	2002
Guilford Mills, Inc. (Pine Grove Mfg Site)		232	2001

KEY LABOR FINDINGS: NORTHEAST PENNSYLVANIA

Labor Market Orientation

1. The region addressed by the Northeast Pennsylvania Logistics and Transportation Industry Partnership encompasses twelve-counties, consisting of Bradford, Carbon, Lackawanna, Luzerne, Monroe, Pike, Schuylkill, Sullivan, Susquehanna, Tioga, Wayne, and Wyoming Counties. The four core-area counties of Luzerne, Lackawanna, Monroe, and Schuylkill are best positioned geographically in the region to accommodate distribution center activity. These counties are traversed by and offer best access to Interstate Highways I-81, I-80, I-84, and I-476. Distribution centers locating in these counties would also be closest to the region's highest population and labor centers (e.g., Scranton, Wilkes-Barre, Hazleton, New Castle, and East Stroudsburg).
2. The core area and the entire twelve-county Northeast Pennsylvania region are strategically located for distribution centers serving the northeastern section of the country and beyond. The region's proximity to New Jersey and New York State, and its location in Pennsylvania provide excellent opportunities for distribution centers serving those areas. It also is well positioned to serve a broader region extending from New England and parts of Ontario and Quebec, to the District of Columbia, Delaware, Maryland, Ohio, Indiana, Michigan, Virginia, and West Virginia. Many of the distribution centers in the region serve these areas and ship export items through the ports of New York and New Jersey, and Philadelphia. (See Figure 3, page 3).
3. The core area is generally within a 2-1/2 hour drive of New York City, a two-hour drive of Philadelphia, and a 3-1/2 hour drive of Baltimore. Table 17 shows mileage and driving distances from Pittston, Pottsville, and Tobyhanna to select local and regional destinations. Additional service is provided outside the region at the Lehigh Valley International Airport in Allentown.

TABLE 17
DISTANCE FROM REGIONAL CENTERS TO SELECT LOCAL AND REGIONAL DESTINATIONS
 Source: Mapquest

Destination City	From Pittston, PA		From Pottsville, PA		From Tobyhanna, PA	
	Highway Miles	Driving Time	Highway Miles	Driving Time	Highway Miles	Driving Time
Albany, NY	189.6	3 hrs, 5 mins.	246.1	3 hrs, 59 mins.	188.7	3 hrs, 5 mins.
Baltimore, MD	193.7	3 hrs, 16 mins.	137.7	2 hrs, 26 mins.	204.7	3 hrs, 23 mins.
Boston, MA	302.8	4 hrs, 52 mins.	359.2	5 hrs, 46 mins.	301.8	4 hrs, 52 mins.
Chicago, IL	697.2	11 hrs, 11 mins.	704.6	11 hrs, 16 mins.	711.3	11 hrs, 17 mins.
Cincinnati, OH	573.7	9 hrs, 9 mins.	526.7	8 hrs, 28 mins.	587.9	9 hrs, 24 mins.
Hazleton, PA	38.3	43 mins.	31.0	36 mins.	47.6	47 mins.
Pittsburgh, PA	271.3	4 hrs, 54 mins.	257.7	4 hrs, 19 mins.	285.4	5 hrs.
Philadelphia, PA	117.5	2 hrs, 3 mins.	97.5	1 hr, 47 mins.	118.7	1 hr, 59 mins.
Schuylkill Haven, PA	63.8	1 hr, 10 mins.	5.0	7 mins.	80.3	1 hr, 21 mins.
Scranton, PA	16.5	27 mins.	73.0	1 hr, 21 mins.	24.9	35 mins.
Stroudsburg, PA	53.1	51 mins.	84.0	1 hr, 22 mins.	21.6	23 mins.
Trenton, NJ	131.5	2 hrs, 16 mins.	111.5	2 hrs, 1 min.	89.8	1 hr, 56 mins.
New York, NY	129.9	2 hrs, 19 mins.	134.5	2 hrs, 25 mins.	97.2	1 hr, 43 mins.
Washington, DC	231.4	3 hrs, 56 mins.	175.4	3 hrs, 4 mins.	240	4 hrs.
Wilkes-Barre, PA	13.0	18 mins.	53.5	1 hr, 1 min.	42.7	45 mins.

4. Air service is provided through the Wilkes-Barre Scranton International Airport, positioned along I-81 midway between Scranton and Wilkes-Barre. Table 18 shows those locations that can be reached from the area on daily direct flights. Additional service is available through the Lehigh Valley International Airport in Allentown.

TABLE 18
DIRECT FLIGHTS OFFERED FROM WILKES-BARRE SCRANTON INTERNATIONAL AIRPORT
 Source: OAG, Inc.

Destination City	From W-B Scranton International Airport	
	Direct Daily Flights	Flight Time
Atlanta, GA	3	2 hrs, 15 mins
Boston, MA	2	2 hrs, 0 mins
Charlotte, NC	1	1 hr, 35 mins
Chicago, IL	2	2 hrs, 10 mins
Cincinnati, OH	3	1 hr, 45 mins
Cleveland, OH	2	1 hr, 35 mins
Detroit, MI	2	1 hr, 40 mins
Philadelphia, PA	5	50 mins
Pittsburgh, PA	3	1 hr, 20 mins

Labor Availability

- The twelve-county Northeast Pennsylvania region has a population of 1,176,569, which has been growing slower than Pennsylvania and the nation in recent years. The population base in the twelve constituent counties ranges from 5,967 (Sullivan County) to 315,165 (Luzerne County).
 - Between 1990 and 2005, the population declined in four counties, including Luzerne County (-4.0%), Lackawanna County (-3.8%), Sullivan County (-2.2%), and Schuylkill County (-1.9%), while three counties grew dramatically (e.g., Pike County [92.6%]; Monroe County [65.2%]; and Wayne County [23.5%]).
 - The remaining five counties experienced no or moderate net population growth over the 15-year period (e.g., Tioga County [0.0%]; Wyoming County [0.7%]; Bradford County [2.6%]; Carbon County [4.1%]; and Susquehanna County [4.7%]).
 - Table 19 shows that the twelve-county region's population is projected to grow by 1.3% between 2005 and 2010; the growth in Pike, Monroe, Wayne, and Wyoming Counties will offset projected population declines in the remaining eight counties.

TABLE 19A
NORTHEAST PENNSYLVANIA POPULATION ESTIMATES AND PROJECTIONS

Source: ESRIBIS, Inc.

	Monroe County	Luzerne County	Schuylkill County	Lackawanna County	Wayne County	Wyoming County	Susquehanna County	Bradford County
1990	95,717	328,149	152,585	219,039	39,944	28,076	40,380	60,967
2000	138,687	319,250	150,336	213,295	47,722	28,080	42,238	62,761
2005	158,083	315,165	149,665	210,735	49,322	28,581	42,283	62,577
2010	176,010	310,429	147,091	208,177	50,627	28,789	42,205	62,081
% Chg. '90-'05	65.2%	-4.0%	-1.9%	-3.8%	23.5%	1.8%	4.7%	2.6%
% Chg. '05-'10	11.3%	-1.5%	-1.7%	-1.2%	2.6%	0.7%	-0.2%	-0.8%

TABLE 19B
NORTHEAST PENNSYLVANIA POPULATION ESTIMATES AND PROJECTIONS

Source: ESRIBIS, Inc.

	Tioga County	Carbon County	Pike County	Sullivan County	Northeast PA Region	PA	U.S.
1990	41,126	56,838	27,966	6,104	1,096,891	11,881,643	48,709,873
2000	41,373	58,802	46,302	6,556	1,155,402	12,281,054	281,421,906
2005	41,136	59,185	53,870	5,967	1,176,569	12,480,851	298,727,898
2010	40,452	59,029	61,568	5,553	1,192,011	12,694,512	317,430,845
% Chg. '90-'05	0.0%	4.1%	92.6%	-2.2%	7.3%	5.0%	20.1%
% Chg. '05-'10	-1.7%	-0.3%	14.3%	-6.9%	1.3%	1.7%	6.3%

2. **The twelve-county region has a civilian labor force of 585,980 (2005), which has been expanding faster than Pennsylvania and national rates over the last five years.** According to the U.S. Bureau of Labor Statistics, the region's labor force grew by 4.9% between 2000 and 2005 (the latest five-year period for which data is available). Comparatively, Pennsylvania's labor force grew by 3.4% and the national workforce grew by 4.7%. The counties in the region vary significantly in their growth rates, ranging from Schuylkill County (1.3%) to Pike County (17.8%). (Refer to Exhibit C-2 in Appendix C).
- As shown in Table 20, of the four counties in the core area, Monroe County saw the fastest growth rate (12.3%). The labor force increased modestly in Lackawanna County (2.3%), Luzerne County (1.9%), and Schuylkill County (1.3%).
 - Paradoxically, this more rapid growth in the labor force versus state and national trends has occurred in the face of a slower population growth. This growth has been the result of not-employed residents entering the workforce.
 - Labor-force participation in the twelve-county region is lower than the Pennsylvania average, and is 4.4 percentage points lower than the national average, due in large part to the higher unemployment in the region (5.5% regionally versus 5.1% nationally in 2005) leading to a higher degree of discouraged workers (those not collecting unemployment benefits nor seeking employment), and the region's high proportion of residents near to or in retirement.
 - In 2000, 59.0% of the twelve-county region's residents 16 years of age or older were actively participating in the labor force, compared to 61.8% in Pennsylvania and 63.4% nationally. In that year, 27.8% of the twelve-county region's residents were over age 55, compared to 21.0% nationally. The non-core counties serve as workforce feeders to the four-county core-area employers. Therefore, drawing workers back into the workforce benefits regional and core-area employers alike.
 - In the four-county core area, labor-force-participation rates are lowest in Schuylkill County (55.3%), which had a higher-than-average unemployment rate (5.9%) in 2005, Luzerne County's participation rate was slightly below the regional average (58.3% compared to 59.0% regionally).
 - Of the remaining counties in the twelve-county region, three had participation rates below the regional average, including Wayne County (56.9%), Pike County (58.9%), and Sullivan County (54.8%).
 - In 2005, the nation's average unemployment rate (5.1%) was exceeded in all four of the core area counties: Schuylkill County (5.9%), Luzerne County (5.8%), Monroe County (5.4%), and Lackawanna County (5.2%).

TABLE 20
NORTHEAST PENNSYLVANIA LABOR FORCE CHARACTERISTICS

Sources: U.S. Bureau of Labor Statistics; ESRIBIS, Inc.

	Lackawanna County	Luzerne County	Monroe County	Schuylkill County	Northeast PA Region	PA	U.S.
Labor Force:							
2000	103,625	155,431	69,262	69,929	558,420	6,085,833	142,583,000
2005	105,967	158,388	77,791	70,815	585,980	6,292,282	149,320,000
% Chg. '00-'05	2.3%	1.9%	12.3%	1.3%	4.9%	3.4%	4.7%
Labor Participation, 2000	59.1%	58.3%	64.3%	55.3%	59.0%	61.8%	63.4%
Unemployment:							
2005	5.2%	5.8%	5.4%	5.9%	5.5%	5.0%	5.1%
November, 2006	4.5%	4.9%	4.5%	5.3%	4.1%	4.4%	4.4%

3. **The populations of the 30-minute commute zones around the three points-of-opportunity identified by LTIP (e.g., Schuylkill Highridge Business Park; Arcadia North Business Park; and CenterPoint Commerce and Trade Park East) range in size from 205,749 (Schuylkill**

Highridge) to 428,888 (CenterPoint). The Arcadia North commute zone is the fastest growing. Between 2005 and 2010, the population within this Monroe County site is projected to expand by 6.4% (16,965 residents). The Schuylkill Highridge (Schuylkill County) site's commute zone, however, is projected to decline by 1.4% (2,936 residents), and the CenterPoint (Luzerne County) site is also projected to decline in population by 1.4% (6,139 residents). As shown in Table 21, the Arcadia North site's labor-force-participation rate in 2000 was higher than the regional average.

**TABLE 21
LABOR FORCE CHARACTERISTICS FOR
LTIP-SELECTED POINTS-OF-OPPORTUNITY WITHIN THE FOUR-COUNTY CORE AREA**

	Schuylkill Highridge 30-minute Commute Zone	Arcadia North 30-minute Commute Zone	CenterPoint 30-minute Commute Zone	Northeast PA Region
Population:				
1990	210,312	206,378	448,413	1,096,891
2000	207,593	247,728	435,161	1,155,402
2005	205,749	265,960	428,888	1,176,569
2010	202,813	282,925	422,749	1,192,011
% Chg. '90-'05	-2.2%	28.9%	-4.4%	7.3%
% Chg. '05-'10	-1.4%	6.4%	-1.4%	1.3%
Labor Force:				
2000	93,718	119,175	208,731	558,420
2005	97,104	140,650	217,743	585,980
% Chg. '00-'05	3.6%	18.0%	4.3%	4.9%
Labor Participation, 2000	55.4%	61.2%	59.1%	59.0%
Unemployment, 2005	7.8%	7.8%	7.2%	5.1%

4. **The twelve-county region's median age is higher than the state and national figures.** The median age of the twelve-county region is 41.6 years, compared to 39.5 years in Pennsylvania and 36.3 years in the U.S. This higher median age reflects the above-average concentrations of retirement-age residents.
- Of the four counties in the core region, Luzerne County has the highest median age (42.4 years).
 - As depicted in Table 22, the concentrations of residents under the age of 54 are projected to decline in three core-area counties (e.g., Lackawanna, Luzerne, and Schuylkill Counties), indicating future labor-supply constraints, and requiring greater reliance on regional (multi-county) labor-supply resources for company recruiting, or significant in-migration of working-age residents.

**TABLE 22
AGE DISTRIBUTION AND MEDIAN AGE**
Sources: U.S. Bureau of Labor Statistics; ESRIBIS, Inc.

	Lackawanna County	Luzerne County	Monroe County	Schuylkill County	Northeast PA Region	PA	U.S.
Median Age, 2005	41.8	42.4	39.3	42.2	41.6	39.5	36.3
Age Distribution, '05:							
0-19	23.5%	22.3%	27.8%	21.8%	24.1%	25.8%	27.8%
20-34	17.4%	17.3%	16.6%	17.9%	16.9%	18.1%	20.4%
35-54	28.5%	29.3%	31.6%	29.8%	29.8%	29.8%	29.2%
55-64	11.2%	11.5%	11.0%	11.2%	11.6%	10.7%	10.0%
65-74	8.1%	8.4%	6.9%	8.4%	8.2%	7.2%	6.3%
75 and over	11.2%	11.1%	6.0%	10.9%	9.5%	8.4%	6.3%
% Chg. '05-'10:							
0-19	-5.7%	-6.5%	4.8%	-5.9%	-3.1%	-2.3%	3.0%
20-34	-3.2%	-4.2%	20.6%	-6.1%	0.3%	0.5%	5.1%
35-54	-3.5%	-3.6%	4.3%	-3.5%	-1.8%	-1.3%	3.6%
55-64	19.1%	17.1%	30.4%	20.2%	19.7%	21.4%	22.6%
65-74	-0.2%	0.5%	12.1%	-3.6%	2.6%	2.8%	9.5%
75 and over	-4.1%	-2.6%	17.3%	-2.3%	0.5%	1.3%	7.8%

5. **Although it is already relatively large, the transportation, distribution, and logistics sector is in a position to expand its employment further, particularly in light of recent downsizings and closures in the manufacturing sector that have released skilled-manufacturing workers into the labor market.** Transportation, distribution, and logistics employers provide employment opportunities for a diversity of skills and career pathways, including management, accounting, logistics systems, information technology, industrial engineering, drivers, shipping and receiving, warehouse operations, and occupational safety, among others. As seen in Table 23, the four-county core area and the larger twelve-county region contain higher concentrations of transportation and warehousing industry employment than the state and nation.

TABLE 23
INDUSTRY EMPLOYMENT BY SECTOR (2005)
Source: ESRIBIS, Inc.

