

PROLOGUE: PORTRAIT OF A DYNAMIC COMMUNITY

Thirty years ago, Contra Costa County served primarily as a bedroom community for its busier neighbors in the Bay Area. Today, the suburban, semi-rural environment of the seventies has become a developing urban setting with retail centers, business parks, recreation and cultural facilities, and educational institutions. Even though the county still exports a significant number of its skilled workers to other communities in the Bay Area, it has developed strong local industries with a growing employment base for its residents.

According to the county's *2006 Performance Index*¹, its economic base is comprised of six sectors (petrochemical manufacturing, financial services, professional & business services, healthcare, construction, and leisure & hospitality), which together employ half of the county's labor force. However, over one-third of local jobs are located in high-tech clusters (software, instruments, biotechnology, environmental, and medical technology), the telecommunications sector, and the more traditional retail and public sectors. The diversity of the local economy presents a challenge to the Workforce Development Board of Contra Costa County (WDBCCC) in terms of determining where the Board's work is needed most and where its limited resources can cause the greatest impact.

THE CHALLENGE: SERVING A DIVERSE ECONOMY

To address this challenge the WDBCCC has developed a **strategy** that revolves around continuously addressing the question: "What are the drivers of our local economy?" The organization has designed a **process** to implement this strategy, which is based on three pillars: energetic **networking**, desire to **learn**, and willingness to **broker**. In addition to continuous dialogue with a very participative policy board, the organization's business service representative acts as WDBCCC's eyes and ears in the community by constantly receiving input on trends, needs and expectations. Once the organization identifies a need in the community workforce, it further investigates the problem by commissioning targeted reports and sorting through a wide variety of publicly available information in order to better understand that need. Finally, as issues become concrete, the WDBCCC summons representatives of industry, educational institutions, community and its own One-Stop consortium to collectively discover which pieces of the proverbial puzzle are present in the community, which ones are not, and how the missing ones could be developed.

The outcome of such process is an organizational **structure that constantly learns** about its economic environment and the pieces driving or restricting its growth. Linda

¹ The Performance Index is published by Contra Costa Economic Partnership and can be found at: <http://www.cceconptnr.org/2006PerformanceIndex/index.htm> (accessed on June 21, 2007).

Chandler, strategic planner of WDBCCC, believes that workforce investment boards should go beyond their Workforce Investment Act mandate, which calls workforce investment boards to deliver programs to their respective communities; this is the **demand** side of workforce training. “It needs to be turned around and we must think about the **supply** side as well,” Ms. Chandler says. “A good healthy economy needs to be in place since they drive the job creation process.” The need for jobs has to match the need for good workers in promising industries.

“WIBs should go beyond their mandate... we must think about the supply side as well as the demand side.”

- Linda Chandler, Strategic Planner

The result from the first round of investigations was surprising: *despite the Bay Area’s association with high-tech industries, Contra Costa’s economic health was primarily associated with advanced energy and advanced manufacturing industries.* Although the WDBCCC had confidence in its analysis, the results contradicted common perceptions of the region. Before the WDBCCC could take any action based on these results, it needed to both validate them and better understand their implications.

The WDBCCC initiated two approaches to **convene** local partners to collectively discuss the results. First, the WDBCCC organized small focus groups made up of representatives from local manufacturing and energy industries, and gave these groups the task to better understand the nature of industry operations and to assess industry expectations for current and projected workforce needs. Second, the WDBCCC invited local industry leaders, community college representatives, and staff from its One-Stop Centers to a Manufacturing Summit where the WDBCCC introduced its findings about Contra Costa County’s economic structure and discussed how, as a group, the parties present could serve the needs of these industries. The presence of key players (i.e. industry, education, and workforce training representatives) was essential for the development of a solution.

IDENTIFYING THE PROBLEM: FILLING GAPS LEFT BY RETIRING WORKERS

While sharing their contextualized experiences, industry representatives realized they were **facing a common problem**: plant operators, or process technicians, were retiring at faster rate than the rate at which replacements could be found. Subsequent studies have concluded that an average of one hundred plant operating jobs will be offered in the area every year for the next decade due to retirements. A combination of high levels of commitment associated with shift-work, rigorous technical and physical requirements, lack of preparation of the local labor force, and misperceptions local jobseekers have regarding the nature of the work made the recruitment, selection and training processes expensive and ineffective. It was common practice for local companies to recruit process technicians from other states such as Washington, Mississippi, and Texas. Ryan Hess, in an article for the *Employment and Training Reporter*, mentioned that to fill fifty openings, local refineries expected over 1,500 applications—but only twenty jobseekers would pass the screening process.

It seems that the issue of retiring workers is not specific to these industries. Scott Anderson, executive director of the Industrial Association of Contra Costa County, said in an interview with the *East Bay Business Times* that “the Industrial Association has identified hiring skilled entry-level workers as our number one challenge.” Process technicians are sought to operate plants in a wide range of industries including chemical, petrochemical, refining, power generation, pharmaceutical, water treatment and several manufacturing industries. Starting salaries for these positions are over \$45,000 and the benefits offered by these large (often multi-national) companies are highly competitive.

