

DEPARTMENT OF DEFENSE

Converting Closed Military Bases to Centers for Education and Vocational Training



Office of Economic Adjustment

D E P A R T M E N T O F D E F E N S E

Community Guidance Manual
Converting Closed Military Bases
to Centers for Education and
Vocational Training

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Office of Economic Adjustment



ACQUISITION AND
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Community Leaders, Educators, and Public Officials

The Office of Economic Adjustment (OEA) periodically prepares and distributes community guidance manuals dealing with subjects that are timely and of interest to communities confronted with the issue of military base closures. This manual provides guidance to community leaders, educators, and vocational training providers wishing to convert portions of a closing base to higher education and vocational training centers.

Across this country people are returning to school in greater numbers to learn new skills, obtain degrees and technical certification, and increase their ability to compete for higher earning jobs. Both employers and employees are searching for better ways to improve living conditions, lower costs, upgrade skills, and expand American business and industry.

To be competitive in the global marketplace we will need to rethink traditional education, create more business-education partnerships, and establish collaborative programs to meet the work force needs for business and industry. Closing military bases offer to the new wave of education providers the opportunity to establish "smart" campuses, at the least cost, using the substantial public investment already made in bases across this country.

When bases are closed, opportunities are created for the local community to consider the reuse potential of large parcels of land and surplus personal property and buildings in ways not previously thought about. This office is pleased to present this community guidance manual for consideration by local community leaders, base redevelopment authorities, and the greater educational and vocational training communities. We hope this manual will be of assistance.

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Acting Director
Office of Economic Adjustment

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SECTION I

Introduction

Downsizing of the Military Force Structure

Since the end of the Second World War, military bases, both within and outside the United States, have opened and closed, contracted and expanded to meet the challenges brought by over 50 years of uninterrupted Cold War. With the collapse of the Soviet Empire has come a shift in U.S. defense priorities. This shift has resulted in significant reductions in national defense budget outlays and in the size and deployment of the military force structure within the 50 United States, Puerto Rico, Guam, and abroad.

Decisions to reduce the size of the military force structure translate, most publicly, to the closing of military bases. Across this country, military installations, often the economic mainstay of local communities, have come under close scrutiny. Since 1988 there have been four successive bipartisan Defense Base Closure and Realignment Commissions (BRAC) that recommended the closure of 352 major and minor military bases and installations, and the realignment in operations and functions of 145 others.¹

For many local communities hard reality came in 1988 with the first round of base closures. Between 1981 and 1988 not a single major military installation was recommended for closure. However, in 1988 the Secretary of Defense's bipartisan Base Closure and Realignment Commission made recommendations affecting 145 installations. Of this number, 86 major and minor bases were closed in the first round. An additional 5 were closed in part, and 54 experienced either an expansion or contraction, as units or activities realigned.²

Again in 1991, 1993 and 1995, the Secretary of Defense recommended, through the bipartisan commissions, to the president and the Congress an additional 96 major base closures. These 3 successive rounds of base closure decisions involved a total of 187 major military bases within the 50

United States, Puerto Rico, and Guam,³ impacting approximately 168,000 military and 98,000 civilian at place jobs.⁴

The Challenge to Local Communities

Economic impacts of military base closures and force structure realignments have been felt most dramatically at the local level. Communities across this country are having to face the challenge of realigning their local economies as bases close, workers lose their jobs, and economic activities shift from military to civilian dependency.

In cases where the local economies are strong and well diversified, economic dislocation may not be as severe and adjustments may be accomplished fairly quickly. England Air Force Base near Alexandria, Louisiana, and Pease AFB in Portsmouth, New Hampshire, are cited as examples of rapid community economic adjustment efforts.

In others, where closure is more complex and the local economies are heavily dependent on the

military presence, recovery may take many years and involve considerable community investment. The Philadelphia Naval Shipyard is an example.

Communities that have been able to adapt to the base closures have done so by building on already established and stable resource bases. The cities of Aurora and Denver, Colorado; and Mesa, Arizona, are examples. Both have moved aggressively and with purpose to establish on their former bases major centers for higher learning and vocational training as new growth industries and replacement activities for their communities.

Another community, Alexandria, Louisiana, did not wait for the closure of England Air Force Base to announce that J.B. Hunt Transport, Inc. would establish a new truck driver school and train 1,500 students a year. The school is part

"It is not so much that all jobs will become 'high tech' but rather that technology will increasingly alter the way jobs are performed as well as the very nature of the workplace. It is the condition of work in America, driven by technological changes, innovation and world competition, that undergirds the need to adjust employment and training policy."

*Marion Fling
and Anthony Corcorano*

Since 1988, there have been four successive bipartisan Defense Base Closure and Realignment Commissions (BRAC) that recommended the closure of 352 major and minor military bases and installations, and the realignment in operations and functions of 145 others.^[1]

of a larger planned unit development under the aegis of the England Authority. The Authority is an independent governing body created by the State of Louisiana with powers similar to that of a municipality.

Office of Economic Adjustment (OEA)

The Office of Economic Adjustment was established in 1961 within the Department of Defense (DoD) by then Secretary of Defense Robert McNamara. OEA since has assisted over 500 communities adjust to military base closings and force structure realignments. In recent years OEA's workload has expanded in response to the BRAC actions and resulting community economic impacts.

In 1993 OEA conducted a survey of 97 pre-1988 base closures. The survey revealed among the surveyed military bases that more than 88,000 civilian and 136,000 military at place jobs were directly affected. However, during this 30-year period local contacts reported that 171,000 new jobs were created as part of community sponsored reuse planning and economic adjustment processes. During this same period, nearly 50 converted military bases provided additional capacity for private and public sponsored education and vocational training facilities sufficient to accommodate over 145,000 students.⁵

Community Guidance Manuals

When bases close, opportunities are created for the local community to consider the reuse of large parcels of land and surplus personal property and buildings in ways not previously envisioned. To assist communities, OEA periodically publishes community guidance manuals. These manuals are intended to help communities steer their way through an often traumatic and confusing adjustment period—learning as they go.

