EXEMPLARY PRACTICES IN HIGH-SKILL
U.S. DEPARTMENT OF LABOR H-1B TRAINING PROGRAMS

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ABSTRACT

In October 1998, Congress enacted the Competitiveness and Workforce Improvement Act of 1998. A major provision of the Act was the establishment of a fee to be paid by those employers importing foreign workers to the United States under the H-1B visa authority. The H-1B visas are used by employers to bring high-skilled workers to the United States for a period of up to three years. The fee, initially set at $500 per H-1B worker and subsequently increased to $1,000, is to be used, in part, for U.S. Department of Labor (DOL) "demonstration programs and projects that provide technical skills training for U.S. workers in an attempt to increase the pool of workers in the United States with the skills necessary to fill high-tech jobs." Demonstration projects have been funded through a series of grant competitions. This report provides an assessment of six of the 43 projects funded in the first three rounds of competition awarded in 2000: Pima County, Arizona; Hampden County, Massachusetts; Anchorage, Alaska; New York City, New York; the State of Vermont; and Clarksville, Tennessee. Sites were identified based on whether they were close to meeting their enrollment targets, occupations targeted for training, employer involvement, training methods, and location. Meeting enrollment targets had the highest priority in site selection, and we sought diversity for the other criteria. Once a preliminary list had been established, consultations were held with officials in the national and regional offices of the Department of Labor to determine the suitability of the selections. Finally, any sites that were included in another evaluation of the H-1B sites were dropped. Semi-structured interview guides were used to interview site directors, other key staff, employers, training institutions, and participants. Site visits took place in late 2001 and early 2002.

The projects shared similar goals, including upgrading incumbent and unemployed/underemployed workers' skills to enable these workers to fill jobs in high-skill occupations for which local employers face shortages; facilitating worker job retention, career advancement, and wage growth; offsetting training costs for local employers to encourage investment in training; and increasing worker productivity. The sites generally had low unemployment rates at the time their projects started, but the economy had worsened by the time of our visits. Most of the training involved training for information technology (IT) and health occupations and included a mix of incumbent workers and unemployed workers.

This project provided an early look at the H-1B projects, so outcome data are not available. Instead, the project focused on identifying interesting practices that might be of use to other local areas implementing similar projects. The report documents interesting practices in the categories of applications, screening, and paperwork requirements; recruitment; employer involvement; job commitment by employers and participants; matching contributions for training; utilization of workforce investment boards, advisory boards, and industry associations; training technology, training management; institutional development, data systems, and service area covered. The report also includes a summary of each project, a listing of all projects funded in the three rounds of competition and an illustrative interview guide.

EXECUTIVE SUMMARY

In October 1998, Congress enacted the Competitiveness and Workforce Improvement Act of 1998. A major provision of the Act was the establishment of a fee to be paid by those employers importing foreign workers to the United States under the H-1B visa authority. The H-1B visas are used by employers to bring in high-skilled workers to the United States for a period of up to three years. The fee, initially set at $500 per H-1B worker and subsequently increased to $1,000, is to be used, in part, for U.S. Department of Labor (DOL) "demonstration programs and projects that provide technical skills training for U.S. workers in an attempt to increase the pool of workers in the United States with the skills necessary to fill high-tech jobs."

Demonstration projects have been funded through a series of grant competitions. This report provides an assessment of six of the 43 projects funded in the first three rounds of competition awarded in 2000: Pima County, Arizona; Hampden County, Massachusetts; Anchorage, Alaska; New York City, New York; the State of Vermont; and Clarksville, Tennessee. Sites were identified based on whether they were close to meeting their enrollment targets, occupations targeted for training, employer involvement, training methods, and location. Meeting enrollment targets had the highest priority in site selection, and we sought diversity for the other criteria. Once a preliminary list had been established, consultations were held with officials in the national and regional offices of the Department of Labor to determine the suitability of the selections. Finally, any sites that were included in another evaluation of the H-1B sites were dropped. Semi-structured interview guides were used to interview site directors, other key staff, employers, training institutions, and participants. Site visits took place in late 2001 and early 2002.

Project Goals. The grant solicitations under the initial legislation included five guiding principles: partnership sustainability, business involvement, training for current shortages in high-skill occupations, use of Innovative and effective tools, and targeting on all segments of the population—low-skill as well as high skill workers, unemployed as well as incumbent workers, and minority workers and workers with disabilities.

These goals were all accepted by the grantees visited. The grantees most frequently identified the following goals:

- Upgrade incumbent and unemployed/underemployed workers' skills to enable these workers to fill jobs in high-skill occupations for which local employers are facing shortages;

- Facilitate worker retention of jobs, career advancement, and wage growth;

- Offset training costs for local employers to encourage these firms to invest in training their workforce;

- Increase worker productivity, particularly with respect to incorporating new technologies into the workplace.

Operating Environment. The geographic areas served by the H-1B training programs in our sample range from remote rural areas (e.g., Alaska, Vermont) to center-city areas (e.g., New York). The size of service areas and the populations served vary substantially across sites. Several projects serve large geographic areas that extend across multiple counties: for example, the Alaska site serves a 26,235 square mile area; the Vermont site covers the entire state; the Nashville site extends across a 12-county area; and the Massachusetts site serves a four-county area, but also extends services across the state boundary to workers living in the Greater Hartford area. Finally, the New York City site targets services on the residents of New York City's five boroughs, though it includes a few indiviudals who live outside of the city but work for New York City-based employers.

The project began at a time of economic growth, highly favorable economic conditions, and low unemployment rates. In several sites, unemployment rates were reaching historic lows – and employers were complaining of labor shortages, particularly for highly skilled workers. As the projects developed, however, the national economy began to cool (in the latter part of 2000 and into 2001), and with it economic conditions in all project sites (with the possible exception of Alaska) began to slack off and deteriorate. By the summer of 2001, though unemployment rates still remained low by historic standards in the six study sites, unemployment rates were on the rise. As the

nation's economy slid toward recession and the bottom fell out of the "dot.com," IT, and telecommunications sectors, shortage conditions for high-tech workers also abated. General economic conditions in the country--particularly the slide toward recession and weakness in the IT and telecommunications sectors--were exacerbated further by the events of September 11th, particularly in New York City.   In several of the sites, as a result of the slowing economy and layoffs, some employers who had either committed to be part of the H-1B project or might have been willing to join the effort did not have a need for additional workers trained through the H1-B project. Grantees have had to replace their participating employers with others as labor market conditions changed. In the case of Vermont, for example, of the original 14 employers who signed on supporting the grant and who indicated they would either hire or use the services to train incumbent workers, only 2 remain but 23 others have taken their place.

Finally, it is important to note, that while the high-tech and IT sectors have been adversely affected by general economic trends, some sectors of the economy have remained largely unaffected along with demand for highly-skilled workers. For example, the H-1B training sites included in this study that focused on nursing and other health professions (Vermont and Pima County) reported that the demand for health care workers (especially nurses) has largely been unaffected by general economic slowdown. In fact, shortage in all areas of nursing continues largely unabated.

Grant Characteristics. Awards for grantees in the study sites ranged from $1.5 million to almost $3.0 million. Grants under the second and third rounds (when the ceiling was increased) were in the $2.4 million to nearly $3.0 million range. All grants were for a two-year period, but most of the grantees have or plan to request no-cost extensions to either complete a training cycle or to continue to provide training in some areas – it was either not possible or difficult to obtain degrees needed to enter some high-tech fields within a two-year time frame (e.g., a four-year degree). The two-year period of performance also included time needed to start-up programs and recruit participants. Finally, some of the academic programs were scheduled to last almost through the life of the grant, which allowed little or no time for intensive placement services after graduation.

Matching Funds. Minimum non-federal match requirements were dictated by the grant solicitation round. Round One required that 50 percent of the grant award be matched by non-federal funds. Rounds Two and Three required a 25 percent match. Grantees dealt with the match in a variety of ways. Workforce Essentials (in Tennessee) required that employers pay 40% of the actual tuition costs for trainees. If an incumbent worker was being trained, the employer was asked to share in the tuition payments. If the employer would not or could not make the contribution, other sources of funds were sought.   The grantees were very creative in identifying alternative funding sources, where necessary. In Vermont, the IT training program required a 25% payment from an outside source.

Most of the sites used paid release time in the calculation of the match. Employers would give workers time off during regular working hours for H-1B participants to attend classroom or other types of training and record the amount of time and expense as part of the employer match. For example, release time was almost the entire match in the Vermont Nurse Training program, and amounted to more than $2,000,000.

Where employers made their facilities available, a value was attributed to the space and overhead. This value was used as part of the match. Equipment used as part of the training activity and provided by the employer was also valued for the match. For example, in the Massachusetts site, one employer provided a fully equipped laboratory for the students to conduct their lab assignments.

Employer Partners. Every site reported partnerships with employers; however the strength of the relationships varied considerably; the number of partners ranged from fewer than 10 to over 50 employers. The role of employers varied within and across sites. In some cases, employers sent workers for training and could better be defined as program beneficiaries. In other sites, the employers were heavily involved in the program design, curricula development, and program support, as well as providers of incumbent workers for H-1B training activities. The Vermont nurse-training program provides a good example of comprehensive employer involvement. Under the Vermont program, employers were on the project design team; helped develop the training curricula; provided classroom space; contributed guest lecturers for the classroom

components; provided the trainees; used the program to attract unemployed workers; provided paid release time for their workers; and trained nurse mentors to provide on-the-job support.

Training Partners. Sites used several types of training providers. For IT training, the most common training providers were community colleges and proprietary schools. Training for health care occupations often involved four-year colleges as well. The relationship of the grantees with training providers also varied. Some sites provided grants directly to educational institutions to develop programs as well as using existing curricula in public and private proprietary schools. Sites did not generally limit themselves to the WIA-eligible provider list. Several sites used Individual Training Accounts (ITAs), but set higher cost limits than those used typically under their WIA programs.

Where programs were specifically designed for H-1B trainees, there was often an attempt to infuse greater flexibility and innovation in the delivery of the programs than had been the case in prior training initiatives and under the regular WIA program. For example, grantees and employers worked with training providers to develop new curricula and to adjust times and places of training to respond to the training needs and scarce time that incumbent workers had available for training. A common focus in structuring training initiatives was to work within the competing demands that workers often faced in balancing work, training, family, and leisure activities. In addition, in some sites, training providers went beyond instructional activities to provide ongoing support/mentoring and assist with job placement efforts for trainees who were either unemployed or underemployed.

Union or Association Partners. Four of the six sites had active working relationships with industry or trade associations. In each case, the association played an important role in the operation of the program. Among the roles played by associations were: surveying employer members concerning needs in the target occupations; screening applicants for entry into the program; promoting the H-1B training program among its membership; developing job opportunities for program graduates; identifying employers who might be interested in tailored training provided under the grant; and, in one case, tracking employer participation. Union involvement in

this program was limited. Only a few sites dealt with employees covered by collective bargaining agreements, and many of the targeted occupations are not traditionally unionized. Where there was a union presence, certain conditions had to be met, i.e., paid release time and overtime pay for training after hours.

Population Served.   Five of the six sites had enrollment goals in the range of 200 to 300 participants. One site (Tennessee) planned to serve 735 participants. Since one of the criteria used to select programs for this study was success in meeting enrollment targets, it is not surprising that all of these programs are likely to meet or exceed enrollment targets.   By the time of our visit, three of the six sites had already achieved their enrollment goals (Tennessee, Arizona, and Massachusetts); two other sites were nearing achievement of their overall goals at the time of our visit (Alaska and New York); one site (Vermont) had reached about half of its goal, but was bringing new programs on line that would help in reaching its goal.

All programs reviewed served both incumbent and unemployed workers. In one program (Tennessee) unemployed workers were only enrolled if they had a job commitment upon completion of training. Underemployed workers could either be in the field for which training was being offered or could be in the process of changing fields.

The mix of males and females varied by the occupational focus of the training programs. Health training enrollees were almost exclusively female. Industrial training programs (e.g., several of the training programs in Massachusetts) enrolled mostly men. The IT programs typically attracted somewhat more men than women.

Educational requirements varied considerably depending on the occupations for which training was being provided and on whether the workers were in employer-specific training programs or not. Entry-level career ladder health programs required high school diplomas or a GED. IT programs were typically seeking individuals with some college (an AA Degree or higher).   If the individual had no work experience in the field, and at least a high school diploma, the person would be considered but not enrolled without extensive testing to ensure that the candidate could cope with the material. Grantees were aware that occupations eligible for consideration under the H-1B program are generally more challenging and are often presented in an accelerated mode that demands that participants have good basic reading and math skills. Two of

the sites instituted programs that helped prepare students for more advanced IT work, though both of these programs required a high school diploma, aptitude and interest testing, and an interview prior to entry. Most sites indicated that they targeted the underserved groups for their projects, but that did not mean that program requirements were adjusted to accommodate for lack of preparation on the part of the participants. In several sites, programs offered remedial courses to applicants lacking prerequisites to participate.

Recruitment, Screening, and Assessment. The most common outreach activities were:

- Partnering employers referred incumbent workers;

- Web sites were used to announce the program;

- Notice of the grant award were placed in newspapers, with additional information about available services and how and when to make application to the program;

- Notification of training opportunities was provided to one-stop career centers, Unemployment Insurance (UI) offices, TANF agencies, Job Corps programs, other workforce development organizations, and to community-based organizations; and

- Training providers (public and private) publicized the program.

None of the grantees used paid advertisements to attract participants. Several grantees used job fairs to spread the word to potential trainees. Because all grantees were established players in workforce development in their communities, it was not difficult for them to mount a publicity campaign where needed. One (Alaska) grantee had to do little more than wait after the notice was in the local newspaper about the project award, because the interest on the worker side was great and the need on the employer side was equally great. Other H-1B grantees had to work at getting the word out about the program to the targeted workers and employers – generally through contacts with one-stop career centers, trade associations, and other local human service agencies.

Applicants at the program sites were generally required to have at least a high school diploma or GED.   Some type of test or assessment instrument was used in

every site, but not all applicants were required to take the tests. Educational achievement and work history were cited as reasons why individuals were not tested. All grantees mentioned that acceptance into the program was based on more than just test scores. Applicants needed to demonstrate an interest in the field. Some programs required that the applicants identify the training program in which they wished to participate and justify why it was important to them. Other programs required an essay from applicants on what the training would mean to them in their future. For example, the Alaska site ensured that applications for training, whether submitted by individuals or employers, go through a technical review to ensure that the type of training requested was suitable for the student's capabilities and to ensure that the proposed training made sense for the local labor market. Students enrolling in degree granting institutions also had to meet the enrollment requirements of the school. In addition to the paper process, applicants were all interviewed. The interviews might consist of a meeting with a career counselor or caseworker in a one-stop career center, or it might consist of a meeting with representatives from educational institutions, industry associations, and the grantee organization.

Many of the steps involved in enrolling and assessing unemployed and underemployed workers in training were eliminated for incumbent workers in specialty training. This was because the employers in these initiatives screened the workers that they wanted trained – though grantees made the assessment facilities at one-stop career centers and/or training partners available to these employers should they desire to have employees screened and assessed prior to the start of training.

Training. All sites provided computer-related training for at least some of the H-1B participants. Five of the six sites trained in computer skills which would be used in an IT or software environment or in an IT or software unit of a company. Three sites trained in the industrial applications of computer technology (Tennessee, Arizona, and Vermont). Courses were identified through employer surveys or discussions with employers as types of computer training courses needed within the workplace. At one site, 80 percent of the incumbent workers were enrolled in one or more of computer courses. Common courses generally related to systems maintenance and Web and Internet applications. Many of the programs were combined into a computer science

curriculum so that participants could obtain AA degrees or work toward a BA degree. Employers report that in addition to these technical skills, they wanted workers with good English, math, and communication skills.

Three of the sites – the Tennessee, Pima County, and Vermont sites -- provided training in health fields (licensed practical nurse, registered nurse, specialty nurse, medical transcription, and radiation technology). One site (Arizona) offered training in fields outside of IT and health care occupations, including training for teachers, accountants, and electronic technicians/engineers.

Every program included a classroom training component, which was offered at an educational facility or at the job site. Most programs also incorporated experiential learning opportunities either in a laboratory or on the job. Four of the six programs augmented training with some type of Web-based support. Instructors generally used the Web to post notices, syllabi, assignments, recommended reading, and links to other useful sites. One site (Massachusetts) implemented its full classroom instruction for one employer on the Web in an interactive mode. Another site (New York City) required that each student develop a Web site to demonstrate proficiency in Web design.

Interactive TV was used by one site (Vermont) to provide classroom instruction to students in remote audio-video labs throughout the state. Some technical and instructional difficulties were encountered, causing the grantee to recommend the presence of a technician whenever classes were scheduled. In addition, instructors were required to have a briefing on techniques to use when broadcasting live to multiple sites.

It is difficult to generalize about training hours and program duration. IT training programs ranged from two days to two academic years. Those programs offering training through a college setting with a degree objective required up to two academic years. Students enrolled in these programs could attend school full time during the week either during the day or at night with a scheduled Saturday class. The vendor-specific programs varied from a few days to several weeks, depending on the certification being sought. For example, the Microsoft Certified Systems Engineer training was offered as a series of 7 courses lasting from two days to three weeks each. These classes were offered in the evening or during the day, and the format affected

program duration. Students could take these courses as part of a degree program or as stand-alone certification preparation.

Nurse training ranged from 10 weeks (including the clinical practice) for specialty care nurses to several years for some degree nursing programs. The grantees providing LPN training anticipated that some of these trainees would continue their formal education and become registered nurses.

Employer-based training for incumbent workers appeared to be generally of shorter duration (e.g., as short as two days to three weeks) and more narrowly focused, in comparison to training provided for unemployed or underemployed workers. However, there were also examples of longer-term employer-based training provided at the various program sites. On-site training appeared to have considerable employer support as release time could be granted with the knowledge that, in case of emergencies, workers could return to their duties. Not all employers had the facilities or equipment necessary to support on-site training.

Factors that promoted and hindered implementation. The sites visited reported several factors that facilitated in designing and implementing the projects:

- **Incumbent worker training.** Employers were asked what they needed to remain competitive in the market. Even where employers were required to contribute funds towards the training, it was still perceived as being worth the investment.

- **Established relationships with employers.** All grantees mentioned that they had very little time to get projects started, and if they had not had existing, positive relationships with employers and employer associations, it would have been very difficult to meet the HI-B grant requirements.

- **Prior experience in operating a government-financed training activity.** Certain of the requirements under the grant, such as matching funds, could have presented a problem for those not familiar with government grants. Each of these grantees had operated programs before or was currently involved with WIA or other workforce development activities. One site (Massachusetts) had piloted its training program using a prior government grant.

- **Serious shortage of trained individuals in the target occupation coupled with a pool of candidates meeting minimum requirements.** Clearly, there needed to be a demand for workers in the occupations for which training was planned. In addition, the training program would have failed in H-1B training

sites if there was not an adequate supply of suitable candidates for training. Sites would also have had difficulty reaching full scale and achieving participation goals if they had attempted to mount their programs for only the unemployed individuals because of strong economic conditions and low unemployment rates at the time the initiatives started.

- **Available curricula to use as base for establishing training program.** All grantees used standardized, pre-existing curricula for their training programs. This enabled them to avoid spending significant time developing curricula. Several sites also worked with post-secondary institutions to develop a degree program (AA or BA), but even those programs relied to a large extent on existing course that were modified.

- **Established working relationships with training providers, both public and private.** Where there were existing relationships with training providers, it was easier for the grantees to develop tailored training programs for employers or to develop more non-traditional approaches to the delivery of credit courses.

- **Access to start-up funds.** One grantee was given private start-up funds to bridge the gap between the time the grant was awarded and when federal funds could be spent. This allowed the grantee to set up operations, engage staff, and begin developing the program.

Although our site selection process was designed to yield sites that were relatively successful in enrolling participants, all sites encountered some problems that hindered implementation. These problems included:

- **Availability of Funds.** Some grantees indicated that they did not have access to grant funds when the program was officially started. For some grantees, there were local grant approval processes that further slowed down start–up efforts. In two cases, grantees lost 3-4 months of operating time.
- **Grant Period.** A two-year grant period hindered implementation of some degree programs, even AA degree programs, because there needs to be time devoted to recruitment and assessment prior to enrolling people into training. In addition, there is little time at the end of longer training (provided within a two-year time frame) to provide placement assistance for those needing it. An option year on the grant does not fully address this problem because grantees cannot plan for the option year as part of their initial submissions. Some site administrators indicated that it would be more useful if the programs were for 3 years to 5 years.
- **Employer fear of government paperwork and audits.** Some employers feared that if they became involved with government sponsored training programs, that they would be engulfed by a mountain of paperwork and/or would open the door to government audits.

- **Inflexible Training Providers.** Incumbent worker training requires maximum flexibility on the part of training providers, and some just could not adapt. Small institutions and community colleges seemed to be more attuned to dealing with the working student.
- **Deteriorating Labor Market.** A number of programs started with a list of employers willing to partner in the program, but some did not follow through on their commitments to the program because of deterioration in the business climate and/or cutbacks in staffing. In response, programs sought to replace these employers with others not as affected by the economic downturn.

Interesting Practices. The sites visited had a number of practices that might be of interest to others implementing an H-1B training program. In this section several of the interesting practices are described. The full report includes more examples.

- **The Individual Training Account (ITA) training component is closely connected with the one-stop career system, but employs pre-screening criteria for determining which unemployed and underemployed individuals are appropriate for receiving ITAs under the H-1B grant (Massachusetts).** In linking the H-1B project to its one-stop system, REB is able to generate a steady flow of unemployed and underemployed individuals with the potential for upgrading skills for entry into fields within the IT or telecommunications fields. The ITAs made available to the target population, while narrowly targeted to training for careers within IT or telecommunications, are more flexible in the sense that trainees are not limited to the WIA eligible list of providers or by the $5,000 cap normally placed on ITAs in the locality. However, to ensure that those who are recruited into the program are capable of and interested in higher skilled occupations in the IT or telecommunications fields, REB has developed pre-screening criteria and an assessment process through which individuals must go to receive an ITA (paid for out of the H-1B grant). Under the eligibility criteria, for example, the individual must have either recent employment (within one year) and/or current employment in an IT or telecommunications occupation and/or have "self-taught" skills equivalent to work experience in the field.

- **Exceptional employer involvement (Vermont).** The exceptional employer involvement in the nursing program might not be applicable to other fields, but is worthy of note. The situation in Vermont hospitals in regard to nurse shortages was critical and appeared to be getting worse. In the case of health care, having several small hospitals unable to serve critical care patients or support physicians in the operating room only resulted in increased demand for those services at larger hospitals and in a potential deterioration in the care of those who needed it the most. To overcome this statewide problem, employers, educators, training professionals, state officials, associations, and other health care organizations had to come together to find a solution or they would all

suffer. The grantee enlisted the aid of the Vermont Association of Hospitals and Health Systems and together they shared information on the H-1B training solicitation with all interested parties.   They were able to overcome resistance by explaining program benefits and developing solutions to such problems as employee retention upon the completion of training. It is likely that severity of the situation made this unusual cooperation possible.

- **Unemployed workers are guaranteed jobs if they successfully complete the training program (Tennessee).** To be enrolled in the project individuals either had to already be employed or to have a commitment from an employer that they would be hired upon completion of H-1B funded training.

- **Utilization of an IT technical review board representative to determine whether candidates and proposed courses of study quality for support under the H-1B program (Alaska).** There was consensus that case managers did not have the technical expertise to evaluate participant readiness for IT training, nor were they able to determine whether the course of study proposed by the trainee or employer was appropriate under H-1B definitions and the current labor market. For this reason, when a participant did not have demonstrated skills or educational background, his/her file was submitted to the Alaska High-Tech Business Council for assessment. This careful screening minimizes the numbers of participants dropping out of the program due to their inability to complete the required coursework. It is too early to tell if this policy will affect placement success for those unemployed at the time of entry into the program.

- **Web-based training provided at job site (Massachusetts).** REB sponsors training at one employer site (JDS Uniphase), which provides training to incumbent workers via the Internet. Participants are enrolled in college credit courses through the Springfield Technical Community College. Lecture notes and homework assignments are disseminated over the Internet, so the participants can learn the material when it is most convenient for them. The firm has made laboratory facilities available, so that individuals involved in the training can complete required laboratory assignments without traveling to the community college campus.

- **Modification of training programs to provide college credit (Arizona).** A common problem in health occupations is that one cannot build on courses already taken if one wants to move up to a higher-skill job. For example, LPNs typically take courses that do not provide college credit, so they cannot count their courses if they wish to become a RN. The Pima County project overcame this problem by negotiating with the local educational and training institutions so that the courses taken for a LPN program carried transferable credit.
- **Development of a Research Model for the purposes of predicting whether future enrollees would successfully complete the program (New York).** A team of researchers from the Center for Advanced Study in Education at CUNY,

representatives from the NY Workforce Alliance, and CUNY trainers identified 185 data items to collect. Data is collected for all formal applicants for the long-term training component of the program. Pre-program, in-program, and post-program data is scheduled to be collected. Such items as employment history, interview scores, interest inventory scores, self-assessment of IT skills, attendance, and class performance are quantified. The objective of the data collection effort is to establish a model profile that will help predict which applicants will be successful in IT training programs. The data collection effort also provides management information for the project. Whether the results of this effort will be of use or not may depend on factors beyond the project's control.

This project was undertaken to provide early feedback on the H-1B training projects. The six sites selected for study were not drawn randomly, but largely because they were on track to meet their enrollment goals. The project has identified a number of promising practices, but conclusions on the projects' success must await future studies that include outcome data.

I. INTRODUCTION

A.   *STUDY BACKGROUND*

In October 1998, Congress enacted the Competitiveness and Workforce

Improvement Act of 1998. A major provision of the Act was the establishment of a fee

to be paid by those employers hiring workers in the United States under the H-1B visa

authority.[1] H-1B visas are used by employers to bring in high-skilled workers to the

United States for a period of up to three years. The fee, initially set at $500 per H-1B

worker and subsequently increased to $1,000, is to be used, in part[2], for U.S.

Department of Labor (DOL) "demonstration programs and projects that provide

technical skills training for U.S. workers in an attempt to increase the pool of workers in

the United States with the skills necessary to fill high-tech jobs."

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[1] In response to demands from industries that were experiencing skill shortages in cases such as information technology, Congress enacted the Immigration Act of 1990 (IMMACT). IMMACT created the H-1B visa category for nonimmigrants seeking to work in high skill or specialty occupations. The legislation, implemented in 1992, also established annual limits on the number of H-1B visas that could be granted. The original limit was 65,000 visas, but sequent legislation has increased the limit. At this time the ceiling has been temporarily increased to 195,000.

[2] Of the funds raised under this program, current legislation allots 55% for DOL training programs, 22% for NSF Scholarships, 15% to NSF for K-12 education programs, 4% to DOL for labor condition applications (LCA) processing and enforcement, and 4% to Department of Justice and INS for H-1B case processing and processing complaints relating to the recruitment attestation of H-1B dependent employers.

For the projects covered by this study, the statute stated that "specialty occupations" eligible for training required "theoretical and practical application of a body of highly specialized knowledge and attainment of a bachelor's or higher degree in the specific specialty (or its equivalent) as a minimum."[3] To comply with the provisions of the Act, the Department of Labor has held several grant competitions, and as of June 2001, 43 grantees had been selected and were operating programs.

DOL engaged a contractor, Bruno and Associates, to conduct a major evaluation of the H-1B grants program. Because findings from that study will not be available for some time, DOL also decided that that a smaller effort to identify exemplary practices would be useful. This report is the result of the smaller effort to identify exemplary practices.

B.   STUDY METHODOLOGY

A task order was issued to Coffey Communications to conduct visits to six H-1B funded sites featuring what appeared to be promising practices. Sites were identified based on whether they were close to meeting their enrollment targets, occupations targeted for training, employer involvement, training methods, and location.[4] Meeting

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[3] Legislation passed in 2000 modified the requirement and stated that training funded with the H-1B visa fees could be used to prepare workers to advance along an appropriate career ladder. The 2000 legislation also reduced from 100 percent to 75 percent the proportion of demonstration grants that were to be made to workforce investment boards or regional consortia of such boards. The remaining 25 percent of the grants can now go to partnerships of at least two businesses or a business-related nonprofit organization that represent more than one business, and which could include any educational, labor, community organization, or workforce investment board.

[4] A complete listing of the 43 sites with a brief description of the project objectives is provided in Appendix A.

enrollment targets had the highest priority in site selection, and we sought diversity for the other criteria. Once a preliminary list had been established, consultations were held with officials in the national and regional offices of the Department of Labor to determine the suitability of the selections. Finally, any sites that were included in the major study being conducted by Bruno and Associates were dropped. The team developed interview protocols for grantee program administrators and staff, partnering training providers, employers, and participants; a sample interview guide for the H1-B Program Director/Key Staff is attached in Appendix B.

Following each visit, project summaries were developed, which detailed project implementation history, key factors required to implement projects, barriers and how they were overcome, and interesting practices.

The objectives of the report are to compare and contrast approaches undertaken across the six sites and to highlight interesting practices that might be replicated by current and future grantees. The team focused on program implementation, adherence to proposal design, innovation, and potential for replication rather than compliance with authorizing legislation. This final report first provides a synthesis across sites of major study findings, which includes discussion of project goals, environmental/contextual factors, grant features and partnering, enrollment levels, and project design features (e.g., recruitment, training provided, and support services).

The next section highlights a series of interesting practices that were evident at various sites. The final section provides the six site visit summaries, which provide more detailed information about each of the sites visited as part of this study. Several appendices are attached to this report: (a) a chart that summarizes key features of the

43 grantees receiving H-1B training grants under the first three rounds of funding, (b) a copy of the discussion guide used for the H-1B project director and key project staff, and (c) a chart that provides a comparison of key project features across the six H-1B projects included in this study.

The reader should keep in mind that these are *pilot* projects—the initial efforts by the nation's workforce investment system to train a new group of workers for occupations that have not been traditionally served by the workforce investment system. It is likely that performance will improve as experience is gained, and the authors hope that this report will provide assistance to future projects.

