

TECHNICAL ASSISTANCE PROGRAM



A YEAR IN REVIEW JULY 2007–JUNE 2008

Message From the President



France A. Córdova

During my first year as Purdue's president, I have been impressed by successful efforts of Purdue's Technical Assistance Program, which have clearly been a boon to our state and its economy. TAP is remarkable in its ability to impact the businesses, institutions, and people of Indiana. It is truly a vehicle to "advance Indiana's economic prosperity and quality of life" — and, thus, positively impacts thousands of Hoosiers from Fort Wayne to Terre Haute.

Without question, it is successful in this mission. During the 2007-2008 fiscal year, TAP served 622 companies and healthcare providers in 80 counties. It achieved another year of record economic impacts, which, for the first time, exceeded more than \$100 million. And TAP received record funding of \$9.8 million, six times the level of three years ago, and a 30 percent increase from last year.

Our economy is currently fraught with challenges. So it's even more impressive that, this year, TAP's efforts helped create or retain more than 900 jobs. It partnered with many governmental, public and private organizations to multiply its benefits statewide. And, through TAP, 65 Purdue University faculty and 62 Purdue University students assisted employers on more than 250 projects throughout the state.

TAP's activities and impacts are too numerous to mention here. Here are some highlights that I'm especially proud to share. This year, TAP:

- » Increased or retained sales of \$63 million;
- » Facilitated \$19 million in cost savings and \$22 million in new capital investments;
- » Trained 4,802 employees in multiple areas including manufacturing and healthcare;
- » Added 14 full time employees to meet rapidly increasing demands for services.

Progress continues into the new fiscal year. Beginning in August 2008, TAP will:

- » Add TAP offices in Evansville, New Albany, and South Bend as a result of increased state funding;
- » Pursue development of a "Green Workforce" initiative to help manufacturing companies become more environmentally sustainable;
- » Launch and deploy a new curriculum for healthcare employees.

This report will give you much more information on the accomplishments of this remarkable initiative. I am confident TAP will continue to far exceed our expectations. I am proud that Purdue, through TAP, is making such a positive impact on Indiana's economy and quality of life.

A stylized, handwritten signature in black ink, reading "France A. Córdova". The signature is fluid and cursive, with a large initial "F" and "C".

France A. Córdova, President

Purdue University

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*Advancing
Indiana's
economic
prosperity and
quality of life.*



Indiana's Growth and Prosperity

Economic Impact Data

July 2007—June 2008

Increased or retained sales.....	\$63 million
Cost savings.....	\$19 million
Capital investments.....	\$22 million

Employment

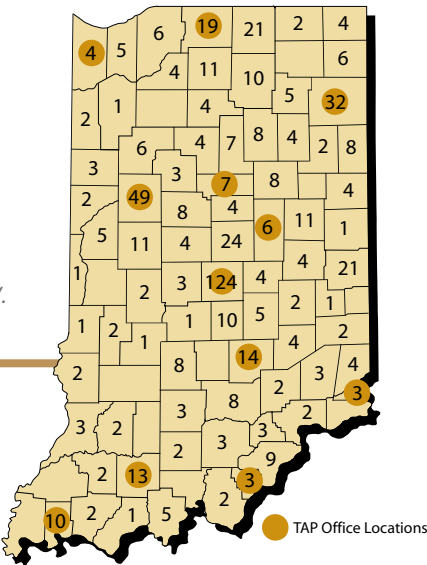
Jobs created or retained: **904**

Workforce Development

2007-08: TAP trained **4,802** employees in multiple areas including manufacturing, public health, healthcare, and pharmacy.