This community guidance manual is focused on converting all or part of closing military bases to centers for education and vocational training. Most military installations contain significant assets dedicated to training military personnel. To the extent such assets are made available through the closure process as surplus real and personal property the more adaptable the base becomes for reuse.

Organization of this Manual

This manual is organized into six sections. Each section concentrates on a particular learning experience related to converting base assets to community owned and operated centers for education and vocational training.

Section II explores the workplace of today and the technological advances that are propelling business and industry to introduce new ways of doing business.

It introduces the concept of today's footloose industry and labor force, the concept of the "composite community," and the role closing military bases can play in positioning business and industry, the work force, and educational institutions for the next century.

This section also presents an outlook on the American work force between 1994 and 2005. It was extracted from the Bureau of Labor Statistics (BLS) *Occupational Outlook Quarterly* (Fall 1993) and the *Employment Outlook: 1994-2005* (Dec. 1995) and includes selected topics, observations, and conclusions relevant to this manual.

Section III discusses the steps leading to the development of a base-specific community education and vocational training plan. It focuses on steps education providers can take to implement an education or vocational training center on surplus military base property.

Section IV focuses on the public benefit conveyance (PBC) process for educational purposes. The Department of Education was particularly helpful in presenting in clear terms the opportunities available to communities and educational providers.

Section V introduces two case studies of post-1988 community conversion efforts involving new and expanding educational and vocational training opportunities at closing bases. These are projects in the making and are presented for the purpose of illustrating post-1988 communities and their efforts to muster community support and financial and political resources to secure control over all or parts of surplus military property for education purposes.

Section VI reviews seven pre-1988 closure projects where educational and technical institutions have been established, how they came into being, experiences to be shared, and lessons learned.

It is our hope that this manual will be of value to communities and educators who have been affected by a base closure.

SECTION II

Setting the Stage for the Next Decade

ABSTRACT: This section presents an overview of the workplace of today and the technological advances that are propelling change in the way business is conducted. It introduces the ideas of footloose industry and labor force; the idea of the composite community; and the role military bases can play in responding to the shifting paradigms confronting business and industry, the work force, and educational institutions.

Introduction

Preparing the labor force for the next decade will require a substantial commitment of resources from all sectors of the economy. Government, business and industry, and educational providers across the country are forming partnerships in anticipation and in recognition of continuing changes in the workplace. Advances in business technology have rapidly accelerated the rate and means by which information is received, assimilated, processed, and exchanged. The workplace of tomorrow will be highly dependent on an educated, articulate, and thinking work force.

A 1991 National Association of Manufacturers survey of its membership revealed concern about the skills of present and future employees among those businesses responding to the survey. The respondents feared their workers could not technologically advance to meet the high demand for quality in a global economy. They also had little faith in public school systems' ability to prepare a skilled workforce.

In response to this, business-education partnerships have sought assistance from community colleges across the country to provide remedial programs to combat illiteracy, expand the quality of education, and meet the growing needs of business and industry. Economic development organizations, including local chambers of commerce, are promoting quality and excellence in the workplace as a way to increase the skill level of the labor force and expand the ability of American business and industry to be more competitive.

The Workplace of Today

The workplace of today is radically different from the workplace of the past. Carbon paper and ink ribbons have been swapped for laser printers; personal com-

puters have replaced the typewriter; layout, typesetting and offset printing have been exchanged for desk top publishing; telephonic facsimile (FAX) transmissions and electronic mail and file transfers have made written communications instantaneous and ubiquitous. Everywhere, networking, both socially and electronically, has changed the way business is conducted.

Marion Pines and Anthony Carnevale in an essay titled "Employment and Training" remind us that:

It is not so much that all jobs will become "high tech" but rather that technology will irreversibly alter the way jobs are performed as well as the very nature of the workplace. It is the upskilling of work in America, driven by technological changes, innovation and world competition that undergirds the need to adjust employment and training policy.⁷

Footloose Industry

The engines that drive the economy are no longer geographically tied to traditional central workplaces. They have become footloose, capable of moving from one location to another as markets advance and contract, wage rates change, and the skill levels of the labor force vary in response to changes in regional migration patterns, markets, and economies.

The information highway has and will continue to alter the way we live, communicate with each other, and conduct day-to-day business. Business and industry are free to seek locations where a skilled labor force, competitive wage rates, less government interference, and reasonable living costs predominate. The 1970s witnessed the emergence of the "Sunbelt" states. The 1980s saw the attraction of Silicon Valley and Denver Tech Center in the West, and Research Triangle, Boston Route 128, and Reston in the East. The 1990s will see concentration of business and industry in less costly and congested locations that possess the educational centers that can train the labor force to meet the work skills desired by emerging businesses and technology.

Footloose Work Force

Personal computers, supported by FAX machines and Internet, have networked homes, businesses, offices, production sites, and automobiles making communications instantaneous and universal. The notion of workers telecommuting from their homes in distant

The future will not duplicate the past. However, it will be influenced by it. Unforeseen events will occur that affect our economy in some major way. Even though the past 13 years are not likely to be duplicated, they may continue to shape the economy of the future.

regions of the country is no longer futuristic—it has become reality.

Just as the information highway has supported the migration of businesses, it also has supported the movement of well-educated and trained workers seeking better living conditions with less crime and congestion and lower living cost. The Mountain and Central States increasingly are attractive to the worker as places to live and work.

The Composite Community⁸

Both employers and employees are searching for the ideal composite community within which to live and conduct business, grow, and prosper. This is driving industry to search for communities that offer improved living conditions with safer environments, lower costs, and a trained work force. Communities that can offer this will be better positioned to attract a quality labor force and successfully compete in the global marketplace.