II. FINDINGS

A.   *PROJECT GOALS*

The authorizing legislation for the H-1B training program was enacted in 1998 and modified in 2000. In both statutes, the primary purpose of the legislation was to deal with labor shortages in the United States by enabling employers to import temporary workers under the H-1B authority and to increase the domestic supply of skilled workers through several means. In this section, we first discuss the goals from a national perspective and then present the goals articulated in the six projects reviewed for this study.

The 1998 legislation, which covered all grantees reviewed for this project, allocated 56.3 percent of the funds collected from H-1B visas for the Department of Labor's H-1B demonstration program. Another 28.2 percent of the money collected was to be used by the National Science Foundation (NSF) to fund scholarships for low-income students enrolled in programs leading to degrees in mathematics, engineering, or computer science. The remainder of the funds obtained from H-1B visas was to be used for purposes such as expanding academic enrichment courses in mathematics, engineering, or science; implementing systemic reform activities by NSF; processing petitions received by the Attorney General from nonimmigrant petitioners; and for improving application processing and enforcement of nonimmigrant petitions by the department of Labor.

Applicants for grants under the 1998 legislation were restricted to local private industry councils (PICs) or consortia of PICs operating Job Training Partnership Act (JTPA) programs (similar to the workforce investment boards (WIBs) operating under the Workforce Investment Act (WIA), which became operational in July 2000). An occupation was considered suitable for training under the program if the occupations included theoretical and practical application of highly specialized knowledge and attainment of a bachelor's or higher degree in the specific specialty is a minimum entry requirement for the occupation in the United States. In the first round of awards, the Department of Labor required applicants to provide a match of 50 percent of the grant award, but the match requirement was decreased to 25 percent for the second and third round of grants. The grant solicitations under the initial legislation included five guiding principles:

- Partnership sustainability. The projects should be able to last beyond the period covered by the grant.

- Business involvement.   The grant solicitations indicate that it isimperative that businesses with shortages who intend to hire participants be included in the project.

- Current skills grant. The grant solicitations indicate that the proposed training should target occupations with current shortages in the area covered by the grant application.

- Innovative and effective tools. The projects are supposed to use innovative or proven tools to provide training to the participants.

- Target population. The grant solicitations encourage grantees to include all segments of the population—low-skill as well as high skill workers, unemployed as well as incumbent workers, and minority workers and workers with disabilities.

The American Competitiveness in the Twenty-First Century Act of 2000 increased the number of H-1B visas and made some changes to the H-1B skill training

program.[5] On the visa side, the number of visas that could be granted annually was increased, and the fee was increased from $500 to $1,000. The training program goals remained the same, but several modifications were instituted:

- Eligibility for grants was extended to include partnerships including at least two businesses or a business-related nonprofit organization representing more than one business. This newly defined group is eligible for 25 percent of the funds, and the remaining 75 percent is reserved for workforce investment boards or consortia of boards. Applicants in the 25-percent pool must show why they cannot apply under the 75 percent pool rules.

- The matching requirement is set at 50 percent for the 75-percent funds and at 100 percent for the 25-percent funds. Matches can be in cash or in kind.

- Although training is generally to be for H-1B occupations, training is not limited to skill levels commensurate with four-year degrees. Training can be for occupations along a career ladder leading to an H-1B skill-level job.

- At least 80 percent of the grants are to be awarded to projects that train workers in high technology, information technology, and biotechnology skills.

- No more than 20 percent of the grants may be awarded to grants that train for skills related to a single specialty occupation.

- The funds must be distributed fairly across the country.

- Accountability goals for those who complete training include employment of unemployed trainees, increasing wages of incumbent workers, skill certification or linking training to industry.

- In addition to the section criteria used under the 1998 legislation (need, service delivery strategy, target population, sustainability, linkages with key partners, outcomes, and cost effectiveness), added criteria are use of funds to demonstrate an ability to expand a training program through collaboration with small business or with a labor management program;

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[5] The changes in the legislation and implication for the program are summarized in a paper issued by the Employment and Training Administration, and these points are drawn from that paper. See Employment and Training Administration (2001). "Consultation Paper on ACWIA 2000: Proposed Approach for H-1B Grants in 2001 and Beyond." Washington, DC: Employment and Training Administration, April 2.

> partnership that involves and benefits two or more small businesses; meeting the accountability criteria specified above;

All grantees accepted the charge that the grant was to train workers for high-skill technical/professional occupations, and recognized that in the process, they had the opportunity to structure interventions that would continue to increase the supply of skilled workers within their program area beyond the period of their H-1B grants. As shown in Exhibit 1, key project goals cited in our interviews with program administrators/staff, training partners, employers, and participants at the six study sites broadly support the intended goals identified in the authorizing legislation for the H-1B training program. Among the key goals most frequently identified across the six sites are the following:

- upgrade incumbent and unemployed/underemployed workers' skills to enable these workers to fill jobs in high-skill occupations for which local employers are facing shortages;

- facilitate worker retention of jobs, career advancement, and wage growth;

- offset training costs for local employers to encourage these firms to invest in training their workforce;

- increase worker productivity, particularly with respect to incorporating new technologies into the workplace.

These project goals are reflected in all of the projects visited (see site visit summaries for additional details about the specific goals in each site). For example, in the Tennessee site, the goal of the program was not only to increase the pool of trained workers, but also to ensure that both the employee and employer benefit from the process. In this case, they wanted to partially offset employer training costs to encourage investment in training of workers; at the same time, they wanted to improve

worker skills and productivity – leading to increased chances of career advancement and higher wages for workers.   The Regional Employment Board (REB) in Massachusetts recognized that it needed to encourage employers to continue to train and upgrade workers -- and through the H-1B training program, they hoped to demonstrate the benefits of the investment.

Workers in Alaska needed more formal training that would prepare them for certification examinations. Without this training, these individuals would not be eligible for emerging high-skill, information technology (IT) jobs. This meant that one of Alaska's goals was to institutionalize a course of study in the University of Alaska that would prepare workers to pass the certification examinations that would promote entry into and advancement in IT jobs. This was also an important goal of the Work Alliance in the New York site. In Pima County, the grantee decided that it would not be possible to implement training that would prepare most people for high-tech jobs without investing in the development of career ladders for these jobs. Finally, as a result of current labor force shortages and an analysis of future needs, Vermont determined it needed to create a formal system to train specialty nurses and to reduce turnover in the nursing field in general.

EXHIBIT 1: PROJECT GOALS

Project Characteristic	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Project Goals	-Enhance employability of participants -Upgrade skills and worker productivity -Improve wages (10% for employed workers; 15% for new hires) -Offset employer training costs -Reduce worker turnover	-Facilitate career advancement, wage growth, and self-sufficiency -Create new career paths to reduce local shortages (particularly in nursing field) -Offset employer training costs	-Provide career ladder and high-skill training to unemployed, underemployed , and incumbent workers in IT occupations. -Develop IT curricula that can be replicated throughout the State - Partially offset employer training costs	-Provide high skill training to employed Registered Nurses in critical shortage areas -Establish lasting training partnerships among participating organizations in health care and high-tech programs -Reduce dependency on temporary workers in health care field. - Develop web-based training tools	-Facilitate career advancement, wage growth, and self-sufficiency -Offset employer training costs -Encourage employers to train and upgrade workforce	-Facilitate IT career advancement, wage growth, and self-sufficiency -Target underserved populations -In response to the events of September 11th, provide increased support to employers needing to train workers

11

B.   OPERATING ENVIRONMENT

The geographic areas served by the H-1B training programs in our sample of sites range from serving populations in remote rural areas (e.g., Alaska, Vermont) to center-city areas (e.g., New York). The size of service areas and the populations served vary substantially across sites. Several projects serve large geographic areas that extend across multiple counties: for example, the Alaska site serves a 26,235 square mile area; the Vermont site covers the entire state; the Nashville site extends across a 12-county area; and the Massachusetts site serves a four-county area, but also extends services across the state boundary to workers living in the Greater Hartford area. The Arizona site, while limiting H-1B training to the residents of a single county – Pima County (which includes Tucson) – actually serves a very large geographic area because the county is one of the largest in the United States (about the size of Massachusetts). Finally, the New York City site targets services on the residents of New York City's five boroughs, though it includes small numbers of residents who live outside of the city but work for New York City-based employers.

As might be expected, a critical environmental factor affecting skills shortages in each program site and the need for specific types of training is local economic conditions – particularly, unemployment rates. As shown in Exhibit 2, for the six H-1B programs examined as part of this study, the project began at a time of economic growth, highly favorable economic conditions, and low unemployment rates. In several sites, unemployment rates were reaching historic lows – and employers were complaining, as a result, of labor shortages, particularly for more highly skilled workers.

For example, New York City started 2000 with a 6% unemployment rate. By the time the grant had been awarded in August, the rate had dropped to 5.3%. The Springfield/ Worchester/ Hartford Area served by the Regional Employment Board of Hampden County, Inc. began 2000 with rates of 3.4%-4.2%, and by the time of the grant award (three months later), those rates had declined further to 2.7%-3.5%. Anchorage started 2000 at 5.8%, and by August 2000 the rate was 3.8%. Unemployment for every grantee except Workforce Essentials (in Tennessee) was on the decline. Even in the area served by Workforce Essentials, unemployment declined by 0.6% in the month after the grant was awarded.

As the projects developed, however, the national economy began to cool (in the latter part of 2000 and into 2001), and with it economic conditions in all project sites (with the possible exception of Alaska) began to slack off and deteriorate. By the summer of 2001, though unemployment rates still remained low by historic standards in the six study sites, unemployment rates were on the rise. As the nation's economy slid toward recession and the bottom fell out of the "dot.com," IT, and telecommunications sectors, shortage conditions for high-tech workers also abated. General economic conditions in the country -- particularly the slide toward recession and weakness in the IT and telecommunications sectors -- were exacerbated further by the events of September 11th (especially in one of the H-1B training sites [New York City]).

EXHIBIT 2: OPERATING ENVIRONMENT

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Project Service Area	-12-county area in N. Tennessee (includes Nashville) -Mostly rural, some urban and suburban	-Pima County (with focus on Tucson metropolitan area) -Urban and suburban	-Comprises 26,235 square miles and includes the Municipality of Anchorage, as well as the Matanuska-Susitna Borough -Urban and rural	-Statewide initiative -State characterized as primarily rural; however, program serves small cities and town as well	-4-counties in West MA (Hampden, Franklin, Hampshire, Worcester); and Greater Hartford, CT. -Mostly rural, some urban and suburban	-5 boroughs of NYC -Also, includes employees of NYC-based firms regardless of residence
Unemployment Rate (Seasonally unadjusted)	-Start of grant: Nashville: 3.1% Clarksville: 3.7% - As of 11/2001: Nashville: 3.4%, Clarksville: 5%, & other counties as high as 8.7%	-Start of grant: 2.7% - As of 11/2001: 4%	-Start of grant: 3.8% - As of 11/2001: 3.7%	-Start of grant: 2.6% - As of 11/2001: 3.4%	-Start of grant: 2.7% to 3.5% - As of 11/2001: 2.9 - 4.3%	-Start of grant: 5.3% - As of 11/2001: 6.3%
Environmental/ Contextual Factors	-Economic conditions vary by county -Local economy deteriorating by mid-2001, affecting demand for workers in some high-skill occupations	-Much low-wage employment -Service sector dominates -Large Hispanic population; high concentration of youth/young adults -Problems with high school dropouts	-State isolated from lower 48 states has not experienced increase in unemployment -Program serves very large geographic area (including one major city and large rural expanse) – affecting how training is delivered	-High-tech sector hard hit by slowing economy -Industry to service sector shift; job growth outpacing labor force -Declining school age population & slow growing work-age population, but boom in elderly - Aging nurses	-Project serves multi-state region (MA/CT) -WIB co-located with economic development agency & Chamber of Commerce – helps with links to employers -Local economy slowing by mid-2001	-Slowing economy , further exacerbated by the World Trade Center attack. -Employers still attempting to recover from the effects of the attack

The unemployment rate does not, however, present a complete picture of conditions faced in each of the six H-1B project sites. More important than generally increasing unemployment for the project sites have been the industry sectors affected by rising unemployment. According to most grantees, the demand for IT workers in particular – and many other types of high-tech workers – has seriously declined as a result of layoffs in the IT industry and other sectors that require IT workers. For example, in the San Jose, California metropolitan area (home of Silicon Valley), unemployment went from 2.2 percent in March 2000 to 6.6 percent in November 2001. Many of those who became unemployed in San Jose (and in other localities around the nation) were formerly working for IT firms and have high-tech skills – which adversely affected demand conditions for high-tech workers generally (including the H-1B project sites included in this study). A general decline in manufacturing has further exacerbated the problem.

In several of the H-1B training sites, as a result of the slowing economy and layoffs, some employers who had either committed to be part of the H-1B project or might have been willing to join the effort did not have a need for additional workers trained through the H1-B project. Grantees have had to replace their cadre of participating employers with others as labor market conditions changed in their local area. In the case of Vermont, for example, of the original 14 employers who signed on supporting the grant and who indicated they would either hire or use the services to train incumbent workers, only 2 remain but 23 others have taken their place.

Finally, it is important to note, that while the high-tech and IT sectors have been adversely affected by general economic trends, some sectors of the economy have remained largely unaffected along with demand for highly-skilled workers. For example, the H-1B training sites included in this study that focused on nursing and other health professions (Vermont and Pima County) reported that the demand for health care workers (especially nurses) has largely been unaffected by general economic slowdown. In fact, shortage in all areas of nursing continues largely unabated.

C.   GRANT AMOUNTS AND MATCH, DURATION, AND PROJECT PARTNERS

Grant Amounts and Period of Performance. Awards for H-1B grantees in the study sites ranged from $1.5 million to almost $3.0 million (see Exhibit 3).[6] Grants under the second and third rounds (when the ceiling was increased) were in the $2.4 million to nearly $3.0 million range.

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[6] The first round grants were capped at $1.5 million. Rounds two and three had increased ceilings.

EXHIBIT 3: GRANT AMOUNTS AND MATCH, DURATION, AND PROJECT PARTNERS

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Grant Round	3rd	1st	2nd	3rd	1st	2nd
Grant Start	11/2000	3/2000	8/2000	11//2000	3/2000	8/2000
Grant End	10/2002	3/2002	7/2002	11/2002	3/20002	7/2002
Funding Amount	$2.8 million	$1.5 million	$2.425 million	$2.658 million	$1.5 million	$2.94million
Match	40% (minimum for each employer)	Variable – 25% local match sought across all sources	60% cash match covering tuition and release time	Over 100% - Salary continuation-in kind contributions and tuition payment	Variable – sought 85% in-kind & 10% cash from employers	50% in-kind match
# of Employer Partners	28	~10	50+	39	7	15-20
Types of Employer Partners	Health sector & variety of manufacturers	Health sector (especially hospitals), teleservices, IT, electronics, aviation, and education	Eclectic array including: telecom, social service, hospital, IT service firms, banks, communications, local, state, and federal government, and Native Alaskan groups	Hospitals and employers of IT workers	IT, telecommuni-cations	Initial target was software industry; expanded to include any industry utilizing IT skills
Leading Employer Partners	St. Thomas/IT, CEI Company, Aerostructures, Baptist Hospital, Standard Gypsum,	Kino Hospital, Sunquest, Universal Avionics, Convergys, Honeywell, Opinion	Science Applications International Corporation, United States Airforce,	Fletcher –Allen Hospital Mt. Ascutney Hospital Rutland Regional	JDS Uniphase; Coghlin Electrical Contractors, Inc.; Valley Communi-cation; Systems,	Martha Stewart, Associated Press, Salomon Smith Barney, Vanguarde Media, and several

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
	& others	Research, Teletech, Cross County, USA Relay	State of Alaska, General Communications, Inc., First National Bank of Alaska, Alaska Communications Systems	Medical Center No leading employer partners in the High-Tech , but 23 participating employers in incumbent worker program.	Software, & Support (SSS); Yankee Candle; Electechs	smaller companies.
Training Partners	-Limited to training providers on Governor's WIA approved list -Most skill training provided by community colleges, Tennessee Technical Centers, Nashville State Technical School, & several proprietary schools	~1/2 of training provided through community colleges, but also use universities & proprietary schools -Partners include: Pima Co. Community College, SAIAT, U. of Phoenix, AZ State U, U. of AZ, Prescott College, and New Horizons	-University of Alaska, Anchorage -Mat-Su campus of U of A, Anchorage, - private proprietary schools (2-3)	-University, of VT, -Vermont Community Colleges -Individual participating hospitals -Vermont Technical College - Vermont Interactive Television	-Most training provided through community colleges and proprietary schools -Partners include: Springfield Technical CC; Northeast Center for Telecom Technologies; Capital CC; and IKON	-City University of New York (CUNY), -CUNY -Institute of Software Development, -Manhattan Community College
Union and or Association Partners	International Association of Machinists	Tucson Education Association	Alaska High Tech Business Council	Vermont Association of Hospitals and Health Systems	None	New York Software Industry Association

All grants were for a two-year period, but most of the grantees have or plan to request

no-cost extensions to either complete a training cycle or to continue to provide training

in some areas – it was either not possible or difficult to obtain degrees needed to enter

some high-tech fields within a two-year time frame (e.g., a four-year degree). As

discussed later in this report, the constraints on moving participants to higher skill levels

was also hampered because the two-year period of performance on programs also

included time needed to start-up programs and recruit participants. Finally, some of the

academic programs were scheduled to last almost through the life of the grant, which

allowed little or no time for intensive placement services after graduation.

   Matching Funds. Minimum non-federal match requirements were dictated by

the grant solicitation round. Round One required that 50 percent of the grant award be

matched by non-federal funds. Rounds Two and Three required a 25 percent match.

Grantees dealt with the match in a variety of ways:

- **Employers required to share in the payment of tuition:** Workforce Essentials
  (in Tennessee) required that employers pay 40% of the actual tuition costs for
  trainees. To ensure that payments were made, the employer was billed by
  Workforce Essentials. Anchorage required that 60% of tuition payments be
  made from sources outside the grant. If an incumbent worker was being trained,
  the employer was asked to share in the tuition payments. If the employer would
  not or could not make the contribution, other sources of funds were sought, and
  in some cases, the individual being trained had to contribute to the cost of
  training.   Unemployed workers were supported through the grant and through
  grants from state-financed programs. The grantees were very creative in
  identifying alternative funding sources, where necessary. In Vermont, the IT
  training program required a 25% payment from an outside source. Generally, the
  employer paid, but in some cases the trainee had to provide the match. The
  REB of Hampden County (in Massachusetts) requested that employers pay 10%
  of the tuition costs.

- **Paid employee release time:** Most of the sites used paid release time in the calculation of match. Employers would give workers time off during regular working hours for H-1B participants to attend classroom or other types of training – and record the amount of time and expense as part of the employer match. For example, release time was almost the entire match in the Vermont Nurse Training program, and amounted to more than $2,000,000. New York had anticipated using internship wages for their match, but the internships did not materialize due to economic declines in the software industry – and so the program turned to other types of match to meet the requirement.

- **In-kind contributions for training facilities and equipment:** Where employers made their facilities available, a value was attributed to the space and overhead. This value was used as part of the match. Equipment used as part of the training activity and provided by the employer was also valued for the match. For example, in the Massachusetts site, one employer provided a fully equipped laboratory for the students to conduct their lab assignments.

- **Match generated by training partner:** New York was able to negotiate a reduced overhead rate for its training conducted by the City University of New York (CUNY). This savings was calculated and included as part of the non-federal match.

Employer Partners. Every site reported partnerships with employers; however the strength of the relationships varied considerably. As shown in Exhibit 3, the number of partners ranged from fewer than 10 to over 50 employers. The role of employers varied within and across sites. In some cases, employers sent workers for training and could better be defined as program beneficiaries. In other sites, the employers were heavily involved in the program design, curricula development, and program support, as well as providers of incumbent workers for H-1B training activities. The Vermont nurse-training program provides a good example of comprehensive employer involvement (see site visit summaries later in this report for additional examples).   Under the Vermont program, employers:

- were on the project design team;
- helped develop the training curricula;
- provided classroom space;
- contributed guest lecturers for the classroom components;
- provided the trainees;
- used the program to attract unemployed workers;
- provided paid release time for their workers; and
- trained nurse mentors to provide on-the-job support.

Several sites used WIA or JTPA initiated employer advisory boards in the creation and implementation of the program. For example, advisory board members assisted in labor market surveys and program promotion.

Training Partners. Sites used several types of training providers (see Exhibit 3). For IT training, the most common training providers were community colleges and proprietary schools. Training for health care occupations often involved four-year colleges as well. The relationship of the grantees with training providers also varied. Some sites provided grants directly to educational institutions to develop programs as well as using existing curricula in public and private proprietary schools. Sites did not generally limit themselves to the WIA-eligible provider list. Several sites used Individual Training Accounts (ITAs), but set higher cost limits than those used typically under their WIA programs.

Where programs were specifically designed for H-1B trainees, there was often an attempt to infuse greater flexibility and innovation in the delivery of the programs than had been the case in prior training initiatives and under the regular WIA program. For example, grantees and employers worked with training providers to develop new curricula and to adjust times and places of training to respond to the training needs and

scarce time that incumbent workers had available for training. A common focus in structuring training initiatives was to work within the competing demands that workers often faced in balancing work, training, family, and leisure activities. In addition, in some sites, training providers went beyond instructional activities to provide ongoing support/mentoring and assist with job placement efforts for trainees who were either unemployed or underemployed.

Union or Association Partners. Four of the six sites had active working relationships with industry or trade associations. In each case, the association played an important role in the operation of the program. For example, among the roles played by associations were: surveying employer members concerning needs in the target occupations; screening applicants for entry into the program; promoting the H-1B training program among its membership; developing job opportunities for program graduates; identifying employers who might be interested in tailored training provided under the grant; and, in one case, tracking employer participation.

Union involvement in this program was limited. Only a few sites dealt with employees covered by collective bargaining agreements, and many of the targeted occupations are not traditionally unionized. Where there was a union presence, certain conditions had to be met, i.e., paid release time and overtime pay for training after hours.

D. PROJECT ENROLLMENT

Enrollment Goals. Five of the six sites had enrollment goals in the range of 200 to 300 participants. One site (Tennessee) planned to serve 735 participants. Since one of the criteria used to select programs for this study was success in meeting enrollment targets, it is not surprising that all of these programs are likely to meet or exceed enrollment targets. As shown in Exhibit 4, three of the six sites had already achieved their enrollment goals (Tennessee, Arizona, and Massachusetts); two other sites were nearing achievement of their overall goals at the time of our visit (Alaska and New York); one site (Vermont) had reached about half of its goal, but was bringing new programs on line that would help in reaching its goal.

Population Served.[7] All programs reviewed served both incumbent and unemployed workers. In one program (Tennessee) unemployed workers were only enrolled if they had a job commitment at the completion of training. Underemployed workers could either be in the field for which training was being offered or could be in the process of changing fields.

The mix of males and females varied by the occupational focus of the training programs. Health training enrollees were almost exclusively female. Industrial training programs (e.g., several of the training programs in Massachusetts) enrolled mostly men.

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[7] The site visit team was provided with enrollment data from every site, and in half the sites, significantly less data was collected for incumbent workers than for the unemployed. In some cases, data was not collected because it was considered an intrusion into worker privacy. In one site, enrollees were not even asked to indicate gender.

The IT programs typically attracted somewhat more men than women (e.g., two programs reported 55 percent men in IT training).

Educational requirements varied considerably depending on the occupations for which training was being provided and on whether the workers were in employer-specific training programs or not. Entry-level career ladder health programs required high school diplomas or a GED. IT programs were typically seeking individuals with some college (an AA Degree or higher). If the individual had no work experience in the field, and at least a high school diploma, the person would be considered but not enrolled without extensive testing to ensure that the candidate could cope with the material. Grantees were aware that occupations eligible for consideration under the H-1B program are generally more challenging and are often presented in an accelerated mode that demands that participants have good basic reading and math skills. Two of the sites instituted programs that helped prepare students for more advanced IT work, though both of these programs required a high school diploma, aptitude and interest testing, and an interview prior to entry. Most sites indicated that they targeted the underserved groups for their projects, but that did not mean that program requirements were adjusted to accommodate for lack of preparation on the part of the participants. In several sites, programs offered remedial courses to applicants lacking prerequisites to participate.

EXHIBIT 4: PROJECT ENROLLMENT GOAL, CURRENT PARTICIPATION, AND SUBPOPULATIONS TARGETED AND SERVED

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Original Participation Goal	735	300	300	222	210	300 (220 to finish training & become employed)
Actual # of Participants	812 (as of 11/2001) **110% of goal**	312 (as of 9/2001); (est. 340 as of 11/2001) **113% as of 11/01**	281 (as of 9/30/01) **94% of goal**	108 (12/2001), with new programs coming on line after first of year. **50% of goal**	222 (as of 12/2001) **105% of goal**	238 (as of 12/2001) **196 have** completed one or more training components **79% of goal**
Date of First Enrollments	January 2001	July 2000	Unsure	February 12, 2001	April 2000	March 2001
Target Population Served	-Employed -Unemployed -Participants must be employed or have commitment to be hired by partnering employer	-Employed (2/3) -Unemployed (1/3) -No employer commitment required -Partnering employers refer most participants	-Employed workers either referred by employer or self selected based on information in newspaper or through friends -Unemployed workers identified by WIA, Job Corps, One Stop, Voc. Rehab., Hi Tech Industry Council	-53 Incumbent Operating Room Nurses -95 Incumbent Critical Care Nurses -20 unemployed / dislocated workers attempting entry into IT -45 incumbent IT workers getting skills upgrade.	-130 incumbent workers -80 unemployed -Partnering employers refer most participants	-160 unemployed/ underemployed -140 incumbent workers -For incumbent workers, employers must at least consider salary increase for those trained.

Characteristics of the Population Served	-Estimated 75% female; 40 % minority -All have high school or GED	~2/3 employed at intake -63% female -61% white; 23% Hispanic; 8% Black -Avg. 13.9 years education; avg. reading/math levels, 12.3/12.1	-55% male -Average wage of incumbent worker was $20 per hour with median wage at $24.	-Nursing program almost 100% female -Wage range from $17-$23/hr. -All Registered Nurses with 2 or 4 year degree -Hi Tech Program numbers not available; however participants are predominately male	-80% male -84% white; 4% black; 3% Hispanic; 9% Other -48% high school graduates; 8% post-high school attendees; 44% college graduates -72% earning $15 or more/hr. in most recent job	-55% male -Almost 100% have HS Diploma. -84% have attended college -42% have BA or higher. [Note: figures only available for unemployed or underemployed; no data available for employer-specific programs.]

E.   RECRUITMENT, SCREENING, AND ASSESSMENT

Outreach and Recruitment. Effective outreach and recruitment strategies are vital features of H-1B training programs, because unless programs are able to identify and enroll eligible individuals, the effectiveness of training and other project activities are irrelevant. If recruitment activities are not carefully tailored to the target group and well executed by project staff, they can be ineffective and costly. Participant practices were similar across the programs included in this study. Most often they included the following activities (see Exhibit 5):

- partnering employers referred incumbent workers;

- Web sites were used to announce the program;

- notice of the grant award were placed in newspapers, with additional information about available services and how and when to make application to the program;

- notification of training opportunities was provided to one-stop career centers, Unemployment Insurance (UI) offices, TANF agencies, Job Corps programs, other workforce development organizations, and to community-based organizations; and

- training providers (public and private) publicized the program.

No grantee used paid advertisements to attract participants. One grantee did include information about the program in a paid recruitment notice. It was listed as a worker benefit. Several grantees used job fairs to spread the word to potential trainees.

Because all grantees were established players in workforce development in their communities, it was not difficult for them to mount a publicity campaign where needed. One (Alaska) grantee had to do little more than wait after the notice was in the local

EXHIBIT 5: RECRUITMENT, SCREENING AND ASSESSMENT

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Outreach/ Recruitment Methods	-Partnering employers identify and refer workers needing skill upgrades -Variety of other sources for unemployed individuals, especially referrals from Workforce Essentials' career centers and other public programs (e.g., UI, TANF) -Some individuals heard about program from downsizing employers, at job fairs, and via word-of-mouth. -No paid advertisements, but some articles about project in local newspapers	-Partnering companies refer incumbent workers for upgrade training -Distribution of information about program at career centers; referrals by career center staff to program -Word-of-mouth (increasingly important) -No paid advertisements	-No paid advertising. Grant announced in the paper which generated interest. -Once program at Mat-Su in development stage, brochures printed and used to attract students. - Job Corps invited to submit nominees as well as other workforce development agencies such as Vocational Rehabilitation	-Hospitals recruit from existing nursing staff using in- house communications. -Hospitals use program as recruitment tool to attract nurses from out of state -IT workers identified by employers. -One stop Career Centers identify unemployed/dislocated workers	-Partnering companies refer incumbent workers for upgrade training -Distribution of information about program at career centers; referrals by career center staff (of primarily unemployed individuals) to program -No paid advertisements	-Use NYSIA to publicize program availability to membership. Also did initial survey of needs through this group. Post info on association web-site. -Use business development unit of Workforce Alliance (WA) to identify employers not in IT but utilizing IT that might be interested in upgrading workers. -Staff at WA posted notices on community bulletin boards, used business connections - CUNY advertised program

Eligibility/ Screening/ Assessment	-Participants must be employed by or have commitment of employment from partnering employer -Assessment tailored to requirements of employer and training provider -Workforce Essentials has in-house assessment capability; employers may conduct own assessment -Most participants tested, but no standard set of tests applied -Variety of tests used, tailored to employer needs and training requirements -Among most used tests are: NET Test (similar to TABE); COPS, CAPES, CAPS; VALPAR	-Main requirement is participants must be interested in training being offered -Assessment tailored to requirements of employer, training provider, & program component -WIB career center assessment facilities may be used at the discretion of employer or trainer -Most participants tested, but no standard set of tests applied -Most participants take the TABE; some complete an interest inventory; range of other types of assessment tests is available, if needed	-Incumbent worker screening done by employer who identified potential trainees. -Unemployed/ underemployed screened by Workforce Development Division and where individuals had no existing experience, by Hi Tech Business Council to ensure training desired made sense and that applicant had necessary prerequisites. -Assessment tests administered. -Those attending Mat-Su training courses were screened by the college and normal enrollment standards used	-For the nursing program, eligibility criteria established and applicants self selected. Screened and approved by employer. No testing required. - For Hi Tech program, screening done by One-Stop and by admitting institution	-Partnering companies screen incumbent workers and refer appropriate ones for training -ITA component – career center staff assess appropriate-ness of individual, then H-1B director makes final decision -Formal screening form used -No standard set of formal tests used to assess client – employers may decide to use assessment test	-For incumbents, screening done by employers. -For unemployed/ underemployed, fairly elaborate process involving student self-assessment of IT skills, review by members of CUNY staff, NYSIA, Workforce Alliance -All individual enrollees slotted into basic training component unless they had work history to demonstrate they did not need initial training

newspaper about the project award, because the interest on the worker side was great and the need on the employer side was equally great. Other H-1B grantees had to work at getting the word out about the program to the targeted workers and employers – generally through contacts with one-stop career centers, trade associations, and other local human service agencies. As a result of New York site's recruitment efforts, the site had little difficulty in recruiting sufficient numbers of qualified unemployed and incumbent workers to the program, though the program had to work hard (because of deteriorating local economic conditions and the events of September 11th) at attracting employers to the effort.