Industry	Lackawanna County	Luzerne County	Monroe County	Schuylkill County	Northeast PA Region	PA	U.S.
Total	100%	100%	100%	100%	100%	100%	100%
Accommodation/Food Services	5.2%	5.4%	8.9%	4.3%	5.9%	5.3%	6.5%
Admin. /Support/Waste Mgmt. Svcs.	3.0%	3.6%	3.5%	2.3%	3.2%	3.4%	3.7%
Agriculture/Forestry/Fishing/Hunting	0.4%	0.5%	0.3%	1.1%	1.3%	1.0%	1.3%
Arts/Entertainment/Recreation	1.1%	1.2%	1.6%	0.7%	1.2%	1.5%	1.9%
Construction	5.8%	6.7%	8.9%	7.6%	7.5%	6.8%	7.5%
Educational Services	9.9%	7.3%	8.9%	7.3%	8.4%	9.4%	9.4%
Finance/Insurance	5.9%	5.1%	4.4%	3.3%	4.4%	5.6%	5.2%
Healthcare/Social Assistance	17.0%	16.8%	11.3%	15.2%	15.0%	14.9%	12.7%
Information	2.3%	2.8%	2.2%	1.2%	2.2%	2.2%	2.4%
Manufacturing	12.2%	12.9%	10.0%	20.6%	13.9%	12.5%	10.9%
Mgmt. of Companies/Enterprises	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Mining	0.1%	0.2%	0.2%	0.9%	0.4%	0.2%	0.4%
Other services (excl. Public Admin.)	4.9%	4.0%	4.2%	4.3%	4.3%	4.4%	5.0%
Prof./Scientific/Technical Services	3.6%	3.3%	4.5%	3.4%	3.4%	5.7%	6.0%
Public Administration	4.9%	6.0%	4.5%	5.3%	5.0%	4.6%	5.0%
Real Estate/Rental/Leasing	1.0%	1.0%	2.0%	0.8%	1.1%	1.3%	2.1%
Retail Trade	14.1%	13.7%	15.6%	13.3%	13.9%	12.8%	11.5%
Transportation/Warehousing	4.6%	4.1%	5.7%	4.0%	4.7%	4.4%	4.0%
Utilities	0.7%	1.4%	0.6%	0.9%	0.9%	0.9%	0.8%
Wholesale Trade	3.3%	3.9%	2.6%	3.4%	3.2%	3.3%	3.7%

6. **The four-county core area contains higher proportions of transportation-and-material-moving skills than the state and nation.** Concentrations of transportation-and-material-movement workers are higher in the four core-area counties than Pennsylvania and the nation, with one exception: Lackawanna County has a 6.7% concentration that is slightly lower than the PA average, but higher than the nation. The four-county core area also contains strong proportions of occupations that typically adapt well to employment in the transportation, distribution, and logistics sector include: building, grounds cleaning, and maintenance; construction and extraction; installation, maintenance, and repair; management; production-related occupations; and protective services. (Refer to Table 24.)

TABLE 24
INDUSTRY EMPLOYMENT BY OCCUPATION (2005)
 Source: ESRIBIS, Inc.

Occupation	Lackawanna County	Luzerne County	Monroe County	Schuylkill County	Northeast PA Region	PA	U.S.
Architecture/Engineering	5.0%	4.8%	1.4%	5.4%	4.6%	4.4%	4.0%
Arts/Design/Entert/Sports/Media	1.3%	1.2%	1.6%	0.8%	1.2%	1.5%	1.9%
Building/Grounds Cleaning/Maint	3.6%	3.5%	4.5%	3.5%	3.9%	3.6%	3.6%
Business/Financial	4.1%	4.3%	4.1%	3.2%	3.7%	5.0%	4.4%
Community/Social Services	2.3%	1.9%	2.0%	2.3%	2.0%	2.2%	1.7%
Computer and Mathematical	1.4%	1.2%	2.3%	0.8%	1.3%	2.3%	2.3%
Construction/Extraction	3.9%	4.7%	5.8%	6.0%	5.3%	4.4%	6.1%
Education/Training/Library	5.8%	4.8%	5.5%	4.6%	5.3%	6.0%	6.3%
Farming/Fishing/Forestry	0.2%	0.2%	0.2%	0.5%	0.5%	0.5%	0.6%
Food Preparation/Serving-related	4.7%	4.7%	5.3%	4.3%	4.7%	4.5%	5.2%
Healthcare Practitioner/Technician	5.9%	6.1%	4.2%	5.3%	5.3%	5.0%	5.3%
Healthcare Support	3.3%	3.1%	1.9%	3.7%	3.0%	2.8%	2.4%
Installation/Maintenance/Repair	4.4%	5.2%	5.3%	6.1%	5.4%	4.5%	3.8%
Legal	1.2%	0.9%	0.8%	0.6%	0.8%	1.1%	1.2%
Life/Physical/Social Science	0.5%	0.4%	0.6%	0.4%	0.5%	0.9%	1.0%
Mgmt. incl Farmers/Farm Mgrs	7.5%	7.1%	8.7%	6.5%	7.6%	8.7%	9.2%
Office/Administrative Support	16.0%	16.4%	13.9%	13.3%	14.6%	15.1%	14.3%
Personal Care/Service	2.5%	2.2%	2.8%	2.0%	2.5%	2.7%	3.1%
Production-Related Occupations	8.2%	8.6%	6.1%	13.5%	9.1%	7.2%	6.4%
Protective Service	2.6%	2.8%	2.0%	2.2%	2.4%	2.2%	2.3%
Sales/Related	12.6%	11.3%	13.2%	9.5%	11.3%	11.3%	11.4%
Transportation/Material Moving	6.7%	7.8%	7.9%	9.9%	8.3%	6.8%	5.8%

7. **Surveyed employers report satisfactory-to-very-good availability (average score of 3.0 or better; median score of 3.0 or better) of a variety of skills.** Among the 26 occupations for which sufficient data was received from the completed WDG employer survey, eleven (42%) of these can be recruited satisfactorily or better. Transportation-and-material-moving positions with satisfactory-to-good availability include the following: material-moving workers; general laborers; and freight, stock, and material movers-hand. (Refer to Table 25, and Exhibit B-7 in Appendix B).

TABLE 25
SELECT OCCUPATIONS WITH SATISFACTORY-TO-VERY GOOD AVAILABILITY,
AS REPORTED BY REGIONAL EMPLOYERS
 (5=PLENTIFUL; 1=UNAVAILABLE)
 Source: WDG Employer Survey, Fall 2006

Occupation	Employers Responding	Average Score	Median Score
General Business and Office Support			
Office clerks	11	4.1	4.0
Administrative assistants	10	3.7	4.0
Accounting clerks/bookkeepers	9	3.6	4.0
Shipping and receiving clerk	11	3.5	4.0
Computer/office technical support specialists	8	3.4	4.0
Clerical workers with advanced computer skills	12	3.3	3.0
Management and Supervisory			
Management trainees	6	3.3	3.0
Human resources manager	5	3.2	3.0
Transportation and Material Moving			
Material-moving workers, all other	4	3.3	3.0
General laborers	7	3.1	3.0
Freight, stock, and material movers-hand	8	3.0	3.0

8. Among the 26 occupations for which sufficient information was received, surveyed employers rated five (19%) as currently having borderline availability (average score of 2.5 to 2.9; median score of 3.0). Occupations directly related to transportation considered by surveyed employers to have borderline availability include the following: dispatcher; warehouse associate/warehouse clerk; industrial truck and tractor operators (forklift operators); and conveyor operators and tenders. (Refer to Table 26 and Exhibit B-7 in Appendix B).

TABLE 26
SELECT OCCUPATIONS WITH BORDERLINE AVAILABILITY,
AS REPORTED BY AREA EMPLOYERS
(5=PLENTIFUL; 1=UNAVAILABLE)
Source: WDG Employer Survey, Fall 2006

Occupation	Employers Responding	Average Score	Median Score
General Business and Office Support			
Dispatcher	6	2.5	3.0
Management and Supervisory			
First-Line Supervisors/Managers of Helpers, Laborers, and Material-Movers, Hand	14	2.8	3.0
Transportation and Material-Moving			
Warehouse associate/ warehouse clerk	9	2.8	3.0
Industrial truck and tractor operators (forklift operators)	11	2.5	3.0
Conveyor operators and tenders	2	2.5	3.0
Other, non occupation			
Applicants willing to work the second shift	12	2.6	3.0

9. Many occupations are difficult to staff (average score of 1.8 to 2.9; median score of 2.0 to 2.9). Of the 26 occupations for which sufficient data was received, ten (38%) are considered difficult to staff. Occupations with challenging availability include: database administrators, transportation storage and distribution managers; traffic/logistics managers; hand packers and packagers; tractor-trailer truck drivers; inventory control and shipping and receiving clerks; heavy-truck drivers; and truck drivers - light or delivery services. Truck mechanics and diesel mechanics are especially hard to recruit. Also identified is the fair-to-poor availability of applicants willing to work the third shift and seasonal workers. (Refer to Table 27 and Exhibit B-7 in Appendix B).

TABLE 27
SELECT OCCUPATIONS WITH FAIR-TO-POOR AVAILABILITY,
AS REPORTED BY AREA EMPLOYERS
(5=PLENTIFUL; 1=UNAVAILABLE)
Source: WDG Employer Survey, Fall 2006

Occupation	Employers Responding	Average Score	Median Score
General Business and Office Support			
Database administrators	5	2.6	2.0
Management and Supervisory			
Transportation, storage and distribution managers	9	2.4	2.0
Traffic / logistics managers	8	2.4	2.0
Transportation and Material-Moving			
Hand packers and packagers	7	2.3	2.0
Tractor-trailer truck drivers	9	2.2	2.0
Inventory control/shipping & receiving clerk	8	2.1	2.0
Truck drivers, heavy	9	2.1	2.0
Truck drivers, light or delivery services	6	2.0	2.0
Mechanics, truck	6	1.3	1.0
Mechanics, diesel	7	1.3	1.0
Other, non occupation			
Applicants willing to work the third shift	10	2.1	2.0
Seasonal workers	4	2.0	2.0

10. **The WDG findings are consistent with the *Training Needs Assessment of the Logistics and Transportation Industry of Northeast Pennsylvania* report prepared by Karl M. Kapp, wherein the focus group and survey results indicate recruiting difficulties with CDL drivers, forklift operators, warehouse management, and flat-bed and dump-truck operators.** Also identified in the Kapp report are skills-training gaps for mechanics, drivers, the general labor force, leadership, and logistics and distribution technologies, with a need for more effective internal and external training resources.
11. **Employers report that they are generally able to recruit managers and professional talent from outside the region.** Employers report an average score of 2.7 (on a scale where 1=unable to recruit and 5=easily recruited) and a median score of 3.0 on their ability to recruit talent from outside the region. (See Exhibit B-1 in Appendix B). Employers rate the area's quality of life as perceived by job candidates from outside the area as satisfactory (average score of 2.7 and a median score of 3.0).
 - One factor that may negatively impact employers' ability to recruit talent into the area is the availability of employment opportunities for "following" spouses, which employers report are limited. Employers provided an average score of 2.1 and a median score of 2.0 on the availability of job opportunities for trailing spouses.
 - Interviewed employers indicated that housing is affordable and available for transferees or new employees relocated in from outside the area.
12. **Employers most frequently use the newspaper, referrals, and the Internet for recruiting employees.** Of the 28 survey respondents, 20 report using newspaper advertising, 12 use referrals, and up to 11 employers use the Internet for recruiting, with *pacareerlink.com* and *worknepa.com*, *careerbuilders.com*, and *monster.com* reportedly utilized. Other recruiting methods include temp-to-perm hiring, walk-ins (unsolicited resumes), and word-of-mouth.
13. **Area employers indicated that one of the barriers to hiring entry-level truck drivers is the cost of insuring inexperienced drivers.** As a result, warehouse and distribution firms tend to hire only those drivers with at least 18 to 24 months of driving experience. The LTIP is encouraged to explore funding sources and/or incentives to offset the insurance costs for those companies willing to hire and train inexperienced drivers.

Labor Demand

1. **Among the 28 companies responding to the employer survey, 573 workers are currently needed.** The occupations in greatest current demand by employers located throughout the region are warehouse associates/warehouse clerks, and hand packers and packagers. Workers are needed for the third shift and second shift, as well as to meet seasonal demands (Refer to Table 28).
 - Comparing the current demand for workers against the availability ratings assigned by employers responding to the WDG survey indicates a demand and supply imbalance for the following occupations: warehouse associates/warehouse clerks; hand packers and packagers; industrial truck and tractor operators (forklift operators); heavy-truck drivers; tractor-trailer truck drivers; and diesel mechanics. Surveyed employers also need applicants willing to work second and third shifts, and seasonal workers.

**TABLE 28
CURRENT DEMAND AND SUPPLY OF WORKERS
BY RESPONDING SURVEYED LOCAL EMPLOYERS**
Source: WDG Employer Survey, Fall 2006
(X=modest imbalance; XX=imbalance; XXX=high imbalance)

Current Labor Demand/Supply	Demand		Supply Rating (5=plentiful; 1=unavailable)		
	# of Req. Apps.	% of Ttl. Demand	Average Score	Median Score	Imbalance
General Business and Office Support					
Clerical workers with advanced computer skills	11	1.9%	3.3	3	
Dispatcher	4	0.7%	2.5	3	
Accounting clerks/bookkeepers	3	0.5%	3.6	4	
Shipping and receiving clerk	3	0.5%	3.5	4	
Computer/office technical support specialists	3	0.5%	3.4	4	
Office clerks	1	0.2%	4.1	4	
Management and Supervisory					
First-Line Supervisors/Managers of Helpers, Laborers, and Material-Movers, Hand	16	2.8%	2.8	3	
Transportation, storage and distribution mgrs.	7	1.2%	2.4	2	XX
Management trainees	5	0.9%	3.3	3	
Traffic / logistics managers	4	0.7%	2.4	2	XX
Transportation and Material-Moving					
Warehouse associate/warehouse clerk	256	44.7%	2.8	3	XX
Hand packers and packagers	87	15.2%	2.3	2	XX
Ind. truck and tractor operators (forklift ops)	32	5.6%	2.5	3	X
Freight, stock, and material movers, hand	31	5.4%	3.0	3	X
Truck drivers, heavy	29	5.1%	2.1	2	XX
Tractor-trailer truck drivers	22	3.8%	2.2	2	XX
General laborers	18	3.1%	3.1	3	
Mechanics, diesel	15	2.6%	1.3	1	XXX
Material-moving workers, all other	13	2.3%	3.3	3	
Conveyor operators and tenders	5	0.9%	2.5	3	
Mechanics, truck	5	0.9%	1.3	1	XXX
Truck drivers, light or delivery services	2	0.3%	2.0	2	
Inventory control/shipping & receiving clerk	1	0.2%	2.1	1	XX
Total Needed:	573	100%			
Other:					
Applicants willing to work the third shift	57	-	2.1	2	XX
Applicants willing to work the second shift	48	-	2.6	3	XX
Seasonal workers	42	-	2.0	2	XX

2. In twelve months, the greatest projected skills demand will be for heavy-truck drivers, warehouse associates/warehouse clerks, and hand packers and packagers. In order to estimate future demand for various occupations, WDG asked employers to estimate the number of specific positions they would need to fill in twelve months' time. As can be seen in Table 29, there is an alarmingly large demand for heavy-truck drivers, with over 1,000 required. There will also be a need for 306 warehouse associates/warehouse clerks and 200 hand packers and packagers. These three positions combined account for 84.1% of the total labor demand.

- Comparing the twelve-month demand for workers against the availability ratings assigned by employers responding to the WDG survey indicates critical labor shortages for the following occupations: heavy-truck drivers; warehouse associates/warehouse clerks; hand packers and packagers; industrial truck and tractor operators (forklift operators); tractor-trailer truck drivers; diesel mechanics; and seasonal workers. Surveyed employers also need applicants willing to work second and third shifts, and seasonal workers.

TABLE 29
ANTICIPATED DEMAND AND SUPPLY OF WORKERS IN TWELVE MONTHS
BY RESPONDING SURVEYED LOCAL EMPLOYERS
 Source: WDG Employer Survey, Fall 2006
 (X=modest imbalance; XX=imbalance; XXX=high imbalance)

Current Labor Demand/Supply	Demand		Supply Rating (5=plentiful; 1=unavailable)		
	# of Req. Apps.	% of Ttl. Demand	Average Score	Median Score	Imbalance
General Business and Office Support					
Clerical workers with advanced computer skills	9	0.5%	3.3	3	
Accounting clerks/bookkeepers	8	0.4%	3.6	4	
Dispatcher	5	0.3%	2.5	3	
Shipping and receiving clerk	5	0.3%	3.5	3	
Administrative assistants	4	0.2%	3.7	4	
Computer/office technical support specialists	2	0.1%	3.4	4	
Office clerks	2	0.1%	4.1	4	
Management and Supervisory					
First-Line Supervisors/Managers of Helpers, Laborers, and Material-Movers, Hand	17	0.9%	2.8	3	
Management trainees	4	0.2%	3.3	3	
Transportation, storage and distribution mgrs.	3	0.2%	2.4	2	X
Traffic / logistics managers	1	0.1%	2.4	2	X
Human resources manager	1	0.1%	3.2	3	
Transportation and Material Moving					
Truck drivers, heavy	1,011	56.0%	2.1	2	XXX
Warehouse associate/warehouse clerk	306	17.0%	2.8	3	XXX
Hand packers and packagers	200	11.1%	2.3	2	XXX
Freight, stock, and material-movers, hand	54	3.0%	3.0	3	
General laborers	52	2.9%	3.1	3	
Ind. truck and tractor operators (forklift ops)	47	2.6%	2.5	3	XXX
Tractor-trailer truck drivers	38	2.1%	2.2	2	XXX
Mechanics, diesel	15	0.8%	1.3	1	XXX
Material-moving workers, all other	6	0.3%	3.3	3	
Conveyor operators and tenders	5	0.3%	2.5	3	
Mechanics, truck	4	0.2%	1.3	1	XX
Inventory control/shipping & receiving clerk	3	0.2%	2.1	2	
Truck drivers, light or delivery services	2	0.1%	2.0	2	
Total:	1,804	100.0%			
Other					
Seasonal workers	144	-	2.0	2	XXX
Applicants willing to work the third shift	59	-	2.1	2	XX
Applicants willing to work the second shift	21	-	2.6	3	XX

Labor Quality

1. **Surveyed transportation-and-distribution-related employers report that the level of basic skills seen among job applicants is satisfactory in four skills criteria, and fair-to-poor in three criteria.** As viewed in Table 30, the median score (on a five-point scale where 1=poor and 5=excellent) is 3.0 (satisfactory) for four skills (overall basic skills, reading comprehension, verbal communication/comprehension, and team and cooperative skills). The remaining skills (written communication; math; thinking and judgment/problem-solving) received a median score of 2.0, with average scores ranging from 2.3 to 2.5, which are unsatisfactory levels.
2. **Surveyed employers report satisfactory-to-very-good work ethic and productivity levels among employees.** Overall employer/employee relations received a median score of 4.0 and an average score of 3.5, indicating a good-to-very-good experience. Satisfactory and higher ratings (median score of 3.0 and average scores ranging from 3.0 to 3.3) according to surveyed

employers were received for work ethic, productivity, productivity compared to other company sites, willingness to work overtime, and punctuality. (Refer to Table 30).