The Role of Closing Military Bases

Closing military bases are being made available for civilian reuse in large and small communities across this country. The most practical and cost-effective reuse scenarios for closing military bases are those uses that most closely emulate the original function. For example, former military airports are being converted to civilian airports with related industrial reuse opportunities. Military depots are converting to warehouse, storage, and transfer facilities. Armed forces training centers are being converted to public and private education, research, and training campuses.

Military Bases as Ready-Made Composite Communities

A closing military base closely resembles a city in miniature, with infrastructure, industrial and commercial buildings, open space, residences, schools and recreational facilities—all ready for occupancy and reuse.

As a potential composite community of the future, closing military bases are attractive to community colleges and universities; technical, trade, and business schools; secondary and continuing education institutions; and primary and special education institutions. Singularly or collectively, these institutions are seeking

closing military bases for the opportunity to create educational environments with linkages to business and industry.⁹

Closing military installations represent substantial public investment in land, buildings, and infrastructure that can be made available to communities and non-profit eligible institutions, either at market rate or substantial discount, depending on the degree of public benefit and the nature of the educational institutions seeking to acquire property.

The following were taken from 1993 and 1995 reports prepared by the U.S. Bureau of Labor Statistics. They summarize the agency's view of the American work force and employment opportunities between 1994 and 2005.

Occupational Outlook: The American Work Force 1994-2005¹⁰

Introduction

Expectations about the future influence the decisions people make today. In particular, information about impending changes in the American work force plays an important role in many decisions: Individuals choose one educational program rather than another. Educators change curricula. Government officials determine which policies to pursue and which to abandon. Business executives make plans to meet the changing conditions of the labor market.

Assumptions About the Future

The future will not duplicate the past. However, it will be influenced by it. Unforeseen events will occur that affect our economy in some major way. Even though the past 13 years are not likely to be duplicated, they may continue to shape the economy of the future. For example, the political changes in Eastern Europe that occurred in the late 1980s will result in lower defense expenditures for the United States in the 1990s. Other issues that no doubt will have significant impacts include the cost and availability of health care, the large federal deficit, and the balance of trade.¹¹

Labor Force: Since the very large baby-boom group completed their entry into the labor force in the late 1970s and early 1980s the labor force has continued

to grow, but at a markedly slower rate. The 1994–2005 labor force is projected to continue that pattern. The change over this period is expected to be slightly more than 12 percent, or a growth rate of 1.1 percent a year. This change is compared with the 16 percent expansion, or a 1.4 percent growth rate per year over the 1982–1993 period.

Between 1994 and 2005 the labor force is projected to grow by 16 million. Its composition will also change during this period as Blacks, Hispanics, and Asians and other groups expand more rapidly than Whites. By 2005, White non-Hispanics will make up 74 percent of the labor force; Black non-Hispanics will comprise 11 percent; Hispanic, all races, will contribute 11 percent of the labor force; and Asian and other non-Hispanic will represent 4 percent of the labor force.

Employment: BLS projections indicate that employment should increase from 127 million to 144.7 million between 1994 and 2005. This represents a growth rate of about 14 percent, just over one-half that prevailing from 1983–1994. The slowing of employment growth reflects the slowing of labor force growth. Projected employment growth will be concentrated by industry. Employment in services and retail trade is projected to increase by 16.2 million out of total employment growth for wage and salary workers of 16.8 million. Business services, health services, and education services will account for 9.1 million service industry jobs.

Manufacturing is projected to lose 1.3 million jobs from 1994–2005. Nearly 1 million operator, fabricator, and laborer and precision production, craft and repair jobs will be lost. These workers accounted for 60 percent of total manufacturing employment in 1994.

Because industries have unique needs for workers in different types of occupations, changes in the industrial structure of the economy affect occupational employment trends. Such changes can come about because of changes in technology, business practices, and in goods and services provided.

- **Technology Changes Will Affect Employment Growth of Many Occupations, But in Different Ways.**

For example, new office technology will reduce the demand for typists, statistical clerks, and bookkeepers, but will increase the demand for computer programmers and systems analysts.

- **Changes in Business Practices Will Result in More Travel Agents as Businesses Increasingly Use Travel Agents to Obtain the Lowest Fares for Travel.**

In contrast, the employment growth of railroad conductors will continue to decline as railroads shift away from little remaining passenger traffic to freight traffic.

- **Personal Consumption Expenditures, Which Account for About Two-thirds of the Gross Domestic Product (GDP), Have a Major Impact on Employment as do Changes in What Consumers Demand.**

Generally, consumer demand for services, such as health care, education, and recreation, is projected to increase much faster than demand for goods, such as food, clothing, and shelter. Employment in service-producing industries is projected to increase much faster than in goods-producing industries. With the expected decline in defense expenditures in the 1990s, employment prospects in those industries will be less favorable than in the 1980s.

- **Professional Specialty Workers Will Continue to be the Fastest Growing Major Occupational Group.**

Employment in all major occupational groups is projected to grow more slowly than during the previous 11 years, as will growth in total employment. The most significant change from the past is the slowing of employment growth for administrative support occupations, including clerical, from 23 to 4 percent. This reflects the expected increasing effect of technological change.

- **Education Will Play a Bigger Role in the Workplace.**

Among categories of jobs, those that generally require at least an associate degree are projected to grow at a faster than average rate. Occupations that generally require moderate term (1 to 12 months) on-the-job training are projected to grow the slowest, because this group includes many production occupations that are concentrated in manufacturing industries in which employment is declining.