Screening and Assessment. As was mentioned in the discussion of participant characteristics, almost all applicants at the program sites were required to have at least a high school diploma or GED. Some type of test or assessment instrument was used in every site, but not all applicants were required to take the tests. Educational achievement and work history were cited as reasons why individuals were not tested. All grantees mentioned that acceptance into the program was based on more than just test scores. Applicants needed to demonstrate an interest in the field. Some programs required that the applicants identify the training program in which they wished to participate and justify why it was important to them. Other programs required an essay from applicants on what the training would mean to them in their future. For example, the Alaska site ensured that applications for training, whether submitted by individuals or employers, go through a technical review to ensure that the type of training requested

was suitable for the student's capabilities and to ensure that the proposed training made sense for the local labor market. This review was done when there was any doubt on the part of grantee staff as to whether the applicant was qualified. Students enrolling in degree granting institutions also had to meet the enrollment requirements of the school. In addition to the paper process, applicants were all interviewed. The interviews might consist of a meeting with a career counselor or caseworker in a one-stop career center, or it might consist of a meeting with representatives from educational institutions, industry associations, and the grantee organization. Many of the steps involved in enrolling and assessing unemployed and underemployed workers in training were eliminated for incumbent workers in specialty training. This was because the employers in these initiatives screened the workers that they wanted trained – though grantees made the assessment facilities at one-stop career centers and/or training partners available to these employers should they desire to have employees screened and assessed prior to the start of training.

F.   TRAINING

Training Courses. All sites provided computer-related training for at least some of the H-1B participants (see Exhibit 6). Five of the six sites trained in computer skills which would be used in an IT or software environment or in an IT or software unit of a company. Three sites trained in the industrial applications of computer technology

EXHIBIT 6: TRAINING SERVICES

Project Characteristic	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Primary Types of Training Offered by Occupation	-Training provided in wide range of occupations, spread across manufacturing and health care fields -Examples of types of occupational training: LPN, radiation technology, medical transcription,	-5 main career paths: nursing (primarily RN), teachers, computer specialist (e.g., MCSE, A+), electronic technicians, and accounting (rarely used) -Emphasis on career path and building pipeline into shortage occupations (e.g., LPN to RN to BSN) -Individual referrals into a variety of other occupations	-Training provided in: A+, Microsoft Certified Systems Engineer (MCSE), Data Base Administration (MSDBA), Microsoft Certified Professional (MCP), Certified Cisco Network Associate (CCNA), Certified Cisco Network Professional (CCNP), Java Script, Local Office Network Technician, Computer Aided Drafting -Grant paid for development of IT training program infrastructure at University. AA degree program which can be used toward BA degree.	-Nursing: Critical Care PeriOperative Preceptoring (mentoring) Plan Psychiatric Nursing -Hi Tech: AA Degree training in Computer Systems and Programming. Anticipate some graduates will go on for BA Degree.	-Most training for careers in IT or telecommuni-cations fields, such as: help desk technicians, PC support specialist, network administrators, web developers -Individuals in ITA track could receive training in variety of technical fields (i.e., under individual referrals to training)	-Individual training provided in: Web Development; Unix System Administration; Java; Data Base Systems Administration -Employer-specific training developed to meet employer needs. Generally very short term. Grant paid for the development of curriculum to deliver these programs at CUNY

Project Characteristic	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Training methods	-Mostly classroom instruction; clinical and hands-on instruction provided, where appropriate -Instruction provided at training facility or employer site -Duration/intensity of training varies - ranging from 9 weeks to 2 years (average about 1 year); instruction hours per week varied from several hours to 35 hours -Training done in group (e.g., LPN) or individual basis (e.g., referral to community college) -Most training results in certification; few degrees conferred and none above 2-year associate degree	-Mostly classroom instruction; clinical, lab, and hands-on provided, where appropriate -Instruction provided at training facility or employer site -Duration/intensity of training varies - -ranging from 6 months to 2 years; instruction hours per week varied from 6 hours to full-time -Training done for groups (e.g., LPN) or on individual basis (e.g., referral to training providers) -Some training results in degree (AA, BA, BS, including RN, BSN, MSN) or certification; some have no degree or certification (e.g., those completing course in Visual Basic)	-Mostly classroom with some Web-based support. -Some done on college campus or training site -Some done at employer job site. -Intensive, vendor specific training could be very short term unless coupled with other academic program. -If enrollee was being sponsored by employer, the training was likely to be more short term. Program offered what was needed -Average training duration was 103 hours but most people were in courses lasting 55 hours or less.	-Classroom with lab, Web-based, TV-Distance Education, OJT Instruction done at central hospital, at home hospital and at 12 distance learning labs throughout the state -Actual classroom sessions last btw. 72 and 82 hrs over a 5-6 week period depending on the specialty. Clinical on-the-job portion of training ranged from 680 hrs to 720 hours -Hi Tech program training all in classroom setting. Two types of program: Degree objective training offered to full time unemployed and upgrade offered to employed individuals 3 days per week over 16 months. Also leads to AA	-ITA component: mostly classroom and lab -Employer-based training: classroom and lab (often at employer site), web-based (distance learning) -Mostly off-the-shelf training, but some customization for company-specific programs) -Many participants seek MCSE or other certifications -Some employers send participants as a group for short-term training	-Classroom with lab – Web used extensively in training but not as a delivery mechanism -Employer specific training varies between two days and several weeks

Project Characteristic	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Employer Role in Training	-Help with recruitment and screening of appropriate individuals -If not already employed, make commitment to hire participant if he/she completes training -Provide input on curriculum, if appropriate -Pay at least a 40 percent match payment (e.g., can be direct payment for training or in form of wages paid to worker while in training)	-Refer incumbent workers for upgrade training -May assist trainer with curriculum development -May pay part of costs of tuition -May provide training facility on-site -Most training done on participant time; one employer gave employees 1 hr. paid time (matched by 2 hours of employees' time)	-Refer incumbent workers for upgrade training - Paid 60% of tuition costs. -Provide on-site facility for some training -Provide paid release time	**Both Components** -Refer incumbent workers for upgrade training - Assist with curriculum development **Health Component** -Conduct on-the-job training -Provide preceptors (mentors) for each student in the clinical portion of training -Provide release time -Arrange for replacements in order to facilitate training	-Refer incumbent workers for upgrade training -May assist trainer with curriculum development -May pay part of tuition -May provide training facility on-site -Most training done on participant time	-Refer incumbent workers for upgrade training -Provide input regarding high demand fields -Signed intent letter to consider upgrade for employee in the future

(Tennessee, Arizona, and Vermont). The following were the most frequently offered

computer courses:

- A+ (Microsoft Entry Level Computer Service Technician)
- Microsoft Certified Systems Engineer (MCSE)
- Data Base Administration (MSDBA)
- Microsoft Certified Professional (MCP)
- Certified Cisco Network Associate (CCNA)
- Certified Cisco Network Professional (CCNP)
- Local Office Network Technician
- Computer Aided Drafting
- Novell Engineers
- Networking Engineers
- Internet Web Masters (Design, E-Commerce, and Enterprise Developers)
- Net+, and I-Net+
- Computer Aided Design
- Web Design
- Java Script
- Flash
- Dreamweaver
- Unix/Linux;
- Micro-Computer Applications (BA Level Training)
- Information Systems Processing. (BA Level Training)
- Systems analysis/programming (BA Level Training)

These courses were identified through employer surveys or discussions with employers

as types of computer training courses needed within the workplace. At one site, 80

percent of the incumbent workers were enrolled in one or more of these programs.

These courses generally related to systems maintenance and Web and Internet

applications. Many of the programs were combined into a computer science curriculum

so that participants could obtain AA degrees or work toward a BA degree. Employers

report that in addition to these technical skills, they wanted workers with good English,

math, and communication skills.

Three of the sites – the Tennessee, Pima County, and Vermont sites -- provided training in health fields (licensed practical nurse, registered nurse, specialty nurse, medical transcription, and radiation technology). One site (Arizona) offered training in fields outside of IT and health care occupations, including training for teachers, accountants, and electronic technicians/engineers.

Training Methods. Every program included a classroom training component, which was offered at an educational facility or at the job site (see Exhibit 6). Most programs also incorporated experiential learning opportunities either in a laboratory or on the job. Four of the six programs augmented training with some type of Web-based support. Instructors generally used the Web to post notices, syllabi, assignments, recommended reading, and links to other useful sites. One site (Massachusetts) implemented its full classroom instruction for one employer on the Web in an interactive mode. Another site (New York City) required that each student develop a Web site to demonstrate proficiency in Web design.

Interactive TV was used by one site (Vermont) to provide classroom instruction to students in remote audio-video labs throughout the state. Some technical and instructional difficulties were encountered, causing the grantee to recommend the presence of a technician whenever classes were scheduled. In addition, instructors were required to have a briefing on techniques to use when broadcasting live to multiple sites.

Training Hours and Program Duration. It is difficult to generalize about training hours and program duration. IT training programs ranged from two days to two academic years. Those programs offering training through a college setting with a degree objective required up to two academic years. Students enrolled in these programs could attend school full time during the week either during the day or at night with a scheduled Saturday class. The vendor-specific programs varied from a few days to several weeks, depending on the certification being sought. For example, the Microsoft Certified Systems Engineer training was offered as a series of 7 courses lasting from two days to three weeks each. These classes were offered in the evening or during the day, and the format affected program duration. Students could take these courses as part of a degree program or as stand-alone certification preparation.

Nurse training ranged from 10 weeks (including the clinical practice) for specialty care nurses to several years for some degree nursing programs. The grantees providing LPN training anticipated that some of these trainees would continue their formal education and become registered nurses.

Employer-based training for incumbent workers appeared to be generally of shorter duration (e.g., as short as two days to three weeks) and more narrowly focused, in comparison to training provided for unemployed or underemployed workers. However, there were also examples of longer-term employer-based training provided at the various program sites. On-site training appeared to have considerable employer support as release time could be granted with the knowledge that, in case of

emergencies, workers could return to their duties. Not all employers had the facilities or equipment necessary to support on-site training.

G.   SUPPORT SERVICES AND POST-PROGRAM ASSISTANCE

Funding for support services is not available through the H-1B grant (see Exhibit 7).   H-1B grantees reported that this was not an issue for most enrollees, as many participants were employed. When support services were needed, participants were referred to WIA or social service agencies for assistance.

Case managers were used in several sites to monitor enrollee progress, to act as a resource to help resolve personal or educational difficulties, and to provide post-placement help and tracking. Where needed (mostly in the case of unemployed or underemployed workers), a case manager or placement specialist would help with job search once training was complete. In one site (New York City) it was necessary to devote significant resources to assist participants with job search efforts due to a precipitous decline in IT employment opportunities.

EXHIBIT 7: SUPPORT SERVICES AND POST-PROGRAM ASSISTANCE

Participant Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Support Services	-No support services provided directly under grant, but referrals made to WIA and other agencies (especially for transportation, child care, and housing assistance)	-No support services provided directly under grant, but referrals made to WIA and other agencies -Pathways referrals receive support services paid by Pathways (e.g., transportation)	-No support services provided directly under grant, but referrals made to WIA and other agencies	-No support services provided directly under grant, but referrals made to WIA and other agencies	-Pay for exams, books, instructional materials -No support services provided directly under grant, but referrals made to WIA and other agencies	-No support services provided directly under grant, but referrals made to WIA and other agencies
Post-Training Services	-Primarily case management by Workforce Essentials staff during training period and for a year (or longer) staff visit with and call participants	-Emphasis on tracking attendance and outcomes -Several employers (e.g. Kino Hospital) provide ongoing case management/ mentoring	-Job search assistance by public agencies. -Private proprietary schools doing training are not required to assist with placement. At the time of the review, there was still an active labor market for IT workers and no one was particularly concerned that those trained wouldn't find work.	-Focus of nursing program on incumbent workers, so post-training services not much of an issue. -The hi tech training program was designed to last almost to the end of the grant at which time job placement services will be made available at the One Stop Centers and at the training facilities.	-Under ITA component – monthly contact by H-1B director with participants while in training -Under company-specific training – ongoing monitoring left to the employer	-Each participant assigned a Customer Service Representative to assist with support services needed . – Series of Job search workshops offered in evenings -Students required to develop web pages during training which could be used to demonstrate skills to potential employers.

H.   PROJECT IMPLEMENTATION

The sites visited reported several factors that facilitated in designing and

implementing the projects (see Exhibit 8):

- **Incumbent worker training.** Employers were asked what they needed to remain competitive in the market. Even where employers were required to contribute funds towards the training, it was still perceived as being worth the investment.

- **Established relationships with employers.** All grantees mentioned that they had very little time to get projects started, and if they had not had existing, positive relationships with employers and employer associations, it would have been very difficult to meet the HI-B grant requirements.

- **Prior experience in operating a government-financed training activity.** Certain of the requirements under the grant, such as matching funds, could have presented a problem for those not familiar with government grants. Each of these grantees had operated programs before or was currently involved with WIA or other workforce development activities. One site (Massachusetts) had piloted its training program using a prior government grant.

- **Serious shortage of trained individuals in the target occupation coupled with a pool of candidates meeting minimum requirements.** Clearly, there needed to be a demand for workers in the occupations for which training was planned. In addition, the training program would have failed in H-1B training sites if there was not an adequate supply of suitable candidates for training. Sites would also have had difficulty reaching full scale and achieving participation goals if they had attempted to mount their programs for only the unemployed individuals because of strong economic conditions and low unemployment rates at the time the initiatives started.

EXHIBIT 8: FACTORS AFFECTING PROJECT IMPLEMENTATION

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Factors Facilitating Project Implementation/Success	-Existing & well established relationships with employers and local training providers -Previous experience with administering training program, especially employer-based training -Employers willing to meet match requirements -Readily available pool of potential participants	-Existing & well established relationships with employers and local training providers -Low unemployment and local shortages in targeted occupations (esp. nursing) -Career centers available to help with assessment -Available pool of potential participants	-Existing & well established relationships with employers and local training providers -Recognition by employers that this was a very good deal given that the alternative was importing workers or sending workers to training themselves. The isolated nature of Alaska labor force dictates employers either train their own workers or pay to bring them in from lower 48 states or from foreign countries. - Recognition that establishing training center for vendor specific training would save money	-Desperate need for specialty nurses which resulted in Hospitals joining together. -Existence of piloted training programs and curricula which could be adapted. -Participants willing to be trained without promotion or increased wages -Closing of critical care facilities in neighboring NY resulting in extra burden on Vermont. -Low unemployment rate and nursing shortage - State population demographics portent continued labor shortages	-$15K planning grant from Comm Corp -Employers involved in prior state grant program, so already lined up and ready to go	-Existing & well established relationships with employers and local training providers - Support by Industry Specific Advisory Committees (formed under JTPA to advise Private Industry Councils)

Project Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Factors Hindering Project Implementation/ Success	-Slowing economy meant some employers did not want to partner -Grant started immediately upon award, leaving little time for start-up	-Flexibility needed in curriculum and schedule to accommodate incumbent workers	-Difficulty in start-up due to need for State approval of award and release of funds. -2-year grant period a hindrance when doing hi tech, hi skill training. The best that can be done to minimize the need for H-1B workers is to provide interested workers with the tools needed to climb the career ladder to those jobs	-Award of grant 1.5 months ahead of request by grantee thus leaving little time to prepare -Initial suspicion by hospitals that if workers were trained they might be "poached" by other hospitals. -Continued decline in the high-tech field nationwide	-No administrative costs included in Round 1 grants -Process for issuing ITAs had to be developed -Grant started upon award – leaving little time for start-up	-Employers wanting to train everyone in a unit including H-1B workers to avoid the appearance of favoritism. -National decline in high-tech -World Trade Center attack and decline in employer base -Unable to gain access to funds in a timely way. -Businesses are wary of government programs.

- **Available curricula to use as base for establishing training program.** All grantees used standardized, pre-existing curricula for their training programs. This enabled them to avoid spending significant time developing curricula. Several sites also worked with post-secondary institutions to develop a degree program (AA or BA), but even those programs relied to a large extent on existing course that were modified.

- **Established working relationships with training providers, both public and private.** Where there were existing relationships with training providers, it was easier for the grantees to develop tailored training programs for employers or to develop more non-traditional approaches to the delivery of credit courses.

- **Access to start-up funds.** One grantee was given private start-up funds to bridge the gap between the time the grant was awarded and when federal funds could be spent. This allowed the grantee to set up operations, engage staff, and begin developing the program.

Although our site selection process was designed to yield sites that were relatively successful in enrolling participants, all sites encountered some problems that hindered implementation. These problems included:

- **Availability of Funds.** Some grantees indicated that they did not have access to grant funds when the program was officially started. For some grantees, there were local grant approval processes that further slowed down start–up efforts. In two cases, grantees lost 3-4 months of operating time.

- **Grant Period.** A two-year grant period hindered implementation of some degree programs, even AA degree programs, because there needs to be time devoted to recruitment and assessment prior to enrolling people into training. In addition, there is little time at the end of longer training (provided within a two-year time frame) to provide placement assistance for those needing it. An option year on the grant does not fully address this problem because grantees cannot plan for the option year as part of their initial submissions. Some site administrators indicated that it would be more useful if the programs were for 3 years to 5 years.

- **Employer fear of government paperwork and audits.** Some employers feared that if they became involved with government sponsored training programs, that they would be engulfed by a mountain of paperwork and/or would open the door to government audits.

- **Inflexible Training Providers.** Incumbent worker training requires maximum flexibility on the part of training providers, and some just could not adapt. Small institutions and community colleges seemed to be more attuned to dealing with the working student.
- **Deteriorating Labor Market.** A number of programs started with a list of employers willing to partner in the program, but some did not follow through on their commitments to the program because of deterioration in the business climate and/or cutbacks in staffing. In response, programs sought to replace these employers with others not as affected by the economic downturn.

III. INTERESTING PRACTICES

This section of the report highlights a series of interesting and exemplary practices that were in evidence in the six H-1B project sites visited as part of this study. The case study summaries included in the next section of this report provide additional details on these and other interesting practices that H-1B training programs (and other training programs, in general) may find useful. Selected interested practices are provided below, and a more complete list organized by category follows.

- **The Individual Training Account (ITA) training component is closely connected with the one-stop career system, but employs pre-screening criteria for determining which unemployed and underemployed individuals are appropriate for receiving ITAs under the H-1B grant (Massachusetts).** In linking the H-1B project to its one-stop system, REB is able to generate a steady flow of unemployed and underemployed individuals with the potential for upgrading skills for entry into fields within the IT or telecommunications fields. The ITAs made available to the target population, while narrowly targeted to training for careers within IT or telecommunications, are more flexible in the sense that trainees are not limited to the WIA eligible list of providers or by the $5,000 cap normally placed on ITAs in the locality. However, to ensure that those who are recruited into the program are capable of and interested in higher skilled occupations in the IT or telecommunications fields, REB has developed pre-screening criteria and an assessment process through which individuals must go to receive an ITA (paid for out of the H-1B grant). Under the eligibility criteria, for example, the individual must have either recent employment (within one year) and/or current employment in an IT or telecommunications occupation and/or have "self-taught" skills equivalent to work experience in the field.

- **Exceptional employer involvement (Vermont).** The exceptional employer involvement in the nursing program might not be applicable to other fields, but is worthy of note. The situation in Vermont hospitals in regard to nurse shortages was critical and appeared to be getting worse. In the case of health care, having several small hospitals unable to serve critical care patients or support physicians in the operating room only resulted in increased demand for those services at larger hospitals and in a potential deterioration in the care of those who needed it the most. To overcome this statewide problem, employers,

educators, training professionals, state officials, associations, and other health care organizations had to come together to find a solution or they would all suffer. The grantee enlisted the aid of the Vermont Association of Hospitals and Health Systems and together they shared information on the H-1B training solicitation with all interested parties. They were able to overcome resistance by explaining program benefits and developing solutions to such problems as employee retention upon the completion of training. It is likely that severity of the situation made this unusual cooperation possible.

- **Unemployed workers are guaranteed jobs if they successfully complete the training program (Tennessee).** To be enrolled in the project individuals either had to already be employed or to have a commitment from an employer that they would be hired upon completion of H-1B funded training.

- **Utilization of an IT technical review board representative to determine whether candidates and proposed courses of study quality for support under the H-1B program (Alaska).** There was consensus that case managers did not have the technical expertise to evaluate participant readiness for IT training, nor were they able to determine whether the course of study proposed by the trainee or employer was appropriate under H-1B definitions and the current labor market. For this reason, when a participant did not have demonstrated skills or educational background, his/her file was submitted to the Alaska High-Tech Business Council for assessment. This careful screening minimizes the numbers of participants dropping out of the program due to their inability to complete the required coursework. It is too early to tell if this policy will affect placement success for those unemployed at the time of entry into the program.

- **Web-based training provided at job site (Massachusetts).** REB sponsors training at one employer site (JDS Uniphase), which provides training to incumbent workers via the Internet. Participants are enrolled in college credit courses through the Springfield Technical Community College. Lecture notes and homework assignments are disseminated over the Internet, so the participants can learn the material when it is most convenient for them. The firm has made laboratory facilities available, so that individuals involved in the training can complete required laboratory assignments without traveling to the community college campus.

- **Modification of training programs to provide college credit (Arizona).** A common problem in health occupations is that one cannot build on courses already taken if one wants to move up to a higher-skill job. For example, LPNs typically take courses that do not provide college credit, so they cannot count

their courses if they wish to become a RN. The Pima County project overcame this problem by negotiating with the local educational and training institutions so that the courses taken for a LPN program carried transferable credit.

- **Development of a Research Model for the purposes of predicting whether future enrollees would successfully complete the program (New York).** A team of researchers from the Center for Advanced Study in Education at CUNY, representatives from the NY Workforce Alliance, and CUNY trainers identified 185 data items to collect. Data is collected for all formal applicants for the long-term training component of the program. Pre-program, in-program, and post-program data is scheduled to be collected. Such items as employment history, interview scores, interest inventory scores, self-assessment of IT skills, attendance, and class performance are quantified. The objective of the data collection effort is to establish a model profile that will help predict which applicants will be successful in IT training programs. The data collection effort also provides management information for the project. Whether the results of this effort will be of use or not may depend on factors beyond the project's control.

A.   APPLICATION, SCREENING, AND PAPERWORK REQUIREMENTS

- **Application Process (Alaska).** In order to have training approved under the H-1B program, employers and participants must clearly articulate their training objectives, provide estimates of training costs, and identify and locate suitable training providers. In addition, the employer must provide a statement of need for both group programs and as part of the sponsorship for individual training. Along with this paperwork, a refundable deposit check of $100 per participant is required. (The participant receives the deposit back after completing the program.) These requirements serve several purposes:

    - Participants and employers take an active role in the design of the training program by specifying the needs training will fill
    - Program costs and match requirements are very clear up front
    - Participants have a better understanding of requirements for work in the IT field
    - The procedure may result in screening out applicants who are not highly motivated.

- **The Individual Training Account (ITA) training component is closely connected with the one-stop career system, but employs pre-screening criteria for determining which unemployed and underemployed individuals are appropriate for receiving ITAs under the H-1B grant (Massachusetts).** The Regional Employment Board (REB) of Hampden County emphasizes the importance of closely linking its ITA training component to the regular workforce development system – particularly the operations of its one-stop career centers – so that the H-1B project becomes another tool of the overall system to meet local economic development and workforce development system needs. In linking the H-1B project to its one-stop system, REB is able to generate a steady flow of unemployed and underemployed individuals with the potential for upgrading skills for entry into fields within the IT or telecommunications fields. The ITAs made available to the target population, while narrowly targeted to training for careers within IT or telecommunications, are more flexible in the sense that trainees are not limited to the WIA eligible list of providers or by the $5,000 cap normally placed on ITAs in the locality. However, to ensure that those who are recruited into the program are capable of and interested in higher skilled occupations in the IT or telecommunications fields, REB has developed pre-screening criteria and an assessment process through which individuals must go to receive an ITA (paid for out of the H-1B grant).   Under the eligibility criteria, for example, the individual must have either recent employment (within one year) and/or current employment in an IT or telecommunications occupation and/or have "self-taught" skills equivalent to work experience in the field. Other considerations (though not required) in the selection process are that the individual have an employer commitment to hire or upgrade and that the most recent/current wage from IT or telecommunications-related employment be in the $10-$12 range.

- **Streamlined contracts and paperwork for the employer-based training component (Massachusetts).** REB has found that in engaging employers in programs such as the H-1B program, it is essential to keep paperwork to a minimum and be as "non-bureaucratic" as possible. The agency has found that even when employers are offered the opportunity to train workers at little or no cost through government-sponsored grants, they are reluctant because of fears of being engulfed in inflexible eligibility/program requirements or having to collect and maintain mounds of paperwork. REB has consciously tried to keep program rules relating to who can be trained and the types of training that can be provided under the employer-based component as flexible as possible under the constraints of the grant. In addition, the agency has been very sensitive to any paperwork burden that it imposes on employers – trying at all times to keep it to the minimum needed to meet H-1B grant requirements.

B.   RECRUITMENT

- **Partnering employers play key role in recruitment of incumbent workers (Arizona).** Many of the participants (estimated at about two-thirds) came to the program as a result of referrals made by partnering employers. Employers notified workers of the availability of training opportunities at staff meetings, through company notices to staff (including e-mails), and word-of-mouth (from supervisors and fellow workers). Unemployed and underemployed workers often heard about the project through interactions with one-stop career center staff and seeing posted flyers about the program at career centers and other public facilities. The Community Service Department also subcontracted with a local service provider (Pathways) to help with recruitment of low-income individuals for the health care component. Pathways recruited individuals for the program at churches, area schools, and through other local social service agencies.

- **H-1B training funds have helped partnering firms to recruit, screen, and train unemployed workers to fill shortage occupations (Tennessee).** Grant funds have been particularly targeted by Workforce Essentials to help firms facing local shortages of workers within the health care sector. An emphasis has been placed on building the supply (i.e., pipeline) of nurses and other health workers that can enter the health care field and then over time advance to higher skilled and higher paid jobs.   For example, one of the key areas of concern locally (in part because the area served under the grant is largely rural) is a shortage of all types of LPNs and RNs.   With the help of Workforce Essentials' one-stop career center system, H-1B grant funds have been used to assist local health care firms with recruitment, assessment, and careful screening of candidates to enter LPN training. The availability of the grant also encouraged the technical school to form an LPN class in the local community, where nursing training had not been formerly available.

C.   EMPLOYER INVOLVEMENT

- **Exceptional employer involvement (Vermont).** The exceptional employer involvement in the nursing program might not be applicable to other fields, but is worthy of note. The situation in Vermont hospitals in regard to nurse shortages was critical and appeared to be getting worse. In the case of health care, having several small hospitals unable to serve critical care patients or support physicians in the operating room only resulted in increased demand for those services at larger hospitals and in a potential deterioration in the care of those who needed it the most. To overcome this statewide problem, employers,

educators, training professionals, state officials, associations, and other health care organizations had to come together to find a solution or they would all suffer. The grantee enlisted the aid of the Vermont Association of Hospitals and Health Systems and together they shared information on the H-1B training solicitation with all interested parties.   They were able to overcome resistance by explaining program benefits and developing solutions to such problems as employee retention upon the completion of training. It is likely that severity of the situation made this unusual cooperation possible.

D.   JOB COMMITMENT (Employer and Employee Commitments)

- **Unemployed workers are guaranteed jobs if they successfully complete the training program (Tennessee).** To be enrolled in the project individuals either had to already be employed or to have a commitment from an employer that they would be hired upon completion of H-1B funded training.

- **Two-year work commitment (Vermont).** By requiring a two-year employment commitment from trainees in the nursing program, employers were much more likely to participate in the program. They felt that their investment would be recouped in that period.   It is difficult to calculate when a training investment will pay off, but a negotiated employee-employer commitment does make sense. The commitment should be based on training costs and release time.

E.   CASH CONTRIBUTIONS FOR TRAINING

- **Establishing a substantial cash contribution for participating employers (Alaska).** A 60 percent cost-sharing requirement was developed after consultation with the local planning group.   The prevailing sentiment was that the H-1B grant training was a substantial benefit to the employers and they would be more than willing to participate. Employer participation has not been a problem so the assessment was accurate. By having a higher employer match, once government support diminishes, it will be less of a shock for employers to pick up the entire cost of employee upgrade training. Also, because this match is largely a cash match, the numbers of participants that can be served under the grant is considerably increased.

F.   *UTILIZATION OF WORK INVESTMENT BOARDS, ADVISORY BOARDS, OR INDUSTRY ASSOCIATIONS*

- **Utilization of an IT technical review board representative to determine whether candidates and proposed courses of study quality for support under the H-1B program (Alaska).** There was consensus that case managers did not have the technical expertise to evaluate participant readiness for IT training, nor were they able to determine whether the course of study proposed by the trainee or employer was appropriate under H-1B definitions and the current labor market. For this reason, when a participant did not have demonstrated skills or educational background, his/her file was submitted to the Alaska High-Tech Business Council for assessment. This careful screening minimizes the numbers of participants dropping out of the program due to their inability to complete the required coursework. It is too early to tell if this policy will affect placement success for those unemployed at the time of entry into the program.