3. **Turnover rates are acceptable and are consistent with WDG's national experiences.** The average annual turnover rate for new hires is in the 10%-to-20% range which is generally consistent with WDG's experiences in other U.S. markets. Employers report average annual turnover under 10%. (Refer to Table 30).
4. **Absenteeism is not considered a problem for area employers.** The average daily absenteeism rate is generally below 5%.

TABLE 30
EMPLOYER RATINGS ON LABOR QUALITY MEASURES
(1=POOR; 5=EXCELLENT)

Source: WDG Employer Survey, Fall 2006

Basic Skills of Job Applicants	Average Score	Median Score
Overall basic skills of all applicants	2.8	3.0
Written communication	2.3	2.0
Reading comprehension	2.6	3.0
Math	2.4	2.0
Thinking and judgment/problem solving	2.5	2.0
Verbal communication/comprehension	2.8	3.0
Team and cooperative skills	2.8	3.0
Productivity and Work Ethic of Employees		
Work ethic	3.2	3.0
Productivity	3.3	3.0
Productivity compared to that of other company sites	3.3	3.0
Willingness to work overtime	3.0	3.0
Punctuality	3.0	3.0
Overall employer/employee relations	3.5	4.0
Employee Turnover and Absenteeism		
	(1=0-10%, 2=10%-20%, 3=20%-30%, 4=Over 30%)	
New-hire turnover rate (i.e., employed less than 1 year)	2.3	2.0
	(1=0-5%, 2=6%-9%, 3=10%-14%, 4=over 15%)	
Average annual turnover rate	1.9	2.0
Average daily absenteeism rate	1.5	1.0

5. **Interviewed/surveyed transportation-and-distribution-related employers do not see substance abuse as a major problem among job applicants and current employees.** Most interviewed employers require applicants to pass a drug screen/test prior to employment, and federal laws require that new holders of commercial drivers licenses (CDL's) be drug-free. For-cause drug testing is also common practice in the region, and failures are considered atypical.

Labor Cost

1. **Average earnings in the four core-area counties and in the twelve-county Northeast Pennsylvania region are below Pennsylvania and national averages.** As seen in Table 31, the twelve-county region's overall median employee earnings are 74% of the Pennsylvania average and 71% of the national average.
 - The twelve-county region's median earnings in the transportation and warehousing industry (NAICS Code 48) are 80.1% of the Pennsylvania average and 71.9% of the national average. With the exception of Monroe County's average earnings (\$53,037) for this industry sector, the remaining three counties in the core area have earnings below the state and national averages.

TABLE 31
AVERAGE ANNUAL EARNINGS BY INDUSTRY, 2004
 Source: U.S. Department of Commerce, County Business Patterns

NAICS	Industry	Lackawanna County	Luzerne County	Monroe County	Schuylkill County	NE PA Region (median)	PA	U.S.	% Diff. NEPA vs. US
-----	Total	\$27,926	\$28,686	\$28,961	\$28,192	\$26,300	\$35,594	\$36,967	71.1%
31----	Manufacturing	\$33,906	\$35,806	\$57,764	\$34,328	\$33,877	\$41,823	\$42,890	79.0%
42----	Wholesale trade	\$36,690	\$36,142	\$38,864	\$32,318	\$32,487	\$48,921	\$49,191	66.0%
48----	Transportation & warehousing	\$29,047	\$27,196	\$53,037	\$29,753	\$25,989	\$32,427	\$36,167	71.9%
56----	Admin, suprt., waste mgt, remed. svcs.	\$19,924	\$23,578	\$18,564	\$18,478	\$20,068	\$25,379	\$27,049	74.2%

2. Table 32 shows that wages for typical benchmark occupations in the transportation, distribution, and logistics industry within the labor market areas of the three identified points of opportunity (Wilkes-Barre, Stroudsburg, and Pottsville) are typically lower than national figures. Stroudsburg annual earnings are slightly higher than Wilkes-Barre and Pottsville earnings, but are generally below or at parity with U.S. median wages in selected representative occupations. The wage structure in Monroe County has been influenced by its proximity to the Lehigh Valley and New Jersey – areas which have slightly higher wage positioning than found in the Scranton/Wilkes-Barre area.

TABLE 32
MEDIAN ANNUAL EARNINGS FOR SELECTED OCCUPATIONS
 Source: SalarySource.com; Salary.com

Industry	Wilkes-Barre Luzerne County	Stroudsburg Monroe County	Pottsville Schuylkill County	U.S.
Dispatcher	\$31,170	\$33,973	\$31,455	\$34,210
Forklift Operator	\$27,857	\$30,363	\$28,050	\$30,398
Inventory Control Manager	\$67,225	\$73,271	\$67,652	\$73,670
Materials Handler	\$25,226	\$27,495	\$25,297	\$27,209
Materials Handler-Senior	\$30,746	\$33,512	\$31,056	\$33,814
Packer	\$23,023	\$25,094	\$22,983	\$24,312
Ship/Receiving Clerk	\$26,703	\$29,105	\$26,753	\$28,724
Ship/Receiving Supervisor	\$45,262	\$49,333	\$45,906	\$49,829
Truck Driver-Short Haul	\$29,849	\$32,535	\$30,132	\$32,749
Warehouse Mgr	\$58,619	\$63,892	\$59,284	\$64,345
Average of All Occupations	\$36,568	\$39,857	\$36,857	\$39,926

3. Table 33 provides the average and median starting rate salaries/wages according to surveyed transportation, distribution, and logistics employers. The complete survey data on wages/salaries is provided in Exhibit B-7 in Appendix B.

TABLE 33
ANNUAL SALARIES OF SURVEYED EMPLOYERS
 Source: WDG Employer Survey, Fall 2006

Occupation	Responses	Avg. Starting Rate	Median Starting Rate
General Business and Office Support			
Accounting clerks/bookkeepers	9	\$ 20,769	\$ 20,800
Administrative assistants	10	\$ 23,019	\$ 23,400
Clerical workers with advanced computer skills	12	\$ 21,497	\$ 20,800
Computer/office technical support specialists	8	\$ 25,297	\$ 26,624
Database administrators	5	\$ 35,000	\$ 35,000
Dispatcher	6	\$ 31,744	\$ 31,200
Office clerks	11	\$ 20,464	\$ 21,112
Shipping and receiving clerk	11	\$ 22,746	\$ 22,880

TABLE 33, CONTINUED
ANNUAL SALARIES OF SURVEYED EMPLOYERS
 Source: WDG Employer Survey, Fall 2006

Occupation	Responses	Avg. Starting Rate	Median Starting Rate
Management and Supervisory			
First-Line Supervisors/Managers of Helpers, Laborers, and Material-Movers, Hand	14	\$ 34,873	\$ 35,000
Human resources manager	5	\$ 50,000	\$ 50,000
Management trainees	6	\$ 32,060	\$ 32,060
Traffic / logistics managers	8	\$ 43,333	\$ 45,000
Transportation, storage and distribution managers	9	\$ 42,610	\$ 42,500
Transportation and Material-Moving			
Conveyor operators and tenders	2	\$ 24,700	\$ 24,700
Freight, stock, and material-movers, hand	8	\$ 19,594	\$ 19,781
General laborers	7	\$ 20,867	\$ 20,800
Hand packers and packagers	7	\$ 17,726	\$ 15,829
Industrial truck and tractor operators (forklift operators)	11	\$ 21,614	\$ 20,530
Inventory control/shipping & receiving clerk	8	\$ 23,673	\$ 23,504
Material-moving workers, all other	4	\$ 25,861	\$ 23,504
Mechanics, diesel	7	\$ 27,317	\$ 26,000
Mechanics, truck	6	\$ 23,781	\$ 26,000
Tractor-trailer truck drivers	9	\$ 27,319	\$ 27,040
Truck drivers, heavy	9	\$ 26,104	\$ 27,040
Truck drivers, light or delivery services	6	\$ 25,307	\$ 27,040
Warehouse associate/ warehouse clerk	9	\$ 21,154	\$ 20,405
Other			
Applicants willing to work the second shift	12	\$ 23,071	\$ 23,400
Applicants willing to work the third shift	10	\$ 22,672	\$ 22,776
Seasonal workers	4	\$ 21,979	\$ 24,960

4. **Benefits offered by area transportation, distribution, and logistics employers are slightly more favorable compared to other communities examined by WDG.** As can be seen in Table 34, 100% of the responding firms offer company-paid health insurance, and 85% provide life insurance. Roughly three out of four employers offer company-paid dental and optical insurance. Short-term and long-term disability is provided by 82% and 75% of employers, respectively. Tuition reimbursement is offered by 60% of survey respondents. One firm reports offering an on-site daycare program.

TABLE 34
FRINGE BENEFITS OFFERED BY AREA EMPLOYERS,
AS REPORTED BY EMPLOYED RESIDENTS
 Source: WDG Employer Survey, Fall 2006

Benefit Offered	% of Responding Employers
Health insurance (company-paid)	100.0%
Dental insurance (company-paid)	76.9%
Optical insurance (company-paid)	76.9%
Life insurance (company-paid)	85.2%
Long-term disability	75.0%
Short-term disability	81.5%
Retirement plan	85.2%
Subsidized daycare program	4.5%
On-site daycare program	4.5%
Tuition reimbursement	60.0%

- 5. The local Society of Human Resource Managers (SHRM) organization conducted a survey of Scranton and Wilkes-Barre area employers in 2002 (the latest data that WDG has found to be available), and received 86 complete responses. The majority of responding manufacturing firms covered 75% or more of the employees' premiums for medical (HMO's & PPO's), dental, vision, and prescription drug coverage.** Long-term disability was provided by 100% of the 23 responding manufacturing firms, with coverage periods ranging as long as 90 to 365 days. Between 70% and 80% of manufacturing firms provided 401(K) plans to exempt and nonexempt employees, with company contributions averaging 3.6% for exempt and 3.8% for nonexempt workers. Tuition reimbursement was offered by 56% of responding employers in all sectors. Childcare benefits were offered by 3% of respondents. Information from the six responding distribution-and-warehouse employers was incomplete and inconclusive in most benefits categories.

EDUCATIONAL INFRASTRUCTURE

Institutions Within and Outside of the Region

1. **The twelve-county Northeast Pennsylvania region contains six two-year schools and 13 four-year and graduate post-secondary institutions.** According to U.S. Department of Education records for the 2004-2005 school year, enrollment at the area's two-year institutions was approximately 15,900, with the largest enrollments reported for Lehigh-Carbon Community College (6,564) and Luzerne County Community College (6,396). The region's four-year institutions enroll approximately 33,700 students annually. Table 35 indicates the enrollment and graduation figures for the region's institutions; and as shown, the total number of certificate and degree program graduates from all post-secondary institutions was approximately 8,060 annually. Exhibit C-9 (pages 34-46 in Appendix C) shows, where data is available, degrees awarded by program for each post-secondary institution.

TABLE 35
GRADUATION AND ENROLLMENT FIGURES FOR LOCAL POST-SECONDARY SCHOOLS
 Source: U.S. Department of Education, IPEDS

Less-than-Four-Year Institutions	Location	Total Fall Enrollment ('04-'05)	Total Graduates ('04-'05)
Johnson College	Scranton	366	128
Lackawanna College	Scranton	1,197	215
Lehigh Carbon Community College (9 locations)	Schnecksville, Allentown, Nesquehoning, Tamaqua	6,564	695
Luzerne County Community College	Nanticoke	6,396	754
McCann School Of Business And Technology	Pottsville	1,210	304
Schuylkill Institute Of Business Technology	Pottsville	153	55
Total:		15,886	2,151
Four-Year and Graduate Institutions	Location	Total Fall Enrollment ('04-'05)	Total Graduates ('04-'05)
Baptist Bible College And Seminary	Clarks Summit	940	199
College Misericordia	Dallas	2,271	518
East Stroudsburg University Of Pennsylvania	East Stroudsburg	6,553	1,339
Keystone College	La Plume	1,658	291
Kings College	Wilkes-Barre	2,223	493
Mansfield University Of Pennsylvania	Mansfield	3,556	715
Marywood University	Scranton	3,127	349
Pennsylvania State University- Hazleton	Hazleton	1,114	95
Pennsylvania State University- Schuylkill	Schuylkill Haven	969	85
Pennsylvania State University- Wilkes-Barre	Lehman	779	123
Pennsylvania State University- Worthington Scranton	Dunmore	1,354	179
University Of Scranton	Scranton	4,795	1,122
Wilkes University	Wilkes-Barre	4,364	405
Total:		33,703	5,913

2. **Penn State University's Main Campus offers a comprehensive program in Supply Chain and Information Systems that ranges from non-degree coursework up to the PhD level.** The program is within the business school and accepts 300 students annually. The program presently enrolls 500 undergraduate students, 30 MBA students, and 14 PhD students. *U.S. News and World Report* ranks the quality of the undergraduate-level program as fifth best in the nation, and the graduate level program as seventh best in the nation.
3. **Automotive Technology, Diesel Technology, and Distribution/Logistics programs are offered at several two-year and four-year institutions in or within reasonable commuting distance of the Northeast Pennsylvania region.** Many of the institutions in or within a reasonable commuting distance of the region also offer accounting, business administration,

and industrial maintenance/engineering programs that would help to support the transportation, distribution, and logistics operations throughout the region. (Refer to Appendix D for program specifics). Identified in Table 36 are the institutions that offer programs specific to Automotive and Diesel Technology, CDL training, and distribution and logistics programs.

**TABLE 36
TRANSPORTATION, DISTRIBUTION AND LOGISTICS-RELATED TRAINING PROGRAMS
AT POST-SECONDARY SCHOOLS IN/NEAR THE NORTHEAST PENNSYLVANIA REGION**

Source: U.S. Department of Education, IPEDS; Educational Institutions

Less-than-Four-Year Institutions	Location	Program	Certs & Degrees*	Total Grads (2005)
Johnson College	Scranton	Auto Mechanic	AAS/AS	14
		Diesel Mechanic	AAS/AS	15
		Distribution & Supply Logistics (new in 2006)	AAS	-
Lackawanna College	Scranton	CDL Training	Cert	-
Lehigh Carbon Community College	5 sites in the Lehigh Valley	CDL Training	Cert.	-
		Logistics Technologies	Cert.	-
		Logistics Technologies	AAS	-
Luzerne County Community College	Nanticoke	CDL Training	Cert.	-
		Auto Mechanic	AAS/AS	-
		Warehouse/Distribution Management	Cert.	-
Northampton Community College	Bethlehem, Tannersville, Bartonsville, Pike & Wayne Counties	CDL Training	Cert.	-
		Auto Mechanic	Cert.	-
		Auto Mechanic	AAS/AS	-
Four-Year and Graduate Institutions	Location	Program	Certs & Degrees*	Total Grads (2005)
Penn State University-Main Campus	University Park	Supply Chain and Information Systems	Minor	50 (est)
		Supply Chain and Information Systems	BS	150 (est)
		Supply Chain and Information Systems	NS	new
		Supply Chain and Information Systems	PhD	14 (est)
Penn State Wilkes-Barre	Lehman	Logistics & Supply Chain Management (four course certificate program)	Certificate	-

4. **Secondary vocational and technical schools provide training programs in Automotive Technology and Diesel Engine Mechanics within the Northeast Pennsylvania region.** Table 37 identifies ten secondary schools that provide training for high school students (four programs for adult students) in these technology programs.