- **A Third of All New Jobs Will Require Bachelor's Degrees.**

The job categories that will require a bachelor's degree or higher will account for job growth of nearly 6 million. This will account for 34 percent of total growth, significantly more than

High Paying Jobs are Projected to Grow Faster than Low Paying Jobs

Jobs with above average earnings are projected to account for nearly 60 percent of employment growth over the 1994-2005 period. However, replacement needs will be greater in occupations with below-average wages, and total job openings will be similar to the distribution of employment in 1994.

the 21 percent share of 1994 employment accounted for by these jobs. In contrast, jobs requiring less than 1 year of on-the-job training are projected to account for job growth of 7.4 million, or 42 percent of job growth compared with a 52 percent share of 1994 employment.

- **Minority and Women Workers Will Increase Their Shares of the Work Force.**

The 1994–2005 projections indicate that women, Hispanics, Asians, and others, and older workers will significantly increase as a proportion of the labor force, while men, youth, Blacks, and non-Hispanic Whites, while growing, will become a smaller share.

- **Industry.**

Industry employment will continue to shift from the goods-producing to the service-producing sector of the economy, but the shift will be less pronounced than during the previous 13 years.

- **Employment in Occupations.**

On average, employment will grow faster in the major occupational groups that require the most education and training.

The category of professional specialty workers¹² is projected to grow the fastest and to increase more—by 5 million workers—than any other major group. This group also posted the fastest rate of increase and largest job growth from 1983 to 1994. Professional specialty occupations are expected to experience the largest increase in share of total employment, rising from 13.5 percent in 1994 to 15.4 percent by 2005.

Technicians and related support workers and executive, administrative, and managerial occupations—two other groups having higher than average earnings and educational attainment—are expected to experience growth. A slight increase in total employment is represented by this group.

With the exception of the rapidly growing service worker occupational group, occupational groups having the lowest educational attainment and the lowest earnings are projected to have the lowest rates of growth.

Occupations with the Largest Job Growth: Most of the occupations with the largest increases in numbers of jobs are concentrated in three industries that are expected to provide nearly half of the total growth in wage and salary jobs from 1994–2005—retail trade, health services, and educational services. Within retail trade, employment of salespersons, retail; cashiers; waiters and waitresses; food preparation workers; marketing and sales worker supervisors; and food service and lodging managers is expected to grow substantially. All of these occupations also had large employment increases from 1983–1994.

The health services sector is expected to provide numerous opportunities for registered nurses, licensed practical aides, and personal and home care aides. (The last two are on the list of the fastest growing occupations.) Of the occupations in this group, only registered nurses and home health aides were also on the list of the 30 occupations with the largest job growth between 1983 and 1994. The public and private education industry is projected to provide large employment increases for elementary school teachers, secondary school teachers, teachers aides and educational assistants, and special education teachers.

Educational Requirements and Earnings of Growth Jobs:

Educational requirements and median weekly earning of workers vary widely among the 30 occupations with the largest numerical increases. About one-half of the occupations on both lists require education or training beyond high school. Occupations that generally require a bachelor's degree or more education are concentrated in the professional and specialty group, and all had median weekly earnings in 1994 that were higher than average for all full-time wage and salary wage workers. Examples of occupations in this category include computer engineers, systems analysts, operations research analysts, physical therapists, occupation therapists, and elementary and secondary school teachers.

The remainder of the occupations require high school graduation or less education. Examples include home health aides; human services workers; personal and home care aides; salespersons, retail; cashiers; truck drivers; correction officers; and clerical supervisors and managers. Very few of the occupations in this group had average or higher than average earnings in 1994.

The Return to the Classroom

Across this country people are returning to school to learn new skills, obtain degrees and technical certification, increase competence to compete for higher earning jobs, or to remain current and proficient in their career of choice. Education providers are keenly aware of this trend and are struggling to respond to emergent needs for a better trained, articulate, and thinking labor force.

There is a growing emphasis on the part of education providers to establish stronger ties with business and industry, especially at the postsecondary and community college levels. Partnerships among educational institutions are forming as capital costs to provide new or expanded educational space exceed the resources and abilities of most providers.

This willingness to share resources has spawned multi-institutional campuses that are programmatically integrated, mutually supportive, noncompetitive, and highly responsive to customer demands. For example, educational institutions at the former Lowry AFB in Denver, Colorado, and Williams AFB in

Not only do closed military installations offer an opportunity to create new links between education and business, but to house customized programs to retrain the work force of today for the challenge of tomorrow.

Mesa, Arizona, have successfully organized multiple educational consortia in response to the emerging demands of employers for a better-trained work force.

A driving force behind the move toward consolidation is the need to pool scarce operating and capital resources, reduce duplicate capital outlays for plants and equipment, and achieve economies of scale. Through effective cross-programming of curricula, education institutions have been able to not only share costs, but also to retain their independence, reputations for excellence, and academic identities.

With advanced technology for electronic super-highways, teleconferencing, and uplink/downlink systems for multimedia programs, the new educational campus will provide a variety of traditional and nontraditional training and work force development experiences. It will be capable of reaching not only local, but also national audiences with new instructional programs in information technology that will touch every level of higher education.¹³

Closing military bases offer to the new wave of education providers the opportunity to start fresh and to establish "smart" campuses at the least cost, using the substantial public investments already made in land and buildings. This community guidance manual examines education and vocational training as one adaptive reuse scenario that could assist a local community to diversify its economic and jobs base and become more attractive and competitive in the open market.

Summary

In summary, the outlook is for business and industry to grow steadily but modestly throughout the decade and into the next century. However, shifts within industry sectors will require different levels of employee expertise. Helping employees find their way will be the schools that link with business and industry to integrate classroom learning with on-the-job experiences, colleges that offer specialized training that local businesses demand, and companies that find new ways to teach and motivate employees.

Not only do closed military installations offer an opportunity to create new links between education and business, but to house customized programs to retrain the work force of today for the challenge of tomorrow. If we are to be competitive in the global market we will need to rethink traditional education and establish partnerships among educational institutions and collaborative programs to meet the work force needs for business and industry. Closed military bases can be adapted to civilian reuse and form the foundation for the composite community of the future.