G.   *TRAINING TECHNOLOGY*

- **Web-based training provided at job site (Massachusetts).** REB sponsors training at one employer site (JDS Uniphase), which provides training to incumbent workers via the Internet. Participants are enrolled in college credit courses through the Springfield Technical Community College. Lecture notes and homework assignments are disseminated over the Internet, so the participants can learn the material when it is most convenient for them. The firm has made laboratory facilities available, so that individuals involved in the training can complete required laboratory assignments without traveling to the community college campus.

- **Web-based training (Vermont).** As a result of the H-1B grant, part of the critical care program was translated to Web-based instruction. The Web focus is on case studies to encourage students to develop critical thinking skills. In addition, Web-based instruction also developed a student's sense of responsibility.   Students reported that they had more access to everyone involved in the program. The long-term benefits from translating classroom training to Web-based instruction are that more students will have access to program components for initial and refresher training and that there is potential to expand the audience nationwide. The effort to develop the Web-based program

took about 6 months, so it was not fully functioning for the first wave of students. Finally, it should be mentioned that as part of the curriculum development for both critical care and operating room nursing, interactive Web-based instruction was considered. As a result of student input, the program managers eliminated the operating room (OR) nursing component as not being suitable. This was a valuable lesson for designers. Not all programs benefit from using the Web as a training delivery mechanism, and early student evaluations provide essential feedback when considering Web-based and distance learning course delivery.

- **Satellite Training Labs (Vermont).** In a rural state such as Vermont, the existence of satellite training labs affords even those in remote locations the opportunity to obtain new skills and keep current with their professions. Normally, the nurse participants would have to spend full time away from home to attend classes. This was a personal drain on them and a financial drain on their employers. The training labs allow training time to remain the same but result in as much as a 50% reduction in time away from home. The labs are the sites for the Vermont Interactive Television programs, which means that all participants can attend classes at the same time but in as many as 12 locations throughout the state. (The demand for the courses was such that only four of the satellite labs were actually required for the program.) Course developers learned that using television as a training tool required training for instructors in a different set of presentation skills. They also learned that more time needed to be allocated to developing graphics and slides. Use of guest presenters is a risk unless the presenters are also provided training. Perhaps the most important lesson learned was that there are always technical problems, so there needs to be technical assistance at the delivery and receiving end of the transmissions.

H.   TRAINING PROGRAM MANAGEMENT

- **Providing remediation on the front-end of training and breaking training down into several modules helps to bring workers into training programs with varying capabilities and to move them along career pathways (Arizona).** Several of the training programs – such as the electronics and nursing training – are able to offer remediation prior to entry into regular degree or certificate programs. For example, in the nursing training program at Kino Community Hospital, a group of about 20 hospital workers (mostly certified nursing assistants (CNAs)) were able to attend a nine-month program (taught in the evenings and weekends at the hospital) that both remediated basic reading/math skills and provided instruction necessary for participants to prepare

to be certified as a licensed practical nurse (LPN). At the end of this nine-month remediation program, participants were ready to enroll at the beginning of the third semester of the registered nurse (RN) training program at Pima Community College and to complete their associate's degree in nursing within about one year. RNs at the hospital who already had their associate's degree in nursing, with the help of the H1-B grant, could enroll in training to obtain their bachelor of science in nursing (BSN) or master of science in nursing (MSN) at the University of Arizona. Hence, the H1-B program was able to provide upgrade training at virtually every level along the nursing pathway (e.g., bringing hospital workers without nursing degrees into the nursing field and upgrading existing LPNs and RNs who had been in positions for many years to higher nursing degrees).

- **Tailored Training (Massachusetts).** One of the challenges in providing training for incumbent workers is finding the time those workers can take away from work and/or family to upgrade skills in a meaningful way. Firms are often reluctant to undertake training for a number of reasons: (a) cost associated with developing curriculum and paying instructors; (b) lost production time while workers attend training (if training is during work time); and (c) worry that upgrading of skills will result in employees being lured away by other firms. Under this H-1B project, REB is providing much flexibility to the seven partnering firms in determining which workers are selected for upgrade training and the specifics of how and where training is provided. Each of the seven training programs are differently structured – some provide training at the worksite, others send workers to local training facilities; some give workers paid time off for training, others require that workers attend training on their own time or use at least some of their own time to attend training; some hire trainers and play a significant role in curriculum development, others send workers to accredited community colleges or propriety schools for training as part of regular courses offered through the institutions; and some provide training that leads directly to degrees or certifications, others provide training that upgrades skills, but does not lead to added credentials.

- **H-1B training grants have enabled local employers to train workers to meet rapidly changing technological requirements within the production process (Tennessee).** Manufacturing firms involved in this initiative have been afforded considerable flexibility in working with local training institutions to tailor training to meet the latest skill requirements and to provide training at times and places convenient for trainees. Often the training provided under the grant has been at the company's worksite (generally on company time or a combination of worker and company time). Firms have also been able to provide input in many instances as part of the curriculum development process to orient training to the production process and latest equipment being used.

- **Use of Immediate Trainee Feedback to ensure program relevance (New York).** Because so many of the incumbent worker programs are of such short duration, it is essential that the instructors cover all the necessary material to satisfy the needs of the trainees. In many cases, programs are developed specifically for an employer to meet a very targeted need. To help ensure that the training material is relevant, at the end of each day of training, formal student feedback is requested. The results of these evaluations are immediately shared with the instructors so they can modify the material or delivery.

- **Modification of training programs to provide college credit (Arizona).** A common problem in health occupations is that one cannot build on courses already taken if one wants to move up to a higher-skill job. For example, LPNs typically take courses that do not provide college credit, so they cannot count their courses if they wish to become a RN. The Pima County project overcame this problem by negotiating with the local educational and training institutions so that the courses taken for a LPN program carried transferable credit.

H.   INSTITUTIONAL DEVELOPMENT

- **Utilizing grant resources to enhance the capacity of a rural institution to provide training in IT (Alaska).** While training is available in the City of Anchorage, individuals residing outside the city do not have access to the same resources. For many people, employed or unemployed, traveling to Anchorage is not practical. Employed workers seeking to upgrade skills may have to work part time at their jobs, which means a lengthy commute to a training site may be impractical. For the unemployed, the costs involved in making the trip on a daily basis to Anchorage would be prohibitive. Providing grant resources to a smaller institution also meant that the program would have more visibility and be more important to the institution charged with its development. There is also some thought that the development of this program as an academic offering would allow those people, for whom accelerated training is too difficult, the opportunity to get into the IT field. For these reasons, the grantee determined that developing an IT curriculum for the Mat-Su College made the most sense.

- **Preceptor Training (Vermont).** The preceptor training component appears to have as much of a potential for long-term impact on the nursing shortage in Vermont as some more costly interventions. There was unanimity among those interviewed that new nurses were often in a "sink or swim" situation in their first months on the job. Many new nurses cannot survive in the environment and abandon the field. Considering that enrollments in nursing schools nationwide

are inadequate to meet current and future needs, to have those that make it through quit in the first few months of actual work is alarming. The preceptor training program is attempting to help experienced nurses develop the skills to nurture and encourage new nurses, something that appears to be currently lacking in the nursing culture.

I.   *DATA SYSTEMS*

- **Participant-level data system used to track participant characteristics, types of training received, and outcomes (Massachusetts).** REB has developed a Microsoft ACCESS database that enables the agency to track characteristics and the progress of participants receiving ITAs enrolled under the H-1B grant. At the time of intake, data is collected and entered into the system about the participant, including contact information, demographic characteristics, and work history. For example, demographic information includes: gender, age, highest grade completed, race/ethnicity, citizenship, veteran status, unemployment insurance status, weeks unemployed in the last 26 weeks, disability status, and whether the individual is economically disadvantaged. As the individual proceeds through the program, data are entered into the system on types and amounts of training activities the individual is engaged in (e.g., voucher amount, total hours of training, date of completion of training, type of training received). At the conclusion of training and during the period following training, data are entered into the system related to outcomes, including type of skill certification attained, whether the individual attained a wage increase, hourly wage, number of hours worked per week, job title, and whether the individual receives fringe benefits. As a result of data and analyses generated from this system, REB has been able to monitor regularly whom the H-1B project has served, types of training provided, and related outcomes. For example, reports generated from this system have helped to ensure that the program stays on target to meet program enrollment and outcome goals – and assisted in refining program interventions as the project has developed. The project has also employed a participant feedback survey, which has provided a steady stream of feedback relating to the how H-1B participants have rated each type of training provided under the project, as well as suggestions for how the project might be improved.

- **Development of a Research Model for the purposes of predicting whether future enrollees would successfully complete the program (New York).** A team of researchers from the Center for Advanced Study in Education at CUNY, representatives from the NY Workforce Alliance, and CUNY trainers identified 185 data items to collect. Data is collected for all formal applicants for the long-term training component of the program. Pre-program, in-program, and post-program data is scheduled to be collected. Such items as employment history, interview scores, interest inventory scores, self-assessment of IT skills, attendance, and class performance are quantified. The objective of the data collection effort is to establish a model profile that will help predict which applicants will be successful in IT training programs. The data collection effort

also provides management information for the project. Whether the results of this effort will be of use or not may depend on factors beyond the project's control.

J.   SERVICE AREA

- **The geographic area served by the H-1B program extends well beyond the workforce development board's service delivery area (Massachusetts).** REB, the workforce development board serving Hampden County, has used its H-1B grant to collaborate with employers, workforce development boards, and training facilities outside of its normal service area under WIA. In fact, training services provided under the grant serve workers and firms across four Massachusetts counties and extend across the state's border into Connecticut.

- **Two neighboring workforce development areas have partnered under the grant (Tennessee).** Workforce Essentials has partnered with the workforce board serving the nearby Nashville area, which expanded the area served by the H-1B grant from nine to 12 counties. This helped to expand the pool of employers and workers that the agency was able to serve under the project.

IV. SITE SUMMARIES

This section includes a summary describing the design and interesting practices on display at each of the six H-1B sites visited as part of the study.

WORKFORCE ESSENTIALS, INC. [TENNESSEE]

AWARD: $2,800,000

IMPLEMENTATION PERIOD: November 2000 – October 2002 (Round Three Grant
                                              Recipient)

MAJOR PARTICIPATING ORGANIZATIONS:

The lead agency on this H-1B training project is Workforce Essentials, Inc., which is
responsible for design, implementation, and ongoing administration of the grant.
Workforce Essentials (formerly the North Tennessee Private Industry Council) is a
private, nonprofit employment and training agency, headquartered in Clarksville, TN.
The fiscal agent of the North Tennessee Workforce Board (Local Workforce Investment
Area 8), Workforce Essentials provides a range of training programs tailored to meet the
needs of local businesses and workers. The agency also operates one-stop career
centers across a nine-county area in Northern Tennessee and at Fort Campbell
(Kentucky). Under the H-1B grant, Workforce Essentials is partnering with the Middle
Tennessee Workforce Investment Board, which serves a four-county area (including
Nashville). The project design features collaboration with nearly 30 employers in the
health care and manufacturing sectors, including St. Thomas Hospital, NHC/Franklin
Hospital, CEI Company, Aerostructures, Baptist Hospital, Standard Gypsum, and
Teleco. Community colleges, Tennessee Technical Centers, the Nashville State
Technical School, and several proprietary schools are providing training under the
initiatives. Workforce Essentials is also subcontracting with the International
Association of Machinists.

SERVICE AREA:

The service area for the H-1B project extends across a 12-county area in North and
Middle Tennessee (which coincides with the workforce investment areas served by the
two partnering workforce boards involved in the initiative). The service area contains
the 8-county Nashville metropolitan area (consisting of Cheatham, Davidson, Dickson,
Robertson, Rutherford, Sumner, Williamson, and Wilson Counties), and four outlying
counties (Houston, Humphreys, Montgomery, and Stewart). While including a major
urban area, the service area for the H-1B grant is a predominantly rural area (that
includes smaller cities and towns).

PROJECT DESIGN:

The goal of this project is to enhance skills, employability, and wages of 735 employed or unemployed individuals to meet the high-skill workforce needs of the region's employers. The project aims to upgrade worker skills and productivity, and in so doing, to lift wages of incumbent workers by 10 percent and unemployed workers (new hires) by 15 percent. In addition, the project is also intended to encourage local employers to invest in upgrading worker skills (by offsetting training costs) and to reduce worker turnover. To participate in the project, workers must either be currently employed or have a commitment to be hired (once training is completed) by one of the firms involved in the initiative. The project partners with employers primarily in the manufacturing and health care sectors. Training is provided for a variety of occupational fields, including electrical/electronics, mechanical, and industrial engineering; precision manufacturing assembly; manufacturing industry management; systems analysis/programming; and a variety of health careers (nursing, radiation technology, and medical transcription).

Workforce Essentials makes available its one-stop career center facilities – which have an extensive inventory of assessment tools and resources -- to assist employers in assessing each worker's capabilities, interests, and training needs. Employers may conduct their own assessment or utilize career center facilities. While most participants are assessed and tested, no standard set of tests is applied (some of the assessment tests used include the Valpar System S2000 and the Career Occupational Preference System [including the COPS, COPES, and CAPS]).

The training provided – curriculum, duration, where training occurs, and other features – is tailored to both workers' and companies' needs. Training mostly involves classroom instruction, though where appropriate clinical, laboratory, internships, and other types of hands-on instruction are provided. Instruction may be provided at an accredited educational or training institution (such as a community college) as part of regular courses offered through the institution or may be conducted at the employer site. Some employers train groups of employees under the initiative; other employers send workers on an individual basis to local training providers. The duration of training varies -- ranging from about 9 weeks to about two years (the average is about one year). Instructional hours per week also vary -- from several to over 30 hours. Training generally results in some type of certification, but may also result in a post-secondary (usually two-year AA) degree. Several examples of the types of training mounted by employers under this initiative follow:

- **NHC Franklin HealthCare** (located in Franklin, TN) – part of the National Health Corporation – faces critical shortages of all types of nurses (certified nurse's aides, licensed practical nurses, and registered nurses) to fill positions at its nursing home facility in Franklin. The nursing home – serving a mostly rural and

small town area -- faces nursing shortages, in part, because of the lack of a training facility in the locality, as well as other shortage conditions that generally affect nearly all health care facilities in the state, and nationally (e.g., high turnover rates, an aging nursing population, and inadequate numbers of young people entering the nursing field, an aging population with greater health care needs, and constraints on wages). The H-1B training initiative has enabled NHC Franklin HealthCare to partner with the Tennessee Technology Center at Dickson/Clarksville to offer a one-year LPN degree program in Franklin for the first time. One of the difficulties the locality has experienced is that nursing candidates from the community have had to go to other localities to receive nursing training – and once in another locality, have often not returned to practice nursing in Franklin. The aim of the project is to expand the pipeline of nurses in the locality by providing LPN training to move incumbent workers (e.g., CNAs and other workers already working at the nursing home) up to LPN positions and to bring new hires to the firm (who may not have been formerly in a health profession) that have LPN degrees. Once at the LPN level, the firm offers a tuition reimbursement program to assist workers in moving to higher levels of nursing (i.e., RNs). The LPN program is a one-year program (conducted over 4 quarters, involving 1,296 hours of classroom and clinical instruction). NHC, which helps with recruitment and screening of individuals for the program and pays 40 percent of the training costs, receives a commitment from trainees that upon completion that they will work for the firm for a specified period of time.

- **Standard Gypsum** (located in Cumberland City, TN), a manufacturer of wallboard, has provided upgrade training for 27 of its employees under the H-1B training program. The grant has enabled the company to forge a close linkage with the Tennessee Technical Centers to bring much needed training to its technical and administrative workforce. Under the grant, instructors from the Tennessee Technical Center provide instruction at the employer site for maintenance technicians, safety personnel, and human resources staff. The instruction, typically several hours per week, is conducted during standard work hours.

- **CEI Company, Ltd** (located in Springfield, TN), an automated automotive component manufacturer, has provided upgrade training for 176 incumbent workers. The goal of the training is to move technicians to higher skill levels to improve worker productivity, improve worker morale, and reduce turnover rates. Several types of training have been provided. Production technicians at the plant have been enrolled in electrical maintenance technician training at Nashville State Technical College. This training program offers six courses (for college credit) over an 18-month period that lead to an Electrical Maintenance Technical certificate. The curriculum is tailored to the skill requirements and production

processes at CEI. A Nashville State Tech instructor comes to CEI twice a week (a total of four hours) to provide instruction. CEI provides input on the curriculum, a classroom at the plant where instruction is provided, and paid time off for technicians to attend the training program. Nashville State Tech has also partnered with CEI to provide a 13-week introductory course and an 8-week advanced course in Statistical Process Control. A Nashville State Tech faculty member comes to CEI once a week (for two hours) to provide instruction, which includes a combination of lecture and in-class assignments. A total of 110 supervisors, engineers, and production technicians have attended this training, which also occurs on company time. Finally, CEI has sponsored some specialized, short-term training (lasting four or five days) on design and drafting for its employees using computerized applications (e.g., CNC and CAD applications).

RECRUITMENT METHODS

- **Employers:** Employers play a critical role in the program – screening workers to determine who is appropriate for training, making a commitment to hire new (unemployed) workers if they complete training, providing input on curriculum and teaching methods, providing training facilities (where appropriate), and providing partial payment for training and other types of in-kind matches.   Since its founding in 1992, Workforce Essentials had been involved in administering a series of training programs with employers in Northern Tennessee and so was already well connected with the employer community when it submitted its proposal for grant funds. As part of its proposal development process, the agency gained commitments to partner from many of the firms it has contracted with under the H-1B project. In addition, the agency sent out a mailing to the employer community notifying them about the program and asking about each employer's training needs.

- **Participants:** Incumbent workers involved in the program have nearly all been screened and referred by partnering employers. Employers examine their workforce for individuals who they feel would benefit from skills upgrading in occupations that Workforce Essentials and the firm have agreed conform to the H-1B high skill occupations. Unemployed workers mostly come to the program either through the recruitment efforts of Workforce Essentials' one-stop career centers or partnering companies' regular recruitment efforts. Individuals may be referred to the one-stop career centers by local human service agencies (e.g., welfare agencies) or downsizing employers; individuals may also hear about the career centers (and training opportunities such as those available under the H-1B program) at job fairs or via word-of-mouth. Career center staff has been notified

about the types of unemployed or underemployed individuals appropriate for the H-1B training program and referral procedures. Career center staff screens individuals for the H-1B program (as they do for other available education and training programs available through the center) – those who seem appropriate and interested are referred to the H-1B program for further screening and assessment. If appropriate, referrals are matched with partnering employers and only become enrolled under the H-1B program if a partnering employer agrees to hire the individual immediately or upon successful completion of training. Some employers – particularly those in the health care sector facing labor shortages – have conducted their own recruitment (for example, at job fairs and by placing advertisements in newspapers) and referred appropriate individuals to Workforce Essentials for further screening and enrollment in H-1B training.

ENROLLMENT:

The grant agreement indicates that a minimum of 735 individuals will be trained by the project termination date. As of November 2001 (with about one year remaining under the grant), Workforce Essentials had exceeded its goal, enrolling 812 individuals under the grant. Availability of participant characteristics is limited (in part, because the agency wants to impose as little reporting burden as possible on partnering companies and their workers). To date, an estimated three-quarters of those served are female; all participants have at least high school diplomas or GEDs, and many have some post-secondary certification or degrees.

COST SHARING POLICY:

Although the third round requirement under the H-1B grant is for 25 percent match of local funds to federal funds, Workforce Essentials requires employers to provide a 40 percent match. Partnering companies have met their match requirements mostly in the form of cash payments to cover a portion of the tuition costs, though some have also utilized in-kind matches (e.g., payment of worker wages during release time for training, provision of classroom space, and payment for books and uniforms).

INTERESTING PRACTICES:

- **Two neighboring workforce development areas have partnered under the grant.** Workforce Essential has partnered with the workforce board serving the nearby Nashville area, which expanded the area served by the H-1B grant from

nine to 12 counties. This helped to expand the pool of employers and workers that the agency was able to serve under the project.

- **H-1B training grants have enabled local employers to train workers to meet rapidly changing technological requirements within the production process.** Manufacturing firms involved in this initiative have been afforded considerable flexibility in working with local training institutions to tailor training to meet the latest skill requirements and to provide training at times and places convenient for trainees. Often the training provided under the grant has been at the company's worksite (generally on company time or a combination of worker and company time). Firms have also been able to provide input in many instances as part of the curriculum development process to orient training to the production process and latest equipment being used.

- **While primarily oriented training incumbent workers, H-1B training funds have also helped partnering firms to recruit, screen, and train unemployed workers to fill shortage occupations.** Grant funds have been particularly targeted by Workforce Essentials to help firms facing local shortages of workers within the health care sector. An emphasis has been placed on increasing the supply of nurses and other health workers that can enter the health care field and then over time advance to higher skilled and higher paid jobs.   For example, one of the key areas of concern locally (in part because the area served under the grant is largely rural) is a shortage of all types of LPNs and RNs.   With the help of Workforce Essentials' one-stop career center system, H-1B grant funds have been used to assist local health care firms with recruitment, assessment, and careful screening of candidates to enter LPN training. The availability of the grant also encouraged the technical school to form a LPN class in the local community, where nursing training had not been formerly available.

- **Program enrollment and provision of training is tied to a job with an employer.** To be enrolled in the project individuals either had to already be employed or to have a commitment from an employer that they would be hired upon completion of H-1B funded training.

EMPLOYER COMMENTS:

Employers involved in the initiative indicated that the program had brought much needed funding to help them expand training available to their workforce. One firm indicated that they had a strong preference for hiring locally – but could not always find the type of skills needed to operate their highly automated production process. For example, the firm has experienced great difficulty in finding qualified technical staff to

maintain production equipment. The H-1B program provided the funding needed to move current workers to higher levels of skill so that positions could be filled within the company and additional hires could then be made for lower-skill jobs. This particular firm was pleased with their ability to combine work with upgrade training right at the facility to boost skill levels of existing workers. Company administrators also indicated that the training increased productivity and helped to reduce turnover rates. A second firm indicated that the program had been critical in its efforts to respond to serious shortages of nurses. The training – while provided at the LPN level – helped to build the pipeline of nurses within the locality. The program helped with identifying viable candidate for entry into health careers and then helped to offset the training costs for the firm. A third company – in the manufacturing sector – indicated that the H-1B grant program had boosted skills and knowledge of the workforce, which led directly to productivity increases. Enhanced skill levels helped to make the job easier for workers, helped them to be more productive in their application of new equipment and production processes, and reduced turnover rates. The added training also provided workers with the opportunity to change occupational classifications and move to higher wage levels.

TRAINING PROVIDER COMMENTS:

The training provider interviewed indicated that the H-1B grant had been helpful in promoting links between area employers and training providers and encouraged local firms to increase investment in training workers because it offset training costs. The H-1B grant has provided an impetus for providing training at or near the employer's location and to provide clinical experience at area health care facilities.

TRAINEE COMMENTS:

Trainees involved in the program indicated that they probably would not have had the time or resources required to upgrade their skills without the help of the H-1B training program. With regard to the LPN training program, most participants would have been unable to pay the tuition for training on their own. The program also provided case management and help with referrals for other types of support that helped participants to make it through the ups and downs of full-time nursing training over a one-year period. According to students involved in the LPN training, employer involvement in the project is important – it "helps students know that they have a job at the end of the training…it helps to motivate and focus students."

OUTCOMES:

According to data available through January 2002, of the 162 participants who had completed training to date, 18 had resulted in new hires for partnering firms and the remaining 146 had upgraded their skills at their existing workplace. No placement or wage data were available at the time of the visit.

OVERALL ASSESSMENT:

As discussed in this summary, the H-1B funded training initiative's main effects have been to expand the availability of training for incumbent workers and new hires and to link training activities to the specific needs of the nearly 30 partnering employers. The grant has provided a very flexible means for partnering employers to work with local training institutions to develop curricula and provide instruction targeted on the current needs of the firm and its workforce. The collaboration between the firm and training provider also has helped to provide training that could be easily attended (often on company time at the worksite or a nearby training facility) and involves curriculum and training exercises that are directly relevant to day-to-day work of the trainee.

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PIMA COUNTY COMMUNITY SERVICES DEPARTMENT [ARIZONA]

AWARD: $1,500,000

IMPLEMENTATION PERIOD: March 2000 – March 2002   (Round One Grant Recipient)

MAJOR PARTICIPATING ORGANIZATIONS:

The lead agency and grant recipient is the Pima County Community Services Department, which is responsible for design, implementation, and administration of the grant. Pima County Community Services Department, part of the Pima County government, is the designated operator of the one-stop system and Workforce Investment Area (WIA), Welfare-to-Work, and Community Development Block Grants in Pima County. The project design features involvement of a range of training institutions and employers in the Tucson metropolitan area. Employer involvement is particularly focused in the health sector (especially hospitals and nursing homes), teleservices, information technology, electronics, aviation, and education. There are about ten leading employment partners (and less extensive involvement on the part of other employers), which include: Kino Hospital, Sunquest, Universal Avionics, Convergys, Honeywell, Opinion Research, Teletech, Cross County, and USA Relay. There are a variety of partnering training institutions (both public and proprietary training providers), including: the Pima County Community College, Southern Arizona Institute of Advanced Technology (SAIAT), Arizona State University, the University of Phoenix, the University of Arizona, Prescott College, and New Horizons. About half of the participants receive training through the community college system.

SERVICE AREA:

The targeted service area is Pima County, with a primary focus on the Tucson metropolitan area. Pima County is a large county encompassing both rural and urban populations, spanning almost 10,000 square miles (or about the area of the state of Massachusetts).

PROJECT DESIGN:

The goals of this H-1B training project for participants are to facilitate job placement, enhance prospects for job retention and career advancement, and promote wage growth and long-term self-sufficiency. The goal for partnering employers is to promote their involvement in training of both incumbent and unemployed workers to reduce critical shortages in the local labor force of professional and technical workers. The program promotes employer involvement by offsetting the costs of training and by helping employers to partner with local training facilities that can help with curriculum development and provide training. The goal of the project is to serve 300 individuals, including high- and low-wage incumbent workers and unemployed individuals.

The program design features four key components: (1) training to become registered nurses (RN) and other health professionals (known as the "Dare to Care" program component); (2) training to upgrade workers in teleservices to enter higher paying careers in the information technology (IT) field ("Train to Gain" program component); (3) training to upgrade teaching assistants to become teachers ("Reach to Teach" program component); and (4) training to enter the field of applied engineering ("Get in Gear to be an Engineer"). The project had a fifth component – accounting and management systems training -- during its early stages of development, but dropped the component after providing training for several participants (mostly dislocated workers).

In conducting these training components, the Pima County Community Services Department partners with about 10 local companies and a range of local training providers in the region. Instruction is provided at training institutions (such as community colleges) or at employer sites. While most of the instruction occurs in the classroom, where appropriate, there are laboratory assignments, clinical internships, and hands-on instruction tailored to the production process and workforce needs of specific employers. Duration and intensity of training varies across the four training components – ranging generally from about 6 months to two years overall, with instruction hours per week varying from 6 hours per week to full-time training. Some training is conducted on a group basis (e.g., the RN training), while other training is conducted through individual referral to local training providers (e.g., as part of regular classes operated by community colleges and proprietary schools). Some training results in the award of a post-secondary degree, including Associate's degrees in Nursing, Bachelor's degrees in Nursing [BSNs], or Master's degrees in Nursing [MSNs]) or certification; other lines of training provided under the project do not result in degrees or certifications, but enhance worker productivity and advancement prospects (e.g., individuals completing coursework in Visual Basic). Below, we highlight key features of three of the training components included in this initiative:

- **Health Care Training ("Dare to Care").** Similar to other localities around the country, the Tucson area suffers from critical shortages of nurses and other trained health professionals. Using H-1B training funds, the project has partnered with a number of area hospitals and the Pima County Community College District to improve the pipeline of individuals entering and advancing within nursing careers. The program has primarily targeted individuals already within health careers and provided needed financial resources (and flexibility in programming) to assist these individuals to advance along the nursing career path. For example, training has been provided to Certified Nursing Assistants (CNAs), Medical Assistants, Patient Care Technicians, and Licensed Practical Nurses (LPNs) to assist these individuals in achieving two-year Registered Nursing degrees. In addition, assistance has been provided for those already working as RNs to begin on the pathway toward achieving BSNs and MSNs at the University of Arizona and other institutions of higher learning. As of September 2001, a total of 81 (of the 318 served to date under the H-1B grant) have been enrolled in this program component. As part of the nursing component, Pima County Community College District worked closely with Kino Hospital on the design of a part-time training program to prepare CNAs, Medical Assistants, and Patient Care Technicians to obtain their LPNs and meet prerequisites for immediate entry into the RN program at the community college. A group of about 20 Kino Hospital employees were enrolled in this program, which met in the evenings and on Saturdays (so that participants could continue to work at their regular jobs at the hospital). A regular faculty member from the nursing program at the community college provides instruction, with classes meeting in a classroom at the hospital (to make it as easy as possible for participants to work and attend classes). Participants go to the community college campus to complete necessary laboratory assignments. At the conclusion of the nine months of coursework (which include math, biology, and workplace math), participants are prepared to enter the RN Associate's degree program at the community college campus. As part of the employer match, under this initiative, Kino Community Hospital provides a hospital worker to provide case management/tracking services, classroom space at the hospital, and allows for flexible work hours to facilitate attendance in the training program. Under the H-1B grant, Kino Community Hospital has also been able to enroll additional employees in upgrade training to obtain higher-level RN degrees (Associate degrees in Nursing, BSNs, and MSNs). About 20 of its employees – mostly LPNs who have met prerequisites for entering two-year RN programs – have enrolled (with the help of training vouchers issued under the H-1B program) in the Associate's Degree in nursing program operated at the nearby West Pima Community College campus. In addition, an additional 15 RNs have been enrolled in BS and MSN degree programs at the University of Arizona, with H-1B funding covering the costs of tuition.