Representatives from companies with operations nationwide also revealed that their plants in the Gulf region did not seem to have as much problem

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finding qualified candidates due to the presence of well established process technician training programs in their area. In fact, many employees California companies hired from other states had been trained by those programs.

THE SOLUTION: CREATING A LOCAL TRAINING PROGRAM

The members of the Manufacturing Summit assessed the possibility of bringing the training and certification programs to Contra Costa. **Continued dialogue** led to the development of a strategy: Los Medanos College offered its educational infrastructure to host the program, while local companies committed to providing equipment, facility space, and assistance in advertising the program, in addition to staff members to help develop curricula and teach applied courses. Staff from the WDBCCC and One-Stop Centers identified that recently displaced aircraft maintenance and other manufacturing workers had enough experience with shift-work and similar tasks to justify the development of a displaced worker training program which could be funded by a State grant. Such funds could then be used as seed money to develop the local curricula.

DON'T RE-INVENT THE WHEEL: BORROWING FROM NEIGHBORING COMMUNITIES

While strategizing a format for the grant application, **WDBCCC staff identified similarities between their project and another displaced worker training program** for which the San Mateo Workforce Investment Board was successful in obtaining funds. The San Mateo format was adopted and a grant for \$925,000 from the State was secured to train 81 dislocated workers in jobs in the petrochemical industries. Partners in the grant included: Cemco, Dow, USSPOSCO, Tesoro, Shell, Valero, Chevron, Conoco-Phillips, Diablo Sanitation District, United Steelworkers Local 5, Ironhouse Sanitation District, Mountain View Sanitary District, Mt. Diablo Adult School, Los Medanos College, Foundation for California Community Colleges, Alameda County Workforce Investment Board, and the EASTBAY Works Contra Costa County One-Stop Operator Consortium.

According to David Kail, director of the Process Technician (PTEC) program at Los Medanos College, the attendees of the Manufacturing Summit were able to finalize their curricula with the assistance of a project engineer from Dow², hire instructors, and obtain approval from the State Chancellor's Office for a certification and associate degree program in less than eighteen months. All faculty hired were either retired from or currently in industry. This fact, together with donated equipment from and visits to local companies, gave the program the kind of hands-on experience that makes graduates ready to quickly enter the workforce.

STRUCTURE OF THE PTEC TRAINING PROGRAM



The twenty-week intensive certification of achievement program—five days a week with six hours per day—was implemented, and its first cohort graduated in December 2006 with only one of the original twenty enrolled students failing to finish the training.³

Candidates for this intensive displace worker training program are screened to assess their employability, and must go through a Wonderlic Basic Skills Test, agility test, and background check. A second cohort expected to graduate in June of 2007 has thirty-two students currently enrolled, and the third and last cohort is expected to graduate around Thanksgiving. Over seventy-five percent of graduates from the first cohort are currently employed and doing well.

Those who do not qualify for the intensive displaced worker program can enroll as a regular student and pursue a certification of completion that is closer to the regular community college structure and has eleven extra units for courses in Intermediate Algebra, Chemistry, Physics and English. In addition, Los Medanos College has designed an associate degree program; its first cohort of thirty-one students started in January of 2007. Students in these open-enrollment courses range in age from mid-20s to mid-50s. In December, Los Medanos College secured a \$1.4 million grant under the federal Employment and Training Administration to expand the program. The college is working closely with local companies and the WDBCCC to avoid flooding the job market by attempting to deliberately match the number of graduates to the number of expected jobs offered.

THE PTEC PROGRAM DRAWS TO AN END

The WDBCCC laments that the intensive displaced worker program will be phased out. The duration of the training did not coincide with the college's semester structure. Nevertheless, the initial effort and seed money raised by the organization has allowed the creation of a workforce training pipeline with the certification of completion and

² The curriculum used at Los Medanos College was adapted from the Center for the Advancement of Process Technology located in Texas, which has been successfully implemented for ten years.

³ Average course drop rates at Los Medanos College is around fifty percent.

associate degree programs that will be under the responsibility of Los Medanos College and local industry. Representatives of local companies sit in an advisory board to the PTEC program and provide feedback on the graduates' abilities to meet industry needs and determine what can be done to address any potential training gaps. This deep industry involvement keeps the training current and gives program graduates their best shots at being employable, benefiting both the trainees and the industry.

Although Contra Costa County's intimate relationship with manufacturing seems well established, evolution from traditional to advanced methods of production is required if operations are to remain in the US. With process technicians becoming the operators of the future, due to the need for constant troubleshooting of changing plant technologies, there are talks about developing an incumbent workforce training program to assist current workers in evolving with the changing industry. Also, it is possible that the presence of the only PTEC program in Northern California may attract new economic opportunities to the region. The **WDBCCC's learning-based approach to problem solving** will be an essential piece of its continued understanding of these regional changes and its abilities to help local players develop solutions.

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