OUTLOOK: Employers will continue to require workers at all levels of education and training. Nevertheless, the fact remains that workers with higher levels of education or training usually will have more options in the job market and better prospects of obtaining the higher-paying jobs.

Labor Markets of the Next Decade

by Norman C. Sanders
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Between 1994 and 2005 the Bureau of Labor Statistics (BLS) has predicted that employment will increase by 14 percent (from 127 million to 144.7 million). This compares to a 19 percent increase in employment over the previous 13-year period (1979 to 1992). This growth projection translates into an expected increase of 17.7 million new jobs by the year 2005. Virtually all of the growth is expected to occur in service-producing industries, as the shift from manufacturing to services and products continues through this and into the next decade.

Although the services sector has often been considered the home of low-paying, low-skill jobs, the BLS projections imply that this may no longer be the case. Although there will be continuing demand for fast-food workers and retail sales clerks, there will also be strong growth in new and emerging areas of the services sector that will require higher-skilled workers who will demand high pay. BLS projections anticipate that almost 60 percent of the expected increase in jobs (10.5 million) between the years 1994 and 2005 will be those with above-average earnings—the so called “good jobs.”

Over 5.1 million new “good jobs” will require a bachelor's degree or better, about 99 percent of all jobs requiring this level of education. Over 5 million new jobs with better than average earnings will be generated that require some postsecondary training, but less than a bachelor's degree. These account for about 70 percent of the all new jobs requiring this level of training. Finally, a bit over 3.5 million new “good jobs” will be created that require high school or less education, about 30 percent of all jobs created that need this lower level of educational attainment.

The growth in jobs over the next 11 years will be matched by approximately 16 million new labor force entrants. By the year 2005, Hispanics will account for 11 percent of the labor force, Black non-Hispanic 11 percent, Asian and other non-Hispanic 4 percent, and White, non-Hispanic 74 percent.

The message is clear—yes, there will be many job opportunities in the future that will represent all levels of educational attainment. Yes, some of the less well educated will be able to find jobs with higher than average earnings. However, the less well educated an individual is, the less likely it is that he or she will find a “good job” with higher than average earnings. In short, education pays. This was true in the 1980s and will be even more critical in the coming decade.

The major problem foreseen by the BLS is whether or not the available supply of labor will meet the educational needs of the future. The greatest rate of growth in labor supply is predicted for Hispanic-origin workers, those who in the past have had the lowest educational attainment levels. It is still an open question if educational and retraining programs can be designed that will adequately prepare our labor force for the evolving world of work.

SECTION III

The Process of Converting Parts of a Military Base to Educational and Vocational Training Centers

ABSTRACT: Section III discusses the steps leading to the development of a base-specific community education and vocational training plan. It focuses on how educational providers can implement an education or vocational training center on surplus military base property. It speaks to organizing, planning, and applying for surplus real and personal military property through the U.S. Department of Education (DoEd). Also, it talks about the importance of maintaining the financial integrity of the campus from inception to implementation and beyond.

Introduction

Since the first round of base closings in 1988, over 100 communities across the country have been affected. Some have experienced significant job losses with resulting impacts to the local economy. In other communities the impacts have been less severe and have offered the community opportunity to reflect on its future and how best to recover in the short term.

For all communities the closure of a local military base presents a challenge to marshal the resources of the community and develop creative solutions to rebuild the community's economic base and in some cases lessen dependency on a single major industry for employment.

Among the more creative solutions to be considered is the conversion of parts of closing bases to centers of education, technical, and vocational training under the auspices of DoEd.

Since 1949, DoEd, formally a part of the Department of Health, Education and Welfare (HEW), has orchestrated over 2,200 surplus federal property transfers to eligible education providers representing all levels of education. The DoEd is the primary federal point of contact for educational public benefit conveyances and reserves this duly delegated authority to assure that all proposals for a public benefit conveyance for education

meet DoEd criteria. Since 1950, out of 2,200 educational transfers, postsecondary and vocational education represented 39 percent of all transfers; elementary and secondary education represented 41 percent.¹⁴

This section explores the base reuse planning process as context for a later discussion of education and vocational training centers desiring to locate at closing military installations. Its purpose is to acquaint the reader with the opportunity extended to local governments and education providers to deal first-hand with a closure and recovery project. It lays the foundation for education and vocational training providers to become fully engaged in the reuse planning process at an early stage. This will assure community consideration of an educational or vocational training reuse proposal in the context of the larger base reuse planning process.

Preparing for the Orderly Reuse Planning Process

Potential education providers need to be mindful that communities experiencing base closures today face greater challenges than during previous closure periods. In addition to substantial reduction in national defense expenditures, bases facing redevelopment must deal with far more stringent environmental cleanup requirements, which can delay the property conveyance process.

Community Reuse Strategy for Rapid Recovery

Business retention and expansion are major components of most local economic development strategies. The challenge for communities impacted by base closing is to create an environment that will stimulate, attract, and retain growing businesses. Important factors are:

- an effective small business development system;

- a high quality labor force;
- adequate governmental services and support; and
- a strong education system.

A strong local education systems continues to provide positive location advantages for business and industry seeking new markets.

Overview of the Process

Based on over thirty-five years of experience in base conversion, OEA has found that the proven formula for a successful base reuse effort is in three parts: organization, planning, and implementation. This formula has been applied uniformly through the local reuse organization, often called a local redevelopment authority (LRA), with positive results. Educators seeking to affiliate with a base reuse project are advised to work with the LRA as they proceed to plan and implement their own education-related conversion project.

Getting Organized

The key to getting off on the right foot is to organize the community and state education leaderships to work with the base reuse planning organization LRA.¹⁵

TIP ONE: Decide Early in the Process Who Will be in Charge on Behalf of the Education Providers.