- **Teleservices to IT/Computer Skill Career Path (Train to Gain).** About 15,000 individuals are employed in local teleservices companies, which provide technical services telephone support at help desks for large companies (e.g., airline reservations, technical support for new products, survey research, etc.). Beginning wages are typically $7-$8 per hour and top out about $10-$11 per hour, with little in the way of a career ladder to higher skilled and better paying jobs. Companies employing teleservices workers typically suffer from problems of high labor turnover (in the range of 150 percent annually and higher) – in part because there are few prospects for career advancement and wage growth. Under this program component, the Pima County Community Services Department is collaborating with four local teleservices companies – Teletech, Cross County, Opinion Research, and USA Relay. The four companies identify potential employees who they feel would benefit from the training provided under this project. Through September 2001, a total of 71 incumbent workers (from these four firms) had been enrolled in training under this program component. After an orientation session and assessment, participants are enrolled in basic computer training leading to A+ certification at Convergys (a local employer and training provider). The coursework is designed to take non-technical individuals and help them to make the transition to a job within the IT sector. The training is not viewed as an end, but as a place to provide computer hardware/software fundamentals that can enable an individual to obtain a job for the first time in the IT industry and provide the basis for more advanced training within the IT field. The training provided at Convergys is conducted over a six-month period (six hours per week for a total of 132 hours). The first part of the course work focuses on basic computer skills (e.g., beginning Windows, fundamentals of the Internet, basics of computer hardware, and networking); the final 48 hours focuses on providing instruction needed to pass the A+ certification test (e.g., basics of DOS, networking, and hardware). At the end of the coursework, participants take the practice A+ exam and are encouraged (though not required) to take the actual A+ certification exam. During the six-month training period, participants are expected to stay employed at their referring employer. At the end of the six months, however, they may apply for a job in the computer industry (generally with a new employer) or stay with their existing employer (but generally moving up to a higher skill job, such as help desk for new computer hardware or software applications). Upon completion of the six-month course, participants become eligible for a training voucher worth up to $2,000 (paid for under the H-1B grant) for more advanced training in the IT industry. Such vouchers may be used to enroll in short-term certification courses (e.g., MCSE, UNIX, and Cisco training leading to certification) or two-year degree programs in computer science (e.g., at the community college).

- **Applied Engineering Program ("Get in Gear to be an Engineer").** In collaboration with local manufacturers, the Pima County Community Services Department has developed a program component to assist incumbent, motivated, underemployed workers advance into highly skilled technical positions with local employers as certified electronic assemblers and technicians. The 18-course curriculum, designed to industry specifications, provides electronics training, math, computer, and writing courses. The program awards college credits toward an Associate's Degree from Pima Community College. The coursework is broken into two phases: (1) Phase I takes about nine months to complete and consists of 6 courses that result in participants receiving an electronic assembly certificate; and (2) Phase II is comprised of 12 courses requiring about two years to complete, and ends with participants receiving an electronic technician's certificate. Those who successfully complete the program can make application to enter the Bachelor's of Applied Science degree program at Arizona State University.

RECRUITMENT METHODS

- **Employers:** Employers have played an important role in this H-1B initiative, selecting incumbent workers to be trained, helping with curriculum development, making available training facilities, providing release time, and providing other in-kind matches. The Community Services Department had worked with a number of these employers in earlier training programs (such as the under its High-Tech/High Wage pilot project and other dislocated worker training projects), and was able to get some of these employers interested in participating under the H-1B training project. Some partnering employers had company executives who were members of the Workforce Investment Board (WIB); others heard about the project as a result of an announcement in a newsletter circulated by the local Chamber of Commerce.

- **Participants:** Many of the participants (estimated at about two-thirds) came to the program as a result of referrals made by partnering employers. Employers notified workers of the availability of training opportunities at staff meetings, through company notices to staff (including e-mails), and word-of-mouth (from supervisors and fellow workers). Unemployed and underemployed workers often heard about the project through interactions with one-stop career center staff and seeing posted flyers about the program at career centers and other public facilities. The Community Service Department also subcontracted with a local service provider (Pathways) to help with recruitment of low-income individuals for the health care component. Pathways recruited individuals for the program at churches, area schools, and through other local social service agencies.

ENROLLMENT

The grant agreement indicates that a minimum of 300 individuals will be trained by the project termination date (including unemployed, underemployed, and dislocated workers). As of September 2001 (with about six months remaining under the grant), the Community Services Department had enrolled 312 individuals under the grant. Of those served, about three-quarters (73 percent) were employed at the time of intake. Other available data on participant characteristics includes the following:

- 63% female;
- 61% white, 23% Hispanic, 8% black, 7% Asian/Pacific Islander, and 2% Native American; and
- the average years of education, 13.9; the average reading level, 12.3; and the average math level, 12.1.

COST SHARING POLICY:

Under the first round grant requirements, H-1B local grantees were to provide a non-federal match of 50 percent on federal funds expended under the project. Major sources of non-federal matching funds include Pima County general fund for a portion of the staff salaries (and related expenses) and Arizona Department of Education funds. In addition, the H-1B project typically looked to employer partners to provide at least a 25 percent match in the form of worker release time for training, case management services provided by employer staff, utilization of employer facilities and/or equipment, staff time allocated to administering the grant, and covering the cost of travel.

INTERESTING PRACTICES:

- **Flexible training hours and locations facilitate training for incumbent workers and firms.** Under this H-1B training project, the Community Services Department collaborated closely with firms and training providers on the development of curriculum and the scheduling of training. On several of the project components – notably, the nursing training, electronics, and computer skills training – the project was able to facilitate the participation of incumbent workers in training by arranging training hours in the evenings and on weekends and by bringing community college faculty to employer sites to provide classroom instruction.

- **Providing remediation on the front-end of training and breaking training down into several modules helps to bring workers into training programs with varying capabilities and to move them along career pathways.** Several of the training programs – such as the electronics and nursing training – are able to offer remediation prior to entry into regular degree or certificate programs. For example, in the nursing training program at Kino Community Hospital, a group of about 20 hospital workers (mostly CNAs) were able to attend a nine-month program (taught in the evenings and weekends at the hospital) that both remediated basic reading/math skills and provided instruction necessary for participants to prepare for certification as a LPN. At the end of this nine-month remediation program, participants were ready to enroll at the beginning of the third semester of the RN training program at Pima Community College and to complete their Associate's Degree in nursing within about one year. RNs at the hospital who already had their Associate's Degree in nursing, with the help of the H-1B grant, could enroll in training to obtain their BSN or MSN at the University of Arizona. Hence, the H-1B program was able to provide upgrade training at virtually every level along the nursing pathway (e.g., bringing hospital workers without nursing degrees into the nursing field and upgrading existing LPNs and RNs who had been in positions for many years to higher nursing degrees).

- **Implementing five component areas, complemented by training vouchers, enables the Pima County Community Services Department to provide training across a broad spectrum of occupations and industry sectors.** The training provided under the H-1B project in Tucson spanned a wide range of higher skills professions – teachers, nurses, accounting and management, electronics and engineering, and a range of IT professions. The grantee was also able to accommodate specialized training and advanced training needs by utilizing training vouchers that H-1B trainees could use at a large number of education and training vendors.

- **One-Stop Career Center centers assisted with both H-1B recruitment and assessment.** While most H-1B trainees came through direct referrals by partnering employers, one-stop career centers provided another way for incumbent workers and unemployed/underemployed individuals to learn about and enroll in the program. Career center staff promoted the availability of H-1B training services as another training resource open to the public. In addition, the career centers made their assessment facilities available to employers to help with assessing abilities and interests of workers for higher skill employment. The use of the reading/math tests (e.g., the TABE), interest inventory tests, and other diagnostic tools was tailored to the needs of employees and the specific occupational training being provided. Career centers could also effectively refer individuals enrolled in the program for other needed support services (e.g., basic

skills, life skills, substance abuse services, housing, etc.). The career centers could also refer those not enrolled under the H-1B grant to other training programs and providers.

- **Modification of training programs to provide college credit.** A common problem in health occupations is that one cannot build on courses already taken if one wants to move up to a higher-skill job. For example, LPNs typically take courses that do not provide college credit, so they cannot count their courses if they wish to become a RN. The Pima County project overcame this problem by negotiating with the local educational and training institutions so that the courses taken for a LPN program carried transferable credit.

- **Opportunity for a company providing training to incumbent workers to hire the workers into jobs with more advancement potential.** One organization provided training in IT work to incumbent workers at other firms. Part of the firm's motivation was that they could hire the trained workers for jobs with more upward mobility potential after they had completed the training and the six-month minimum stay with their current employer. To date, none of the trainees had taken advantage of this option, but the approach might work in some settings.

EMPLOYER COMMENTS:

Employers were favorable in their views about the training provided with H-1B training funds.   Under the health care component, one employer noted that the providing workers with "flex time" to attend training, case management/mentoring services, and convening classes at the employer site contributed to no one dropping out during the nine months that participants were involved in the training.

TRAINING PROVIDER COMMENTS:

One training provider noted that the "project gives skills to participants to get them in the door" within the IT sector. Another training provided noted that the H-1B program had enabled the educational institution "to move away from traditional education" and to respond to the specific needs of local employers. In designing the nursing curriculum, the training provider (a community college) noted that it was important to "design a part-time RN training program" – one that would enable training participants to both upgrade skills and at the same time continue to work in a full-time capacities at their jobs. In addition, the training provider noted that in designing the nursing curriculum, "we were asking our faculty to deliver a different type of program" than was typically provided within the community college.

TRAINEE COMMENTS:

Trainees involved in the program are favorable in their views about the flexibility of the training provided under the grant and in terms of how the project helped them to either enter a new field or advance to higher skill jobs within their occupation. Trainees within the IT training component noted that the program "provided hands-on training" which included special projects (such as installing a computer laboratory) which reinforced what was learned within the classroom. Other trainees noted that the H-1B training upgraded skills and increased the potential for promotion at their current job.

OUTCOMES:

The only systematic data available was on participation levels (overall and by each of the five program components) -- no performance or outcome data were available. Many program participants were still engaged in training activities and, hence, it was too early to assess participants' outcomes.

OVERALL ASSESSMENT:

The H-1B training program has enabled the sponsoring workforce development agency (the Community Services Department), employers, and training providers to develop several lines of training that are tailored to the needs of both workers and the employers. The grantee limited occupational training under the initiative to occupational areas where employers were finding it difficult to recruit sufficient numbers of workers and where higher-level technical skills were required and there was potential for career advancement. Some of the training areas were more successful than other – for example, the nursing, IT, and electronic components ended up training a large proportion of H-1B trainees (as opposed to the small numbers trained in the accounting/management and teachers training components. In addition, in these three areas, the grantee was able to carefully tailor curriculum and training methods to local employer and workforce needs – in particular, to make the training easily assessable for workers and geared to helping trainees make gradual steps along career pathways to higher paying jobs.

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VERMONT TECHNICAL SKILLS TRAINING PROJECT [VERMONT]

AWARD: **$2,658,000**

IMPLEMENTATION PERIOD: November 15, 2000 through November 14, 2002 (Round Three)

MAJOR PARTICIPATING ORGANIZATIONS:

The lead agency is the Department of Employment and Training (DET), which operates the grant on behalf of the Vermont Human Resources Investment Council. DET was responsible for identifying the partners and preparing the grant submission. Under the Health Training program component, the main partners are the Vermont Association of Hospitals and Health Systems, and 16 hospitals located throughout the state (mainly Fletcher Allen Health Care Facility, Mt. Ascutney, and Rutland Hospitals where programs were developed). Under the High-Tech training project component, the main partner is the Vermont Technical College

SERVICE AREA:

This program serves individuals and employers throughout the state. With the exception of Burlington, most areas are rural.

PROJECT BACKGROUND AND DESIGN:

The goal of this project is to provide specialty care training for employed Registered Nurses resulting in minimizing the need to bring in foreign workers and temporary contract nurses to fill these critical jobs. A total of 148 nurses are to receive this training. In addition the project plans to provide training to incumbent, unemployed, and dislocated workers in engineering technology. A total of 65 workers are expected to participate.

Nursing Program Component

The State of Vermont has been facing a crisis in the nursing field for several years. In 1998, a study of the condition of nursing in Vermont was commissioned, and shortly thereafter a Blue Ribbon Nursing Commission was established. The Commission

elaborated on the study and presented its findings in January 2001. Among the findings were:

- Vermont schools and colleges are producing 36% fewer nurses today (year 2000) than six years ago;
- The population of current RN's is aging (45 years old, on average);
- Aging baby boomers will contribute to increased demand;
- A point in time job opening count showed 168 vacancies for Registered Nurses; and
- Health care employers are using "traveling nurses"[8] to fill openings—they are paid more than co-workers and in 2000, cost Vermont hospitals $3.9 million over their budgets.

To alleviate some of these problems, the Commission made seven recommendations. Among the recommendations were the following:

- Create a Center for Nursing located at the University of Vermont in collaboration with Vermont state colleges to address ongoing issues of supply, education, practice, and research.
- Establish a partnership between the State of Vermont, health care providers, educators, and other health care partners to fund a comprehensive program to promote the profession of nursing.
- Increase state funding to expand nursing continuing education programs.

The timing of the study dovetailed with the announcement of the H-1B grant program. Nursing was included under the H-1B visa demand occupations, and Vermont had articulated the problems and some of the solutions in the 1998 study and as a result of the work of the Blue Ribbon Commission.

As part of the proposal preparation grant submission, a partnership among the State, health care providers, educators, and other health care organizations was developed. Hospital administrators had been fearful that by establishing a central mechanism to train current nursing staff, they might lose those workers to bigger, more affluent hospitals. These concerns were discussed and addressed by the partnership. It was decided that individuals trained under this program would have to commit to remaining with their current employer for two years.

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[8] Licensed Registered Nurses who work for agencies throughout the United States and are sent on temporary assignment. In addition to salary, living costs for these nurses are paid by the host hospital.

The nursing components would include training in critical care and operating room nursing, two of the more extreme areas of need. The critical care component would build on an existing but newly piloted program developed by Fletcher Allen Health Care. The Operating Room component would be developed based on criteria established by the Association of PeriOperative Registered Nurses (AORN). Both programs were to include classroom/laboratory instruction for between 72 and 82 hours offered over 5- 6 weeks at Fletcher Allen and at 4-distance education learning sites throughout the state (potential to use all 12 distance education sites in the state if necessary). The distance education model would be based on a program developed for licensed practical nurses funded by the state Workforce Education and Training Program using Vermont Interactive Television. This formal training would then be followed by clinical practice on the job for between 680 and 720 hours. The clinical practice involved identifying preceptors (mentors) who would work side by side with the newly trained nurses and evaluate their performance in accordance with a set of competencies. Preceptors were sent to the first day of each training program so they would have a better understanding of what the participants were to learn. There were to be 5 programs of critical nursing for 20 participants each and 5 programs of operating room nursing for 10 participants each. The program anticipated having 5 dropouts from each series.

As a result of early student evaluations, the distance-learning component of the operating room program was eliminated. The students felt that they needed direct contact with the instructors. Both programs are being videotaped for future use. In addition, use of the Internet was expanded to include providing the syllabus and reading materials, establishing communication links for the participants, posting notices regarding the program, and enabling the instructors to communicate with participants. With the success of Internet usage, the program developers began considering use of the Web as a means to fully deliver the critical care classroom component. The ultimate objective for this interactive program would be to train more Vermont nurses and potentially offer the program to other states on a fee for service basis.

As mentioned above, the program required having mentors or preceptors assigned to each new specialty nurse. This brought into question the quality of the preceptors. As part of the review of the nursing occupations, the Vermont Internship Preceptor Focus Group had been established. This group had recently developed a formal training program for preceptors, but delivery was limited due to lack of funds. As a result of the H-1B grant, the program could now be delivered to all Vermont hospitals. Initially the focus was to be on those persons who would be preceptors for the critical care and operating room nurses, but given that the lack of adequately trained preceptors was affecting retention of new RNs, the program was expanded to include any interested, experienced RN. Over a 2-day period these preceptors learn about adult learning, delegation, legal responsibilities, personality styles, communication techniques, critical thinking. Because preceptors report to Nurse Educators in each hospital, an additional

one-day workshop was developed for the Educators to prepare them to mentor and guide the preceptors in their new roles, reinforce learning, and eventually grant certification when preceptors have demonstrated competence.

All these components not only required money to implement, but they also required a substantial commitment of time by the employers, participants, and preceptors. The employers had very little choice regarding participation. In some cases, lack of adequately trained nursing staff in these fields meant that patients had to be sent to other facilities for treatment. Several participants had to travel long distances to attend classes and had to study on their own time. The preceptors had the additional burden of being responsible for patients and new nurses.

Providing incentives mitigated some of the time burden for the preceptors. Each hospital was given a small grant to assist in offsetting the cost of loss of staff and to enable them to reward the participating preceptors. This was considered a fee for training services. Preceptors only received the additional money during that time they worked with a nurse trained under the H-1B program, and the maximum payment was approximately $2,100.

Nurses participating in the critical care and operating room nurse training did not automatically receive pay increases, but there were other incentives:

- 6 college credits awarded upon completion of the critical care program continuing education credits were awarded for completion of the operating nurse program;
- certification was provided;
- successful participants were eligible for salary increases; and
- participants increased their personal satisfaction.

Because distance education and Web-based instruction were dropped from the operating room nurse program, psychiatric nursing training is being added using the savings. A 3-month program is planned for the summer of 2002. There will be 2 teaching days and three clinical practice days for 12 weeks.

High-Tech Program Component

The technical training project design initially anticipated using a core of 14 employers to supply workers (45) needing skills upgrade training. In addition, 20 unemployed and dislocated workers would be provided similar high skills training. The project anticipated utilizing Vermont Technical College to coordinate the program with Castelton and Lyndon State College and Community Colleges of VT as training providers. Technical high skills training was defined as training in:

- Computer science
- Electrical Engineering
- e-commerce
- Mechanical Engineering
- General engineering technology
- Telecommunications

A survey of Vermont employers had identified these skill areas as important and in demand.

Training was to be offered on-site at employer facilities, on-campus and via distance learning through Vermont Interactive TV, a statewide system of 12 real-time audio-video labs. The DET One Stop offices would conduct statewide public awareness and recruitment efforts to include interviewing, testing in math and writing, screening for educational preparedness, and administering interest and aptitude tests.

The original plan called for participants to spend one day per week in class over a 16-24 month period.

In reality, this schedule proved unworkable. The colleges claimed that the program would have to include 3 days per week of training. This adversely affected participation targets. Employers were much less likely to provide release time – paid or unpaid. The switch from one to three days resulted in a 40% dropout rate for the first class. The classes offered for the unemployed workers were not affected. There are two distinct programs now offered. One is directed to the needs and time constraints of the incumbent worker and the other is for the unemployed or dislocated worker. Both programs provide college credits, but the program attended by the unemployed and dislocated workers has more non-IT elements and will not only prepare participants for work in IT but will also prepare them to seek more advanced academic training resulting a Bachelor's Degree.   Apparently, several of the current enrollees in the academic track program are at the top of their classes and may be eligible for academic scholarships to complete their education.

The program has been able to offer all the necessary training at Vermont Technical College and community colleges.

The anticipated outcomes for the High Skills component are: industry approved certifications, AA Degrees, Salary increases for incumbents, employment for the unemployed, and improved skills for all.

RECRUITMENT METHODS:

Employers: Because 90% of the participants in this program are incumbent workers, employers played a central role in recruitment. For the health program, employers publicized the program internally along with eligibility criteria.   The following are minimum criteria (could be more restrictive depending on the hospital):

- Citizens/Green Card holders
- Licensed RN
- 6 months medical/surgical RN training
- Currently employed by hospital
- Two-year commitment to remain with sponsoring hospital

Each applicant had to supply:

- Resume
- Essay on interest in the specialty field
- Letters of reference
- Self-assessment of computer skills
- 2-year commitment letter
- Commitment to attend all courses.

The Nurse Manager for the specialty area at each hospital interviewed the applicant and determined whether the applicant would be endorsed and when they could be released. All applications were submitted to Fletcher Allen Hospital where they were jointly reviewed by instructors and the representative of the Vermont Association of Hospitals and Health Systems.

Preceptor training was widely publicized and individuals self-selected for participation. Three to five years of experience was the only requirement (hospitals acknowledge that this may have to be modified to a minimum of one year depending on continued interest). Hospital representatives felt that this training was generally useful even if the trainees were never selected to perform the preceptor function.

For High-Tech, the DET originally identified 14 employers interested in staff training through the H-1B program. Between the planning and award of the grant, all but two of these employers dropped out.   The two remaining employers identified participants to be trained. Additional employers were later added to the project.

Participants: The high-tech component accepted unemployed workers who were identified by staff at One Stop Centers. Employed workers also learned about the program from a variety of media announcements. Those workers had to consult with

their employers regarding participation because of the need to take time off to attend the program. If the employer agreed, the applicant could enroll.

ENROLLMENT:

The agreement indicates that a minimum of 213[1] individuals will be trained by the project termination date with a projected 202 completing training.

2001	Planned	In Training or Completed	Drop Out
Critical Care	57	38	NA
OR	20	18	2
High-Tech	48	43	10
Total	125	99	
2002			
Critical Care	38		
OR	33		
High-Tech	17		
Psychiatric	12[9]		
Total	100		
Grand Total	225		

Of the 225 to be trained, 205 are scheduled to be incumbent workers.

As of December 2001 (with approximately 10 months remaining), the project has 99 of the anticipated 125 still enrolled, or 79% of their target.

If enrollment continues at its current rate, it is likely that overall enrollment goals will be reached. Individual component targets and completion targets will be off, however. Currently (December 2001), the critical care program had a combined in-training and completion figure of 38. Given that the grantee anticipated a 95% completion rate for all components, the combined in-training and completion figure should have been 54, or 16 more than the current figure. Enrollment in OR nursing will be on target and high-tech will be on target.

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[9] The Psychiatric Nursing component was not included in the original plan so the grand total does not correspond with the grant. Approval was granted to add the program.

At the end of the grant, using current enrollment targets, 199 could possibly complete the program (2001 figures plus planned 2002). This would be a completion rate of 88% of target.

The grantee did not highlight the preceptor program in the grant other than to include a small budget line item, but training for that group will be significant. Nine sessions were held in the fall 2001 and over 150 nurses have been trained to date. Programs were filled weeks in advance.

The majority (possibly 99%) of the enrollees in the health component are female. Statistics on enrollments in the high-tech programs are collected but not aggregated at this time; however, the majority of enrollees are male according to the grantee.

COST SHARING POLICY:

Round Three grantees were required to provide a 25% match of local funds to federal funds. Vermont had no difficulty in achieving a far greater match because its health component required that employers continue salary for the entire training period. Classroom training for these programs ranged between 72 and 82 hours. The average salary of nurses is between $19 and $23 per hour. This generates over $239,000 in match for classroom training alone. Once the clinical portion of the training begins, the employer loses one full-time staff to the preceptor function. In essence, two people are working where there would normally be one. The clinical portion of the training averages 705 hours, and that generated over $2,190,000 in match. Additional match was in the form of reimbursement for travel and for time spent by the Nurse Educator. Other program costs could have been used to generate match but there was no need given that using just these elements resulted in about a 100% match.

The high-tech component requires a 25% contribution toward tuition costs. This contribution can come from an employer or from the employee when the employer would not/could not contribute. Employers do not uniformly support release time for incumbent workers in High-Tech. The grantee advises that only about 30% of the employers currently provide paid release time.

INTERESTING PRACTICES:

- **Web-based training.** As a result of the H-1B grant, some of the critical care program was translated to Web-based instruction. The Web focus was on case studies to encourage students to develop critical thinking skills. In addition, Web-based instruction also developed a student's sense of responsibility. Students

reported that they had more access to everyone involved in program. The long-term benefits from translating classroom training to Web-based instruction are that more students will have access to program components for initial and refresher training and that there is potential to expand the audience nationwide. The effort to develop the Web-based program took about 6 months, so it was not fully functioning for the first wave of students. Finally, it should be mentioned that as part of the curriculum development for both critical care and operating room nursing, interactive Web-based instruction was considered. As a result of student input, the program managers eliminated the OR nursing component as not being suitable. This was a valuable lesson for designers. Not all programs benefit from using the Web as a training delivery mechanism, and early student evaluations provide essential feedback when considering Web-based and distance learning course delivery.

- **Two-year work commitment.** By requiring a two-year employment commitment from trainees, employers were much more likely to participate in the program. They felt that their investment would be recouped in that period.   It is difficult to calculate when a training investment will pay off, but a negotiated employee-employer commitment does make sense. The commitment should be based on training costs and release time.

- **Satellite Training Labs.** In a rural state such as Vermont, the existence of satellite training labs affords even those in remote locations the opportunity to obtain new skills and keep current with their professions. Normally, the nurse participants would have to spend full time away from home to attend classes. This was a hardship for them and a financial drain on their employers. The training labs allow training time to remain the same but result in as much as a 50% reduction in time away from home. The labs are the sites for the Vermont Interactive Television programs, which means that all participants can attend classes at the same time but in as many as 12 locations. Course developers learned that using television as a training tool required training for instructors in a different set of presentation skills. They also learned that more time needed to be allocated to developing graphics and slides. Use of guest presenters was a risk unless the presenters were also provided training. Perhaps the most important lesson learned was that there are always technical problems, so there needs to be technical assistance at the delivery and receiving end of the transmissions.

- **Preceptor Training.** The preceptor training component seems to have as much of a potential for long-term impact on the nursing shortage in Vermont as some of the other, more costly interventions. There was unanimity among those interviewed that new nurses were often in a "sink or swim" situation in their first

months on the job. Many new nurses cannot survive in the environment and abandon the field. Considering that enrollments in nursing schools nationwide are inadequate to meet current and future needs, to have those that make it through quit in the first few months of actual work is alarming. The preceptor training program is attempting to help experienced nurses develop the skills to nurture and encourage new nurses, something that appears to be currently lacking in the nursing culture.

- **Exceptional Employer Involvement.** The exceptional employer involvement in the nursing program might not be applicable to other fields, but is worthy of note. The situation in Vermont hospitals in regard to nurse shortages was critical and appeared to be getting worse. In the case of health care, having several small hospitals unable to serve critical care patients or support physicians in the operating room only resulted in increased demand for those services at larger hospitals and in a potential deterioration in the care of those who needed it the most. To overcome this statewide problem, employers, educators, training professionals, state officials, associations, and other health care organizations had to come together to find a solution or they would all suffer. The grantee enlisted the aid of the Vermont Association of Hospitals and Health Systems, and together they shared information on the H-1B training solicitation with all interested parties individually and in groups.   They were able to overcome resistance by explaining program benefits and developing solutions to such problems as employee retention upon the completion of training. It is likely that severity of the situation made this unusual cooperation possible.

EMPLOYER COMMENTS:

The involvement of employers in the health care components of this program is so significant that it could be characterized as being run by employers. The first observation that is made is that in the absence of this program, there would be no coordinated, statewide training program for specialty nurse occupations.

TRAINING PROVIDER COMMENTS:

Again, there isn't much of a distinction between the employer community and the training community. Some classroom training is provided by the University of Vermont School of Nursing utilizing paid staff, but that training is augmented by lectures provided by the nursing community. The planning stages of the Psychiatric Nursing program envisioned having 9 guest lecturers.

The staff that was involved with developing the distance education portions of the critical care nursing program commented on the difficulties and challenges they faced in putting together the program.

TRAINEE COMMENTS:

Trainees interviewed were very positive about the program. One individual answered an employment ad in a nursing journal based on the fact that this training would be made available to her if she joined a Vermont hospital. She was one of several people who relocated based on the promise of this training.

The trainees reported that they had applied for the program because of their interest in the field. Both the hospitals and trainees confirmed the fact that specialty nurses do not necessarily get paid more. Advanced degrees and certain certifications may result in higher pay, but does not.

The preceptor training was well received by the trainees and those who had completed the program. One interviewee said she had performed this function for 28 years without any formal training. Another critical care nurse reported that when she was asked to be a preceptor, she was highly honored.

OUTCOMES:

Because this is a Round Three recipient, outcome information would be very incomplete if reported. Anecdotal information from one hospital confirmed that the critical care training resulted in her hiring many fewer "travelers," thus saving thousands of dollars. This kind of information is clearly quantifiable but, as of the date of our visit, was not being collected. The grantee will have to work at increasing enrollments to meet overall training targets.

OVERALL ASSESSMENT:

The high-tech component is similar to what we observed at other sites. Trainees are identified by employers, DET, or they self-select the program based on information in the media or from friends. They enroll in a college program, get training, and find work. Participating employers were identified in the grant, and when many dropped out, others were identified to take their place. The employment community for high-tech could not be characterized as any type of partnership. That is not to say that this approach is a poor one, and it may be the correct approach for this labor market.

The shining star of the Vermont H-1B program is the health component. Program designers reviewed existing studies on the condition of nursing in Vermont (including recommended solutions) and identified those components that could be implemented under this grant, thus addressing the H-1B training objectives as well as local hospital needs.

The Department of Employment and Training (DET) identified the Vermont Association of Hospitals and Health Systems as critical to implementing the program based on prior working relationships with VAHHS and on VAHHS' access to hospital decision-makers. VAHHS was able to:

- convince hospital members that this combined effort was worthwhile;
- minimize the concern about loss of staff to other hospitals;
- work to get college credit for some parts of the program;
- help with design and instruction of preceptor program; and
- convince nursing school deans to participate in program review activities.

VAHHS also assumed responsibility for managing data, tracking the matching funds, and reviewing participant applications.

Full use was made of off-the-shelf curricula, thus avoiding expensive course development costs. State of the art Web-based instruction was created that can be used for future training.

Designers were cognizant of the need to mount a program that could be sustained once federal funding stopped. By establishing a network of cooperating organizations, demonstrating cost savings, institutionalizing a course of study and producing well-trained workers, it is likely that this program will continue to serve the State of Vermont.

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MUNICIPALITY OF ANCHORAGE [ALASKA]

AWARD: $2,425,035

IMPLEMENTATION PERIOD: August 1,2000 - July 31,2002 (Round Three)

MAJOR PARTICIPATING ORGANIZATIONS:

The grantee is the Anchorage-Mat-Su Local Workforce Board with management by the Municipality of Anchorage Planning Department, Workforce Development Division. Major subgrantees are the Alaska High-Tech Business Council/IT Careers Consortium(AHTBC/ITCC) and Matanuska-Susitna College (University of Alaska).