**TABLE 37
VOCATIONAL TECHNICAL SCHOOLS
OFFERING LOGISTICS AND TRANSPORTATION-RELATED TRAINING PROGRAMS/COURSES**
Source: Institution Websites

Institutions	City	County	Programs/Courses	Participants
Carbon Career & Technical Institute	Jim Thorpe	Carbon	Automotive Technology	HS & Adult
Career Technology Center of Lackawanna County	Scranton	Lackawanna	Automotive Technology	HS
			Diesel Equipment Technology	HS
Hazleton Area Career Center	Hazleton	Luzerne	Automotive Technology	HS
			Diesel Technology	HS
Monroe Career & Technical Institute	Bartonsville	Monroe	Automotive Technology	HS & Adult
			Diesel Technology	HS & Adult
Northern Tier Career Center	Towanda	Bradford	Automotive Mechanics Diesel Engine Mechanics & Repair	HS HS
Schuylkill Technology Center	Frackville, Mar Lin, Minersville	Schuylkill	Automotive Technology	HS & Adult

TABLE 37, CONTINUED
VOCATIONAL TECHNICAL SCHOOLS
OFFERING LOGISTICS AND TRANSPORTATION-RELATED TRAINING PROGRAMS/COURSES
 Source: Institution Websites

Institutions	City	County	Programs/Courses	Participants
Susquehanna County Career and Technology Center	Dimock	Susquehanna	Automotive Technology	HS & Adult
West Side Area Vocational & Technical School	Kingston	Luzerne	Automotive Technology	HS
Western Wayne High School	South Canaan	Wayne	Automotive Technology	HS
Wilkes-Barre Area Vocational & Technical School	Plains Township	Luzerne	Automotive Technology Diesel & Heavy Equipment Mechanics	HS HS

5. **Positioned outside the Northeast Pennsylvania region, but within a reasonable recruiting distance for area employers, are two two-year institutions and twelve four-year and graduate post-secondary institutions, from which transportation and logistics employers could attract entry-level managers, supervisors, accountants, and customer-service workers.** According to 2004-2005 U.S. Department of Education records and WDG's research and contact with individual institutions, total annual enrollment at the identified two-year and four-year institutions was approximately 7,450 and 143,325, respectively. Table 38 indicates the enrollment and graduation figures for these institutions; as presented below, the total number of graduates approximates 35,500.

TABLE 38
GRADUATION AND ENROLLMENT FIGURES FOR POST-SECONDARY SCHOOLS
OUTSIDE THE 5-COUNTY REGION
 Source: U.S. Department of Education, IPEDS-online; local institutions

Less than-Four-Year Institutions	Location	Total Fall Enrollment ('04-'05)	Total Graduates ('04-'05)
Northampton County Area Community College	Bethlehem	7,019	1,034
Lincoln Tech	Allentown	424	406
Total:		7,443	1,440
Four-Year and Graduate Institutions	Location	Total Fall Enrollment ('04-'05)	Total Graduates ('04-'05)
Bloomsburg University of Pennsylvania	Bloomsburg	8,570	1,740
Bucknell University	Lewisburg	3,743	912
Drexel University	Philadelphia	18,466	3,884
Lafayette College	Easton	2,346	532
Lehigh University	Bethlehem	6,748	1,494
Lock Haven University of Pennsylvania	Lock Haven	5,283	863
Penn State Berks	Reading	2,488	238
Penn State Lehigh Valley	Fogelsville	722	169
Penn State University-Main Campus	University Park	40,709	12,323
Pennsylvania College of Technology	Williamsport	6,537	1,491
SUNY Binghamton	Binghamton, NY	14,018	3,500
Temple University	Philadelphia	33,695	6,991
Total:		143,325	34,037

6. **The two-year and four-year and graduate post-secondary institutions located outside the Northeast Pennsylvania region offer a diversity of workplace safety, CDL training, auto and diesel mechanics, and logistics programs (refer to Appendix D for program specifics).** Area employers would have opportunity to attract students and graduates from these institutions for co-op programs, internships, or job possibilities.
7. **Of the 40 public high schools in the four-county core area, 24 have met the Adequate Yearly Progress measures as required by the No Child Left Behind Act, according to the Pennsylvania Department of Education.** Institutions that fall within this designation's six

categories (e.g., warning/making progress; School Improvement I; School Improvement II; Corrective Action I; Corrective Action II; and Corrective Action III) are not meeting adequate yearly progress and are subject to various degrees of remediation, the most stringent being alternative governance. As seen in Table 39, the 16 public schools not meeting the requirements for the 2005-2006 school year include the following:

- *Warning*: Scranton High School; West Scranton High School; Riverside Junior/Senior High School; Wyoming Valley West High School; North Schuylkill Junior/Senior High School; Mahanoy Area High School; and Shenandoah Valley High School
- *School Improvement I*: Carbondale Junior/Senior High School; Nanticoke High School; and Pleasant Valley High School
- *School Improvement II*: Mid Valley Secondary School; Hanover Junior/Senior High School; and East Stroudsburg High School South
- *Corrective Action I*: Hazleton High School; Pocono Mountain High School; and Stroudsburg High School

TABLE 39
PUBLIC HIGH SCHOOL ENROLLMENTS AND NO CHILD LEFT BEHIND DESIGNATIONS
CORE-AREA COUNTIES, 2005-2006
 Source: PA Dept. of Education; School Tree.org

School District	High School	# Enrolled	# Sr.'s	NCLB Adequate Yearly Progress
Lackawanna County				
Abington Hts.	Abington Heights HS	1,202	265	Met
Carbondale	Carbondale JSHS	753	118	Improvement I
Dunmore	Dunmore HS	533	111	Met
Lakeland	Lakeland JSHS	858	151	Met
Mid Valley	Mid Valley Secondary	799	138	Improvement II
North Pocono	North Pocono HS	1,082	288	Met
Old Forge	Old Forge JSHS	479	76	Met
Riverside	Riverside JSHS	774	134	Warning
Scranton	Scranton HS	1,709	657	Warning
	West Scranton HS	971	238	Warning
Valley View	Valley View HS	803	184	Met
Luzerne County				
Crestwood	Crestwood HS	964	265	Met
Dallas	Dallas SHS	810	195	Met
Greater Nanticoke	Nanticoke HS	930	162	Improvement I
Hanover	Hanover JSHS	1,024	186	Improvement II
Hazleton	Hazleton HS	2,872	795	Corrective Action I
Lehman	Lake-Lehman JSHS	704	161	Met
Northwest Area	Northwest Area HS	646	88	Met
Pittston	Pittston Area HS	1,101	255	Met
Wilkes-Barre Area	GAR Memorial JSHS	906	123	Met
	James M. Coughlin JSHS	1,071	270	Met
	Elmer L. Meyers JSHS	961	128	Met
Wyoming	Wyoming Area Secondary	1,319	218	Met
Wyoming Valley West	Wyoming Valley West HS	1,482	338	Warning
Monroe County				
East Stroudsburg	E Stroudsburg HS South	1,399	317	Improvement II
Pleasant Valley	Pleasant Valley HS	2,068	565	Improvement I
Pocono Mountain	Pocono Mtn East HS	1,755	417	Met
	Pocono Mtn West HS	1,978	424	Corrective Action I
Stroudsburg	Stroudsburg HS	1,205	490	Corrective Action I
Schuylkill County				
Blue Mountain	Blue Mountain HS	994	241	Met
Mahanoy	Mahanoy Area HS	402	93	Warning

TABLE 39, CONTINUED
PUBLIC HIGH SCHOOL ENROLLMENTS AND NO CHILD LEFT BEHIND DESIGNATIONS
CORE-AREA COUNTIES, 2005-2006
 Source: PA Dept. of Education; School Tree.org

School District	High School	# Enrolled	# Sr.'s	NCLB Adequate Yearly Progress
Schuylkill County, continued				
Minersville	Minersville Area JSHS	600	81	Met
N. Schuylkill	North Schuylkill JSHS	1,008	124	Warning
Pine Grove	Pine Grove Area SH	560	136	Met
Pottsville	Pottsville Area HS	1,209	277	Met
Schuylkill Haven	Schuylkill Haven HS	408	94	Met
Shenandoah Valley	Shenandoah Valley JSHS	465	79	Warning
Tamaqua	Tamaqua Area HS	700	133	Met
Tri-Valley	Tri-Valley JSHS	473	64	Met
Williams Valley	Williams Valley JSHS	598	89	Met

Employer Utilization of Regional Institutions

1. **Employers responding to the survey rated the quality of vocational technical schools as satisfactory (a median score of 3.0 and an average score of 3.1).** Area high school educational programs and graduates were rated as borderline satisfactory (a median score of 3.0 and an average score of 2.8). (Refer to Table 40.)
2. **Surveyed employers are pleased with the quality of graduates from local post-secondary institutions.** As seen in Table 40, employers report that the overall quality of graduates and programs offered by two-year and four-or-more-year, post-secondary educational institutions as strong. Although the employer response sample is small, it can be used to infer area employers' opinions. Good ratings (a median score of 4.0 and average scores of 3.0 and above) were reported for Johnson College, Luzerne County Community College, Schuylkill Institute of Business, Penn State University Park, Penn State Scranton, College Misericordia, Wilkes University, Kings College, and the University of Scranton. Satisfactory ratings (a median score of 3.0 and an average score of 3.0 to 4.0) were reported for the remaining eight institutions.

TABLE 40
EMPLOYER RATINGS OF THE QUALITY OF GRADUATES AND PROGRAMS
FROM EDUCATIONAL INSTITUTIONS WITHIN AND NEAR THE REGION
 (1=POOR; 5=EXCELLENT)

Source: WDG Employer Survey, Fall 2006

Institution	Employer Responses	Average Score	Median Score
Secondary Institutions			
Area High School	4	2.8	3.0
Area Vocational/technical School	2	3.1	3.0
Two-Year Institutions and Above			
University of Scranton	12	3.8	4.0
Kings College	14	3.7	4.0
Pennsylvania State University - University Park	14	3.7	4.0
Wilkes University	14	3.7	4.0
Johnson College	12	3.6	4.0
College Misericordia	11	3.5	4.0
Luzerne County Community College	18	3.5	4.0
Pennsylvania State University - Scranton	10	3.5	4.0
Pennsylvania State University - Wilkes-Barre	12	3.5	4.0
Schuylkill Institute of Business Technology	8	3.4	4.0
Marywood University	11	3.5	3.0
Pennsylvania State University - Hazleton	10	3.5	3.0

TABLE 40, CONTINUED
EMPLOYER RATINGS OF THE QUALITY OF GRADUATES AND PROGRAMS
FROM EDUCATIONAL INSTITUTIONS WITHIN AND NEAR THE REGION
(1=POOR; 5=EXCELLENT)

Source: WDG Employer Survey, Fall 2006

Institution	Employer Responses	Average Score	Median Score
East Stroudsburg University of Pennsylvania	8	3.3	3.0
McCann School of Business and Technology	12	3.3	3.0
Mansfield University of Pennsylvania	5	3.2	3.0
Lackawanna College	9	3.1	3.0
Pennsylvania State University - Schuylkill	11	3.1	3.0

3. **Despite the relatively-high ratings given by area employers regarding the quality of graduates and training programs among area post-secondary institutions, employers have very limited experience working with the region's educational institutions for general and customized training programs, or for apprenticeships, internships, or co-op programs.** Table 41 shows that post-secondary institutions appear to be underutilized. The reason for this may be that the training providers do not offer programs that meet employers' needs, or employers may not be aware of the programs offered at area institutions. Even post-secondary institutions that do offer dedicated, industry-specific courses and programs (such as Luzerne County Community College and Penn State Wilkes-Barre) rank only modestly higher than the other institutions.

TABLE 41
EMPLOYER RATINGS OF UTILIZATION FREQUENCY OF TRAINING PROGRAMS
FROM TRAINING PROVIDERS WITHIN AND NEAR THE REGION
(1=NEVER; 5=CONTINUOUSLY)

Source: WDG Employer Survey, Fall 2006

Institution	Employer Responses	Average Score	Median Score
Secondary Institutions			
Area High School	27	1.8	1.0
Area Vocational/technical School	26	1.9	1.0
Two-Year Institutions and Above			
Luzerne County Community College	26	1.6	1.0
Wilkes University	26	1.6	1.0
Johnson College	27	1.6	1.0
Pennsylvania State University - Wilkes-Barre	26	1.5	1.0
Kings College	26	1.5	1.0
Pennsylvania State University - Schuylkill	26	1.5	1.0
Pennsylvania State University - University Park	26	1.5	1.0
Pennsylvania State University - Scranton	27	1.4	1.0
University of Scranton	27	1.4	1.0
Pennsylvania State University - Hazleton	26	1.3	1.0
Schuylkill Institute of Business Technology	26	1.3	1.0
Marywood University	27	1.3	1.0
College Misericordia	25	1.3	1.0
McCann School of Business and Technology	25	1.3	1.0
Lackawanna College	26	1.3	1.0
East Stroudsburg University of Pennsylvania	26	1.2	1.0
Mansfield University of Pennsylvania	25	1.1	1.0

4. **The *Training Needs Assessment* prepared by Karl M. Kapp indicated that many companies do not offer training to their employees even in the areas they deem most critical, and the training that is offered by the companies (internally or externally) is not always effective.** The analysis clearly shows that educational institutions need to team with LTIP and employers to ensure that training gaps are recognized and strategies to bridge these training gaps are initiated.

QUALITY OF LIFE

1. The region's good quality of life is influenced by a number of factors. See Exhibit C-12 (pages 49-50) of Appendix C for detailed quality-of-life indicators.
 - The region offers exceptional access to outdoor activities, including hiking, camping, skiing, horseback riding, golf, skydiving/hang-gliding/parasailing, hunting, fishing, and water sports. The area has a long-standing reputation for resort and family-oriented recreation.
 - Spectator sports are centered in the Scranton/Wilkes-Barre/Pocono area and include AAA baseball (Scranton/Wilkes-Barre Yankees – a AAA minor league team to be located in the area in 2008), arena football (Wilkes-Barre/Scranton Pioneers), American Hockey League (Wilkes-Barre/Scranton Penguins), local high school and college sporting events, harness racing (Pocono Downs), and auto racing (Pocono International Raceway).
 - The Mohegan Sun at Pocono Downs, Pennsylvania's first casino, opened at Pocono Downs in November 2006, with 1,100 slot machines and bar and restaurant facilities. More casino licenses are being sought in the Pocono region.
 - Cultural activities include galleries, museums, and performing arts. The Northeast Pennsylvania Philharmonic is a full-size professional orchestra offering a well-respected concert series.
 - Additionally, Philadelphia, New York, Baltimore, Binghamton, and Harrisburg cultural and recreational amenities can be reached in less than a 3-1/2-hour drive from Wilkes-Barre, PA, and Washington DC can be reached in less than four hours. Residents in the southeastern portion of the twelve-county region can easily reach amenities in the Allentown/Easton/Bethlehem area. Tioga and Bradford County residents can access amenities in the Elmira/Corning, NY area.
 - The commute time average for the twelve-county region is relatively short, with 70.5% of residents traveling less than 30 minutes for employment, compared with 65.5% nationally. Commute times are shortest in Lackawanna and Luzerne Counties, where 82.2% and 78.6% of residents, respectively, travel less than 30 minutes to reach work. Residents of Pike, Monroe, and Carbon Counties have the longest commutes, with 30.6%, 21.2%, and 12.2% of residents, respectively, traveling at least 60 minutes to reach their place of employment, exceeding the national average (8%). This long commute pattern is due to a large influx of new residents from New York and New Jersey who commute to jobs in those states. Transportation and logistics employment opportunities will draw workers from throughout the twelve-county region (potentially increasing the commute time for residents in the more rural counties) if wages and benefits are regionally competitive, and career advancement opportunities are provided.
 - According to ESRI Business Information Systems, the median home price in the twelve-county region for 2005 was \$129,945, which was 66.2% of the national median (\$196,153) and 91.4% of the Pennsylvania median (\$142,157). Median home prices in three of the four-core area counties are below the national median: Lackawanna County - \$120,365; Luzerne County - \$110,020; Schuylkill County - \$99,514. The median home price in Monroe County is higher at \$191,257, just below the national median.
 - Farmers Insurance Group, based in Los Angeles, ranked the Scranton/Hazleton/Wilkes-Barre area as the sixth most secure place in the nation to live. The company based the rankings on crime, extreme weather, job loss, terroristic threats, environmental hazards, and the risk of natural disasters.
 - In 2003 (the latest year that comparable data is available), property-crime rates in each of the twelve counties that comprise the region were lower than both the Pennsylvania and national averages, with one exception: Luzerne County had a property-crime rate of 2,557

crimes per 100,000 in population, exceeding the Pennsylvania average (2,431), but less than the national rate (3,588). Violent-crime rates in the twelve-county region were lower than both the Pennsylvania and national averages, with one exception: Schuylkill County had a violent-crime rate of 401 crimes per 100,000 residents (in 2002), exceeding the state rate (398), but below the national average (475). Of the twelve counties in the region, Luzerne, Lackawanna, and Sullivan had the highest property-crime rates of 2,557, 2,197, and 2,139 crimes per 100,000 residents, respectively. The rates of violent crime were highest in Schuylkill County, followed by Luzerne County, with a rate of 250 crimes per 100,000 residents. Table 42 identifies the property- and violent-crime rates for each of the twelve-counties, Pennsylvania, and the nation.

TABLE 42
PROPERTY AND VIOLENT CRIME RATES, 2003
Sources: U.S. FBI Uniform Crime Reports

Locations	Crimes per 100,000 in population	
	Property Crimes	Violent Crimes
Core Area Counties:		
Monroe	1,937	136
Luzerne	2,557	250
Schuylkill	1,566 ('02)	401 ('02)
Lackawanna	2,197	264
Non-Core Area Counties		
Wayne	1,502	97
Wyoming	1,846	212
Susquehanna	1,354	122
Bradford	1,256	105
Tioga County	1,213	68
Carbon	NA	NA
Pike County	1,329	112
Sullivan	2,139	215
Pennsylvania	2,431	398
United States	3,588	475

- The region is served by 26 hospitals, of which eleven are located in Luzerne and Lackawanna Counties, containing six and five hospitals, respectively. Schuylkill and Bradford Counties house four and three hospitals, respectively. Susquehanna and Carbon Counties each contain two hospitals, and there is just one hospital each in Monroe, Wayne, Wyoming, and Tioga Counties. No hospitals are present in Pike and Sullivan Counties. Bradford, Lackawanna, and Luzerne Counties have more physicians per 100,000 residents, at 295, 233, and 225, respectively, than the U.S. average (209).
2. **Table 43 indicates that housing is available and relatively affordable throughout the twelve-county Northeast Pennsylvania region.** According to *Realtor.com*, a total of 10,208 dwellings are listed for sale in the region, and 8,382 homes (82.1%) are priced below \$300,000. Seven counties (e.g., Luzerne, Schuylkill, Lackawanna, Wyoming, Susquehanna, Bradford, Tioga, and Sullivan) have a higher percentage of homes priced below \$200,000 than the regional average (58.2%). Monroe, Wayne, and Pike Counties have the highest percentages of homes priced above \$300,000, exceeding the regional average.