Most base reuse planning organizations establish subcommittees to focus attention on specific functional elements of a reuse plan and recovery strategy. An education subcommittee, consisting of community and state education leaders as well as citizens, may be the most appropriate body for coordinating expressions of interest from among multiple education and vocational training providers, and for determining community education goals, and assessing proposals submitted to the LRA for public benefit conveyance for education purposes.

TIP TWO: Get on Top of the Process and Stay There.

Once the LRA is established by the local affected government(s), it is incumbent on the education providers to: 1) work with the LRA; 2) develop resident expertise in the federal property disposal process, conflict resolution, and the National Environmental Policy Act (NEPA) process; and 3) work with the DoEd, sharing its vision and plan for an educational or vocational training center on the closing installation.

Actively participate with the LRA in the process from the initial community organizational and planning meetings through military Environmental Impact Statement (EIS) scoping meetings, the rough draft of the EIS and the Record of Decision (ROD) for property disposi-

tion. The ROD is one of the most important documents required in the chain of plans and official statements concerning a base closure. Without the ROD and a finding of suitability to transfer (FOST), surplus federal property cannot be conveyed. The ROD is based on the EIS that is to include the community's preferred reuse plan. The EIS analyzes the community's preferred reuse plan and its reuse options and assesses the relative environmental consequences of each disposal consideration.

Work with the LRA to make sure that the military department conducting the EIS satisfies all issues raised by the state and local environmental, historical, and cultural organizations.

TIP THREE: Recognize that no Transfer of Property Can Take Place Until the Base Can Warrant That all Remediation Necessary to Protect Human Health and the Environment has been Taken Under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h)(3), 42 USC 9620(h)(3).¹⁶

The Process of Planning for the Reuse of a Closing Military Base

TIP FOUR: Be Flexible and Expect Change.

The base reuse planning process is primarily focused on identifying alternative land uses that together make up a balanced approach to the efficient and effective reuse of former military property. A major component of the process is resolving conflict among competing objectives and differing stakeholders to reach a unified, community acceptable, and economically viable reuse strategy.

It can mean being flexible and working with all potentially affected interests in searching for compromise and community consensus. It can mean being able to adjust to changing rules at the federal, state and local levels. It can require a keen knowledge and awareness of parallel and related closure processes that are not directly under the control of the reuse organization, but, nevertheless, are influenced by its actions.

TIP FIVE: Learn the Critical Path.

It is in the interest of an education provider to track these closure-related processes so as to be better informed and prepared to participate when and if required. The LRA is the principal source of information relating to the status of each process and will be tracking each as part of its responsibility to direct the reuse planning efforts. Examples of related processes include the following.

- The base closure schedule

The timely preparation of the reuse plan and economic recovery strategy by the LRA is the process that will take the lead and set the tone for the closure and property reuse schedule.

- The federal surplus property screening
- State and local government surplus property screening
- Homeless providers screening
- The environmental clean-up process and schedule
- Public Benefit Conveyance (PBC) interests
- The historical and cultural resources inventory
- The NEPA, EIS, and ROD

At times the base closure schedule will seem to dominate the agenda of the reuse organization. At others, the EIS or homeless screening may seem to take center stage demanding the LRA's time and attention. Each interrelated process is separate, yet highly dependent on the LRA and its reuse plan schedule. The timely preparation of the reuse plan and economic recovery strategy by the LRA is the process that will take the lead and set the tone for the closure and property reuse schedule. It is to the base plan that the military department will look for guidance relative to its possible actions.

For example, both the military department and the Environmental Protection Agency (EPA) will consider the community's preferred alternative plan when developing and approving the property disposal EIS for the closing base. The LRA plan will be one of the factors considered when the military department issues its Record of Decision, setting the stage for a FOST.

The Reuse Plan in Overview

The base reuse plan is more than a conceptual statement of preferred land uses within the confines of the closing military base. It is a consensus document that incorporates, to the extent practical and cost-effective, recommendations regarding the infrastructure; highways and streets, on and off-site, to serve the intended development; development timetables; development phasing and cash flow analysis; market and financial feasibility analysis, including an estimate of net proceeds over a given period of time; proposed considerations of the Department of Defense and other federal and state interests; estimated fair market value of the property; local financial commitments; and proposed

financing strategies for the redevelopment of the base. The military department will closely follow the recommendations of the base reuse plan as it considers its property disposition strategies.

TIP SIX: Secure the Support and Cooperation of the LRA and Incorporate the Education Provider's Concept Plan in the Redevelopment Plan of the LRA.

This important step will ensure that the education and training concepts are considered in the larger context of the reuse planning effort.

Federal Planning Assistance to Local Communities

OEA is actively working with each affected community to assist in the civilian reuse planning and economic adjustment processes. The goal is to help communities achieve successful economic conversion in as short an amount of time as possible within fiscal, planning, and time constraints.

It is important to note that OEA assistance is limited to the recognized local base reuse planning or redevelopment authority (LRA). OEA can be of most assistance to education and qualifying nonprofit providers seeking to convert portions of a closing base for educational purposes through the LRA. It is important that expressed interests in base property for educational and vocational purposes be considered and incorporated by the LRA into the reuse plan. For example, the Lowry Redevelopment Authority, funded under an OEA grant, worked in partnership with the Community College of Aurora to prepare a joint development plan for the Higher Education and Advanced Technology Center on the former Lowry AFB in Aurora, Colorado. Both entities have combined their limited resources to effectively leverage their limited funds to accomplish mutually desired planning objectives.

In the case of independent educational and vocational training providers, OEA's role can be to support the LRA in its efforts to connect education and vocational training providers with the proper federal agencies, such as the Department of Education (DoEd); and to identify other federal agencies that could provide technical and financial support.

