The Keystone Utilities Partnership originated in 2006 with three employers represented by IBEW Local 29 in the Pittsburgh region and expanded to eighteen employers and twenty-three labor organizations statewide. The Partnership serves employers in the electric, gas and water sectors along with supply-chain, and construction trades. Nearly 4,000 workers in the utility industry have attended Partnership subsidized training since its inception.

The Partnership provides services to address emerging technology, the aging workforce, and the lack of skilled applicants. Utility industry employers have projected retirements due to the aging Pennsylvania utility workforce. Additionally, technology changes such as the development of Smart Grid will require new training integrated into apprenticeships, pre-employment and career ladder programs.

In 2009, the Partnership conducted a survey of its stakeholders that acknowledged the benefits of the Partnership. Respondents noted that the Partnership provides an important service to align organizations to create an economy of scale to meet the needs of the employer, the career goals of their employees, and to address utility industry challenges. A highly trained utility workforce lowers production and material costs while ensuring more effective and safer service.
**HISTORICAL ACCOMPLISHMENT:** Partnership members participating in training activities are required to complete the KDP Training Report Form. KDP captures quantitative data and as well as a qualitative narrative. Employers and unions reported the following outcomes:

- 1,622 workers trained 7/1/11 to 6/30/11
- $462 average cost per trainee
- 79% career advancement
- 69% wage increase/promotion
- 73% increased job retention
- 93% increased skills
- 73% training led to certification

<table>
<thead>
<tr>
<th>Program Year</th>
<th>Number Trained</th>
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<tbody>
<tr>
<td>Year 1 (07/06-06/07)</td>
<td>217</td>
</tr>
<tr>
<td>Year 2 (07/06-06/08)</td>
<td>458</td>
</tr>
<tr>
<td>Year 3 (07/08-06/09)</td>
<td>948</td>
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<tr>
<td>Year 4 (07/09-06/10)</td>
<td>367</td>
</tr>
<tr>
<td>Year 5 (07/10-06/11)</td>
<td>1,622</td>
</tr>
<tr>
<td><strong>Total Participation</strong></td>
<td><strong>3,978</strong></td>
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</table>

**Keystone Utilities Partnership Grant Awards**

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities Industry Partnership &amp; Worker Training Grants - Three Rivers WIB</td>
<td>$1,265,000</td>
</tr>
<tr>
<td>Living Cites Foundation for Labor Management Clearing House</td>
<td>$27,500</td>
</tr>
<tr>
<td>PA Department of Labor and Industry Grant Awards</td>
<td>$2,279,227</td>
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<tr>
<td>PA Department of Labor and Industry, Project Waterways</td>
<td>$199,100</td>
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<tr>
<td>PA Department of Labor and Industry, Project Stormwater</td>
<td>$250,000</td>
</tr>
<tr>
<td>Partnership Planning &amp; Building Capacity - PA Fund For Workforce Solutions</td>
<td>$155,000</td>
</tr>
<tr>
<td><strong>Total Funding Program Year 2006 through 2011</strong></td>
<td><strong>$4,175,827</strong></td>
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</tbody>
</table>

**The Keystone Utilities Partnership Survey**

In June 2009, thirty-two KUP stakeholders completed the Keystone Utilities Partnership Survey.

**INDUSTRY PARTNERSHIP DATA**

- 90% of respondents said the Partnership led to cost savings for training
- 70% said that the Partnership led to improved labor/management relations
- 50% said that training provided through the Partnership led to increase in productivity

**EMPLOYMENT DATA**

- Only 16.7% expressed satisfaction with the supply of qualified candidates in skilled trades
- 80% cited the need to retrain or to provide additional new hire training in the skilled trades
- 70% cited the inability to find qualified candidates in the skilled trades as having a negative effect on productivity.

**TRAINING DATA**

- Only 31.6% noted that the PA post-secondary education provides an adequate supply of qualified new hires
- 63% said their company would benefit from an industry-wide apprenticeship similar to those offered in the building trades
- 55% responded that their company used CareerLinks in the last three years for new hires.
**TRAINING SUBJECTS**

### TRANSMISSION & DISTRIBUTION
- Basic Electrical Apprenticeship
- Equipment Operator Apprentice
- National Safety Council Cert
- No Voltage Breaker Cert
- Antilock Airbrake M & O
- SEL Relay Breakers M & O
- SF6 Gas
- Mobile Hydraulic FPS Cert
- Doble Test Lab & Theory
- Doble Hands-on
- HVAC, Plant Maintenance
- Pipe Bending, Plant Maintenance
- Painting, Plant Maintenance
- Masonry, Plant Maintenance
- Lead Awareness
- Substation, Person in Charge
- Mobile Electric Troubleshooting
- ABB Breaker M & O
- Delta Star Mobile
- OSHA Lockout/Tagout
- NERC Reliability Standards Cert
- Mitsubishi Breaker M & O
- Electrical Equip Tech Refresher
- Welding Recertification

### ELECTRICAL GENERATION
- Stainless Steel Welding Cert.
- Beginning Welding
- Advanced Welding
- Adv. Vehicle Electrical Maint
- Crane Operator, Stationary
- Crane Operator Mobile
- Control Room Operator Simulator
- Nuclear Seal Penetration
- Nuclear Asbestos
- Requalification
- Nuclear ABB Relay M&O
- HVAC Beck Drive M&O