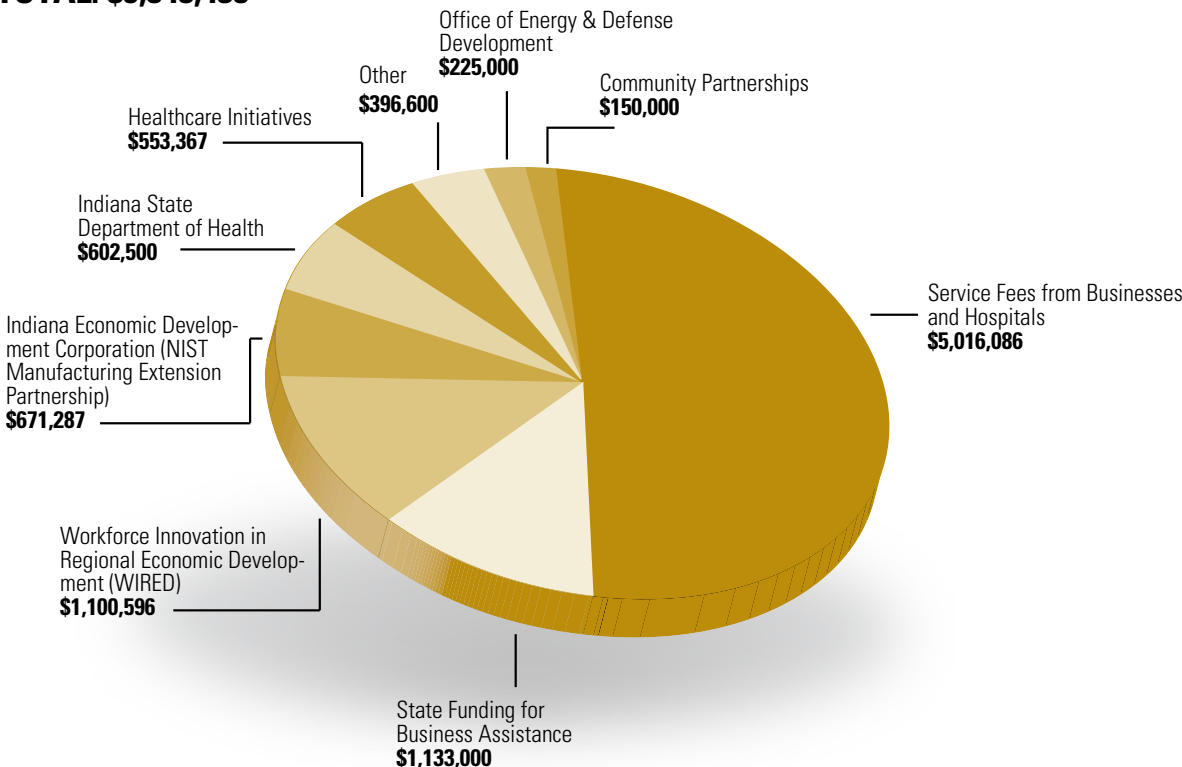
Clients Served

In 2007-08, TAP faculty, graduate students, and staff worked with **622** companies, hospitals, healthcare providers, and governmental units in **80** counties across Indiana.



TAP funding sources for fiscal year 2008

TOTAL: \$9,848,435



PharmaTAP – *Memorial Hospital, Jasper, IN*



“For Memorial, utilizing PharmaTAP was an efficient way to analyze our medication administration processes. They brought expertise and an unbiased perspective to the table.

We felt PharmaTAP’s experience provided us with a different and fresh way of looking at medication processes. PharmaTAP’s consultants made the staff comfortable and made what could have been a stressful experience enjoyable.

We were quite pleased with the depth of the final report. They did a great job of looking at all areas of the process and had recommendations for each area to implement. They fostered a balanced approach and sense of shared responsibility for implementing improvements.”

***- Ray Snowden, President and CEO
Memorial Hospital and Health Care Center***

IMPACT: How TAP worked for Memorial Hospital

Memorial Hospital and Health Care Center offers a comprehensive range of acute medical services in a 133-bed facility located in Jasper, Indiana. As a regional health center with 87 active staff physicians and more than 1,380 employees, Memorial annually provides care for 225,000 patients.

Following an information systems conversion, Memorial experienced increased medication turnaround times and asked PharmaTAP to assist in analyzing the medication processes.

PharmaTAP brought a multi-disciplinary approach to the project and utilized consultants with pharmacy, nursing, and quality backgrounds to develop recommendations for improvement.



Workforce Innovation in Regional Economic Development (WIRED) – *American Stationery, Peru, IN*



Continued projects in conjunction with Purdue's WIRED grant from the U.S. Department of Labor (**\$15 million**) include nanostructured coatings for tooling, agribusiness supply chain improvement, energy efficiency training, healthy workforce, and green workforce training.

"I cannot emphasize enough how positive an experience this was for our company. We energized our employees, raised morale company-wide, and introduced a revolutionary way to consider new products, processes, and markets. We will continue to utilize the Eureka! gospel in the years to come as we try to keep up with a rapidly changing world.

My thanks to Purdue/TAP for this wonderful program – I will continue to be an ardent cheerleader for this project in the hopes that it can help other companies in Indiana as much as it has us."