Targeted federal planning assistance grants are available through the Economic Development Administration (EDA) of the Department of Commerce. EDA is authorized under the Public Works and Economic Development Act of 1965¹⁷ to assist state and local areas in developing and or implementing strategies designed to address adjustment problems resulting from sudden and severe economic dislocation such as plant closing, military base closures, and defense contract cutbacks.

For example, Arizona State University received a \$427,000 operational planning grant from EDA to develop and refine the Education, Research and Training Consortium campus to be located at the Former Williams AFB in Mesa, Arizona.

The University of California received an initial campus planning grant of \$725,000 for its Fort Ord Project through the sponsorship of the County of Monterey. The EDA grant was matched by the state's Trade and Commerce Agency (\$192,000) and the County of Monterey (\$50,000).

State assistance may also be available through the state governor's office or the legislature. For example, the Higher Education and Advanced Technology Center to be located on the former Lowry AFB in Aurora, Colorado, secured campus development and planning assistance from the Colorado legislature in the amount of \$4.8 million to jump-start the campus. It applied these funds to prepare a detailed campus development plan in cooperation with the Lowry Redevelopment Authority and to retrofit buildings to accommodate classroom activities (see Section V).

Implementing the Reuse Plan

Communities shape their futures during the organizational and planning phases by conceiving and formulating plans to carry out their visions and goals. As they progress from reuse planning groups to redevelopment organizations, they build the frameworks and capacities to implement their plans. Likewise, education and vocational training providers evolve from vision builders to campus developers. The base reuse plan and recovery strategy serves as the bridge between the planning and implementation processes.

The Education Conversion Process

The following outlines a process leading to a public benefit conveyance (PBC) for educational purposes. It is both a community- and institution-driven process that mirrors the three-part approach to adaptive reuse of former military property: (1) organize, (2) plan, and (3) implement.

When considering establishing a new or expanded education or vocational training campus on a closing

military installation, there are a number of issues to be addressed, including the following.

Identifying Community Education and Vocational Training Needs

Typically, the stimulus behind establishment of a new or expanded education or vocational training campus, be it public or private, are:

- increasing enrollment projections;
- specialized demands from government, business, or industry to upskill, or retrain, the local labor force; or,
- a need to fill a void in program offerings in response to changing customer demand for new and expanding curricula.

Organizing to Attract Interest from Public and Private Sector Providers

Most education and vocational training providers are constantly scanning the market place for new and emerging trends in customer demand and community need. They openly seek out opportunities to provide new program offerings to remain competitive in an increasingly complex and challenging global market place.

Involvement of state and the local governments:

At the level of state government emphasis is place on maintaining a strong relationship between higher education and business and industry. This relationship is universally recognized as the key to a state's continued economic growth and prosperity in business. Across the country state boards of regents and higher education commissions devote time to the question of providing quality higher education opportunities that will support and enhance a state's business and industrial base.

At the local government level we see educational institutions, chambers of commerce, and public economic development organizations working hand-in-hand to develop recommendations to present to state governors, legislators, and educators seeking to expand curricula and campuses to meet not only increasing education demands, but to remain competitive and at the leading edge of emerging technologies.

Involvement of the private sector: Public and private education, like a business, is demand driven. Also, it is capital intensive and requires sustaining revenues from a variety of sources to survive and expand. Increasingly, partnerships between and among educational providers and business and government are forming to finance expanding education and vocational training needs.

Multiple institutions are sharing campuses, parking, libraries, laboratories, classrooms, cafeterias, and housing to minimize cost, avoid duplication, and achieve economies of scale.

The conversion of parts of Lowry AFB in Colorado to a campus devoted to Higher Education and Advanced Technology (HEAT); and the establishment of an Education, Research, and Training (ERT) consortium on the former Williams AFB are just two case study examples of multiple education and vocational training partnerships in the making (see Section V).

Securing Community Political and Economic Support

Securing community political and economic support is among the first items of business for an institution seeking to expand or locate a new education facility. If a closing military installation presents an opportunity as a possible site for a new campus, the best approach is to affiliate with the LRA appointed to oversee the reuse planning for the installation. Also, form a committee of like interests. Begin to formulate common goals and objectives. Give direction and support throughout the conversion process.

At Williams AFB in Mesa, Arizona, community education and political leaders formed the East Valley Think Tank (EVTT). The Think Tank, under the leadership of the president of Arizona State University (ASU), quickly established the forum for chief executive officers (CEOs) from the educational institutions and local governments to meet and discuss the future educational needs of the East Valley.

From this association came the CEO Group consisting of the executive director of the Williams Redevelopment Partnership, the president of Mesa Community College, the City of Mesa Community Development director, and ASU vice president for University Relations. In the beginning over 23 entities were involved in the Williams ERT Consortium. Today, seven educational institutions¹⁸ remain committed to establishing a presence on the former Williams AFB.

Once all the players were engaged in the ERT Consortium, the process of identifying community education and vocational training needs took on a life of its own. Subcommittees were formed to review every aspect of education needs and formulate recommendations to the leadership group that worked in concert with the LRA, Chamber of Commerce, state Board of Regents, and local governing bodies to develop a plan of action, including a business plan identifying capital and operating costs over time and sources of revenue to sustain a growing campus (see Section VI, Lowry AFB Case Study)

Lessons Learned

Section V explores seven case studies involving converting pre-1988 base closures to education and vocational training centers. Even though recent Defense Authorization Acts established a new set of base closure requirements and procedures, there remain common elements associated with pre-1988 closures and conversions that are relevant to today's conversion projects.

Culled from among the seven case studies are the following eight lessons learned. These lessons apply to current closures just as they applied to past closures.