TABLE 43
AVAILABLE HOMES BY PRICE LEVEL, NOVEMBER, 2006
 Source: Realtor.com

Counties:	Price Level									
	\$0 to \$100,000		\$101,000 to \$200,000		\$201,000 to \$300,000		\$301,000 and over		Total	
	#	% Ttl	#	% Ttl	#	% Ttl	#	% Ttl	#	% Ttl
Core Area Counties:										
Monroe	89	4.9%	704	38.8%	573	31.6%	447	24.7%	1,813	100%
Luzerne	654	33.6%	732	37.6%	308	15.8%	255	13.1%	1,949	100%
Schuylkill	458	34.7%	366	27.8%	288	21.9%	206	15.6%	1,318	100%
Lackawanna	379	20.2%	792	42.2%	375	20.0%	332	17.7%	1,878	100%
Non-Core Area Counties										
Wayne	86	10.2%	356	42.0%	244	28.8%	161	19.0%	847	100%
Wyoming	14	14.9%	52	55.3%	12	12.8%	16	17.0%	94	100%
Susquehanna	50	24.2%	74	35.7%	52	25.1%	31	15.0%	207	100%
Bradford	51	34.7%	57	38.8%	28	19.0%	11	7.5%	147	100%
Tioga County	77	36.7%	91	43.3%	27	12.9%	15	7.1%	210	100%
Carbon	122	13.9%	344	39.2%	273	31.1%	139	15.8%	878	100%
Pike County	21	2.6%	326	40.6%	249	31.0%	206	25.7%	802	100%
Sullivan	14	21.5%	30	46.2%	14	21.5%	7	10.8%	65	100%
Total Region:	2,015	19.7%	3,924	38.4%	2,443	23.9%	1,826	17.9%	10,208	100%

OPERATING ENVIRONMENT

1. **The labor regulatory environment in Pennsylvania has favorable elements.** A review of existing labor legislation reveals many elements that are advantageous to employers. See Table 44 and Exhibit C-13 (page 51 of Appendix C).
 - Pennsylvania has solid employment-at-will legislation, meaning that an employee is hired at will and that employees can be terminated at the will of either the employer or employee. Pennsylvania does not have significant restrictions on the application of employment-at-will laws, unlike New Jersey. New York's legislation is similar to Pennsylvania's.
 - Pennsylvania and New Jersey have some restrictions on employee drug testing, including the procedures used in implementing the tests. New York does not have such restrictions. Nevertheless, interviewed employers have expressed no difficulties administering pre-employment or for-cause drug testing.
 - Pennsylvania restrictions are no stronger than the federal level regarding ADA legislation, bans on hiring replacement workers during a strike, difficulty for an employer to contest workers' compensation and unemployment insurance claims, provisions for wrongful discharge, or mandated parental leave.
 - Pennsylvania employers, however, must be cognizant of regulations considered more restrictive than the federal level. Plant closing laws, EEO hiring standards, and sexual harassment laws exceed federal guidelines. Employers have expressed no difficulty adhering to these standards.

TABLE 44
LABOR LEGISLATION IN PENNSYLVANIA, NEW JERSEY, AND NEW YORK
 Source: State Departments of Economic Development

Labor Legislation	PA	NJ	NY
Employment at will?	Yes	Yes	Yes
If yes, significant restrictions (from employers standpoint)	No	Yes	No
Restrictions on employee drug testing	Yes	Yes	No
Telephone monitoring restrictions for regulation of productivity (or customer service)	Yes: 2-party consent	Yes: 1-party consent	Yes: 1-party consent
Plant Closing Law stricter than Federal?	Yes	No	No
ADA legislation stricter than Federal?	No	No	Yes
Ban on hiring replacement workers during a strike?	No	No	No
Striking workers entitled to unemployment insurance?	No	No	Yes
Relatively difficult for an employer to contest and win a workers' comp. claim?	No	Yes	No
Relatively difficult for an employer to contest and win an unemployment ins. claim?	No	Yes	No
Right-to-Work law in effect?	No	No	No
EEO hiring standards more restrictive than Federal?	Yes	No	No
Sexual harassment laws more restrictive than Federal?	Yes	Yes	No
Mandated parental leave legislation more generous than Federal?	No	Yes	No
Onerous provisions for wrongful discharge	No	-	No

2. **Pennsylvania unemployment insurance and workers' compensation benefits amounts are higher than in New Jersey and New York.** Key components are presented in Table 45, and summarized below:
 - The Pennsylvania unemployment insurance maximum weekly benefit amount is \$497, slightly less than New Jersey (\$521), and higher than in New York (\$405).
 - The Pennsylvania workers' compensation maximum weekly benefit is \$745, considerably higher than both New Jersey (\$691) and New York (\$405). The rate for new employers is 3.752%, higher than New Jersey (3.3%) and lower than New York (4.1%).

- Pennsylvania manufacturers pay average workers' compensation rates of \$4.43 per \$100 of payroll, slightly higher than in New Jersey (\$4.39 per \$100), but lower than in New York (\$4.47 per \$100).
- Pennsylvania is not strict regarding the types of injuries compensable as a result of cumulative trauma, including: mental stress, carpal tunnel, back and neck, and cardiovascular injury.
- In Pennsylvania, an employee must choose from employer-provided physician lists for the first 90 days of treatment (provided employer has provided a list of at least six physicians from which to choose).

TABLE 45
UNEMPLOYMENT INSURANCE, WORKERS COMPENSATION, AND LABOR LEGISLATION IN
PENNSYLVANIA, NEW JERSEY, AND NEW YORK
 Source: State Departments of Economic Development

	PA	NJ	NY
Unemployment Insurance			
Unemployment insurance rate (range-existing employers)	2.2%-13.7%	0.4%-6.15%	1.5%-9.9%
Unemployment insurance rate (for new employers)	3.752%	3.3%	4.1%
Unemployment insurance taxable base (2004)	\$8,000	\$25,800	\$8,500
Unemployment insurance maximum weekly benefit amount	\$497	\$521	\$405
Workers' Compensation			
Maximum weekly benefit (1/2004)	\$745	\$691	\$400
Blended rate per \$100 payroll—all mfg.	\$4.43	\$4.39	\$4.47
Rate for clericals Code 8810	\$0.36	\$0.26	\$0.36
Waiting period (days)	7	7	7
Automatic cost of living increase for total disability	No	No	No
Employee allowed to choose any physician	Yes*	No	No
Physician list provided by	Employer	Employer	State List
Generally allowed as compensable injury from cumulative trauma:			
Mental stress	Yes	Yes	Yes
Carpal tunnel	Yes	Yes	Yes
Back	Yes	Yes	Yes
Neck	Yes	Yes	Yes
Cardiovascular	Yes	Yes	Yes
Second medical opinion allowed from physician chosen by employee, but paid by employer	Yes	No	Yes**
Coverage for permanent partial	Yes	Yes	No

*Employee must choose from employer-provided list for first 90 days of treatment (provided employer has provided at least six doctors from which to choose).

**Allowed in some circumstances, as per 12 NYCRR Section 300.7, Workers Compensation Law Section 13-a(4).

3. **The Pennsylvania sales/use tax rate (6.0% state, with no local add-ons in the four Pennsylvania areas examined) is lower than the New Jersey rate (7.0%), and considerably lower than the Orange County, New York levy (8.125%).** As seen in Table 46, the types of activities subject to sales/use tax in Pennsylvania are not viewed as onerous, and, in most instances, appear comparable to New Jersey and New York practices. Production machinery and equipment and pollution control equipment are exempt in Pennsylvania. Notably, electric power and natural gas are taxed in Pennsylvania and New York, but are exempt in New Jersey.

TABLE 46
SUBJECT TO SALES/USE TAX IN
PENNSYLVANIA, NEW JERSEY, AND NEW YORK
 Source: WDG proprietary data

	PA	NJ	NY
Sales/Use Tax			
State Rate	6.0%	7.0%	4.0%
Local Rate	none(1)	none	4.125%(2)
Total Rate	6.0%	7.0%	8.125%
Subject to Sales/Use Tax			
Production Machinery and Equipment	No	No	No
Non-production Machinery and Equipment	Yes	Yes	Yes
Pollution Control Equipment	No	Yes	No
Office FF&E	Yes	Yes	Yes
Telecommunications Equipment	Yes	Yes	Yes
Computer Hardware	Yes	Yes	Yes
Computer Software – Customized	Yes	No	No
Computer Software – Standard	Yes	Yes	Yes
Raw Materials	No	No	No
Office Supplies	Yes	Yes	Yes
Electric Power	Yes	No	Yes
Natural Gas	Yes	No	Yes
Water	No	No	No
Sewer	No	No	No
Hazardous Waste Disposal	No	Yes	Yes
Non-Hazardous Waste Disposal	No	Yes	Yes
Telephone – Local	Yes	Yes	Yes
Telephone – Intra-State	Yes	Yes	Yes
Telephone – Inter-State	Yes	Yes	No
Professional Services	No	No	No
Building Construction Materials, Office	Yes	Yes	Yes
Building Construction Materials, Industrial	Yes	Yes	Yes

Notes: (1) Local sales tax (1%) only in Philadelphia and Allegheny Counties.

(2) Orange County, NY sales tax is 3.75%, and the Metropolitan Commuter Transportation District tax is an additional 0.375%.

4. **Based on discussions with local commercial real estate experts in Northeast Pennsylvania, central New Jersey, and Orange County, New York, property taxes on commercial property are lowest in Pottsville and Wilkes-Barre, slightly higher in Harrisburg, Stroudsburg, and Middletown, and highest in Hightstown.** The typical property tax pass-through on warehouse and distribution space in Pottstown and Wilkes-Barre ranges from \$0.60 to \$0.70 per square foot. The Stroudsburg, Harrisburg, and Middletown property tax pass-through does not generally exceed \$1.00 per square foot. The pass-through in Hightstown ranges from \$1.10 to \$1.20 per square foot. (Refer to Table 47 in the *Operating Cost Comparison* section which follows).
5. **As shown in Table 47 below, Pennsylvania and New York, unlike New Jersey, exempt most major categories of personal property from taxation, though personal property is subject to local taxation.** Non-production machinery and equipment is exempt from state taxation in Pennsylvania, New Jersey, and New York. Pennsylvania municipalities (cities, townships, and boroughs) are permitted to levy real and personal property taxes that cannot exceed 30 mills on the assessed value of the property without special permission of the courts.

TABLE 47
SUBJECT TO STATE PERSONAL PROPERTY TAX IN
PENNSYLVANIA, NEW JERSEY, AND NEW YORK
 Source: WDG proprietary data

	PA	NJ	NY
Subject to Personal Property Tax			
Production Machinery and Equipment	No	No	No
Non-production Machinery and Equipment	No	No	No
Pollution Control Equipment	No	No	No
Office FF&E	No	Yes	No
Telecommunications Equipment	No	Yes	No
Computer Hardware	No	Yes	No
Computer Software – Customized	No	Yes	No
Computer Software – Standard	No	Yes	No
Office Supplies	No	Yes	No
Inventory: Raw Materials	No	No	No
Inventory: Work-in-Progress	No	No	No
Inventory: Finished Goods	No	No	No

6. **Between 1990 and 2006, there have been a total of 200 union certification elections and 34 decertification elections in the twelve-county region, according to the National Labor Relations Board.** (See Exhibit C-16 in Appendix C).
- Of the 200 certification elections, union won 89, representing a 44.5% union success rate. The Teamsters were involved in 53 of the certification elections and won 26, for a Teamster union success rate of 49.1%.
 - Of the 34 decertification elections held in the region, unions won just six, reflecting a 17.6% union success rate. Teamsters lost five of the six decertification elections in which they were involved.
 - Between 1990 and 2006, there were five elections won by unions affecting transportation and distribution-related firms, and teamsters were involved in four:
 - Arrow Services/Airborne Express, Teamsters, 1994
 - Dot Transportation, Sheet Metal Workers, 1995
 - Ryder Transportation Services, Teamsters, 1999
 - Sears Logistics Services, Teamsters, 2000 (decertified in 2003)
 - Nicholas Trucking Co., Teamsters, 2004
 - During the 16-year period examined, there were ten elections lost by unions affecting transportation and distribution-related firms, and teamsters were involved in five:
 - Wilkes-Barre Logistics Services, Local Independent Union, 1993
 - Price Bus Co., Local Independent Union, 1994
 - Wilkes-Barre Logistics Services, Local Independent Union, 1994
 - Trimac Bulk Transportation, Teamsters, 1994 (decertification)
 - Ryder Transportation Services, Teamsters, 1995
 - C. Wm, Redshaw/Rushville Trucking, Teamsters, 1996
 - Tri-State Distribution Services, Electrical Workers, 1997
 - DSC Logistics, Local Independent Union, 1998 (decertification)
 - Sears Logistics Services, Teamsters, 2003 (decertification)
 - Caterpillar Logistics, Teamsters, 2005

- Of the LTIP-identified transportation-distribution-and-logistics employers in the four-core area counties, six are known to be unionized, including:
 - Fabri-Kal (356 workers) – United Steelworkers
 - Harper Collins Publishing (500 workers) – Teamsters
 - Liz Claiborne (500 workers) – Garment Workers
 - Ocean Logistics (Supermarket Services) (313 workers) – Teamsters
 - T. J. Maxx (1,250 workers) – not identified
 - Tobyhanna Army Depot (4,400 workers) – not identified
- Interviewed employers indicated that new transportation-and-distribution-related employers would be able to retain a non-union environment, provided that competitive wages and benefits were provided and an employee-friendly work environment, including an open-door communication policy, was maintained.
- Pennsylvania is not a right-to-work state; however, employers report that workers are not predisposed to union representation. Nevertheless, the Teamsters and United Food and Commercial Workers unions have a presence in the area, and companies must remain aware of the local and regional labor climate.

OPERATING COST COMPARISON

Labor, real estate, electric power, and natural gas costs in three representative Northeast Pennsylvania communities were compared for this analysis with three competitor communities located elsewhere in Pennsylvania, New Jersey, and New York. LTIP and WDG jointly identified the three Northeast Pennsylvania communities (Pottsville, Stroudsburg, and Wilkes-Barre) and the three competitor locations (Harrisburg, PA; Hightstown [Mercer County], NJ; and Middletown [Orange County], NY).

The three communities in Northeast Pennsylvania and Harrisburg offer considerably lower labor, real estate (e.g., land, construction, and occupancy), and electric power costs when compared to Hightstown, NJ and Middletown, NY. Of the four Pennsylvania communities, Pottsville and Wilkes-Barre have the lowest relative operating costs.

Median Annual Salaries

1. Among the studied locations, salaries/wages for ten key warehouse, logistics, and distribution occupations are lowest in Wilkes-Barre and Pottsville, ranging approximately five to nine percentage points below the national average. As seen in Table 48, Stroudsburg and Harrisburg offer a roughly similar salary/wage structure, ranging close to the national average. Wages/salaries in Middletown exceed the national averages by approximately 2% to 4%. Of the six locations compared, Hightstown had the highest wage pattern, ranging approximately 5% to more than 8% above the national average.