**- Mike Bakehorn, President
American Stationery**

IMPACT:

How TAP / Eureka! Winning Ways worked for American Stationery

In 2006, Purdue was awarded a U.S. Department of Labor Workforce Innovation in Regional Economic Development (WIRED) grant for a 14-county region in north-central Indiana. This grant is aimed at transforming a regional economy by developing a more highly skilled workforce. With a portion of this funding, TAP was able to assist American Stationery, a 90-year-old manufacturing and marketing company specializing in printed personalized products.

Producing hundreds of thousands of orders for customers and retail outlets yearly, American Stationery urgently needed to reconfigure its business model and the internal thought processes that go with marketing stationery in a wired world. With TAP's assistance and the Eureka! Winning Ways initiative, American Stationery is moving into the 21st century of new product selection, introduction, and marketing.



Energy Efficiency Services – *Haynes International Inc., Kokomo IN*



TAP's Energy Efficiency Services team has worked on **228** projects around the state training **420** employees on how to lower their energy usage and costs

"The collaboration with Purdue has provided us with the tools to identify and achieve our reduction goals. We have been extremely pleased with the level of support provided by the Purdue/TAP Energy Efficiency Services. The training sessions have been very informative and we have been able to apply that knowledge to our current plant operations and to identify a number of potential energy savings projects."

**- Greg Morrow, Environmental Manager
Haynes International Inc.**

As a leading developer, manufacturer, and marketer of high-performance alloys for use in corrosion and high-temperature applications, Haynes International Inc. secures annual revenues of approximately \$560 million.

In 2007, Haynes spent \$9.5 million on natural gas and \$5 million on electricity for the Kokomo operations, and like other energy-intensive manufacturers, needed to explore ways to reduce energy consumption.

Working with TAP and the Energy Efficiency Practitioner Training program, Haynes implemented a five-person Energy Savings Team to identify and implement energy savings projects that have saved the company approximately \$18,000 in natural gas costs in just three months. Haynes expects to see natural gas cost savings of nearly \$360,000 annually upon the completion of all the EES projects.



BY THE NUMBERS:
How TAP worked for Haynes International Inc.

We have saved \$18,000 total in natural gas costs in three months since working with TAP, with annual savings expected to be in the neighborhood of \$360,000.





High Tech Job Fair – ***Perpetual Technologies Inc., Indianapolis, IN***

Perpetual Technologies Inc. provides essential database and information systems support to business and government enterprises worldwide by utilizing practical knowledge and understanding to improve client performance and lower costs. With several Purdue graduates on staff, the opportunity to work with Purdue through the High Tech Job Fair (HTJF) was exciting for the rapidly growing Indianapolis-based firm.

"The High Tech Job Fair was the perfect venue to meet highly-skilled candidates. Our business grew 28% in 2007; finding enough qualified technology specialists to stay ahead of that growth has been a challenge for us and the HTJF presented PTI a tremendous opportunity to meet some very talented, energetic, young professionals. We look forward to participating again this year."

***- Ron Plew, Vice President
Perpetual Technologies Inc.***

"I could not be more grateful for how the High Tech Job Fair launched my career. Since starting at Perpetual Technologies, I have been exposed to the wide range of database and application design technologies that compliment my Computer Science degree from Purdue. It is a wonderful work environment and I cannot think of anywhere I would rather be."

***- Kevin Christensen,
Database Administrator
Perpetual Technologies Inc.***



Summer Intern Program – ***Hill-Rom, Batesville, IN***

More than just a hospital bed company, Hill-Rom has set the standard for all types of high performing, intelligent bed systems and has more than one million hospital beds in use around the world.

This past summer, Hill-Rom hired 12 Purdue interns in an effort to provide the company with talented junior professionals to work on challenging projects, while giving students the opportunity to fully experience Hill-Rom.

“The formal program included an orientation, plant tours, customer experience tours, weekly “Lunch and Learns” with business leaders, mentoring programs, project assignments, rotational experiences, and fun summer functions.

Added focus was put into the program to ensure that it was valuable to both the students and the hiring managers – this program was a complete success.”

***- Kelley Palmer, Global Sourcing
Manager and Intern Sponsor
Hill-Rom***

HealthcareTAP – Indiana State Department of Health, Indianapolis, IN



HealthcareTAP worked with **252** employees throughout the state to improve the level of quality in the public health sector (funded by the Indiana State Department of Health)

“HealthcareTAP is a great resource for navigating and improving complex problems and improving systems. Indiana’s public health departments are now better prepared for future accreditation and understand the power of the public health system due to the technical support from HealthcareTAP.”