SERVICE AREA:

While the grant was awarded to the Municipality of Anchorage, the grant service area mirrors the Workforce Investment Area under the Workforce Investment Act. This area comprises 26,235 square miles and includes the Municipality of Anchorage as well as the Matanuska-Susitna Borough. The most recent population figures indicate that more than 313,000 people (over 50% of the state's total population) live in the grant area. The labor force is approximately 188,000.

PROJECT DESIGN:

The project provides training for individuals and groups in basic and advanced IT courses. Individuals may be unemployed or underemployed. They may be currently working in the IT field, but require additional training to retain or advance in their occupation. Training is supported in public and private training institutions.

As part of the grant, an award was made to Mat-Su College, a branch of the University of Alaska, Anchorage, located in Palmer, AK, to develop comprehensive Hi Tech Training Curricula. The Mat-Su program includes a basic skills component for those individuals needing extra preparation for enrollment in advanced course work.   Basic skills include: introduction to computer technology; English; communications; electronics; mathematics; and engineering technology. Advanced IT Training includes vendor-specific courses leading to certifications as computer technicians, network technicians, network administrators, web design technicians, web programmers and

database specialists. Many of these courses have been developed by the hardware and software vendors; however, the College needed to modify the format for delivery in a variety of modalities. Students may attend in a traditional semester program or during intensive sessions on nights and weekends. "Boot camps" (intensive programs that meet 8 hours per day for one to several weeks depending on the complexity of the course) are also available. The courses are offered for credit that may lead to an Associate's or Bachelor's Degree. For example, training is offered for the following:

- A+ (Microsoft Entry Level Computer Service Technician)
- Microsoft Certified Systems Engineer (MCSE)
- Data Base Administration (MSDBA)
- Microsoft Certified Professional (MCP)
- Certified Cisco Network Associate (CCNA)
- Certified Cisco Network Professional (CCNP)
- Java Script
- Local Office Network Technician
- Computer Aided Drafting

Completing a certificate and passing an industry test for one or a series of vendor-specific programs prepares the trainee to enter an IT occupation at a higher than average wage even without a college degree.   The certification process isn't simple. Participants may be required to pass as many as 7 tests to obtain one certification. Schools offering a vendor certification course of study must be licensed by the vendor.

The curricula developed by Mat-Su will be made available to all branches of the University of Alaska. The grantee would have provided training in systems analysis and programming, but the time constraints of the grant made this impossible, as these two occupations normally require a BA degree.

Employers must provide cash payments of 60% of the cost of tuition, fees, and books for incumbent workers. Self-employed workers may also participate. In the case of a self-employed worker, assistance is offered to find other support for some or all of the required 60% contribution; however, the H-1B program limits its contribution to 40%. For unemployed workers, a variety of funding mechanisms are combined to provide training as well as support services. For example, eligible participants may be co-enrolled in the Workforce Investment Act (WIA) programs for youth, adults, or dislocated workers. Short-term, employer specific programs are funded through the grant for the purpose of upgrading units of workers.

One of the primary industries targeted for service through the grant was to have been communications.   Alaska is the largest of all states geographically, and has the smallest population density. This means that there are increasing demands/needs for

distance education and telecommuting. Newly installed fiber optic cables will enhance access to the Internet and its wide array of business applications. The thought was that once computer usage expanded due to improved communication technology, IT professionals would be in more demand throughout the business, education, manufacturing, and service industries. While communications firms have participated in the program, e.g., General Communications Incorporated and AT &T Wireless, it appears that the demand for training in other sectors has been even greater. In the past six months (June 2001 through December 2001), more than 50 employers have participated in the program. Some of those users are:

- Science Applications International Corporation
- State of Alaska (variety of departments)
- United States Air Force
- First National Bank of Alaska
- Alaska Native Medical Center
- Alaska Native Tribal Health Consortium

The training being developed is for most information technology related occupations, so the identification of an industry does not limit participants' opportunities for employment once the training is completed.

The screening process for entry into training is very thorough. It includes orientation programs where the program is described as well as a very comprehensive application and assessment procedure.

Employers may apply on behalf of a group of workers using the Tuition Assistance Application for Groups and Organizations. This document includes details from the employer regarding type of training desired, vendor name (if known), number of participants, cost per participant for tuition and materials, and a calculation of 40% of the costs. Along with the application, the employer must submit a completed Tuition Assistance Application for Individuals and Sole Proprietors. This document provides information on the individual trainee's education, training, and work history along with a confidential questionnaire tracking such items as ethnicity, citizenship, veterans' status, disabilities, UI status, offender status, and Pell Grant history. The employer submission requires an additional letter stating why IT training is needed (on company letterhead) and $100 per person deposit.

Employers may sponsor individuals for training as well. In the case of individual requests for training, the Tuition Assistance Application for Individuals and Sole Proprietors is completed, and the employer is asked to submit a Statement of Need identifying the IT educational skills training needed for employability and upward mobility within the organization. A sole proprietor of self employed person uses the

same form but is not required to submit a separate statement of needs; only a business license number is required. The $100 deposit is also required with these applications.

Unemployed individuals must make application in the same way but efforts are made to find alternative funds to support the 60% employer contribution. The High-Tech Business Council has some scholarship monies. Funding from the State Training and Employment Program also provides support.

Program selection is accomplished in several ways. For individual applicants applying through the One Stop for private proprietary school training, the application is initially reviewed in-house by Workforce Development Division staff. Where deemed necessary, the initial assessment includes aptitude and interest testing (GATB, TABE Academic, Strong, SDS). If the applicant clearly has a background in IT work or education in the field, the application may be tentatively approved and forwarded to the project manager for final acceptance and funding. Where there is any doubt about the suitability of a candidate for training or about the training itself, the application is forwarded to the High-Tech Council for review by more technically versed staff. If the High-Tech Council is satisfied, they notify the Workforce Development Division of their recommendation. Final approval is granted by the Project Manager. The High-Tech Council also reviews group applications for suitability.

Individuals applying for entry into the University of Alaska program are screened and selected by the university.

If a training institution has not been identified by the individual or employer, the default institution is the University.

According to the High-Tech Business Council, the screening process has resulted in a less than 10% drop out rate.

RECRUITMENT METHODS

The project director stated that outreach for this program was not necessary. A press release was issued announcing the grant and its purpose. Over 400 telephone calls were received within one week of the announcement requesting specifics on participation.

The High-Tech Business Council, a major partner, provided information to its membership on the grant as did the University of Alaska. In addition, there are "plenty of people who walk into the one stops asking for high-tech training." Between July 1,

2000 and June 30, 2001, 141 dislocated workers registered for WIA. Those that were suitable for IT training were offered an opportunity to apply.

Many military retirees choose to remain in Alaska. These are generally people in their late 30's and early 40's who are looking for a second full career. High-Tech is an attractive new career alternative for them. Job Corps is another source of applicants. Not only is the Job Corps located near the Mat Su Campus in Palmer, AK, but it also provides computer technician training which for some serves as an introduction to a professional career.   The Job Corps is not the only training center that is aware of the program. The private training vendors were also happy to refer candidates to the program because those candidates would normally return for the training.

ENROLLMENT

The grant agreement indicated that a minimum of 350 individuals would be trained by the project termination date. As of 9/30/01 the following had been achieved:

Plan		Actual thru 9/30/01
50	unemployed with little or no computer skills	
50	unemployed with limited computer skills	101
50	dislocated workers	
200	incumbent IT workers needing skill upgrade	180
Total		
350		281

We were provided with one report that differentiated between the three types of unemployed workers, but the figures were only through June 2001. The Participant Management Information System was still under development at the time or our visit.

During the discussion of enrollments, we were advised that the project would certainly meet its targets and more than likely exceed them by a significant amount if the program was allowed to continue for an additional year.

COST SHARING POLICY:

Employers seeking to upgrade current workers are required to contribute 60% in cash toward the workers training costs. An employed worker whose employer is unwilling or unable to provide the match may be required to contribute personally towards the cost

of training, although every effort is made to find other sources of funds to ameliorate this hardship. Employer response to this request has been positive. Based on data received after the site visit, we were able to calculate that for 185 programs offered between June 1, 2001 and December 20, 2001, the average program cost was $5,035 with a contribution of $3,038 by employers. Other sources of cost sharing have been in the form of scholarship support from the High-Tech Council and the State. On rare occasions, individuals provide the employer match if the employer is unable or unwilling to cover costs. Other match is in the traditional form of paid release time and in-kind contributions by the state and university.

INTERESTING PRACTICES:

- **Utilization of an IT technical review board representative to determine whether candidates and proposed courses of study quality for support under the H-1B program.** There was general consensus that case managers did not have the technical expertise to evaluate participant readiness for IT training, nor were they able to determine whether the course of study proposed by the trainee or employer was appropriate under H-1B definitions and the current labor market. For this reason, when a participant did not have demonstrated skills or educational background, his/her file was submitted to the Alaska High-Tech Business Council for assessment. This careful screening minimizes the number of participants dropping out of the program due to their inability to complete the required coursework. It is too early to tell if this policy will affect placement success for those unemployed at the time of entry into the program.

- **Employer application process requires clear training objectives and deposit for each participant.** In order to obtain training funds under the H-1B program, employers and participants must clearly articulate their training objectives, provide estimates of training costs, and if possible locate suitable training providers. In addition, the employer must provide a statement of need for both group programs and as part of the sponsorship for individual training. Along with this paperwork, a deposit check of $100 per participant is required. These requirements serve several purposes:

    - Participants and employers take an active role in the design of the training program by specifying the needs training will fill
    - Program costs and match requirements are very clear up front
    - Participants have a better understanding of requirements for work in the IT field

- The procedure may result in screening out applicants who are not highly motivated.

- **Utilizing grant resources to enhance the capacity of a rural institution to provide training in IT.** While training is available in the City of Anchorage, individuals residing outside the city do not have access to the same resources. For many people, employed or unemployed, traveling to Anchorage is not practical. Employed workers seeking to upgrade skills may have to work part time at their jobs, which means a lengthy commute to a training site may be impractical. For the unemployed, the costs involved in making the trip on a daily basis to Anchorage would be prohibitive. Providing grant resources to a smaller institution also meant that the program would have more visibility and be more important to the institution charged with its development. There is also some thought that the development of this program as an academic offering would allow those people, for whom accelerated training is too difficult, the opportunity to get into the IT field. For these reasons, the grantee determined that developing an IT curriculum for the Mat-Su College made the most sense.

- **Establishing a substantial cash contribution for participating employers.** A 60 percent cost-sharing requirement was developed after consultation with the local planning group. The prevailing sentiment was that the H-1B grant training was a substantial benefit to the employers and they would be more than willing to participate. Employer participation has not been a problem so the assessment was accurate. By having a higher employer match, once government support diminishes, it will be less of a shock for employers to pick up the entire cost of employee upgrade training. Also, because this match is largely a cash match, the numbers of participants that can be served under the grant is considerably increased.

EMPLOYER COMMENTS:

"We need to train Alaskan workers. Importing workers doesn't make sense because if they don't hate it here, their spouses probably will."

"This program was very useful for us as we have an on going need to have high skilled workers for the pipeline"

One nonprofit employer was using Mat-Su enrollees as interns. This was of great benefit to him as well as the interns. They had a chance to practice skills in a real life setting.

TRAINING PROVIDER COMMENTS:

Before the H-1B program, they saw few employer-sponsored trainees. The 40% contribution by the government has made a substantial difference in enrollments.

The existence of this program has enabled some employers to retain talented professionals. Staff doesn't have to leave to advance and stay current in their fields.

Incumbent workers are more likely to pass certification tests since they have on-the-job opportunities to practice what is learned in the classroom.

TRAINEE COMMENTS:

The Mat-Su program was a wonderful solution for a participant with a medical problem who couldn't commute to Anchorage.

Eight participants in Mat-Su program were from Job Corps. One reported that the Job Corps prepared him for advanced IT studies, and the H-1B grant is now providing the funds for him to pursue those studies.

Hands on experience is very important.

"I am eternally grateful" was the comment of one incumbent worker. He was recently employed but needed to upgrade his skills. He was facing taking 7 classes at a cost of between $1,300 - $1,800 each to become certified. With the H-1B program, his employer would support paying part of the tuition for two courses and testing fees.

"I had to get this training to keep my job."

"This was a great opportunity and I have told all my friends in IT."

"I found out about the program from my wife" (a program participant).

One participant received a Computer Science Degree in 1992. When he went to look for a job, he discovered that the courses he took had no relevance in the current labor market. For almost 10 years, he has been trying to find work in IT. During that period he went through bankruptcy; worked in a music store, an auto shop, and as a house cleaner. Through this program, he has been able to obtain current IT skills, and after some OJT, he was hired full time. He is now in charge of the 28-node system in his office. "This was life-altering for me."

OUTCOMES:

Unfortunately, the grantee had only been fully operational for about one year as of the date of our visit. The grant was technically awarded on August 1, 2000 but it had to be approved by the State of Alaska, a process which took approximately 4 months. It appears that this delay will not affect the grantee's ability to enroll the numbers of participants promised, but it does mean that significant outcome information is not currently available. Of the 281 participants reported as enrolled in the project through September 30, 2001, 156 were still in training as of November 8, 2001. Of the 125 no longer enrolled, we could not ascertain how many were incumbent workers, unemployed workers, or dislocated workers. There were no figures on dropouts. In addition, we do not know whether those individuals enrolled in courses leading to certification actually pass the certification tests. For some vendor programs, there are as many as 7 tests to pass before receiving the certification. There is no doubt that the training in preparation for certification will be useful to an individual in obtaining work in the IT field, but many jobs require certification and there is no substitute.

OVERALL ASSESSMENT:

The training program design is sound. The grantee involved the business community and educational community at the secondary and post secondary level in the planning and implementation of the program. An employer symposium was held early in the grant period to obtain support and input regarding training.

In addition, labor unions, Job Corps, and the Bureau of Apprenticeship and Training were invited to participate in program development.

The grantee utilized existing mechanisms within the One Stop Career Centers to recruit, test, assess, and manage the caseload. Because the grant could only be used to support actual training costs and program administration, the grantee identified other sources of funding to support trainee needs in the areas of transportation, subsistence, and child care. Program support was augmented by WIA funds, vocational rehabilitation funds, Job corps resources, State Training and Employment Program (STEP), dislocated worker resources, trade adjustment assistance, and Pell grants where possible.

Utilizing the University system to deliver newly developed IT curricula allows for the training to be replicated statewide. Offering IT courses for credit will enable some participants to not only obtain skills training but also to work towards the Associate's or

Bachelor's Degree. Many of the IT occupations for which H-1B visas are granted require college degrees, which means that this program provides career ladder training, an objective of the H-1B grant program.   Providing courses in an academic environment with credit may ultimately feed workers into those high demand IT occupations. In addition, developing and delivering the pilot in a more rural environment allows individuals who might not otherwise be able to participate the chance to get this training.   In addition, Alaska must develop in-state capacity to train its labor force. The process of training workers in other states is expensive and importing workers from the lower 48 states is not only expensive but often doesn't work on a long-term basis.

Involving knowledgeable IT professionals in the selection process helps to ensure that suitable candidates are enrolled in programs which make sense given the local labor market.

At this time, it is not possible to judge whether the program will meet its ultimate objectives in terms of placement levels, wage increases, and program sustainability.

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REGIONAL EMPLOYMENT BOARD OF HAMPDEN COUNTY, INC. [MASSACHUSETTS]

AWARD: $1,500,000

IMPLEMENTATION PERIOD: March 2000 – March 2002   (Round One Grant Recipient)

MAJOR PARTICIPATING ORGANIZATIONS:

The lead agency and grant recipient is the Regional Employment Board (REB) of Hampden County, Inc., which is responsible for design, implementation, and ongoing administration of the grant. The REB -- the Workforce Investment Board (WIB) serving Hampden County – is a nonprofit workforce development agency, headquartered in Springfield, MA. The project design features collaboration with seven key employers in IT and telecommunications sectors: JDS Uniphase; Coghlin Electrical Contractors, Inc.; Valley Communications Systems, Inc.; Systems, Software, & Support, Inc.; Yankee Candle Company, Inc.; eclectechs; and RCN Corporation. There are a variety of partnering training institutions, including: Springfield Technical Community College and its Northeast Center for Telecommunication Technologies and Center for Business and Technology; Greenfield Community College and its Rural Technology Partnership in MA.; and Capital Community College in CT. In addition, such proprietary training vendors as New Horizons Computer Learning Center and Computer Education Services Corporation (formerly IKON Office Solutions) provide some of the training.

SERVICE AREA:

The service area for the H-1B project extends across four counties in Western Massachusetts (Hampden, Franklin, Hampshire, and Worcester Counties), and into Connecticut (the Greater Hartford area). The service area includes several cities and towns, as well as large stretches of rural areas.   The WIBs that represent the regions outside of Hampden County are also major partners in the project, along with the One-Stop Career Centers operating in Hampden, Franklin, and Hampshire counties in MA.

PROJECT DESIGN:

The goal of this project is to upgrade the skills of 210 currently employed, unemployed, and/or underemployed workers to meet shortages of workers in the region's (Western Massachusetts and Greater Hartford/Northern Connecticut) information and telecommunications industries. Goals for unemployed and underemployed individuals are to facilitate job placement into full-time, well-paying, high-tech jobs; goals for incumbent workers are to ensure that workers retain the jobs they have and are able to move up the career ladder to fill high-skill and high-wage jobs in the future. The project design incorporates two main project components: (1) employer-based training initiatives being implemented with 7 corporations to meet their incumbent workforce training needs in information and telecommunications technology areas; and (2) Individual Training Accounts (ITAs) for unemployed and underemployed individuals to upgrade skills (through attainment of industry certifications and/or education degrees) to advance careers in the IT and telecommunications sectors.

Under the employer-based training component, REB partners with companies and local training providers in the region to develop training programs to upgrade incumbent workers' skills. The features of training provided – such as, curriculum, duration, and where training occurs – are tailored to each company's needs. Partnering firms may send groups of workers to local training providers for training courses, or they may have trainers come to their facilities to provide instruction. Examples of these employer-based training initiatives, based on the site visits conducted, include the following:

- At **JDS Uniphase** (located in Bloomfield, CT) a close partnership has been forged with the Springfield Technical Community College and the National Science Foundation (NSF)-funded Northeast Center for Telecommunications Technology to provide distance learning (through Internet web-based training) opportunities in the telecommunications field for incumbent workers. Workers involved in the training program at JDS Uniphase are working toward an Applied Science Associate's Degree or certification in Telecommunications Technology with a Photonics Option. Workers involved in the project work toward their Associate's Degree or certification similar to other community college students, but are able to do so by downloading lecture notes and homework assignments via the Internet (referred to as "asynchronous distance learning"). Workers conduct the laboratory portion of the coursework at a lab facility at the employer site (which is available 7 days a week). Trainees typically take one or two courses per term (each is a 15-week course) and receive regular college credit from the community college. Trainees may meet with instructors for additional help in-person or communicate via email. As of December 2001, a total of 80 workers at JDS have received training through this initiative

- At **Coghlin Electrical Contractors, Inc.** (located in Worcester, MA), some employees involved in the H-1B initiative take courses leading to an Associate's or Bachelor's Degree in computer sciences and/or telecommunications; others attend short-term product-specific workshops (by Lucent Technologies, 3M, Krone, and others). As of December 2001, a total of 41 Coghlin employees (including managers, sales workers, technicians, and apprentices) have been enrolled in training under the initiative.   Some workers have had courses paid for through the grant at local accredited institutions of higher education (particularly Worcester Tech), which has helped them in moving toward either an AA or BS degree (usually in the telecommunications field). The H-1B grant has also provided much needed financial support for Coghlin to send workers (as a group or individually) for short-term training sessions (lasting from one day to a week), such as Microsoft Certified Systems Engineer (MCSE) training modules, AutoCAD training, and product-specific training. In addition, the firm has sponsored some training workshops at its in-house training facility.

- At **Systems Software Support, Inc.** (located in Northfield, MA), incumbent workers have attended short-term training programs to upgrade skills and obtain certifications (e.g., a one-week training program held in Pittsburgh for training on Marconi products or a UNIX training program). Through December 2001, a total of 14 workers at the firm (mostly the technical staff) have attended a wide variety of IT training courses leading to MCSE, CISCO, Nortel Bay Networks, COMPAC ASE, Marconi, Novell Certified Engineer, and SCO ACE certifications.   For example, using H-1B training funds, the firm has bought a block of training hours at a local IT training facility and sent technical staff for 3- to 5-day MCSE training courses. Under its H-1B grant, the firm has also paid an instructor to train a group of eight technicians on AutoCAD (held at an in-house training facility two nights a week over a four-week period). In providing salary increases to its workers, one of the critical factors the firm takes into consideration is attainment of certifications (such as a MCSE or UNIX certification).

In addition to providing grants to companies to upgrade existing worker skills, the REB also uses H-1B grant funds to pay for training (using Individual Training Accounts [ITAs]) to upgrade skills of unemployed or underemployed workers. To qualify for ITAs under the project, an individual must have at least a high school diploma (most had some post-secondary education) and experience working in the IT or telecommunications industries. The aim of the ITAs is to provide these individuals with training to move up the career ladder in the IT or telecommunications fields by providing advanced industry certifications and/or post-secondary degrees. No maximum (cap) has been placed on the ITA (the average ITA has been about $10,000), and trainees were not limited in their choice of training providers to the WIA eligible list of providers. Most training has been provided through community colleges or proprietary schools.

Those involved in the ITA component of the program have received the following types of training: (1) industry cortication – A+, Microsoft Certified Professional and Systems Engineers, Novell Engineers, Networking Engineers, Internet Web Maters (Design, E-Commerce and Enterprise Developers) Net+, and I-Net+; (2) computer programming courses – Computer Aided Design, Web Design, JAVA, Flash, and Unix/Linux; and (3) computer degrees – Micro-Computer Applications and Information System Processing.

RECRUITMENT METHODS

- **Employers:** Employers have played a central role in the employer-based training component of the program – selecting workers to be trained, helping with curriculum development, providing training facilities where appropriate, providing release time, and providing other in-kind matches. REB had been involved in training programs with the employer community for many years – and so, was able to recruit among firms with which it had previously worked. In addition, community colleges and other training partners, as well as the local Chambers of Commerce, provided suggestions of possible firms that might be interested in being part of the initiative.

- **Participants:** Participants in the employer-based training component have been identified and selected by the seven employer partners. Employers notified workers of the availability of training opportunities at staff meetings, through company memoranda, word-of-mouth, and putting up flyers in the worksite. Employers have had considerable flexibility with regard to determining which workers are appropriate for upgrade training. Under the ITA program component, most participants learned about the program at the one-stop career centers (usually through discussions with career center staff).

ENROLLMENT

The grant agreement indicates that a minimum of 210 individuals will be trained by the project termination date (including 130 employed and 80 unemployed or underemployed individuals). As of December 2001 (with three months remaining under the grant), REB had enrolled 222 individuals. Of those served, 180 (81 percent) were employed; 25 (11 percent) were unemployed; and 17 were underemployed (8 percent). REB maintains a participant data system, which includes data on characteristics of participants:

- 80% male
- 84% white; 4% black; 3% Hispanic; 9% Other

- 48% high school graduates; 8% post-high school attendees; 44% college graduates
- 72% had earning of $15 or more per hour in their most recent job

COST SHARING POLICY:

Under the grant, though the first round requirements were for 50 percent match of local funds to federal funds, REB's goal was to achieve a dollar-for-dollar (100 percent) match on federal funding. Under the employer-based training component, REB sought a 10 percent cash match and 85 percent in-kind match. To date, the match from employers has averaged 123 percent of federal funds. However, there has been substantial variation across employers in the actual match provided, ranging from 10 percent to 410 percent of expenditures. Most employer match has been in-kind (91 percent) versus in cash (9 percent). Companies have provided match in-kind match in a variety of ways, including worker release time for training, investment in and use of on-site training facilities and/or labs, time allocated to administering the grant, and covering the cost of travel.

INTERESTING PRACTICES:

- **The geographic area served by the H-1B program extends well beyond the workforce investment board's service delivery area.** The REB, the workforce investment board serving Hampden County, has used its H-1B grant to collaborate with employers, workforce investment boards, and training facilities outside of its normal service area under WIA. In fact, training services provided under the grant serve workers and firms across four Massachusetts counties and extend across the state's border into Connecticut.

- **Firms have great flexibility to tailor training to meet the skill requirements of the workforce, and to provide training at times and places that are convenient for trainees and the employer.** One of the challenges in providing training for incumbent workers is finding the time those workers can take away from work and/or family to upgrade skills in a meaningful way. Firms are often reluctant to undertake training for a number of reasons: (a) cost associated with developing curriculum and paying instructors; (b) lost production time while workers attend training (if training is during work time); and (c) worry that upgrading of skills will result in employees being lured away by other firms. Under this H-1B project, the REB has provided much flexibility to the seven partnering firms in determining which workers are selected for upgrade training and the specifics of how and where training is provided. Each of the seven

training programs are differently structured – some provide training at the worksite, others send workers to local training facilities; some give workers paid time off for training, others require that workers attend training on their own time or use at least some of their own time to attend training; some hire trainers and play a significant role in curriculum development, others send workers to accredited community colleges or propriety schools for training through regular courses offered through the institutions; and some provide training that leads directly to degrees or certifications, others provide training that upgrades skills, but does not lead to added credentials.

- **The ITA training component is closely connected with the one-stop career system, but employs pre-screening criteria for determining which unemployed and underemployed individuals are appropriate for receiving ITAs under the H-1B grant.** The REB emphasizes the importance of closely linking its ITA training component to the regular workforce development system – particularly the operations of its one-stop career centers – so that the H-1B project becomes another tool of the overall system to meet local economic development and workforce development system needs. In linking the H-1B project its one-stop system, REB is able to generate a steady flow of unemployed and underemployed individuals with the potential for upgrading skills for entry into fields within the IT or telecommunications fields. The ITAs made available to the target population, while narrowly targeted to training for careers within the IT or telecommunication fields, are more flexible in the sense that trainees are not limited to the WIA eligible list of providers or by the $5,000 cap normally placed on ITAs in the locality. However, to ensure that those who are recruited into the program are capable of and interested in higher skilled occupations in the IT or telecommunications fields, REB has developed pre-screening criteria and an assessment process through which individuals must go to receive an ITA (paid for out of the H-1B grant). Under the eligibility criteria, for example, the individual must have either had recent employment (within one year) and/or current employment in an IT or telecommunication occupation and/or have "self-taught" skills equivalent to work experience in the field. Other considerations (though not required) in the selection process are that the individual have an employer commitment to hire or upgrade and that the most recent/current wage from IT or telecommunications-related employment be in the $10-$12 range.

- **Exemplary management information system developed to track participant characteristics, activities, and outcomes.** The REB has developed a Microsoft ACCESS database that enables the agency to track characteristics and the progress of participants receiving ITAs enrolled under the H-1B grant. At the time of intake, data is collected and entered into the system about the participant, including contact information, demographic characteristics, and work history. For

example, demographic information includes: gender, age, highest grade completed, race/ethnicity, citizenship, veteran status, unemployment insurance status, weeks unemployed in last 26 weeks, disability status, and whether the individual is economically disadvantaged. As the individual proceeds through the program, data are entered into the system on types and amounts of training activities the individual is engaged in (e.g., voucher amount, total hours of training, date of completion of training, type of training received). At the conclusion of training and during the period following training, data are entered into the system related to outcomes, including type of skill certification attained, whether the individual attained a wage increase, hourly wage, number of hours worked per week, job title, and whether the individual receives fringe benefits. As a result of data and analyses generated from this system, the REB has been able to monitor regularly whom the H-1B project has served, types of training provided, and outcomes. For example, reports generated from this system have helped to ensure that the program stays on target to meet program enrollment and outcome goals – and assisted in refining program interventions as the project has developed. The project has also employed a Student Feedback Survey, which has provided a steady stream of feedback relating to the how H-1B participants have rated each type of training provided under the project, as well as suggestions for how the project might be improved.

- **Web-based training provided at one employer site.** REB sponsored training at one employer site (JDS Uniphase), which provides training to incumbent workers via the Internet. Participants are enrolled in college credit courses through the Springfield Technical Community College. Lecture notes and homework assignments are disseminated over the Internet. The firm has made laboratory facilities available, so that individuals involved in the training can complete required laboratory assignments without traveling to the community college campus.

- **REB has streamlined contracts and paperwork for the employer-based training component.** REB has found that in engaging employers in programs such as the H-1B program it is essential to keep paperwork to a minimum and be as "non-bureaucratic" as possible. The agency has found that even when employers are offered the opportunity to train workers at little or no cost through government-sponsored grants, that employers are reluctant because of fears of being engulfed in inflexible eligibility/program requirements or having to collect and maintain mounds of paperwork. REB has consciously tried to keep program rules relating to who can be trained and the types of training that can be provided under the employer-based component as flexible as possible under the constraints of the grant. In addition, the agency has been very sensitive to any

paperwork burden that it imposes on employers – trying at all times to keep it to the minimum needed to meet H-1B grant requirements.

Therefore, the project does not require employers to provide as much information on trainees/employees as individuals being served through the ITAs in terms of Social Security numbers, home addresses, etc. It does, however, gather key demographic data and job information (i.e., titles, wages, length of employment) as well as require outcomes to be reported such as increase in wages, job promotions, skills gains, and the like in order to document successes.

- **At one employer, both union and non-union workers received training.** One participating employer has a partially unionized workforce, and REB was able to work with the firm to develop procedures so that both types of workers could participate in the training offered through the program.

EMPLOYER COMMENTS:

Employers were very favorable in their comments about the employer-based training component of the program. For example, one employer comments: "fantastic…there is no way we could have provided training and maintain our profitability without the grant…the grant helped us to improve the IT credentials of our staff." The credentialing of staff involved in the training (e.g., MCSE certifications) helps both from the standpoint of making the firm more competitive in its bids and workers more productive on the job. A second employer notes that the "H-1B grant has allowed us to educate and grow our young people…the grant has helped our managers to move to higher levels of technical skill, which has enabled them to generate more work for the firm (creating jobs)…the availability of (H-1B sponsored) training has helped us in recruitment, bids for new jobs, and brought us loyalty from our employees." A third employer observed that the H-1B program had helped the firm in upgrading skill levels of a broad range of its workforce – from assembly line workers to technicians to engineers. This employer's ability to "invest in its employees has made workers more loyal to the firm." This firm is giving consideration to replicating the types of training pioneered under the H-1B grant at other company facilities.