TABLE 48
MEDIAN ANNUAL SALARIES/WAGES FOR KEY WAREHOUSE AND DISTRIBUTION POSITIONS
 Sources: Salarysource.com; Salary.com*, November 2006
 (100 = U.S. Average)

Occupation	Pottsville PA		Stroudsburg PA		Wilkes-Barre PA		Harrisburg PA		Hightstown NJ		Middletown NY		U.S.
		Index		Index		Index		Index		Index		Index	
<i>Wages and Salaries - Indexed to U.S. Average (US=100)</i>													
Dispatcher	\$31,455	91.9	\$33,973	99.3	\$31,170	91.1	\$33,889	99.1	\$37,014	108.2	\$34,944	102.1	\$34,210
Forklift Operator	\$28,050	92.3	\$30,363	99.9	\$27,857	91.6	\$30,190	99.3	\$32,922	108.3	\$31,191	102.6	\$30,398
Inventory Control Manager	\$67,652	91.8	\$73,271	99.5	\$67,225	91.3	\$71,455	97.0	\$77,359	105.0	\$74,904	101.7	\$73,670
Materials Handler	\$25,297	93.0	\$27,495	101.1	\$25,226	92.7	\$27,139	99.7	\$29,497	108.4	\$28,174	103.5	\$27,209
Materials Handler-Senior	\$31,056	91.8	\$33,512	99.1	\$30,746	90.9	\$33,447	98.9	\$36,549	108.1	\$34,481	102.0	\$33,814
Packer	\$22,983	94.5	\$25,094	103.2	\$23,023	94.7	\$24,367	100.2	\$26,144	107.5	\$25,313	104.1	\$24,312
Ship/Rec'g Clerk	\$26,753	93.1	\$29,105	101.3	\$26,703	93.0	\$28,680	99.8	\$31,148	108.4	\$29,807	103.8	\$28,724
Ship/Rec'g Supervisor	\$45,906	92.1	\$49,333	99.0	\$45,262	90.8	\$48,637	97.6	\$53,067	106.5	\$50,705	101.8	\$49,829
Truck Driver-Short Haul	\$30,132	92.0	\$32,535	99.3	\$29,849	91.1	\$32,391	98.9	\$35,366	108.0	\$33,454	102.2	\$32,749
Warehouse Mgr	\$59,284	92.1	\$63,892	99.3	\$58,619	91.1	\$62,382	96.9	\$67,757	105.3	\$65,461	101.7	\$64,345
Average of All Occupations	\$36,857	92.5	\$39,857	100.1	\$36,568	91.8	\$39,258	98.8	\$42,682	107.0	\$40,843	102.5	\$39,926

*Sources: Salarysource.com used for Pottsville, Wilkes-Barre, Harrisburg, Hightstown (proxy-East Brunswick), Middletown (proxy-Newburgh), and U.S. medians. Salary.com used for Stroudsburg (proxy-Mount Pocono).

Average Real Estate, Construction, and Occupancy Costs

- Hightstown, NJ has the highest cost of appropriately zoned and fully served land than the four Pennsylvania locations and Middletown, NY.** Land suitable for warehouse and distribution activities in the Hightstown-area markets (Exits 8 and 8A on the New Jersey Turnpike) is currently ranging in price from \$250,000 to \$300,000 per acre. Meanwhile, land is priced from \$70,000 to \$80,000 per acre in Harrisburg and Stroudsburg, and from \$65,000 to \$75,000 per acre in Wilkes-Barre and Middletown. Land in the Pottsville and Schuylkill Haven area is presently priced from \$40,000 to \$50,000 per acre; however, land along Interstate 78 in Berks County (south of Pottsville) is priced in the \$60,000 to \$70,000 range, and higher. *Notably, for sites in Pennsylvania, the KOZ and KOEZ designations, set to expire in 2010 and 2013, respectively, typically elevate the cost of land by \$5,000 per acre because of KOZ and KOEZ incentives.*
- Construction costs for Good Class C Distribution Warehouse buildings (i.e., warehouse structures that exclude high-rise urban settings) in Wilkes-Barre and Stroudsburg are slightly higher (3%) than the national average, but lower than in Pottsville, Hightstown, and Middletown.** Of the six locations examined, Harrisburg had the lowest construction costs at 1% above the national average. Construction costs in Wilkes-Barre and Stroudsburg were next lowest, at 3% above the national norm. Higher construction costs were seen in Pottsville, Hightstown, and Middletown, with costs 11, 14, and 26 percentage points, respectively, higher than the national average. Notably, construction costs do not take into consideration any cost savings from building in a KOZ- or KOEZ-designated business park, where building machinery and equipment may be exempt from state sales-and-use tax.
- Lease rates for distribution warehouse space are typically lower in Pottsville, Wilkes-Barre, Harrisburg, and Stroudsburg, than in Middletown, and Hightstown.** Gross lease rates (including basic tenant electric and gas, operations and maintenance, and property taxes) for distribution warehouse space range from a low of \$5.10 to \$5.20/sf in Pottsville to a high of \$7.90 to \$8.00/sf in Hightstown. Wilkes-Barre had the second-lowest lease rates ranging from \$5.25 to \$5.40/sf, followed by Harrisburg (\$5.40 to \$5.75), Stroudsburg (\$5.60 to \$5.95), and Middletown (\$6.50 to \$7.00). (Refer to Table 49).

TABLE 49
AVERAGE REAL ESTATE, CONSTRUCTION, AND OCCUPANCY COSTS
 Sources: (see * below)

	Pottsville PA	Stroudsburg PA	Wilkes-Barre PA	Harrisburg PA	Hightstown NJ	Middletown NY
Land-zoned & fully served (\$/acre)*						
Industrial Park	\$40K-\$50K	\$70K-\$80K	\$65K-\$75K	\$70K-\$80K	\$250K-\$300K	\$65K-75K
Construction						
Good Class C Distribution Warehouse						
Cost per Sq. Ft.	\$62.00	\$58.00	\$58.00	\$56.00	\$64.00	\$71.00
Cost Index (US=100)	111	103	103	101	114	126
Occupancy						
Distribution Warehouse						
Base Rent (NNN)	\$3.65-\$3.70	\$4.00-\$4.10	\$3.75-\$3.85	\$3.80-\$4.10	\$5.00	\$4.25-\$4.50
Utilities, inc. basic tenant electric	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
Operations/Maint.	\$0.35	\$0.35	\$0.35	\$0.35	\$1.30	\$1.00
Property Taxes	\$0.60-\$0.65	\$0.75-\$1.00	\$0.65-\$0.70	\$0.75-\$0.80	\$1.10-\$1.20	\$0.75-\$1.00
<i>Total (per Sq. Ft.)</i>	<i>\$5.10-\$5.20</i>	<i>\$5.60-\$5.95</i>	<i>\$5.25-\$5.40</i>	<i>\$5.40-\$5.75</i>	<i>\$7.90-\$8.00</i>	<i>\$6.50-\$7.00</i>

*TABLE 49 Notes: For Pennsylvania sites, the KOZ and KOEZ site designations will typically increase the price of land by \$5,000/acre because of incentives available at these sites..

Sources: Land and Occupancy Costs-

--Pottsville, Stroudsburg, Wilkes-Barre, Harrisburg, Middletown: Bill Jones, Mericle Real Estate Services; Black's Guide.

--Hightstown, Middletown: Bob Sticht and Tom Kirczow, Grubb & Ellis Company, Edison, NJ Office; Black's Guide.

Construction Costs: Marshall Valuation Services, Marshall & Swift.

Summary: Wilkes-Barre and Pottsville have the lowest overall real estate, construction and occupancy costs of the six locations examined, and Hightstown has the highest. Table 50 provides a summary ranking of the real-estate-related costs, and shows the total average (mean) ranking of the three cost factors. (Refer to Table 50 below).

TABLE 50
SUMMARY RANKING OF REAL ESTATE-RELATED COSTS
 Sources: (Table 49)

	Pottsville PA	Wilkes-Barre PA	Harrisburg PA	Stroudsburg PA	Middletown NY	Hightstown NJ
Costs	<i>Ranking of Locations (1=lowest costs, 6=highest costs)</i>					
Land-zoned & fully served (\$/acre)	1	2	4	4	2	6
Construction Costs (\$/sf)	4	2	1	2	6	5
Occupancy Costs (\$/sf)	1	2	3	4	5	6
Mean Ranking:	2.0	2.0	2.7	3.3	4.3	5.7

Electric Power Costs

- PPL Utilities Corp. and UGI Utilities provide electric power services to Pottsville, Wilkes-Barre, and Stroudsburg area business parks.** PPL Utilities, along with Metropolitan Edison Company, provide service to most locations in the Harrisburg area. Public Service Electric and Gas Company and Jersey Central Power and Light Company provide service to business parks in the Hightstown area. Rockland Electric Company provides power services to the Middletown area.
- Electric power costs in Northeast Pennsylvania and in the Harrisburg area are above the national average, but represent a locational advantage when compared to costs in Hightstown, NJ, and Middletown, NY.** The average total rate for PPL Utility Corp. users is 6.40 cents/kilowatt-hour, slightly above the national average (5.91 cents/kilowatt-hour). The average total rate for UGI Utilities industrial customers is 7.27cents/kilowatt-hour. Metropolitan Edison Company rates, applicable to Harrisburg, average 6.21 cents/kilowatt hour. PPL Utilities Corp. costs for the four Pennsylvania locations are approximately 33% of the Rockland Electric Company rate in Middletown, and roughly 35% of the Public Service Electric and Gas Company rate in Hightstown. (Refer to Table 51).

TABLE 51
ELECTRIC POWER COSTS – AVERAGE RATES FOR INDUSTRIAL USERS
(FOR 12 MONTH PERIOD ENDING JUNE 30, 2006)
 Source: Edison Electric Institute, Typical Bills and Average Rates Report, Summer 2006

	Pottsville Wilkes-Barre & Stroudsburg, PA		Harrisburg PA		Hightstown NJ		Middletown NY	U.S.
	PPL	UGI	PPL	MetEd	JCPL	PSEG	Rockland	AVG
Utility Company*	PPL	UGI	PPL	MetEd	JCPL	PSEG	Rockland	AVG
Electric Power Components:	<i>cents per kilowatt-hour</i>							
Generation	4.33	5.19	4.33	4.34	2.06	7.33	***	4.42
Transmission	0.58	0.20	0.58	0.24	***	***	***	0.41
Delivery	0.36	1.88	0.36	0.82	***	1.33	***	0.91
Competitive Transition Charge	1.13	**	1.13	0.81	0.92	1.25	***	1.10
Total Rate:	6.40	7.27	6.40	6.21	9.76****	9.91	9.55	5.91

* PPL Utilities Corp. and UGI Utilities provide electric power service to Pottsville, Wilkes-Barre and Stroudsburg, PA area business parks.
 PPL Utilities Corp. and Metropolitan Edison Company (FirstEnergy Corp.) provide service to Harrisburg, PA area business parks.
 Jersey Central Power & Light Company and Public Service Electric & Gas Company provide service to Hightstown, NJ area business parks.
 The Rockland Electric Company provides service to Middletown, NY area business parks.

* UGI's competitive transition charge is included in the delivery charge.

*** Electric power components are not reported to Edison Electric Institute.

**** The total rate for Jersey Central Power & Light Company was not reported to Edison Electric Institute. The New Jersey state average rate is provided. New Jersey is served by at least four electric power providers.

Summary: The three locations in Northeast Pennsylvania and Harrisburg have the lowest electric power costs of the six locations examined. Hightstown has the highest power costs, ranging 65% - 68% higher than the national average. (Refer to Table 52 below).

TABLE 52
SUMMARY RANKING OF ELECTRIC POWER COSTS
Sources: (Table 51)

	Pottsville PA	Stroudsburg PA	Wilkes-Barre PA	Harrisburg PA	Hightstown NJ	Middletown NY	U.S. AVG
Costs	<i>Ranking of Locations (1=lowest costs, 6=highest costs)</i>						
Total Rate (cents per kWh)	6.40-7.27	6.40-7.27	6.40-7.27	6.21-6.40	9.76-9.91	9.55	5.91
Index to U.S. AVG (U.S.=100)	108.3-123.0	108.3-123.0	108.3-123.0	105.1-108.3	165.1-167.7	161.6	100
Ranking	2	2	2	1	6	5	-

Natural Gas Costs

- Stroudsburg, Wilkes-Barre, and Harrisburg business parks are served by UGI Utilities, Inc., and Pottsville-area business parks are served by PPL Utilities Corp.** Public Service Electric and Gas Company provides service to Hightstown-area business parks. Middletown is served by Orange and Rockland Utilities, Inc.
- Natural gas costs are lowest in Middletown and Pottsville, with rates of \$1.4018 and \$1.4068 per 100 cubic feet, respectively.** Natural gas rates for the two vendors serving the four Pennsylvania locations in this analysis vary by less than 6 cents per 100 cubic feet consumed. Hightstown has the highest rates, at \$1.5043 per 100 cubic feet. (Refer to Table 53).

TABLE 53
NATURAL GAS COSTS – RATES FOR GENERAL SERVICE (NON-RESIDENTIAL) USERS
(NOVEMBER, 2006)
Source: Service Providers

	Pottsville PA	Stroudsburg, Wilkes-Barre & Harrisburg PA	Hightstown NJ	Middletown NY
Utility Company*	PPL	UGI	PSEG	Rockland
	<i>dollars per 100 cubic feet</i>			
Service Components*				
Service Charge (monthly)	\$18.00	\$8.55	\$8.50	\$15.62
Supply Charge	\$1.098	\$1.1189	\$1.18	\$1.13
Cost Adjustment Charge	\$0.14422	\$0.09291	\$0.0874	\$0.018
Distribution Charge – at highest consumption level	For supply over 200,000cf: \$0.16459	For supply over 500,000cf: \$0.24841	\$0.2369	For supply over 500,000cf: \$0.27
Total:	\$1.4068	\$1.4602	\$1.5043	\$1.4018

* PPL Utilities Corp. is the natural gas provider for Pottsville, PA area business parks.

UGI Utilities, Inc. provides service to Stroudsburg, Wilkes-Barre, and Harrisburg area business parks.

Public Service Electric & Gas provides service to Hightstown, Mercer County, NJ area business parks.

Orange and Rockland Utilities, Inc. provides service to Middletown, Orange County, NY area business parks.

Summary: Natural gas rates are lowest in Middletown and Pottsville, followed by Stroudsburg, Wilkes-Barre, and Harrisburg, which are served by UGI Utilities Inc. Hightstown has the highest natural gas rate of the areas examined. (Refer to Table 54, below).

TABLE 54
SUMMARY RANKING OF NATURAL GAS COSTS
 Sources: (Table 53)

	Pottsville PA	Stroudsburg PA	Wilkes-Barre PA	Harrisburg PA	Hightstown NJ	Middletown NY
Total Rate (\$ per 100 cubic feet)	\$1.4068	\$1.4602	\$1.4602	\$1.4602	\$1.5043	\$1.4018
Ranking	2	3	3	3	6	1

OUTBOUND FREIGHT COST ASSESSMENT

The outbound freight cost assessment measures and compares the relative costs of shipping outbound freight from three locations in the four-county core area (e.g., Pottsville, Stroudsburg, and Wilkes-Barre) versus three selected representative competitive locations (e.g., Hightstown, NJ; Middletown, NY; and Harrisburg, PA), to 20 location in 17 states, plus Toronto and Montreal in Canada. The analysis is based on less-than-truckload (LTL) and truckload (TL) rates (with typical discounts), applied to shipment characteristics and assumptions agreed to by WDG, Location Advisory Services (LAS – a WDG-affiliated firm), and LTIP. The outbound freight cost assessment was prepared by LAS, and summarized below. Supporting exhibits are presented in Appendix E.

Assumptions

1. **The 22 destinations (identified in Table 55 below) were jointly determined by WDG and LTIP.** The six origins and 22 destinations are geographically depicted in Figure 5, which immediately follows the assumptions subsection of this report. The percentages of outbound shipping weight allocated to each location were determined based on the total population of the destination community. The model used assumes 10% of shipments are exported through the Port of Philadelphia and the Port of Elizabeth, New Jersey.

**TABLE 55
DESTINATION POINTS FOR OUTBOUND SHIPMENTS – BY STATE**

U.S. State/ CN Province	Designated City representing State/Province	Percent of outbound weight
CT	Hartford	3.2%
DE	Wilmington	0.8%
IN	Indianapolis	1.7%
KY	Louisville	1.2%
ME	Augusta	1.2%
MD	Baltimore	5.2%
MA	Worcester	5.9%
MI	Detroit	2.8%
NH	Manchester	1.2%
NJ	New Brunswick	16.7%
NY	Syracuse	9.3%
OH	Columbus	10.6%
PA	Pittsburgh	5.8%
PA	Scranton	5.8%
RI	Providence	1.0%
VT	Rutland	0.6%
VA	Richmond	7.0%
WV	Charleston	0.7%
ONT	Toronto	5.8%
QUE	Montreal	3.5%
NJ	Elizabeth (port)	5.0%
PA	Philadelphia (port)	5.0%
<i>Total:</i>		<i>100%</i>

2. **The shipping parameters – LTL and TL – were evaluated and finalized.** The base of LTL rates that include the following weight breaks: minimum charge; 300-500 lbs; 500-1,000 lbs; 1,000-2,000 lbs; 2,000-5,000 lbs; 5000-10,000 lbs; 10,000 lbs (which would run up to 20,000 lbs which is the normally accepted limit of LTL weights) and full truckload shipments (28,000 lbs). The number of weekly shipments by weight class were reviewed and approved by LTIP. (Refer to Exhibit E-2 in Appendix E.)

3. **The total weight for each shipment type was distributed to each of the 22 destination locations based on population.** Notably, over 1.475 billion pounds of freight were distributed, including 1.456 billion pounds of TL shipments and 19.565 million pounds of LTL shipments. (Refer to Exhibit E-3 in Appendix E.)
4. **Shipping-cost matrices were constructed for each of the six origin locations.** Matrices of truckload charges were developed for each origin location based on mileages generated for origin/destination lanes as applied to TL and LTL mileage rates. These matrices are presented in Exhibit E-4 in Appendix E.
5. **The annual outbound freight costs for each of the six origin locations were determined based on the combined costs of TL shipments and LTL shipments.** The LTL shipments costs were calculated based on National Motor Freight Class 85, and further discounted by 65%. Fuel surcharges were not applied to the freight costs, since the surcharges vary with time and would be about the same from all six origin locations.