*- Judy Monroe MD, State Health Commissioner
Indiana State Department of Health, Indianapolis*

IMPACT:
How TAP worked for the Indiana State Department of Health

The Indiana State Department of Health (ISDH) supports Indiana's economic prosperity and quality of life by promoting, protecting, and providing for the health of Hoosiers in 93 local health departments across the state. Teaming up with HealthcareTAP, the ISDH employed a CDC assessment tool to measure public health system performance at the county and state level, and utilized the results to train teams on leadership principles, root cause analysis, and quality improvement processes.

Under the guidance of HealthcareTAP the ISDH developed a project charter and currently oversees numerous projects that address issues such as tobacco, childhood obesity, school health, workforce development, and healthy lifestyles.



Faculty Assistance Program – *Seyan Foundation, Culver, IN*



“From my standpoint, TAP took a personal interest in this project. It wasn’t a matter of TAP developing a program for us, but taking our project and making it work. They did a great deal of extra research and took the time to make it personal. I appreciate it so much.”

**- Dick Dugger, President
Seyan Foundation**

IMPACT: How TAP worked for the Seyan Foundation

■ *An August 2008 report by the Economic Community of West Africa (ECOWAS) revealed that more than 40 million people from the sub-Saharan are now at risk of malnutrition. The Seyan Foundation of Culver, Indiana works to promote the use of grain amaranth – a broadleaf plant dating back thousands of years to the Aztecs and early American cultures – as a potential solution to the African malnutrition crisis.*

Studies by the Seyan Foundation show that amaranth protein, when popped similarly to popcorn, comes closer than any other grain protein to the perfect balance of essential amino acids at a biological level. Further studies indicate that by consuming 20 grams of popped amaranth daily, children ages 3-7 were able to move from malnutrition to nutrition over a nine-month period.

TAP worked with Seyan to change a pre-designed, high-heat electric “popper” to one that could be operated via propane gas.



Manufacturing Extension Partnership – *King Systems, Noblesville, IN*



The TAP Manufacturing Extension Partnership (MEP) served **135** companies, training and awarding certificates to **3,847** employees in advanced manufacturing, quality, and leadership.

“The TAP/MEP training program has helped accelerate King’s Continuous Improvement program. A sense of empowerment carried all the way to the shop floor, as the excitement level after training was high. It will be imperative that we continue to keep motivated and ensure the new practices are embedded in our culture.”

*- Christie Anderson, SixSigma Coordinator
King Systems*

IMPACT:
How TAP worked for King Systems

King Systems is a global distributor and internationally recognized designer and manufacturer of quality anesthesia and critical care products located in Noblesville, Indiana. King markets nearly 3,500 different circuit configurations, facemasks, and airway management devices with sales exceeding \$60 million annually.

Working with TAP in order to better facilitate employee training, more than 100 King Systems employees attended Lean and SixSigma training – programs focused on workplace organization, advanced manufacturing principles, and strategic approaches to problem solving.

As a result of the TAP/MEP training programs, King Systems met and more than doubled the fiscal year cost savings target.



Manufacturing Extension Partnership – *TI Automotive, Ashley, IN*



“The TAP Manufacturing Extension Partnership is a great resource for organizations to enhance their business and obtain bottom-line results. With a variety of resources and experts to help with just about any problem, this is one of Indiana’s best-kept secrets. Now that we know about this great resource, we have been spreading the word – not just in Indiana, but in other states as well.”

**- Lori Casiano, Plant Manager
TI Automotive**

TI Automotive is the world's leading supplier of fluid storage and transfer and delivery systems, including brake, fuel, and air conditioning applications. Headquartered in Warren, Michigan and Oxford, England, the company employs more than 16,000 workers at more than 110 facilities in 28 countries.

In March 2007, TI Ashley announced that, due to the addition of a new client in its customer base, it had been selected to expand its operation and increase employment by 15 percent. Working with TAP and the MEP's Training Within Industry (TWI) program, TI saw decreased quality mishaps by new employees across its manufacturing teams on the production floor.



FACT:
How TAP worked for TI Automotive

*TI also worked with TAP's Energy Efficiency Services to review energy output and assess for ways to improve on cost savings. TAP completed the assessments with recommendations resulting in a **total savings of more than \$60,000.***

Workforce Innovation in Regional Economic Development (WIRED) – *Perry Foam Products Inc., Lafayette, IN*



“Perry Foam chose to work with TAP and the Healthy Workforce project to help control our healthcare costs. We’ve only completed half of the project, but look forward to the training classes and final results. We feel that our employees will gain useful knowledge to take better care of their own health – especially since it will also be offered in Spanish to accommodate the needs of our Hispanic employees.”