### GAS
- Welding Certifications
- Leak Location & Investigation
- Backhoe Operation
- Natural Gas Main Installation
- International Fuels Gas Code
- Regulator and Relief Valve
- Pipe-fitting
- Fuel & Air Systems
- Regulator Const. and Repair
- Mercury Instrument Testing
- Mercury Removal

### WATER & WASTEWATER
- Backhoe Operation
- Class E Water Dist. License
- Basic Water Business
- Mentor/Shadow New Hires
- Arch Flash
- Leak Detection
- Dam Safety
- Trenching and Shoring

### SUPPLY CHAIN
- Intermediate Blueprint Reading
- Advanced Blueprint Reading
- Welder Blueprint Reading
- Metal Removal Procedures
- Elementary Blueprint Reading

### CONSTRUCTION
- Pre-apprentice Boot Camp
- Customer Relations
- Management
- RedZone Solo Deployment
- Lineworker Boot Camp
- Basic Life Support
- First Aid CPR AED
- CDL A and B Certifications

**FAMILY SUSTAINING WAGES IN THE UTILITY INDUSTRY AND PROMISING HIRING OUTLOOK**

The average annual wage for occupations that participated in Partnership subsidized training was $51 thousand per year. Extreme hiring demands driven by an aging workforce, major infrastructure upgrades, and a lack of skilled applicants challenges the utility industry.

**STRATEGIES TO ADDRESS CHALLENGES**

- **INDUSTRY PARTNERSHIP FORMATION:** KDP assists in identifying stakeholders (employers, unions, and industry associations) to participate in Industry Partnerships and to form an Industry Partnership Steering Committee. KDP coordinates activities to ensure that the Partnership is industry led and governed.

- **LABOR MANAGEMENT TRAINING COMMITTEES:** KDP developed an organizational structure designed to focus on employer and employee skill training needs. At the core of this structure are the Labor Management Training Committees (LMTCs) and proven data-driven processes to identify skill and training needs and determine solutions.

- **EMPLOYER OUTREACH:** KDP identifies and contacts employers as well as other industry stakeholders such as Labor Unions to align with Local Workforce Investment Boards, CareerLink® offices, and community based organizations.

- **UNION ENGAGEMENT:** Affiliated with the Pennsylvania AFL-CIO, KDP engages unions to participate in subsidized training programs. Through Partnership activities, KDP staff provides support for Union leaders and training coordinators to prepare, plan, and implement programs.
• **INDUSTRY ASSOCIATIONS:** The Partnership collaborates with the PA Public Utilities Commission, the Energy Association of Pennsylvania, and the PA AFL-CIO to meet the needs of the utilities industry and its workforce.

• **PROGRAM MANAGEMENT:** Keystone Development Partnership (KDP) has extensive experience managing data-driven training programs, and provides programmatic and fiscal oversight on federal, state, and local projects. In all KDP programs, the Local Workforce Investment Boards, employers, and unions cooperate to document participant data in an accurate and confidential manner. KDP uses the Performance Management System that the PA Department of Labor & Industry uses for evaluating workforce programs and for measuring program results. All employers use the KDP Training Report form to track training and trainee data. KDP then uses the information for reports and funding requests.

**STAKEHOLDERS ENDORSE THE KEYSTONE UTILITIES PARTNERSHIP**

“With KDP’s assistance, we’ve successfully developed and implemented training curriculums for our Transportation Department, fostered reciprocal training with the Port Authority Transit of Allegheny County, conducted a “Train-the-Trainer” program to enhance the skills of our training staff and have plans to use the partnership in other departments within our company. KDP is and continues to be a great training partner for Duquesne Light Company.” Jane Cuff, Duquesne Light Manager Workforce Development and Safety

“Since deregulation, the IBEW has been stressing the need for more training for its members and the Keystone Utilities Industry Partnership is a perfect fit to fill this need. The Keystone Development Partnership has a proven track record in the Transportation Industry and we are now seeing this success being transferred to the Utility Industry. There are programs up and running at several electric utilities with interest to expand into the gas industry. Our hope is that every utility local union and utility company will form a partnership to enhance training in the industry.” Michael Welsh, International Brotherhood of Electrical Workers (IBEW) International Representative Third District

“This training maintains our workforce and gives our employees additional skills to make them more employable. This Partnership has already been fruitful and we hope to continue it and use it as an ongoing training tool as we hire new field employees”. Fred Kaczor, Vice President – Planning and Implementation, UGI

“The help provided by the Keystone Partnership has enabled Voith to provide customized blue print and welding training for our workforce in order to build competence and confidence.” John Seifarth, Director, Manufacturing

“The Advanced Trenching and Shoring curriculum development and training of 262 employees “is a hands-on program that was developed with subject matter experts across PA! We are proud of this program—and grateful for the support of the KDP grant funding. It is difficult to calculate the cost savings of programs like this-- preventing just one accident and one injury is priceless.” Joan N. Shott, M.Ed., Learning and Development Consultant, American Water

“In cooperation with KDP and the WIB, we at PPL we were able to offer quality hands on training to employees that would have not otherwise have learned new skills.” John Wirth, PPL Instructor

**THE KEYSTONE DEVELOPMENT PARTNERSHIP**

The Partnership is managed by the non-profit Keystone Development Partnership (KDP) started in 2005. KDP works with labor/management training committees to develop programs to enhance incumbent employees’ skill levels as well as provide training for new hires. KDP provides project and fiscal management for training partnerships and coordinates activity for stakeholders to define priorities, customize curriculum, and implement programs. KDP identifies and recruits interested employers, labor organizations, workforce development agencies, community based organizations, and the educational community to participate in the Partnership to address common needs.