**FIGURE 5
COST ANALYSIS – ORIGINS AND DESTINATIONS**



Findings

1. **Based on the key assumptions outlined above, Stroudsburg emerges as the lowest cost origin location, with annual outbound freight costs of \$31,908,638.** Of the six origin points, Harrisburg has the highest outbound freight costs, and represents a cost penalty of \$1,075,141 over Stroudsburg.
2. **Wilkes-Barre has the third-lowest costs following Hightstown, NJ.** Shipping from Hightstown, NJ has an annual cost penalty of \$239,294 over Stroudsburg. Middletown, NY and

Pottsville are the fourth- and fifth-lowest cost locations, respectively, differing in costs by just under \$56,000 annually. (Refer to Table 56).

**TABLE 56
TOTAL COSTS AND COST DIFFERENTIALS – SIX ORIGIN LOCATIONS**

Origin Location	Annual Outbound Freight Cost			Annual Differential vs. Low-Cost Origin Point	
	LTL Shipments	TL Shipments	Total Cost	Cost Penalty	Percentage
Stroudsburg, PA	\$1,816,446	\$30,092,192	\$31,908,638	\$0	100%
Hightstown, NJ	\$1,876,600	\$30,271,332	\$32,147,932	\$239,294	101%
Wilkes-Barre, PA	\$1,849,481	\$30,589,728	\$32,439,209	\$530,571	102%
Middletown, NY	\$1,966,332	\$30,663,516	\$32,629,848	\$721,210	102%
Pottsville, PA	\$1,844,778	\$30,840,836	\$32,685,614	\$776,976	102%
Harrisburg, PA	\$1,865,992	\$31,117,788	\$32,983,780	\$1,075,141	103%

INVENTORY OF AVAILABLE DISTRIBUTION SITES/BUILDINGS

WDG conducted a search of existing buildings and currently-proposed sites designated as suitable for warehouse and distribution operations containing 100,000 square feet of space or larger. Property information for Lackawanna, Luzerne, and Monroe Counties was provided by Penn’s Northeast. Current *LoopNet.com* listings were used for sites/buildings in Schuylkill County, Harrisburg, Hightstown, and Middletown.

1. **There are a total of 30 properties (buildings and vacant sites) listed for the four-county core area, including eight in Lackawanna County, 14 in Luzerne County, four in Monroe County, and four in Schuylkill County.** As shown in Tables 57 and 58, all three building types (Big Box–500,000sf or greater; Mid-Size–200,000 to 499,999sf; and Small–100,000 to 199,999sf) are presently available in the four-county region. Vacant sites are available to accommodate new warehouse and distribution buildings.
2. **The Harrisburg area had 20 buildings/properties listed; however, there were no available or proposed buildings suitable for Big Box distribution operations (refer to Table 57).** *LoopNet.com* listed no vacant sites presently proposed for new warehouse and distribution buildings in the Harrisburg area (refer to Table 58).
3. **There were 19 buildings/properties listed for Hightstown, and four buildings/properties listed for Middletown – with all three building types available (refer to Table 57).** Middletown had one vacant site proposed for (and appropriately zoned for) warehouse and distribution uses.

**TABLE 57
INVENTORY OF EXISTING BUILDINGS
SUITABLE FOR WAREHOUSE AND DISTRIBUTION OPERATIONS**
Sources: Penn’s Northeast; LoopNet.com

Warehouse/DC Suitability:	Big Box (500,000 sf or greater)	Mid-Size (200,000-499,999 sf)	Small (100,000-199,999 sf)	Total
Four-County Core Area				
Lackawanna County	0	1	3	4
Luzerne County	1	4	3	8
Monroe County	0	0	1	1
Schuylkill County	0	1	1	2
Core Area Total:	1	6	8	15
Harrisburg, PA	0	6	14	20
Hightstown, NJ	2	8	7	17
Middletown, NY	1	1	1	3

Sources: Penn’s Northeast: Properties in Lackawanna, Luzerne, and Monroe Counties.
LoopNet.com: Properties in Schuylkill County, PA; Harrisburg, PA; Hightstown, NJ; & Middletown, NY

**TABLE 58
INVENTORY OF PRESENTLY PROPOSED SITES
SUITABLE FOR WAREHOUSE AND DISTRIBUTION OPERATIONS**
Sources: Penn’s Northeast; LoopNet.com

Warehouse/DC Suitability:	Big Box (500,000 sf or greater)	Mid-Size (200,000-499,999 sf)	Small (100,000-199,999 sf)	Total
Four-County Core Area				
Lackawanna County	3	1	0	4
Luzerne County	1	4	1	6
Monroe County	3	0	0	3
Schuylkill County	1	0	1	2
Core Area Total:	8	5	2	15
Harrisburg, PA	0	0	0	0
Hightstown, NJ	1	1	0	2
Middletown, NY	1	0	0	1

Sources: Penn’s Northeast: Properties in Lackawanna, Luzerne, and Monroe Counties.
LoopNet.com: Properties in Schuylkill County, PA; Harrisburg, PA; Hightstown, NJ; & Middletown, NY

INCENTIVES

The Commonwealth of Pennsylvania offers a variety of as-of-right incentives programs for new and expanding industries, as well as for upgrading employer skills. Incentives programs are listed below, with details of these programs included in Exhibit C-14:

Tax Credits and Abatements

1. **Job Creation Tax Credits (JCTC).** The program offers a \$1,000 tax credit per full-time job, per year, for three years. Jobs must be created within three years from the start date, and all tax credits must be claimed within five years from the start date. New employees must earn an average hourly rate of at least 150% of the federal minimum wage, excluding benefits.
2. **Keystone Opportunity Zones (KOZ).** Eligible businesses that move into a KOZ are exempt from paying a variety of state and local taxes, including local real estate taxes, state sales tax (on taxable property and services [excluding motor vehicles], telephone and electric service, building machinery and equipment) and gross receipts taxes, as well as Pennsylvania's capital stock and franchise tax, and corporate net income tax, through 2010.
3. **Keystone Opportunity Expansion Zones (KOEZ).** Eligible businesses that move into a KOEZ are exempt from the same categories of taxes as in the KOZ program. These exemptions are in place through 2013.
4. **Local Economic Revitalization Tax Assistance Act (LERTA).** The program allows local municipalities, school districts, and counties to offer up to 100% tax abatement on improvements to property for up to 10 years. Terms vary by location.

Grants

1. **Opportunity Grant Program (OGP).** The Pennsylvania Department of Community and Economic Development (DCED) program provides outright grants to employers that create a substantial number of new jobs. Grant funds can be used for job training, construction, machinery and equipment purchase, and working capital. Companies receiving an OGP award must, within three years, meet certain job creation requirements. New hires must receive a base pay of at least 150% of the federal minimum wage, excluding benefits.

Workforce Training

1. **Customized Job Training (CJT).** This grant program reimburses Pennsylvania employers for specialized job training for existing or newly hired employees. CJT funds can be used for consumable materials and supplies, approved contracted services, instructional costs, and relevant travel costs for instructors. New companies are fully reimbursed, while existing employers receive 70% reimbursement for eligible expenses.
2. **Workforce and Economic Development Network of PA (WEDnetPA).** Free job training for in-state employers that demonstrate solid growth and out-of-state companies that relocate to Pennsylvania.
3. **Workforce Investment Act of 1998 (Title 1, Subtitle B).** Federal program that provides job training to eligible individuals. Through an On-the-Job-Training (OJT) component, companies can be reimbursed for up to 50% of wages paid to eligible trainees during the training period. Training periods vary with the job difficulty. Eligible employees include, but are not limited to, those who are economically disadvantaged and those who have been dislocated due to a plant closing or mass lay-off.

Bond Financing

1. **Pennsylvania Economic Development Financing Authority (PEDFA) Tax-Exempt and Taxable Bond Programs.** Tax-exempt and taxable bonds, both in pooled transactions and as stand-alone transactions, can be used to finance land, building, equipment, working capital, and refinancing. PEDFA can finance up to 100% of eligible project costs, provided the borrower obtains a letter of credit from a local bank equal to the amount of the bond. Interest rates for tax-free loans are substantially lower than the U.S. prime, and are weekly variable. One full-time job must be created or retained for every \$50,000 borrowed.

Business Finance Loans

1. **Pennsylvania Industrial Development Authority (PIDA).** The Authority offers low-interest loan financing through Industrial Development Corporations for land and building acquisition, construction, and renovation, resulting in job creation or retention. PIDA rates can be as low as 3% interest and are fixed for the entire term of the loan, which cannot exceed 15 years. PIDA will finance up to 40% of the real estate project cost (up to 50% in certain circumstances) with a maximum loan amount of \$2.0 million. Companies locating to certain distressed communities or special development zones may receive up to \$2.5 million. Companies must create one full-time job for every \$35,000 borrowed.
2. **Machinery and Equipment Loan Fund (MELF).** Low-interest loan financing to acquire and install new or used machinery and equipment or to upgrade existing machinery and equipment. The maximum amount of the loan is \$500,000, or 50% of the total eligible project cost, whichever is less. Loan terms generally run from three to seven years, at a fixed interest rate as low as 3%. Companies must create one full-time job for every \$25,000 borrowed.
3. **Pennsylvania Capital Access Program (PennCAP).** Loan guarantees through participating banks for all businesses with capital needs, including land, building, equipment, and working capital. Guaranteed loans of up to \$500,000 are available.
4. **Pennsylvania Minority Business Development Authority.** The Authority offers low-interest financing to businesses owned and operated by ethnic minorities. Rates can be 50% of the prime interest rate, but no less than 4%, up to a ten-year term for machinery and equipment; and up to a three-year term for working capital. Loans up to \$500,000 (\$750,000 within Enterprise Zones) or 75% of total eligible costs, whichever is less, are available for manufacturing, high-tech, international trade, or franchise companies, and loans up to \$250,000 (\$350,000 within Enterprise Zones) or 75% of total eligible costs, whichever is less, are available for retail or commercial firms. Companies must create one full-time job for every \$15,000 borrowed.
5. **Small Business First (SBF).** Low-interest loan financing for land and building acquisition and construction, machinery and equipment purchases, and working capital. The maximum loan amount is \$200,000. The program will fund up to 50% of the total eligible project cost. Loan terms are typically at a fixed interest rate of 3%, and real estate runs up to 15 years, machinery and equipment for seven years, and working capital up to three years. Companies must create one full-time job for every \$25,000 borrowed.
6. **Community Economic Development (CED).** Low interest loan financing land and building acquisition and construction, machinery and equipment purchases, and working capital. The program provides loans for small business enterprises with 100 or fewer full-time employees located in designated distressed areas, including Enterprise Zones, Keystone Opportunity Zones, Keystone Opportunity Expansion Zones, among other area designations. The program provides loans up to \$100,000 at an interest rate of 2% with flexible repayment terms.

Other Initiatives

1. **Economic Stimulus Plan.** The Commonwealth has developed a 16-program plan to revitalize jobs, bolster business growth, improve infrastructure and housing, and sustain communities. The economic development package includes:
 - Over \$2.3 billion in loans, grants, and guarantees
 - Programs to leverage funds to generate at least \$5.0 billion in private investment in economic and community development projects
 - Investments in rural, urban, and suburban sites
 - New capital resources for small cities and communities
 - Tools to make Pennsylvania a leader in real estate and business development
 - Incentives and services to attract high-growth firms
 - Resources that allow traditional industries, especially manufacturing, to access new technology to enhance productivity

Comparative Incentives Assessment – Pennsylvania, New Jersey, and New York

1. **Pennsylvania Incentives Applicable to Warehouse and Distribution Operations:**
 - In 1999, Governor Tom Ridge launched the “tax free” zones initiatives. The KOZ, KOEZ, and LERTA programs can significantly reduce the cost of doing business through exemptions, deductions, abatements, and credits of state and local taxes, state sales and use tax, and Corporate Net Income (CNI) tax. These programs were designed to stimulate new and expanding businesses to locate within areas where little or no businesses activity currently exists. Notably, the KOZ and KOEZ exemptions are set to expire in 2010 and 2013, respectively.
 - Warehouse and distribution operations are also able to take advantage of the Job Creation Tax Credit program, which provides a \$1,000 tax credit per full-time job, per year, for three years. New employees must earn an average hourly rate of at least 150% of the federal minimum wage, excluding benefits (currently \$5.15/hour x 1.5 = \$7.725/hour).
 - The Governor’s Job Ready PA initiative provided \$400,000 in grant funding to the Northeast Pennsylvania region in the logistics, distribution, and transportation sectors, which has already been used for 43 training projects at 30 companies, with over 800 existing employees upgrading their skills.
 - There are other job training programs in place which may be used by new and existing employers, including Customized Job Training (CJT), and the Workforce and Economic Development Network of PA (WEDnetPA).
2. **New Jersey Incentives Applicable to Warehouse and Distribution Operations:**
 - New Jersey currently offers two programs which are of benefit to warehouse and distribution-related companies.
 - The Business Employment Incentive Program (BEIP) provides grants to companies expanding in or relocating to New Jersey. The program provides grants that may run up to 10 years and can equal from 10% to 80% of the total amount of state income taxes generated by the newly created jobs. *The amount and duration of the grants are subject to negotiation.*
 - The Business Retention and Relocation Assistance Grant, Tax Credit Program (BRRAG) provides grants of tax credits to businesses that are relocating operations within New Jersey or retaining jobs. To qualify, the company must have been in New Jersey for at least ten years, and relocate a minimum of 250 retained full-time jobs from one location within the

state to another location or locations. Companies retaining 500 or more full-time employees receive \$1,500 per job, not exceeding \$20 million. Companies sized from 250 to 499 workers receive a grant determined by the New Jersey Commerce, Economic Growth, and Tourism Commission.

- New Jersey also offers negotiable grants for workforce training.

3. **New York Incentives Applicable to Warehouse and Distribution Operations:**

- There are no published incentives available for warehouse and distribution operations outside of New York's Empire Zone program. Warehouse and distribution employers are eligible for the Jobs Now grant program, which provides assistance of up to \$10,000 per job for labor training and infrastructure development. However, the incentive is not as-of-right, and must be negotiated with Empire State Development.
- For a project to be eligible for incentives under the Empire Zone program, it must be consistent with the criteria stated in an individual zone's local development plan. Employers that locally qualify appear to be eligible to receive wage-tax credits in the amount of \$1,500 per employee for up to five consecutive years, with unused credit forwarded indefinitely. New businesses are eligible for a 50% refund of unused credits. Investment tax credits for property and equipment and sales-tax refunds are not available for warehouse and distribution operations in any local zone.
- Warehouse and distribution employers are eligible for the Jobs Now grant program, which provides assistance of up to \$10,000 per job for labor training and infrastructure development.

4. **Pennsylvania's current incentives programs appear very competitive against New Jersey and New York.** Warehouse, distribution, and logistics firms positioning within the KOZ, KOEZ, and LERTA designated sites will receive significant tax advantages. These tax advantages, combined with the existing Job Creation Tax Credit, represent an attractive incentive to new and expanding businesses. *The incentives programs in New Jersey are subject to negotiation, and require the demonstration that the grant is a "material factor" for expanding or relocating in New Jersey. New York offers grants to warehouse and distribution operations, but the grants are negotiable.* Empire Zone benefits are subject to local qualifying criteria, and may exclude transportation-related operations.

5. **Pennsylvania's KOZ and KOEZ tax incentives are set to expire in 2010 and 2013, respectively.** The LTIP, along with local and regional economic development entities, are encouraged to work closely with the Department of Community and Economic Development to explore new incentives opportunities for logistics and transportation—a Commonwealth Targeted Industry Cluster.

6. **The State of Nebraska has created a market-leading, distribution incentives package that may contain components that may be of interest to the Commonwealth.** In January 2006, Nebraska commenced a new incentives package (Nebraska Advantage) that applies to a wide variety of industries, including transportation, warehouse, distribution, and logistics operations. It eliminates corporate income and sales taxes for up to 15 years, and enables companies to retain up to six percent of their annual payroll in cash for seven years. Distribution, storage/warehouse, and transportation operations are eligible for two levels of incentives: one for companies creating 30 or more jobs, and a second for companies creating 100 or more jobs. If a company creates more than 100 jobs and at least \$10 million in capital investment, the incentive program provides a 10% investment tax credit; a sliding scale of job credits on new-employee payroll (ranging from 3% - if 60% of the state's average wage – to 6% - if 125% of the state's average wage); and a refund of all sales tax on capital investment. The Nebraska Advantage program has attracted attention, and more than 70 companies have taken advantage of the program since its inception.