**- Michele Felz, Vice President for Business
Services and Community Relations
Perry Foam Products Inc.**

FACT:

How TAP / Healthy Workforce worked for Perry Foam Products Inc.

For more than 45 years, Perry Foam Products Inc. has served customers of all sizes by bringing proven manufacturing and chemical engineering expertise together with a genuine enthusiasm for innovation. Like many companies however, Perry struggled to ensure that its employees received the best healthcare possible in the midst of ever-increasing insurance costs.

Working with TAP, Perry recently completed the first phase of the Healthy Workforce program – an assessment to determine medical and pharmaceutical costs, employee health risk, workplace ergonomics, and productivity – and plans to enter a training phase that will help employees take better care of themselves on the job and assist them in learning to navigate the healthcare system.

HealthcareTAP – *Clarian Labs, Indianapolis, IN*



Since 2005
HealthcareTAP has
assisted **55** hospitals
with **31** projects to
improve productivity
and patient care,
quality and safety

“The opportunity to work with the Purdue HealthcareTAP team was both a productive and pleasant experience. Working with the team has enabled this small group in the Clarian Pathology Laboratories to equip ourselves with improved problem solving skills and a process that involves employees of different job levels, making all feel a part of the resolution effort.”

*- Susan Hill, Administrative Director, Pathology
Clarian Laboratories*

FACT:
How TAP worked for Clarian Labs

The internationally recognized pathologists of Clarian Laboratories provide diagnostic services to support the sophisticated tertiary care provided by specialists and sub-specialists in Indiana hospitals. Among the most comprehensive laboratory services in the state, Clarian's full-service laboratories perform more than 10 million tests a year ranging from diagnosing cancer, AIDS, anthrax, and other infectious diseases, to conducting forensic tests.

Aiming to improve process efficiency and employee productivity, Clarian's Indianapolis pathology lab worked with HealthcareTAP to initiate a five-week training process for employees based on continuous improvement methodologies like process mapping and the elimination of wasted motion, defects, and overproduction. By learning to identify the root causes of process flaws and make decisions based on hard data, Clarian anticipates significant increases in laboratory efficiency and effectiveness.



Expertise for Any Need

TAP offers training and technology implementation on a funded basis. Offerings include:

- » Lean manufacturing and workforce transformation
- » Quality systems and certifications
- » Team building, problem solving, and leadership training
- » Business growth idea creation
- » Customized training for the healthcare and pharmaceutical sectors
- » Energy reduction and training
- » Green workforce training

Our faculty assistance team provides up to five days of free, confidential consulting on a full range of business and technical issues, including:

- » Advanced manufacturing
- » Business management and strategy
- » Data analysis
- » Environmental health and safety
- » Facility addition and layout
- » Human resources
- » Information technology and security assessments
- » Material selection and part failure analysis
- » Product design and engineering

NOTE: TAP does not support projects involving litigation. Projects involving the development of intellectual property require written contracts.

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HealthcareTAP and PharmaTAP Services

HealthcareTAP and PharmaTAP utilize multidisciplinary teams that include nursing, pharmacy practice, industrial and biomedical engineering, and technology to assist healthcare and public health providers with:

- » performance improvement training and implementation
- » process improvement
- » system quality improvement
- » patient throughput
- » patient safety improvement projects

TAP Partners

TAP is a partner with many governmental, public, and private organizations including:

- » Centers for Disease Control and Prevention
- » City of Rising Sun
- » Columbus Economic Development Board
- » Dubois County Area Development Corporation
- » Healthcare Excel
- » Indiana Economic Development Corporation
- » Indiana Hospital Association
- » Indiana Office of Energy and Defense Development
- » Indiana Pharmacists Alliance
- » Indiana State Department of Health
- » Indiana Workforce Development
- » Indianapolis Coalition for Patient Safety
- » IVY TECH Community College
- » Kauffman Foundation
- » Lilly Endowment
- » National Institute for Standards and Technology
- » Rising Sun Regional Foundation
- » South Central Indiana Regional Partnership
- » US Department of Labor
- » US Economic Development Administration
- » Vincennes University

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Produced by Purdue Marketing Communications 1401008a