TRAINING PROVIDER COMMENTS:

The training provider interviewed indicated that the H-1B grant had provided the opportunity to work closely with a local employer and the Northeast Center for Telecommunication Technology (NCTT) on the development of two new educational programs: (1) an Associate of Applied Science in Telecommunications Technology

Degree with a concentration in Photonics (68 credit hours) and (2) a Certificate of Completion in Telecommunications Technology with a concentration in Photonics (28 credit hours). The curriculum -- tailored to the training needs of the company and designed so it is available to students via the Internet – has enabled the community college to provide training that flexibly meets the often constrained time that incumbent workers have available for upgrade training. For example, workers who might not have felt that they could travel to the campus for classroom instruction can download and review lecture notes and homework assignments at any time (day or night, and on the weekends) and complete lab assignments at the company's lab.

TRAINEE COMMENTS:

Trainees involved in the program are very positive in their comments about how the various training programs have helped them to upgrade skills and move forward in their careers. In particular, trainees commented on the flexibility of the training sponsored under the grant – including both short- and longer-term training – and about how without the grant they would have likely been unable to pursue upgrade training. One participant observed that the H-1B training he had been involved in had "increased my knowledge in the IT field and given me confidence…the certification I received led directly to a salary increase." Another trainee involved in H-1B training taken via the Internet liked the "convenience of it…I can do it anytime…when my car battery died, I could still do the coursework." Another trainee noted that some courses are harder than others to conduct over the Internet and that, in general, taking distance-learning courses "takes a lot of discipline." Several trainees involved in short-term IT training (e.g., MCSE training) noted that they had not yet taken or passed certification tests after they had completed their courses – but that even if they did not eventually take or pass the certification test, they would still benefit from what they had learned.

OUTCOMES:

REB has a participant-level data base which allows it to track a number of key outcomes, including whether individuals complete training, receive advanced skill certifications or degrees, attain job upgrades or increased wages, and, for unemployed workers, whether they are placed into new jobs. As of December 2001 (with several months remaining and many participants still involved in training), the available outcome data are incomplete. The average wage at placement for 12 trainees placed into jobs to date is $18.42 per hour (however, it is important to note than many more remain involved in training activities). Of the small numbers that have completed training, 8 have earned certificates (many are waiting to take exams related to their certifications); none have earned Associate's or Bachelor's degrees under the program.

OVERALL ASSESSMENT:

As discussed in this summary, the H-1B funded training provided under this initiative is carefully tailored to the requirements of employers and the needs of individuals being trained. The two program components – ITAs and employer-based training – enable the grantee to meet the training needs of unemployed, underemployed, and incumbent workers in the locality. The program has been structured so it can effectively meet the needs workers desiring either short-term (e.g., a one week intensive workshop on a company-specific product or to prepared for an MCSE certification test) or long-term training (e.g., training at an institution of higher education leading to AA or BS degrees). Through its employer-based training component, REB is able to partner closely with local companies to ensure that training is geared to the employer's future needs for highly-skilled IT or telecommunications workers.

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NEW YORK WORK ALLIANCE [NEW YORK]

AWARD: $2,940,162

IMPLEMENTATION PERIOD: August 1, 2000 – July 31, 2002 (Round Two)

MAJOR PARTICIPATING ORGANIZATIONS:

New York Work Alliance (formally Private Industry Council)
City University of New York (CUNY) Graduate School, Institute for Software Design and Development (ISDI)
City University of New York Graduate School, Center for Advanced Study in Education (CASE)
New York Software Industry Association (NYSIA**)**

SERVICE AREA:

Original Proposal – New York City Residents
Modified Proposal - Unemployed and underemployed individuals applying for training opportunities must be from New York City. Individuals referred to training as part of the project assistance for specific employers may also include individuals who work in New York City but commute from other areas of New York, New Jersey, or Connecticut. Employer-specific training is only available to New York City employers.

PROJECT DESIGN:

The initial grant application stated that training would be provided for 100 NYC residents (50% unemployed and 50% employed). Training was to have been offered on a full- or part-time basis. The specified areas of concentration were: Web Development; Unix System Administration; Java Programming; and Database Systems Administration. Training would include classroom instruction and distance education provided by CUNY under the direction of the Graduate School's Institute for Software Design and Development. Formal training was to be augmented by internships (developed by NYSIA). To recruit participants, the project proposed using the New York City JOBS Consortium because members of the Consortium operated throughout the city and would be able to provide candidates from under-represented groups. In addition, CUNY

would also refer potential trainees. The focus areas for training were identified in collaboration with employers and industry representatives.

Because of the highly technical nature of the training offered, enrollment would be limited to individuals with a "two-year degree, preferably in math and science with some calculus (to serve as a filter)" or "to individuals that possess a combination of high academic achievement in other disciplines and relevant work experience."   Testing would be used to screen participants, and any support service needs would be identified during the initial interview stages. A career counselor would be made available to the participants to ensure that there would be on going access to support services.

"The first six months of training will involve intensive training in core competency areas (equivalent to 15 credits)." Training was to have been offered two nights per week for 3 hours per night. Once participants successfully finished the first six months of the program, they were to be tested and then enrolled in one of the four concentration areas.   Supplementary coursework would also be offered to all participants. This second phase was planned for 10-12 weeks. The final phase of the plan was to identify internship opportunities for the students. Classroom training would continue to be offered during the internship phase with ¾ of participant time on the job and the remaining ¼ in the classroom.   The curricula were to be developed by CUNY.

Shortly after the award, the grant was modified to expand the project to serve more workers. The new targets were:

- Train and place or upgrade skills of 100 workers in training programs (not designed to assist specific employers.)

- Provide tailored training for specific employers by successfully training 120 incumbent workers.

To achieve these outcomes, it was determined that there needed to be a combined enrollment of at least 300 individuals to allow for dropouts and failures.

Several additional modifications have been made as a result of problems with the original assumptions and to adjust to the changing labor market.

- Abandon the distance education: This component of the program was dropped; security issues were cited as the reason. In addition, because of the importance of hands on experience, the utility of distance education in this program was questionable.

- <u>Eliminate the internship program</u>: Due to continued decline in the IT sector throughout New York, it became apparent that identifying internships would be more labor intensive than planned and the results would probably not justify the investment.

- <u>Expand training opportunities to non-IT industries</u>: While the original program design anticipated serving only the IT industry, during the implementation of the program it was determined that this would greatly limit employment potential. The objective of the program was not necessarily to strengthen the IT industry but rather to increase the numbers of skilled IT workers to respond to demand. It made sense to expand the employer base to any organization that could utilize IT workers. This became very apparent after the project was modified to add employer-driven training. The organizations that were most interested in this component of the program were those who were not in the IT sector but needed skilled IT workers in certain departments and divisions of their companies.

The resulting program design, described below, has two main program components.

- **Program component for unemployed or underemployed workers (in IT or other fields).**   Unemployed or underemployed participants attend training at CUNY. The flow through the program is as follows:

  1. Applicant is screened for educational achievement, work history, computer skills, access to computers, understanding of IT occupations (required to submit an essay on how IT will fit with their current or future employment).

  2. Applicant is tested utilizing in-house testing instrument.

  3. Applicant is interviewed by panel from NY Work Alliance, CUNY, and NYSIA.

  4. If accepted into the program, participant is enrolled in one or more of the following tracks (generally starting at the A-level, though with the demonstration of high IT skill levels individuals may enter at the B1, B2, or C levels directly):

     - A-level course is an introductory course, providing basic instruction for entry into Web-related occupations required of all participants except those who scored well enough on the tests.

     - B1-level course (entered upon successful completion of A-level or as a result of test scores) focuses on basic Web design, including

introduction to Dreamweaver and other HTML design packages, Microsoft Access, and Excel.

- B2-level course (entered upon successful completion of B1, though one participant entered directly into B2 because of a high level of IT skills) centers on Advanced Web Design including database interaction, and JavaScript.

- C-level is a course on Web Administration (entered upon successful completion of A-level course or as a result of test scores). This program component does not require enrollment in B1 or B2 courses, although participants of those programs can enter into the C-level course.

These courses are offered both as day and evening programs and are each a minimum of 60 hours over a three-week period. Participants completing the A-level course are equipped to do simple Web applications, but completing only the A-level course is not the training program's main objective. During the program, workshops are offered to assist the participants in preparation of resumes, job search techniques, and interviewing skills. Each participant is assigned a customer service representative to assist with support service needs and job search. Recently, approval was granted to hire a job developer for graduates of the program.

- **Employer-specific training component.** The employer-specific training was recently inaugurated. This component is not as structured as the first component. The Industry Specific Advisory Council has aided in identifying interested employers; business development representatives from the Alliance have also marketed the program within the city.

Employers are presented with a schedule of available programs that include Advanced Java Programming, XML Architectures, Microsoft.NET, Project Management, and IBM WebSphere Studio Workshop. They may enroll one or more participants and may request a separate class for their workers if they have sufficient numbers of participants. In addition, they may request other specialty programs. To date, courses have been provided for Salomon Smith Barney, Associated Press, Martha Stewart, Vanguarde Media, and several others. The courses provided have ranged from 2 to 12 days in duration and have ranged in scope from a simple introduction to Microsoft PowerPoint and Excel to more complicated Web page development. The business development representative works with the employer to develop a program request outlining training objectives. The program is then presented to CUNY to budget and staff. Even

though this training is free to employers, identifying those who will participate has been difficult. There is reluctance on the part of the employer community to become involved with government programs. The concerns center on potential intrusion into company affairs and paperwork.

RECRUITMENT METHODS:

- **Employers:** Initially, the project anticipated using the employer members of the New York Software Industry Association as the main source of internships and job opportunities for unemployed workers and as the main customers for employer-specific training. As late as August 2001, a survey of NYSIA members confirmed a very soft job market. This survey also confirmed that the training being offered and planned was focused on those skills of most interest to this group of employers. As circumstances worsened for the IT industry, it became necessary to approach a broader base of industries. The Alliance decided to use their business development staff to identify new employers. In addition, they enlisted the assistance of the Industry Specific Advisory Committees (formed during the JTPA era).

- **Participants:** Community-based organizations were notified of the training opportunities. Flyers were distributed. Various media association Web sites were used, and the University posted the notice at its campuses throughout the city. As a result of these publicity efforts, at least 800 inquiries from individuals were received. Unfortunately, most of the inquiries were received from people without the prerequisites to enroll in the core course.   Ultimately, 158 people were allowed to enroll in Component One.

ENROLLMENT:

As of November 30, 2001, 158 participants had entered the program component targeting unemployed/underemployed individuals (just two participants less than the target for this program component). Of this number most (102) entered directly into the basic training activity and 82 completed this program. Forty-two were able to enter directly into the second level program (B1) based on test scores and experience in the IT field. The success rate for this group was exceptional as 40 completed. This means that between new entrants and graduates from the A program, at least 103 of the 158 enrollees could be considered successful. Add to this the 13 successful completions of the direct enrollees into the C component and there are 116 individuals that completed a minimum of one component of this program.

	A	B1	B2	C	Total
Entered Directly	102	42	1	14	158
Graduated in from A		73	44	16	
Graduated in from B1			32	20	
Total	102	115	77	50	
Completed	82	103	66	44	
Did not continue	9	27	30	N/A	
Dropped Out	20	12	11	6	

To date, 80 individuals have participated in the employer-specific training activities. Because those enrolled are there because their employers want them trained and because the programs are of limited duration, dropping out has not been a problem.

It is very likely that this program will enroll the anticipated number of participants, considering there are almost 6 months left in the grant. A problem faced by the program is providing IT-related job opportunities for those who have completed Component One and following up with employers to determine if Component Two employees are actually being upgraded and provided opportunities to use new skills.

COST SHARING POLICY:

When the NY Work Alliance submitted their H-1B proposal, there was still an unmet need for information technology specialists. To meet this need, the program designers envisioned offering classroom/laboratory training followed by an internship. During the internship phase, wages paid to trainees would be considered as matching funds. The proposed internships were to generate slightly more than $1,000,000. That money coupled with other smaller estimates for in-kind contributions would result in a match of approximately 50%.

With the demise of the internship component, major matching funds have disappeared. In an effort to salvage the match and keep the grant in compliance, NY Work Alliance has requested permission to reconfigure their match. Now that the program is providing employer-specific group training, paid employer release time will be calculated for the match. In addition, the CUNY indirect cost rate was lowered for this program and the difference between what they would normally charge and what is being charged for the H-1B program is being factored into the match. With these and a few other minor additions, it is anticipated that the original match figure will be achieved.

INTERESTING PRACTICES:

- **Development of a Research Model for the purposes of predicting whether future enrollees would successfully complete the program.** A team of researchers from the Center for Advanced Study in Education at CUNY, representatives from the NY Work Alliance, and CUNY trainers identified 185 data items to collect. Data is collected for all formal applicants for the long-term training component of the program.

  Pre-program, in-program, and post-program data are scheduled to be collected. Such items as employment history, interview scores, interest inventory scores, self-assessment of IT skills, attendance, and class performance are quantified. The objective of the data collection effort is to establish a model profile that will help predict which applicants will be successful in IT training programs. The data collection effort also provides management information for the project. Whether the results of this effort will be of use or not may depend on factors beyond the project's control.

- **Use of Immediate Trainee Feedback to ensure program relevance.** Because so many of the incumbent worker programs are of such short duration, it is essential that the instructors cover all the necessary material to satisfy the needs of the trainees. In many cases, programs are developed specifically for an employer to meet a very targeted need. To help ensure that the training material is relevant, at the end of each day of training, formal student feedback is requested. The results of these evaluations are immediately shared with the instructors so they can attempt to modify the material or delivery.

TRAINING PROVIDER COMMENTS:

CUNY reported that :

- coupling the training with job counseling and case management helped to diminish the dropout rate and improved participant performance;
- the model was being considered for implementation by the regular training programs offered;
- without the grant, they would not have been able to establish a similar training program because it does not follow an academic model
- they will continue to offer these programs

TRAINEE COMMENTS:

A number of incumbent worker trainees were in class at the time of our visit. Other trainees were invited to speak with us, but only a few were available. One participant had been an IT worker, but saw this program as an opportunity to upgrade skills. She had a degree and experience, but she felt new skills were needed. She entered the program to expand and upgrade her IT skills. At the time of the interview, she had elected not to seek employment because of the holidays and the condition of the NY City labor market. She was sure that in a month or so she would be able to find employment because of the training received.

OUTCOMES:

The New York program was and is facing some very difficult obstacles. Shortly after the grant was awarded, it became apparent that many of the so-called "dot.com" companies would not survive. At first there was a trickle of failures, but that soon turned into a waterfall. The downturn in the economy also affected the major computer hardware and software vendors throughout the country, and if that wasn't enough, New York was attacked by terrorists. The terrorist attack on the World Trade Center resulted in short-term closures of many businesses, relocation of businesses, and a slow-down in the tourist and entertainment industries. Between September 11, 2001 and the present, it is still difficult for program operators to find employers who are interested in hiring new workers or in focusing on upgrading employee skills. The level of uncertainty in the economy has been just too great. Between November 2000 and November 2001, New York City lost approximately 81,000 jobs and its unemployment rate increased by one percentage point. As of the date of our visit, only 6 unemployed workers participating in the program had found jobs.

OVERALL ASSESSMENT:

The original design of this program was sound, but expensive on a per participant basis. The modification required by the Department of Labor did result in increasing the numbers to be served, with the additional participants being enrolled in primarily employer-specific training. Because of the events of September 11th and a slowdown in the local economy, job placement is difficult for unemployed or underemployed workers served by the program at the time of training completion. There is no lack of effort to identify jobs for the trainees, but the labor market does not always provide suitable openings to match participant skills. The best that can be hoped for is that as the economy turns around, participants will find suitable jobs.

PROGRAM CONTACT:

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**APPENDIX A: BACKGROUND ON H1–B TRAINING
GRANTEE RECIPIENTS (GRANT ROUNDS 1-3)**

APPENDIX A: BACKGROUND ON H1–B TRAINING GRANTEE RECIPIENTS (GRANT ROUNDS 1-3)[10]

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
ROUND 1 GRANTEES (MARCH 2000 – MARCH 2002)					
1. NOVA PIC	Sunnyvale, CA	High level skills training (Systems Administrators in one year) to 200 low-income, multi-ethnic adults and young adults	$1,320,938	202	Robert Gamble 408-522-1033
2. Pima County Community Services Dept.	Tucson, AZ	Training in 5 tech skill areas: Health, IT, Education, Electrical and Electronics, and Accounting and Mgmt. Modular training, web-based training, internet published skill standards and career ladders to be used to select career, linking system for high school to community college to university with entry for each. Rural setting	$1,500,000	300	Charles Casey 520-740-5205
3. City of Chicago	Chicago, Ill	Upgrade 425 incumbent workers in IT skills. Project partners identify needs; DePaul developing training program; Career center for support services and development of career track for needs of high-tech industry.	$1,500,000	425	Joel Simon 312-746-7962
4. Seattle-King County PIC	Seattle, WA	Training in applications programming, info engineering, and systems analysis for 500 (not clear of goal since project description says 500 in one paragraph and 400 in another) Partners will build a system of articulated and integrated technology modules. Plan to utilize training vouchers. Project to work with Washington Software alliance with 1400 members.	$1,500,000	400	Cas Cogswell 206-448-0474
5. The Workplace	Bridgeport, CN	Training in HI-B growth occupations for 540 (occupations not detailed). Will create Certified Skills Centers at employers business. Centers require that training be structured on National Sills Standards Board standards, all training results in formal certification; al training results in college credits; data base maintained and all instructors be certified in NSSB skill as well as certified as instructors by State.	$1,500,000	378	Adrian Parkmond 203-576-7030 x309
6. Philadelphia Workforce Development Corp	Philadelphia, PA	50 individuals to be trained as RNs and 30 to be trained as LPNs. 200 individuals trained as Nurses Aides.	$563,057	280	Patrick Clancy 215-963-3487

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[10]This table, prepared to assist with the site selection process, is based on information included in original grant submissions. Selected sites are highlighted in gray.

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
7. New Hampshire Job Training Council	Concord, NH	Unemployed and incumbent workers in 10-15 companies in high-tech. Implement technical skills feeder system for high-tech firms, career ladder development process , and on-going commitment by businesses to incumbent worker training. Will provide aptitude testing, individual training accounts, and company based customized training programs for incumbent workers.	$1,500,000	120	Duncan Phillips 603-229-3310
8. Prince Georges Workforce Services Corp	Landover, MD	Telecommunications and IT training for an unspecified number of participants. Cooperation with Communication Workers of America. Will use internet based skills assessment tool. Training presented in 4 stages: basic computer literacy, data cable installation, computer technician skills, and network technician skills. Benchmarks in program allow participants to elect for job placement with CWA participating employers.	$1,500,000	586	Joseph Puhalla 301-386-5522
9.Regional Employment Board Hampden County	Springfield, MA	Telecommunications and IT training for 80 unemployed. Upgrade training for additional 130 in same skill set. Creation of skilled training providers and board to monitor training needs of information and communications industry	$1,500,000	210	Christine Abramowitz 413-787-1547
ROUND 2 GRANTEES (AUGUST 2000 – JULY 2002)					
1. PIC of SF	**San Francisco, CA**	Digital Media Training and placement. Goodwill will train up 100 students in 8 wk program in basic computer skills in preparation for advanced digital media training. An additional 150 will also be trained. (Internet related training)	$3,000,000	250	Pamela Calloway 415-431-8700 415-923-4464
2. Baltimore County/BC Office of E & T	**Baltimore, MD**	300 to receive training for one of eight IT career clusters: database development and administration, digital media, enterprise systems analysis, and integration, network design and administration, programming/software engineering, technical support, technical writing, and web development and administration. Includes distance learning with over 20 complete degree programs; training will be provided through individual training accounts.	$2,517,888	300	Lisa Scott 410-887-3649
3. Berkshire County Regional Employment	**West MA**	IT Training Company Specific for General Dynamics Defense Systems. Systems analysis and programming, mechanical engineering, electrical/electronic engineering, engineering	$2,003,164	1050	Heather Putnam 413-442-7177

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
Board		occupations, and other computer related occupations, as well as soft skills training.			
4. Contra Costa Country	**Contra Costa, CA**	280 workers (250 LPNs to advance to RN. 30 others to be trained in medical field. Company specific for Kaiser Hospitals s	$2,220,018	280	Linda Chandler 925-646-5024
5. Dallas County Local WD Board	Dallas, TX	Training and support services for individual with high-tech skills This is primarily a placement effort.	$909,270	100	Laurie Larrea 214-290-1025
6. City of Glendale	Glendale, CA	Film/Entertainment industry technical skills. 85% will be employed union workers and 15% unemployed. Focus on digital effects, digital imaging, digital film making photography and non-linear editing.	$3,000,000	1496	Diedre Elizabeth /Barbara Lounsberry 818-548-3716/3719
7. Houston-Galveston Area Council	Houston, TX	300 to be trained in IT fields: computer architecture and hardware organization, systems software and design, operating systems function, communications systems and computer network, structured systems analysis, program architecture, program implementation using structured programming language, technical writing and documentation. Training facilities in enterprise zone. 9 month of instruction – 6 months classroom and 3 months software development work.	$2,808,484	300	Sharon Benson 713-993-2445
8. Mercer County	New Jersey	Unemployed and underemployed - will begin with skills assessment after which training will be offered in one of five skill areas based on input from advisory board. Training will be provided on a flexible schedule to accommodate needs of trainees.	$2,997,072	500	Catherine Tramontana 609-989-6827
9. Kentucky-Louisville and Jefferson County WIB	Louisville, Kt	Incumbent IT workers and individuals with9out IT background. Focus on women, older workers, disabled and dislocated workers.	$2,538,040	350	Marilyn Edwards 502-574-3149
10.Anchorage	Anchorage, Alaska	Incumbent workers and unemployed with limited or no computer skills. Area of need will be the telecommunications industry with focus on computer systems analyst, computer software engineers, electrical/electronic engineers, and sales/marketing. Will provide participants with assessment and career counseling, a certificate course in information technology, applied training,	$2,425,033	550	Ruth DeCamp 907-343-6534

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
		apprenticeship, and job placement.			
11. NYC PIC	NYC, NY	Incumbent and unemployed workers. Focus is info technology, web development, Unix system admin., Java programming, and database systems admin. Program will utilize fast track curriculum, hands on internships and distance learning.	$2,940,162	103	Mark Mussolani 212-742-1000 x241
12. South Eastern Connecticut WDB	New London, CN	Incumbent workers in bio-science industries, unemployed defense industry workers and students. Training will be targeted at the pharmaceutical and clinical research companies, HMOs and insurance companies. Basic training will be provided through EC State Univ. in clinical data management and related.	$1,807,624	100	John Beauregard 860-440-3534
ROUND 3 GRANTEES (NOVEMBER 2000 – NOVEMBER 2002)					
1. Arlington-Alexandria WIB	Virginia	Info technology and health care. No other details provided	$2,723,600	540	Susanne Eisner 703-228-1322
2. Buffalo and Erie County Workforce Development Consortium	Western New York State	700 incumbent workers and 80 unemployed or underemployed in IT and automated manufacturing skills. Will utilize individual training accounts.	$2,799,951	780	Marie Kaczmarek 716-885-9840
3. Central Iowa E & T Consortium	West Central Iowa	270 unemployed and 30 incumbent workers. To be trained in software applications, programming and tech support in the IT occupational fields. Will utilize internships. Training to be provided by community college.	$2,157,770	300	John Bargman 515-281-9679
4. City of Newark	New Jersey	Target women, disabled, minorities. Focus on IT, Web authoring and developing, database management and programming. No info in how training to be provided.	$2,770,000	420	Daniel Akwei 973-733-4820
5. City of Peoria WDB	Illinois	Peoria btw ages of 20-29. Other counties with older population. Women, minorities, etc. Talks about bringing business, training and service organizations together but does not say what they will do.	$1,099,000	200	Jennifer Brackney 309-495-8928
6. City of New Orleans	Louisiana	Target both IT and unemployed. Will utilize One Stop for intake and assessment for unemployed. For incumbent workers, the process will vary depending on employers. Will still utilize assessment tool of One Stop. Training services not described.	$2,708,305	350	Thelma French 504-565-6414

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
7. WIB of Cuyahoga County – Ohio	Cleveland and Cuyahoga, Ohio	Welfare to work participants, disadvantaged, women, minorities, etc. General IT fields. No specifics on how program to be conducted	$970,000	175	Susan Muha 216-987-3024
8. Kansas City Full Employment Council High Skills Consortium	Missouri	Industry specific: Hallmark, H&R Block and Sprint. Cooperative program with additional funds provided by employers. IT jobs but no specifics on how training will be accomplished. Generic statement: mix of customized on-site classroom and OJT to attain measurable outcomes.	$2,678,147	1340	Clyde McQueen 816-471-2330 x 256
9. City of Greensboro	North Carolina	IT workers and unemployed new entrants to IT field. Will focus on underrepresented groups (70%). Training and certification…no other specifics provided.	$2,721,000	550	Lillian Plummer 336-373-5922
10. SEIU/League	New York City	Train both employed and unemployed health care workers. Will utilize distance learning, tutoring and counseling, prop courses I computer and Internet, college level research and writing, and pre-course work in subjects required for entry into nursing program.	$2,751,787	675	Deborah King 212-494-0524
11. Metro North WIB	Northeast Massachusetts	Semi-skilled incumbent workers who will be trained in Electronics and telecommunication IT jobs. Will utilize employer /labor union. Education partnership to provide a mix of OJT, customized on-site instruction, and classroom over a 2 yr period.	$2,372,522	750	Nancy Brown 781-388-7700
12. No. Central Texas Council of Gov	N. C. Texas	Targets teacher certification for high-tech occupations as well as occupation in hi tech. Long and short-term training.	$2,800,000	192	Jennifer Roberts 817-695-9179
13. Napa County	California	Community college delivered training in IT for incumbent and unemployed. Serve 4 counties in No CA.	$2,800,000	500	Dona DeWeerd 707-259-8680
14. No. East Indiana WIB	Indiana (Ft Wayne Area)	IT training for employed and unemployed. Utilized existing institutions and vouchers.	$1,750,000	314	Steve Corona 219-458-7152
15. Philadelphia WIB	Pennsylvania	Disabled. Will train Microsoft Certified Systems Engineers, Cisco Certified Internet Experts, Web Design and client Server Applications Development. Serve clients in Penn and Delaware.	$2,797,189	300	Michael Stewart 215-963-2105
16. So Dakota DOL	So Dakota	RN and Practical Nurses. Rural focus.	$2,714,720	300	Bill Molseed 605-773-5017
17. WIB of Selaco,	Los Angeles CA	Serve existing professionals. Provides training for hi tech	$2,800,000	500	Tam Dang

AWARDEE	LOCATION	PROJECT OVERVIEW	AWARD AMOUNT	ENROLLMENT GOAL	CONTACT PERSON
SE LA		machinist/computer numerical control . Will leverage existing resources and expand existing instructional interactive multimedia projects. Will create a sustainable multi-city regional network of training providers, businesses, and the WIB.			562-402-9339 x 216
18. State of Vermont	**Vermont**	**High-tech and nurses for operating room and critical care specialties. Mix of OJT, on-site instruction, and classroom over 2 yrs.**	**$2,658,055**	**213**	**Bill Cormony/Greg Vorheis 802-828-4355 or 4343**
19. Workforce Investment Council of DC	District of Columbia	Unemployed and underemployed inner city, minority and female populations underrepresented in IT. No specifics on how training to be accomplished.	$1,527,854	300	Sara Thompson 202-884-9628
20. Workforce Essentials	**Nashville Tennessee**	**Dislocated civilian and military as well as incumbent workers. Variety of occupations including health, computer systems, construction technology, and plastics. No specifics on how training to be accomplished.**	**$2,800,00**	**750**	**Marla Rye/Diane Lynch 931-551-9110**
21. Worksystems, Inc	Portland, Oregon	Unemployed, employed, dislocated, disadvantaged, etc. Will target manufacturing/microelectronics from entry to specialized engineering positions. Identifies partners but not how training is to be accomplished.	$2,800,000	400	Anne Hill 503-478-7360

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APPENDIX B:

DISCUSSION GUIDE FOR H-1B
PROJECT DIRECTOR AND KEY PROJECT STAFF

APPENDIX B:
DISCUSSION GUIDE FOR H-1B PROJECT DIRECTOR
AND KEY PROJECT STAFF

Project Name: _____

Organization: _____

Address: _____

_____

Telephone: _____ Fax:_____

Email: _____

Respondent(s):_____

_____

A. PROGRAM CONTEXT AND BACKGROUND ON THE ORGANIZATION

1. What is the geographic area served by the program?

2. What is the local economic environment in which the program operates (i.e., during time of project)?

   a. local unemployment rate (start and end of grant) --

   b. availability of job openings (particularly within high-demand occupations for which training is provided) --

   c. wage rates in the locality (particularly for occupations for which training is being provided) --

   d. other local economic conditions that may affect participants' abilities to find employment (e.g., in- or out-migration of major employers, recent major layoffs, base closings)

3. What other programs or initiatives provide similar types of employment and training services for employed/dislocated workers in the service area?

4. Please provide background on your organization [note: obtain brochure/recent annual report on the organization]:

a. General mission/objectives:

b. Major sources of funding (e.g., WIA, WtW, other city/state funding)

c. Total staff: _____

d. General operating expenses/budget for most current year: _____

e. Total funding for H-1B Initiative: _____

f. Estimate of H-1B funding as a percent of annual organization budget (average over course of grant): _____

g. Other relevant features about the grantee organization that may have affected H-1B program implementation/operations:

B.   PROJECT OBJECTIVES AND START-UP

1. What are the project's principal goals/objectives for participants?

2. Are program objectives realistic/achievable? If not, how should the objectives be changed?

3. When did the project first start to enroll participants?

4. a.   How did project start-up proceed (e.g., on-time, slow, etc.)?

   b.   What factors facilitated project start-up?

   c.   What factors hindered project start-up?