MARKETING PLAN

The LTIP is strongly encouraged to design and focus its marketing approach on both internal and external audiences. The marketing plan should be structured to accomplish a variety of objectives:

Internal Audiences – Workforce in the Region

- Introduce high school and middle school students to the dynamic transportation, distribution, and logistics industry and the variety of career opportunities in demand by that industry. The industry has been evolving into a high-tech, mechanized, structured, and efficient environment that requires a higher level of skills than previously needed.
- Reach out to the regional workforce to introduce and promote the diverse career opportunities available in the industry, and the positions and compensation levels currently available and projected in the region. The promotional video (described below) would serve as an important tool to introduce workers to job openings, job descriptions, pay, responsibilities, requirements, etc.
- The LTIP and its members could conduct one-day orientation meetings and tours of state-of-the-art distribution centers in the region for school principals, guidance counselors, and teachers. Participants would be introduced to career opportunities within the transportation industry and to the warehouse and distribution environment. Representatives from the area's post-secondary institutions and WIB's should participate during the orientation portion of the event. The day-long event should include all meals and transportation, as well as other promotional gifts (incentives), such as tickets to Scranton-Wilkes-Barre Yankees Baseball, hockey, skiing, water parks, casinos, resorts, or other entertainment venues. The LTIP should view these educators as partners in the process of developing workforce skills and resources for the industry, and should be proactive in developing long-term cooperative relationships.
- The LTIP should also participate at high school job fairs and career days to introduce the logistics and transportation career ladders, available jobs, skill requirements, and pay expectations.
- Interested high school students – some already in vocational technical facilities – should be given the opportunity to tour state-of-the-art distribution centers, see the latest model tractor-trailer trucks and equipment, tour a modern diesel repair center, and talk with post-secondary training institutions.
- To reach the not-employed, underemployed, and employed workforce, the LTIP should have a presence at all job and career fairs, workforce centers and other major promotional events held within the region. The LTIP booth should include a prominent monitor showing the video, promotional materials, and LTIP members able to discuss job opportunities and skills training/retraining resources

Internal Audiences – Existing Transportation, Distribution, and Logistics Firms in the Region

- Introduce all transportation, distribution, and logistics firms (including all manufacturers with sizable shipping/receiving operations) to the goals and objectives of the LTIP, and foster an ongoing dialogue with the region's stakeholders (e.g., secondary and post-secondary educators; labor-training providers; workforce investment boards, and economic development agencies). Companies in the region should be strongly encouraged to participate in the LTIP to share knowledge, experiences, and technology, and to combine resources to ensure that training programs strengthen the labor pool for the entire industry sector.
- The LTIP should proactively boost its membership or alliance base by reaching out to all transportation-related operations in the region – including rail, air, automotive repair, truck-stop owners and managers, freight forwarders, and customs brokers. LTIP members need to talk up

the area and promote the value of active participation in the partnership. The marketing outreach to local firms would also help to retain transportation-related firms in the region. Area employers may have shared needs for vendors and suppliers, and LTIP could develop a recruiting campaign with the involvement of local companies to recruit necessary vendors and suppliers to the area. This approach has value both to the LTIP in recruiting new companies, and to employers in need of localized services.

External Audiences – Workforce Outside of the Region

- Initiate a program to recruit needed experienced talent to the area. Points to emphasize in the personnel recruiting drive would include a lower cost of living, local training programs, quality of life, and career opportunities within the region. Prime targets would be Metropolitan New York, New Jersey, and the Philadelphia area, but efforts aimed at economically impacted western New York (Rochester, Buffalo, and Binghamton) and at the Washington, DC and Baltimore areas should be considered. A sophisticated job assistance program among area employers also would be helpful for the spouses of relocating personnel.
- The promotional video (described below) would be a useful technique to introduce workers to the Northeast Pennsylvania region and the jobs that are available within the transportation, distribution, and logistics sector. The video could be shown at truck stops in the region to target truck drivers passing through the region.

External Audiences – Transportation, Distribution, and Logistics Firms Outside of the Region

- Publicize the region's favorable market access, demographic and workforce attributes, best operating cost advantages, and available incentives to national firms. Warehousing and distribution operations balance their location decisions on multiple factors, including (but not limited to): proximity to markets served (to lower shipping costs); real estate availability/cost, operating costs; and access to an appropriately skilled and affordable workforce. Companies will be drawn to Northeast Pennsylvania due to its proximity and interstate access to markets, but the other key attributes must be present and verifiable to close the deal. Marketing techniques would include:
 - LTIP participation at transportation-related industry trade shows. LTIP participants should include employers, educators, and economic development officials.
 - Letters to real estate directors of nationwide companies that deal in warehousing, distribution, and logistics, including large retailers, Fortune 500 firms, and food and clothing distributors. The letter should include a map demonstrating proximity to major markets and the top five advantages to operating in Northeast PA. The letter should be succinct, and invite real estate directors to visit the LTIP website, or call/email a key point-of-contact. Specific companies to be targeted could be established using a firm that specializes in such work, such as Gruber Phillips International of Red Bank, NJ (contact Amy Phillips, President, at 888.447.8237, or Inquire@gruberphillips.com), or Development Counselors International (DCI) in New York City (contact Darian Rose at 212.725.0707). Gruber Phillips or DCI could also assist LTIP in arranging visits to specific prospects.
 - LTIP should develop press releases to run in the business section of regional newspapers within the target area. The articles should detail the advantages of locating warehouse and distribution operations in Northeast Pennsylvania
 - LTIP should reach out to real estate brokers in Pennsylvania, New Jersey, and New York to promote the benefits of the region, as well as to attract new prospects.
- The LTIP should work closely with the Commonwealth of Pennsylvania in the marketing efforts to the transportation and logistics industry sectors. Additionally, the LTIP is encouraged to

coordinate efforts with the Commonwealth to attract talent into Northeast Pennsylvania from outside the Commonwealth.

Website Development

WDG recommends that the LTIP continue developing its website dedicated to warehouse, distribution, and logistics (www.nepapeopleonthemove.org). The website should target the internal and external customers discussed above, with distinct sections of the website for each type of customer. The website address should also be a clear identifier for the site's content, and easily put to memory. Additionally, the LTIP should procure a wide variety of web addresses, if they remain available (e.g., LogisticsPA; Distribution PA, PATrans, NEPATrans, PATrucking, TruckingPA, etc.) which will immediately direct the user to the LTIP dedicated website. Marketing efforts should direct each type of user to one website covering the entire region, which subsequently directs them to the separate user areas. Each section should have a clearly identified primary point of contact for each type of visitor.

Logistics and Transportation Video Productions

Strong consideration should be given to funding the design and production of two short videos focused on the region's transportation industry (LTIP members contribute based on an employment or shipping volume formula, or through grants). The objective is to introduce the types of jobs available in Northeast Pennsylvania, and the industry as a fast growing one with career development potential.

- One video should be targeted to high school and middle school students, introducing them to a progressive and dynamic transportation industry and the diverse career opportunities available.
- A second video should be targeted to not-employed, underemployed, and employed residents age 18 and older, featuring the career opportunities in the region in logistics and transportation and the skills training/retraining programs and assistance that are presently available.

The videos should prominently display an easily remembered website address for further information. Placement of these videos also might include TV spots, mall/shopping center kiosks; movie trailers (with appropriate target audiences); sports venue video screens; job fairs; WIB offices; etc. The videos should also be made available for viewing on the website.

The employee recruiting video and website should also be made available in Spanish, with materials directed at high Hispanic-populated locations.

RECOMMENDATIONS

WDG recommends that the LTIP continue to bolster its membership and to serve as the transportation and logistics industry consortium. WDG's recommendations are outlined below:

Internal Audiences

1. **Stronger educator/employer linkages should be developed to enhance the use of the region's educational resources by employers for employee training and recruiting, to alert employers to the full breadth of educational resources available in the region, and to provide the educators with information on the training needs of area employers.** A neutral third party, such as the newly-formed LTIP, would be an essential agent for change, serving as a catalyst to bring the employers and educators together. LTIP is encouraged to assign a liaison to reach out to employers to learn of their staffing and training needs, and to remain in close contact with area educators to ensure that these needs are being addressed.
 - Recommended issues to address include:
 - The automotive and diesel technology programs offered at the region's career and technical institutions should be examined to ensure that they are using state-of-the-art tools and equipment, and receiving curriculum input from industry representatives.
 - LTIP, in cooperation with post-secondary schools (notably, Johnson College, Lackawanna College, Lehigh Carbon Community College, Luzerne County Community College, and Northampton Community College), should ensure that logistics, transportation and distribution companies are aware of the program offerings in the various CDL, auto and diesel mechanics, logistics technologies, distribution and supply logistics, warehouse and distribution management programs that are currently offered.
 - The Supply Chain and Information Systems program at Penn State-Main Campus should be highly publicized to ensure that transportation-related operations in the region are fully aware of program offerings. Co-op and internship opportunities should be fully utilized and urged with area employers as a means of retaining graduates of the program with regional employers.
 - The LTIP should explore methods to develop better communication between area educators and employers on staffing and training needs, and encourage a greater use of co-op programs.
 - Consensus must be gained regarding the kinds of vocational/technical programs that are needed by employers, and develop career pathways between vocational/technical schools, community colleges, and four-year degree programs. (Refer to the *Career Ladder Model* report prepared by Georgia Egan.)
 - High school and post-secondary training programs must be structured to pace the needs of area employers, and to better prepare students for the workplace.
 - Recruiting techniques must be improved to attract graduates from area educational institutions.
 - The group of employers and educators must identify educational service and employer needs and address how to synchronize those needs through effective training/retraining.
 - An initiative should be advanced to re-brand vocational/technical programs for a greater appeal to residents in the 18-25-year age range.
 - There is a need to attract more students into vocational/technical fields by providing facilities that are as attractive and up-to-date as college facilities, with modern equipment and capable, enthusiastic instructors.

- A dedicated outreach individual(s) from the schools should be selected to serve as the point(s) of contact with area industry. The point(s) of contact would regularly or frequently visit or call on area employers to see where training programs can be offered or developed.
2. **It is recommended that a stronger effort be taken at the high schools and middle schools to present vocational/technical careers as acceptable and lucrative alternatives to four-year college.** High school guidance counselors should be as knowledgeable about vocational/technical career training opportunities and careers as they are about college-prepared careers and opportunities, gained through the visitation program and the promotional videos. Expanded programs to have guidance counselors, principals, and high school teachers tour and shadow employees at state-of-the art warehouse, distribution, and logistics operations is recommended. It is also recommended that career days at area middle schools and high schools include, as speakers, former students who are now employed in the transportation industry.
 3. **It is suggested that area educational institutions escalate their outreach program to the not-employed and underemployed residents by offering courses and programs needed by the logistics and transportation industry.** Recruiting programs can be instituted for certain segments of the not-employed population, including retired individuals, physically/mentally challenged residents, and residents with transportation and childcare/elder care issues. Programs could include job sharing and flexible scheduling. Guidelines for employers would be required on the special considerations needed when working with these segments of the population.
 4. **Automotive repair training programs at the secondary and post-secondary schools should be expanded to include diesel technologies, where these diesel programs are not already offered.** Where high school diesel technology programs have been recently terminated, it is urged that LTIP spearhead efforts for their reinstatement.
 5. **Area employers indicated that one of the barriers to hiring entry-level truck drivers is the cost of insuring inexperienced drivers.** As a result, warehouse and distribution firms tend to hire only those drivers with at least 18 to 24 months of driving experience. LTIP is encouraged to explore funding sources and/or incentives to offset the insurance costs for those companies willing to hire and train inexperienced drivers.

External Audiences

1. **The Penn's Northeast economic development organization has a strong business recruitment and retention program in place.** The LTIP should reach out as needed to Penn's Northeast for regular and frequent support and assistance, and should partner in Penn's Northeast initiatives where appropriate.
2. **Actively communicate with the Commonwealth of Pennsylvania's Department of Community and Economic Development to ensure that Logistics and Transportation prospects are directed to appropriate Northeast Pennsylvania site opportunities.** Logistics and Transportation is among Pennsylvania's Targeted Industry Clusters.

Other LTIP Report-generated Recommendations

The LTIP, through the Governor's Job Ready PA funding, also received two other workforce-related reports, including a *Career Ladder Model* and a *Training Needs Assessment*. Recommendations advanced in these reports and endorsed by WDG are summarized below:

Career Ladder Model

1. The *Career Ladder Model for the Northeastern Pennsylvania Logistics and Transportation Industry Partnership* report was prepared by Georgia Egan, M. Ed., Workforce Development Consultant, Luzerne County Community College, in August 2006. The Career Ladder Model was targeted by LTIP as a key tool for the Partnership's use in identifying strategies for collaborative employment issues and curriculum development projects. The purpose of the report as discussed by Ms. Egan "...is to address the identified workforce challenges by creating a Career Ladder Model for the NEPA Logistics and Transportation Industry Partnership." The model identifies:
 - Core competencies and Pathways within the local industry and occupations contained within those Pathways;
 - Key occupations within the local logistics and transportation industry and the skills and competencies specific to each occupation;
 - Training and educational requirements required to move between the various occupations ("career lattices"), and
 - Recommendations and "best practices" for successful implementation of the career ladder
2. The Career Ladder Model identifies five main Pathways and the specific competencies required for each pathway, with competencies gathered from company interviews, focus group meetings, a Training Needs Assessment Survey, industry reports, the Career Cluster Initiative, and O*Net Summaries for each identified occupation. To move upward within the Pathway, employees must master the core competencies and skills through work experience and supplemental training (corporate in-house or corporate-sponsored). An employee's movement upward through the Pathway would thus result in increased skill levels, responsibility, value to the employer, and salaries/wages. The report provides occupation-specific knowledge and skills and education/training requirements for each of the five pathways, which include:
 - Transportation Operations;
 - Facility & Mobile Equipment Maintenance;
 - Logistics Planning and Management Services;
 - Warehousing & Distribution Center Services; and
 - Safety, Training & Human Resources
3. The success of the Career Ladder Model requires close collaboration from a variety of local and regional organizations and stakeholders, including: local employers, colleges and universities, workforce investment boards, chambers of commerce, one-stop centers, technology centers, and high school/vocational school guidance departments. LTIP is strongly encouraged to bring together the key stakeholders in the region to evaluate and implement the recommendations and best practices outlined in the Career Ladder Model approach

Training Needs Assessment

1. The *Training Needs Assessment of the Logistics and Transportation Industry of Northeast Pennsylvania* report was prepared by Karl M. Kapp, Ed. D. CFPIM, CIRM, Assistant Director – Institute for Interactive Technologies, Professor – Instructional Technology, Bloomsburg University, dated August 31, 2006. The objectives of the report are to (1) determine the training needs of incumbent logistics and transportation firms – including the desired requirements of new workforce members, and (2) determine what types of training programs were needed by area employers and to aggregate that training to reduce the costs for any one organization – especially small and mid-sized firms.
2. The report indicates that there are training gaps in nearly every occupation examined. Dr. Kapp suggests that the gaps are due to two primary factors.

- The first is that many companies do not offer training to their employees even in the areas they deem most critical.
 - The second is that the training that is offered by the companies (internally or externally) is not always effective. The report outlines training gaps in five major areas, including: mechanics; drivers; general workforce; leadership; and technology. In each of the five areas, the report outlines the following:
 - The skills deemed most critical by logistics and transportation companies;
 - whether or not companies conduct training related to these skills; and
 - whether or not those companies believed the training was effective.
 - The research indicates there is a discrepancy between the skills that logistics and transportation employers indicate as critical, and the effectiveness or quality of training done in these areas. Also indicated is that many firms that identify skills as critical perform no training in those areas.
3. The report outlines the following specific training recommendations to address deficiencies:
- Conduct classes teaching basic employability skills. Also, training in basic written and oral communication skills is needed.
 - Every firm has a need for strong customer service training for drivers and others who deal with the public. This is not done well, but is seen as highly critical to over half the firms in the survey.
 - Firms look for CDL certification when hiring, but they also want more than just a CDL. Consider adding “soft skills” to the CDL training programs. Teach more than mechanics or truck driving: teach basic business etiquette skills. Also teach truck driving in contexts other than simply “over the road.” Include areas like dump trucks or other utility vehicles.
 - Consider creating a class/workshop/seminar that focuses on Time Management and Preventive Maintenance for mechanics. These are two areas of critical need for L&T firms.
 - The skills of Team Building and Interpersonal Skills are highly critical to the success of L&T firms. Yet, training either does not exist or is not satisfactory in these two areas.
 - Firms are looking for Leadership Training for supervisors and managers who have many direct reports. While this is the area that has been ranked the most effective, it still has a far way to go to meet all the needs.
 - Train-the-trainer classes are required; many of the firms conduct their own in-house training and are not completely satisfied with the results.
 - Technology training is needed in the areas of EDI, Shipment Tracking Systems, Bar Coding, and Warehouse Systems.
 - Technology awareness training is needed in the region, as few firms indicated that they are using any of the technologies listed in Dr. Kapp’s *Training Needs Assessment* survey (less than half of all firms surveyed viewed any of the technology skills as “Extremely or Moderately Critical.”).
 - The need for forklift training is consistent among many of the organizations.
 - Educational institutions need to team with L&T firms to bring the training to the firm at the mechanic, driver, and supervisory level.
 - L&T firms and educational institutions need to work together on designing programs that are taught locally and at times that are convenient for their employees.
 - L&T firms need to be made more aware of the training opportunities that already exist within the region.
 - A consortium of L&T firms may be able to create an advertising or marketing campaign to recruit students into their organizations. Consider teaming with the American Trucking

Association, which has already done studies on why people are entering the L&T industry as a career, and has already created an advertising program that can be tapped into.

- Assistance should be provided to firms from an employee-recruitment perspective. Perhaps local academic institutions could bring potential employers to campus more frequently.
- A consortium-type training initiative would be welcomed by many of the L&T firms in the region.
- Efforts need to be made to expand the consortium and let more firms know about the goals and mission of the group.
- Leverage the larger L&T firms in the region as a focal point for the L&T industry in Northeastern PA, and work to strengthen the consortium, which is deemed valuable by many of the firms already involved.