5. What is the current status of the project? Is it still operational? If it ended, when did the program stop operating?

C.   OUTREACH, INTAKE AND ASSESSMENT

1. a.   What is the size of the pool of employed and/or dislocated workers from which the program draws recruits?

   b.   Are there any general conditions that affect (have affected) the size of the available pool or ability to get referrals to the program?

2. a.   How does the project obtain its participants? Does the grantee receive referrals from other agencies/employers? If so, which ones and what proportion of participants come from each source?

   b.   Does the grantee conduct its own outreach? If so, what specific recruitment strategies and methods are used by the grantee to encourage participation (e.g., TV/radio announcements, newspaper ads, distribution of brochures, word-of-mouth referrals)?

3. a.   What has been the response of the targeted population of employed/unemployed individuals to the initiative? Has it been easy to recruit participants to the program? Are there more applicants than the program can serve? Is there a waiting list to get into the program?

   b.   If there have been difficulties in recruiting the number of participants originally projected under the grant, why is this the case?

   c.   What incentives (if any) have been used to encourage participation?

4. a.   Who determines eligibility to participate in the project?

   b.   What, if any, criteria are used to select (screen) participants among those recruited and eligible to participate?

5. a.   Once enrolled, how are the service needs of participants determined?

   b.   Are any formal assessment tests done (e.g., TABE, interest inventories, substance abuse screening)

   c.   What are the most common barriers to employment (in the particular field for which training is being provided) faced by participants?

   d.   Is an individual service strategy or employment development plan created for each participant?

6.   How is participant involvement monitored (e.g., Are participants assigned to case managers? If so, when? And what is the caseload per case manager?)

D.   PROGRAM COMPONENTS/SERVICES

1. What specific employment, education, and/or training services are provided to participants? For each major service or program component, please describe:

    - specific services/activities participants receive
    - who gets services (all participants; a proportion of participants)
    - who provides the service and where is services provided (e.g., at one-stop, workplace, training facility)?

2. What support services are provided under the project? For each support service describe what proportion of participants receive the service and who provides the service.

3. How do program services compare (similarities and differences) with other employment and training services available in the locality?

4. Is there a typical way in which participants flow through the program (i.e., from recruitment/assessment into training and job search/placement, etc.)? [Note: If available, obtain a flow diagram that shows the typical flow of enrolled participants through the system from the point of intake.]

5. Does the program provide the full range of services needed by program participants? If not, what are the gaps in services?

6. Has the project conducted customer satisfaction surveys? If so, what is the quality of the program/services based on feedback from customer satisfaction surveys? [If available, obtain a copy of the customer satisfaction survey and results.]

7. What methods are used to identify or develop job openings for the specific occupations in which training is being provided? How are employers selected to sponsor participants?

8. Were any program components or service elements of the original program design not implemented or
    abandoned early on? If yes, which ones and why?

9. Has the grantee added any new components? If yes, what are they and why were they added?

E.   PARTICIPATION LEVELS/CHARACTERISTICS

1. What is the overall goal for enrollment/participation in the program?

2.   How many individuals have been enrolled in the program to date?

3.   Is it anticipated that the goal for participation will be met? If not, why not?

4. What are the general characteristics of participants (if possible, have the project complete Table A detailing participant characteristics)? [Note: If available, also obtain additional reports showing number and characteristics of participants.]

5. What factors (e.g. recruitment strategies, types of training/job placement activities and other services offered, local economic conditions) have influenced the types of participants served?

6. a.   What proportion of participants dropped out from the program prior to completion?

   b.   What are the characteristics of participants who dropped out of the program after enrollment?

   c.   When did dropout usually occur and why?

F.   SERVICE INTEGRATION/COORDINATION

1.   What is the relationship of the program with the linked education/training institution (e.g., community college, proprietary school, college)? What are major roles and responsibilities of each party? How has it gone?

2.   What are the other key linkages agencies in the community? (Note: List the organizations, discuss the nature of the linkages with each, and if appropriate, the number and types of program participants referred.)

G. EMPLOYER INVOLVEMENT

1. To what extent have employers been involved in the project?

2. How were employers recruited?

3. What was the employers' reaction to the project initially?

4. Did employers provide input on project design, types of workers wanted, and types of training provided (including suggestions on curriculum design)? If yes, please describe:

5. a. How many total employers were involved in the initiative (i.e., enrolled and trained project participants)?

    b. For each major employer involved, please provide the following:
        -Name of employer
        -Type of employer (e.g., industry)
        -Number of participants referred
        -Types of jobs for which individuals were trained and hired
        -Average wage for those hired

6. In general, were employers supportive of participants and staff throughout the project?

7. What difficulties were encountered with employers?

8. Do you have any other comments relating to employer involvement in the project?

H. PROJECT MANAGEMENT AND STAFFING

1. What is the overall organizational plan for the program? (If available, please provide an organizational chart.)

2. What is the total number of full- and part-time staff involved in the project (i.e., at the time the project was fully implemented)? [For each staff member, provide a description of their role or responsibilities in the project and qualifications for the position.]

    Full-time:_____   Part-time:_____

Staff Position	Number	Role/Responsibility

I. PROGRAM OUTCOMES/IMPACTS

[Note: Obtain reports if available on outcome measures.]

1. Please provide outcome data necessary to complete Table B.

2. Please explain significant differences between what was originally planned (or expected) and what is actually reported.

3. How does the placement wage compare to the previous wages earned by program participants?

4. How does the placement wage compare to wage levels of workers in the same occupation within the local labor market?

5. a.   What have been the greatest impacts of the program on program participants?

   b.   To what extent and in what areas have basic and job-related skills been improved?

   c.   Are there ways in which the program has fallen short of its goals for assisting participants?

   d.   Are there other approaches strategies or services that would contribute to better outcomes for program participants?

J. PROJECT COSTS

1. What are the major ongoing costs for the program (e.g., staff, equipment purchase or rental, transportation, subcontracts, utilities, security, wage subsidies, etc.)?

2. How do the types of participants served affect costs? What types of participants are most/least costly to serve?

K. PROGRAM REPLICABILITY

1. To what extent do you think your program could be replicated in other localities?

2. What features of the H1B project are most amenable to replication?

3. a.   What features of project are least amenable to replication?

   b.   How does location, the target population served, or other distinctive features of your program make it either non-transferable or limit transferability?

   c.   Should replication of the program be limited to localities with certain characteristics? If so, what are they?

4. What do you feel needs to be communicated to other agencies who might be interested in replicating your program?

L. CHECKLIST OF ITEMS TO COLLECT FROM SITE (IF AVAILABLE)

Background information about the locality

Background information about the organization

Additional documentation/reports detailing major services

Evaluation reports that may have been prepared on the program

Blank set of client forms used in the participant's case file

Blank copy of the customer satisfaction form(s); reports on the methodology used and results of the survey

Diagram showing how participants flow through the program

Organizational chart for the program

TABLE A: PARTICIPANT CHARACTERISTICS

Site: _____   Total Participants: _____

Data Provided Is as of: _____   Final Results: ___Yes   ___No

PARTICIPANT CHARACTERISTICS		NUMBER	PERCENT
Gender:	Male		
	Female		
Age (at Enrollment):	29 and under		
	30-44		
	45-54		
	55 and over		
Race/Ethnicity	White (Non-Hispanic)		
	Black (Non-Hispanic)		
	Hispanic		
	Other		
Highest Grade Completed (at Enrollment)	Less than High School Graduate		
	High School Graduate		
	Post High School Attendee		
	College Graduate or Above		
Hourly Wage in Most Recent Job Prior to Participation in H-1B Project	$4.99 or less		
	$5.00 to $7.49		
	$7.50 to $9.99		
	$10.00 to $14.99		
	$15.00 or More		
Duration of Training Received Through H1B Project	None		
	1 to 99 hours		
	100 to 249 hours		
	250 to 499 hours		
	501 to 999 hours		
	1,000 to 1,999 hours		

PARTICIPANT CHARACTERISTICS		NUMBER	PERCENT
	Over 2,000 hours		
Types of Support Services Received (Directly Provided and Paid for through the Grant)	Transportation Assistance		
	Child Care Assistance		
	Substance Abuse Treatment/Counseling		
	Housing or Rental Assistance		
	Clothing/Work Equipment		
	Other:		

TABLE B: PARTICIPANT OUTCOMES

Site: _____

Data Provided as of: _____   Final Results: ___Yes   ___No

PARTICIPANT CHARACTERISTICS	PLANNED	ACTUAL
A. Total Number of Participants Enrolled		
B. Total Number of Participants Completing Training		
C. Total Number of Job Placements		
D. Job Placement Rate (Item C/A)		
E. Average Wage at Placement		
F. Total Number of Job Retentions at 6 Months After Placement		
G. Job Retention Rate (Item F/C)		
H. Average Wage at 6 Months After Placement		
I. Total Cost of the Project		
1. Average Cost per Participant (Item I/A)		
2. Average Cost per Placement (Item I/C)		
J. Workforce Development Area's Average Wage at Placement for WIA Participants	███████	
K. Average Previous Wage Paid to Participants Prior to Enrollment in Project	███████	
L. Other Outcome Measures Used by the Site (List Below):		

APPENDIX C:

**CROSS-SITE COMPARISON OF
FEATURES OF THE
H-1B TRAINING PROJECTS**

APPENDIX C: CROSS-SITE COMPARISON OF FEATURES OF THE H-1B TRAINING PROJECTS

Participant Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Project Goals	-Enhance employability of participants -Upgrade skills and worker productivity -Improve wages (10% for employed workers; 15% for new hires) -Offset employer training costs -Reduce worker turnover	-Facilitate career advancement, wage growth, and self-sufficiency -Create new career paths to reduce local shortages (particularly in nursing field) -Offset employer training costs	-Provide career ladder and high-skill training to unemployed, underemployed, and incumbent workers in IT occupations. -Develop IT curricula that can be replicated throughout the State - Partially offset employer training costs	-Provide high skill training to employed Registered Nurses in critical shortage areas -Establish lasting training partnerships among participating organizations in health care and high-tech programs -Reduce dependency on temporary workers in health care field. - Develop web-based training tools	-Facilitate career advancement, wage growth, and self-sufficiency -Offset employer training costs -Encourage employers to train and upgrade workforce	-Facilitate IT career advancement, wage growth, and self-sufficiency -Target underserved populations -In response to the events of September 11th, provide increased support to employers needing to train workers
Project Service Area	-12-county area in N. Tennessee (includes Nashville) -Mostly rural, some urban and suburban	-Pima County (with focus on Tucson metropolitan area) -Urban and suburban	-Comprises 26,235 square miles and includes the Municipality of Anchorage, as well as the Matanuska-Susitna Borough -Urban and rural	-Statewide initiative -State characterized as primarily rural; however, program serves small cities and town as well	-4-counties in West MA (Hampden, Franklin, Hampshire, Worcester); and Greater Hartford, CT. -Mostly rural, some urban and suburban	-5 boroughs of NYC -Also, includes employees of NYC-based firms regardless of residence

Participant Characteristics	Workforce Essentials, Inc. (Tennessee)	Pima County Community Services Dept. (Arizona)	Municipality of Anchorage (Alaska)	State of Vermont (Vermont)	REB of Hampden County, Inc. (Massachusetts)	New York City Workforce Alliance (New York)
Unemployment Rate (Seasonally unadjusted)	-Start of grant: Nashville: 3.1% Clarksville: 3.7% - As of 11/2001: Nashville: 3.4%, Clarksville: 5%, & other counties as high as 8.7%	-Start of grant: 2.7% - As of 11/2001: 4%	-Start of grant: 3.8% - As of 11/2001: 3.7%	-Start of grant: 2.6% - As of 11/2001: 3.4%	-Start of grant: 2.7% to 3.5% - As of 11/2001: 2.9 - 4.3%	-Start of grant: 5.3% - As of 11/2001: 6.3%
Environmental/ Contextual Factors	-Economic conditions vary by county -Local economy deteriorating by mid-2001, affecting demand for workers in some high-skill occupations	-Much low-wage employment -Service sector dominates -Large Hispanic population; high concentration of youth/young adults -Problems with high school dropouts	-State isolated from lower 48 states has not experienced increase in unemployment -Program serves very large geographic area (including one major city and large rural expanse) – affecting how training is delivered	-High-tech sector hard hit by slowing economy -Industry to service sector shift; job growth outpacing labor force -Declining school age population & slow growing work-age population, but boom in elderly - Aging nursing work force	-Project serves multi-state region (MA/CT) -WIB co-located with economic development agency & Chamber of Commerce – helps with links to employers -Local economy slowing by mid-2001	-Slowing economy , further exacerbated by the World Trade Center attack. -Employers still attempting to recover from the effects of the attack
Grant Round	3rd	1st	2nd	3rd	1st	2nd
Grant Start	11/2000	3/2000	8/2000	11//2000	3/2000	8/2000
Grant End	10/2002	3/2002	7/2002	11/2002	3/20002	7/2002
Funding Amount	$2.8 million	$1.5 million	$2.425 million	$2.658 million	$1.5 million	$2.94million

Match	40% (minimum for each employer)	Variable – 25% local match sought across all sources	60% cash match covering tuition and release time	Over 100% - Salary continuation-in kind contributions and tuition payment	Variable – sought 85% in-kind & 10% cash from employers	50% in-kind match
# of Employer Partners	28	~10	50+	39	7	15-20
Types of Employer Partners	Health sector & variety of manufacturers	Health sector (especially hospitals), teleservices, IT, electronics, aviation, and education	Eclectic array including: telecom, social service, hospital, IT service firms, banks, communications, local, state, and federal government, and Native Alaskan groups	Hospitals and employers of IT workers	IT, telecommuni-cations	Initial target was software industry; expanded to include any industry utilizing IT skills
Leading Employer Partners	St. Thomas/IT, CEI Company, Aerostructures, Baptist Hospital, Standard Gypsum, & others	Kino Hospital, Sunquest, Universal Avionics, Convergys, Honeywell, Opinion Research, Teletech, Cross County, USA Relay	Science Applications International Corporation, United States Airforce, State of Alaska, General Communications, Inc., First National Bank of Alaska, Alaska Communications Systems	Fletcher –Allen Hospital Mt. Ascutney Hospital Rutland Regional Medical Center No leading employer partners in the High-Tech , but 23 participating employers in incumbent worker program.	JDS Uniphase; Coghlin Electrical Contractors, Inc.; Valley Communi-cation; Systems, Software, & Support (SSS); Yankee Candle; Electechs	Martha Stewart, Associated Press, Salomon Smith Barney, Vanguarde Media, and several smaller companies.
Training Partners	-Limited to training providers on Governor's WIA approved list	~1/2 of training provided through community colleges, but also use universities &	-University of Alaska, Anchorage -Mat-Su campus of U of A, Anchorage,	-University, of VT, -Vermont Community Colleges	-Most training provided through community colleges and proprietary	-City University of New York (CUNY), -CUNY -Institute of Software

	-Most skill training provided by community colleges, Tennessee Technical Centers, Nashville State Technical School, & several proprietary schools	proprietary schools -Partners include: Pima Co. Community College, SAIAT, U. of Phoenix, AZ State U, U. of AZ, Prescott College, and New Horizons	- private proprietary schools (2-3)	-Individual participating hospitals -Vermont Technical College - Vermont Interactive Television	schools -Partners include: Springfield Technical CC; Northeast Center for Telecom Technologies; Capital CC; and IKON	Development, -Manhattan Community College
Union and or Association Partners	International Association of Machinists	Tucson Education Association	Alaska High Tech Business Council	Vermont Association of Hospitals and Health Systems	None	New York Software Industry Association
Original Participation Goal	735	300	300	222	210	300 (220 to finish training & become employed)
Actual # of Participants	812 (as of 11/2001) **110% of goal**	312 (as of 9/2001); (est. 340 as of 11/2001) **113% as of 11/01**	281 (as of 9/30/01) **94% of goal**	108 (12/2001), with new programs coming on line after first of year. **50% of goal**	222 (as of 12/2001) **105% of goal**	238 (as of 12/2001) **196 have** completed one or more training components **79% of goal**
Date of First Enrollments	January 2001	July 2000	Unsure	February 12, 2001	April 2000	March 2001
Target Population Served	-Employed -Unemployed -Participants must be employed or have commitment to be hired by partnering employer	-Employed (2/3) -Unemployed (1/3) -No employer commitment required -Partnering employers refer most participants	-Employed workers either referred by employer or self selected based on information in newspaper or through friends -Unemployed workers identified by WIA, Job Corps, One Stop, Voc.	-53 Incumbent Operating Room Nurses -95 Incumbent Critical Care Nurses -20 unemployed / dislocated workers attempting entry into IT	-130 incumbent workers -80 unemployed -Partnering employers refer most participants	-160 unemployed/ underemployed -140 incumbent workers -For incumbent workers, employers must at least consider salary increase for those trained.

			Rehab., Hi Tech Industry Council	-45 incumbent IT workers getting skills upgrade.		
Characteristics of the Population Served	-Estimated 75% female; 40 % minority -All have high school or GED	~2/3 employed at intake -63% female -61% white; 23% Hispanic; 8% Black -Avg. 13.9 years education; avg. reading/math levels, 12.3/12.1	-55% male -Average wage of incumbent worker was $20 per hour with median wage at $24.	-Nursing program almost 100% female -Wage range from $17-$23/hr. -All Registered Nurses with 2 or 4 year degree -Hi Tech Program numbers not available; however participants are predominately male	-80% male -84% white; 4% black; 3% Hispanic; 9% Other -48% high school graduates; 8% post-high school attendees; 44% college graduates -72% earning $15 or more/hr. in most recent job	-55% male -Almost 100% have HS Diploma. -84% have attended college -42% have BA or higher. [Note: figures only available for unemployed or underemployed; no data available for employer-specific programs.]
Outreach/ Recruitment Methods	-Partnering employers identify and refer workers needing skill upgrades -Variety of other sources for unemployed individuals, especially referrals from Workforce Essentials' career centers and other public programs (e.g., UI, TANF) -Some individuals heard about program from	-Partnering companies refer incumbent workers for upgrade training -Distribution of information about program at career centers; referrals by career center staff to program -Word-of-mouth (increasingly important) -No paid advertisements	-No paid advertising. Grant announced in the paper which generated interest. -Once program at Mat-Su in development stage, brochures printed and used to attract students. - Job Corps invited to submit nominees as well as other workforce development agencies such as Vocational	-Hospitals recruit from existing nursing staff using in- house communications. -Hospitals use program as recruitment tool to attract nurses from out of state -IT workers identified by employers. -One stop Career Centers identify unemployed/dislocated workers	-Partnering companies refer incumbent workers for upgrade training -Distribution of information about program at career centers; referrals by career center staff (of primarily unemployed individuals) to program -No paid advertisements	-Use NYSIA to publicize program availability to membership. Also did initial survey of needs through this group. Post info on association web-site. -Use business development unit of Workforce Alliance (WA) to identify employers not in IT but utilizing IT that might be interested in upgrading

	downsizing employers, at job fairs, and via word-of-mouth. -No paid advertisements, but some articles about project in local newspapers		Rehabilitation			workers. -Staff at WA posted notices on community bulletin boards, used business connections - CUNY advertised program
Eligibility/ Screening/ Assessment	-Participants must be employed by or have commitment of employment from partnering employer -Assessment tailored to requirements of employer and training provider -Workforce Essentials has in-house assessment capability, which employers may utilize; employers may conduct own assessment -Most participants tested, but no standard set of tests applied -Wide variety of tests used, tailored to employer needs and occupational training	-Main requirement is participants must be interested in training being offered -Assessment tailored to requirements of employer, training provider, & program component -WIB career center assessment facilities may be used at the discretion of employer or trainer -Most participants tested, but no standard set of tests applied -Most participants take the TABE; some complete an interest inventory; range of other types of assessment tests is	-Incumbent worker screening done by employer who identified potential trainees. -Unemployed/ underemployed screened by Workforce Development Division and where individuals had no existing experience, by Hi Tech Business Council to ensure training desired made sense and that applicant had necessary prerequisites. -Assessment tests administered. -Those attending Mat-Su training courses were screened by the college and normal	-For the nursing program, eligibility criteria established and applicants self selected. Screened and approved by employer. No testing required. - For Hi Tech program, screening done by One-Stop and by admitting institution	-Partnering companies screen incumbent workers and refer appropriate ones for training -ITA component – career center staff assess appropriate-ness of individual, then H-1B director makes final decision -Formal screening form used -No standard set of formal tests used to assess client – employers may decide to use assessment test	-For incumbents, screening done by employers. -For unemployed/ underemployed, fairly elaborate process involving student self-assessment of IT skills, review by members of CUNY staff, NYSIA, Workforce Alliance -All individual enrollees slotted into basic training component unless they had work history to demonstrate they did not need initial training

	requirements -Among most used tests are: NET Test (similar to TABE); COPS, CAPES, CAPS; VALPAR	available, if needed	enrollment standards used			
Employer Role in Training	-Help with recruitment and screening of appropriate individuals -If not already employed, make commitment to hire participant if he/she completes training -Provide input on curriculum, if appropriate -Pay at least a 40 percent match payment (e.g., can be direct payment for training or in form of wages paid to worker while in training)	-Refer incumbent workers for upgrade training -May assist trainer with curriculum development -May pay part of costs of tuition -May provide training facility on-site -Most training done on participant time; one employer gave employees 1 hr. paid time (matched by 2 hours of employees' time)	-Refer incumbent workers for upgrade training - Paid 60% of tuition costs. -Provide on-site facility for some training -Provide paid release time	**Both Components** -Refer incumbent workers for upgrade training - Assist with curriculum development **Health Component** -Conduct on-the-job training -Provide preceptors (mentors) for each student in the clinical portion of training -Provide release time -Arrange for replacements in order to facilitate training	-Refer incumbent workers for upgrade training -May assist trainer with curriculum development -May pay part of tuition -May provide training facility on-site -Most training done on participant time	-Refer incumbent workers for upgrade training -Provide input regarding high demand fields -Signed intent letter to consider upgrade for employee in the future
Primary Types of Training Offered by Occupation	-Training provided in wide range of occupations, spread across manufacturing and health care fields	-5 main career paths: nursing (primarily RN), teachers, computer specialist (e.g., MCSE, A+),	-Training provided in: A+, Microsoft Certified Systems Engineer (MCSE), Data Base Administration	-Nursing: Critical Care PeriOperative Preceptoring (mentoring) Plan Psychiatric	-Most training for careers in IT or telecommuni-cations fields, such as: help desk technicians, PC	-Individual training provided in: Web Development; Unix System Administration; Java; Data Base

	-Examples of types of occupational training: LPN, radiation technology, medical transcription,	electronic technicians, and accounting (rarely used) -Emphasis on career path and building pipeline into shortage occupations (e.g., LPN to RN to BSN) -Individual referrals into a variety of other occupations	(MSDBA), Microsoft Certified Professional (MCP), Certified Cisco Network Associate (CCNA), Certified Cisco Network Professional (CCNP), Java Script, Local Office Network Technician, Computer Aided Drafting -Grant paid for development of IT training program infrastructure at University. AA degree program which can be used toward BA degree.	Nursing -Hi Tech: AA Degree training in Computer Systems and Programming. Anticipate some graduates will go on for BA Degree.	support specialist, network administrators, web developers -Individuals in ITA track could receive training in variety of technical fields (i.e., under individual referrals to training)	Systems Administration -Employer-specific training developed to meet employer needs. Generally very short term. Grant paid for the development of curriculum to deliver these programs at CUNY

Training methods	-Mostly classroom instruction; clinical and hands-on instruction provided, where appropriate -Instruction provided at training facility or employer site -Duration/intensity of training varies - ranging from 9 weeks to 2 years (average about 1 year); instruction hours per week varied from several hours to 35 hours -Training done in group (e.g., LPN) or individual basis (e.g., referral to community college) -Most training results in certification; few degrees conferred and none above 2-year associate degree	-Mostly classroom instruction; clinical, lab, and hands-on instruction provided, where appropriate -Instruction provided at training facility or employer site -Duration/intensity of training varies - - -ranging from 6 months to 2 years; instruction hours per week varied from 6 hours to full-time -Training done for groups (e.g., LPN) or on individual basis (e.g., referral to training providers) -Some training results in degree (AA, BA, BS, including RN, BSN, MSN) or certification; some have no degree or certification (e.g., those completing course in Visual Basic)	-Mostly classroom with some Web-based support. -Some done on college campus or training site -Some done at employer job site. -Intensive, vendor specific training could be very short term unless coupled with other academic program. -If enrollee was being sponsored by employer, the training was likely to be more short term. Program offered what was needed -Average training duration was 103 hours but most people were in courses lasting 55 hours or less.	-Classroom with lab, Web-based, TV-Distance Education, OJT Instruction done at central hospital, at home hospital and at 12 distance learning labs throughout the state -Actual classroom sessions last btw. 72 and 82 hrs over a 5-6 week period depending on the specialty. Clinical on-the-job portion of training ranged from 680 hrs to 720 hours -Hi Tech program training all in classroom setting. Two types of program: Degree objective training offered to full time unemployed and upgrade offered to employed individuals 3 days per week over 16 months. Also leads to AA	-ITA component: mostly classroom and lab -Employer-based training: classroom and lab (often at employer site), web-based (distance learning) -Mostly off-the-shelf training, but some customization for company-specific programs) -Many participants seek MCSE or other certifications -Some employers send participants as a group for short-term training	-Classroom with lab – Web used extensively in training but not as a delivery mechanism -Employer specific training varies between two days and several weeks
Support Services	-No support services provided	-No support services provided	-No support services provided	-No support services provided	-Pay for exams, books, instructional	-No support services provided

	directly under grant, but referrals made to WIA and other agencies (especially for transportation, child care, and housing assistance)	directly under grant, but referrals made to WIA and other agencies -Pathways referrals receive support services paid by Pathways (e.g., transportation)	directly under grant, but referrals made to WIA and other agencies	directly under grant, but referrals made to WIA and other agencies	materials -No support services provided directly under grant, but referrals made to WIA and other agencies	directly under grant, but referrals made to WIA and other agencies
Post-Training Services	-Primarily case management by Workforce Essentials staff during training period and for a year (or longer) staff visit with and call participants	-Emphasis on tracking attendance and outcomes -Several employers (e.g. Kino Hospital) provide ongoing case management/ mentoring	-Job search assistance by public agencies. -Private proprietary schools doing training are not required to assist with placement. At the time of the review, there was still an active labor market for IT workers and no one was particularly concerned that those trained wouldn't find work.	-Focus of nursing program on incumbent workers, so post-training services not much of an issue. -The hi tech training program was designed to last almost to the end of the grant at which time job placement services will be made available at the One Stop Centers and at the training facilities.	-Under ITA component – monthly contact by H-1B director with participants while in training -Under company-specific training – ongoing monitoring left to the employer	-Each participant assigned a Customer Service Representative to assist with support services needed . – Series of Job search workshops offered in evenings -Students required to develop web pages during training which could be used to demonstrate skills to potential employers.
Factors Facilitating Project Implementation/Su ccess	-Existing & well established relationships with employers and local training providers -Previous experience with administering training program, especially	-Existing & well established relationships with employers and local training providers -Low unemploy-ment and local shortages in target-ed occupations (esp. nursing)	-Existing & well established relationships with employers and local training providers -Recognition by employers that this was a very good deal given that the alternative was	-Desperate need for specialty nurses which resulted in Hospitals joining together. -Existence of piloted training programs and curricula which could be adapted.	-$15K planning grant from Comm Corp -Employers involved in prior state grant program, so already lined up and ready to go	-Existing & well established relationships with employers and local training providers - Support by Industry Specific Advisory Committees (formed under

	employer-based training -Employers willing to meet match requirements -Readily available pool of potential participants	-Career centers available to help with assessment -Available pool of potential participants	importing workers or sending workers to training themselves. The isolated nature of Alaska labor force dictates employers either train their own workers or pay to bring them in from lower 48 states or from foreign countries. - Recognition that establishing training center for vendor specific training would save money	-Participants willing to be trained without promotion or increased wages -Closing of critical care facilities in neighboring NY resulting in extra burden on Vermont. -Low unemploy-ment rate and nursing shortage - State population demographics portent continued labor shortages		JTPA to advise Private Industry Councils)
Factors Hindering Project Implementation/ Success	-Slowing economy meant some employers did not want to partner -Grant started immediately upon award, leaving little time for start-up	-Flexibility needed in curriculum and schedule to accommodate incumbent workers	-Difficulty in start-up due to need for State approval of award and release of funds. -2-year grant period a hindrance when doing hi tech, hi skill training. The best that can be done to minimize the need for H-1B workers is to provide interested workers with the tools needed to climb the career ladder to those jobs	-Award of grant 1.5 months ahead of request by grantee thus leaving little time to prepare -Initial suspicion by hospitals that if workers were trained they might be "poached" by other hospitals. -Continued decline in the high-tech field nationwide	-No administrative costs included in Round 1 grants -Process for issuing ITAs had to be developed -Grant started upon award – leaving little time for start-up	-Employers wanting to train everyone in a unit including H-1B workers to avoid the appearance of favoritism. -National decline in high-tech -World Trade Center attack and decline in employer base -Unable to gain access to funds in a timely way. -Businesses are wary of government programs.

Other Comments/ Notes		-Most training done on participants' time -1/10 of H-1B participants co-enrolled under WIA -	-Grantee extremely enthusiastic about the potential of the program to provide long-term training opportunities to residents of the State by replicating the training curricula at other campuses of the U. of Alaska. There is a real desire to ensure that local people can get quality training without leaving the state. -Appeared to be little in the way of suspicion by employers in dealing with government to achieve training objectives.	-Grantee very alert to ways to utilize cost savings to offer more programs. In this case, another critical shortage occupation was added for the last phase of the grant. Working relationships between all groups involved in the program were exceptional. The DET Administrator and the HRIC were very involved and enthusiastic. The Grant Manager was very well versed in all of the workings of the training providers and employers. The employers uniformly sang the praises of the program and administration by the state.		-The training targets for this program were essentially doubled after the grant awarded due to the apparent high per /person cost of original plan. -Working with small business easier but larger employers can provide more trainees.