- Approach the prospect of converting to an education center from the standpoint of a business investment. It is important to understand from the beginning the total costs of conversion over time, including demolition of obsolete structures, retrofitting of buildings to meet Americans with Disability Act (ADA) requirements, local building and life safety codes, infrastructure conditions and required upgrades, security, lighting, and so forth.
- Work closely with DoEd representatives when considering a public benefit conveyance of surplus base property. This is the first point of contact for education public benefit conveyances. Seek their advice and direction coincident with base and local redevelopment authority representatives.
- Approach the conversion process united and focused. A team approach involving a broad spectrum of community leaders from education and business can harness community resources and generate political and financial support for the project. Also, it can produce a "community can-do" attitude among participants.
- Prior to conveyance negotiations, develop a multiyear business plan that is concerned with both revenue generation and costs over time. Use this plan to aid in discussions with DoEd and LRA. Both will be involved in property transactions if it is a PBC. If it is a negotiated sale or other form of property transfer, the military department will conduct the property negotiation.
- Acquire only those portions of surplus property that are needed to develop the campus and that can be financially supported over time. Assuming control over too large a campus can strain limited capital and operating resources. It can shortchange care and maintenance requirements and threaten the financial security and stability of the campus.
- Seek professional engineering and financial advice as to the conditions of buildings and infrastructure. This is an important element of the business plan and will help the applicant understand short- and

long-term financial implications of the deal. Professional engineering and accounting firms can provide information on building conditions and the costs to *upgrade or retrofit buildings* to accommodate proposed new uses. Keep in mind that this is not only a PBC for education purposes, it also is a real estate transaction.

As will be seen from several of the case studies presented in this manual, educational institutions quickly learn following conveyance that the former military property may not have been maintained in the highest order. For example, Section VI identifies the USA Brookley Center (Case Study No. 1) and Texas State Technical College (Case Study No. 4), both of which experienced added expense to upgrade and restore buildings to accommodate planned reuse.

- Hire the right individual(s), professionally trained and devoted to making things happen within fiscal, planning, and time constraints. In all of the case studies presented in Section VI, the single theme that permeated the discussion was having a competent staff to plan, engineer, and implement a conversion project.
- Understand the PBC process and restrictions that will be placed on the use of conveyed property. A public benefit allowance deed does substantially more than transfer ownership of property. It imposes a contractual obligation on the recipients to “pay for property” with 30 years of educational services.

Restrictions normally placed on public benefit conveyances have presented problems for some new campuses. For example, the PBC 30-year restriction does not permit subleasing to non-tax supported interests as a means of raising revenues to support campus operations and maintenance.

When considering a possible transfer, the secretary of DoEd will take into consideration any benefit that has accrued or may accrue to the United States from the use of such property. The emphasis here is on the use and not the condition of the property at time of transfer.

As a tip, when considering a public benefit conveyance or a negotiated sale, carefully consider the *useful life cycle of a building, its adaptability to a new user, and a fair return on investment*. This is especially important when considering obsolete and dated buildings that may have historic value and may not be readily adaptable, or World War II temporary wood-frame construction that may be well beyond its economic and structural life.

In the end, it is still a real estate transaction that must be justified in terms of real value to the buyer.

Reality Check

The following presents a list of reality checks that could be followed by an education or vocational training institution seeking to secure property and buildings on a military base using the public benefit conveyance process as outlined in Section IV. It represents a synthesis of steps in the conversion process including lessons learned from the case studies presented in Sections V and VI.

The steps are structured around the “organization, planning, implementation” steps that have proven to be successful throughout the military base conversion process.

The Process of Organization

- Identify the players and seek their support.
- Identify issues that are important to the players and how they see themselves connected with other educational and/or vocational training systems in the region.
- Obtain commitment and support from the CEO level and bring in the chief elected officials as equal partners.
- Formulate a series of projects that bring faculty and administration into the mix along with community leaders and CEOs.
- Spend time sharing ideas and concerns, brainstorming for the future, and most important of all—*Network*.
- Find a community leader who believes in the program.
- Organize a steering committee of leaders, and appoint and empower them to get the job done.
- Hire the right team to develop the education plan; work with DoEd, military, and LRA; and secure the public benefit conveyance through DoEd.
- Secure start-up planning and programming resources from federal, state, and local government and private sources.¹⁹
- Remember, the military and the LRA may fully support an educational entity and its plan for reuse, but the project or the educational entity seeking a PBC may not be eligible under the Federal Property and Administrative Services Act of 1949. The determination of organizational and program eligibility is the province of DoEd. DoEd early inclusion in discussions with a potential educational entity is very important and needs to be clearly understood by all participants.

As a tip, when considering a public benefit conveyance or a negotiated sale, carefully consider the useful life cycle of a building, its adaptability to a new user, and a fair return on investment.

The Process of Planning

- Develop the programmatic details first.
- Determine the permanent institutional organization that will take charge and manage the educational center and support the educational and vocational training programs.
- Work with the LRA to incorporate the education concept into the base reuse plan.
- Build on the LRA's base reuse plan to develop a more detailed facility development, business, and finance plan that takes into account:
 - institutional growth,
 - local government infrastructure support,
 - federal and state support,
 - continuing financial support,
 - marketing the new education facility, and
 - program development plan.

The Process of Plan Implementation

- Obtain the written approval and commitment of support from all participating entities responsible for implementation of each element of the campus plan
- Incorporate in the base reuse and property disposal plan, EIS, and ROD a clear description of the area of the proposed education or vocational training campus.
- Identify the appropriate conveyance mechanism, be it PBC or negotiated purchase by a state or local government or other qualifying entity.
- Submit to DoEd a formal application for PBC pursuant to established law and regulation.

- Press the affected military department to assign the property to DoEd pursuant to the ROD and the approved application for PBC.
- On transfer of the property, proceed with the orderly development of the education facility pursuant to the detailed implementation plan and terms and conditions of the PBC.

Reality of the '90s

Increasingly, public and private education and vocational training providers are creating new ways to respond to the needs of business and industry for a well-trained labor force. This trend toward partnering between business and education has made possible the formation of new multi-institutional centers of higher education, technology, and research in response to the need for a better trained, articulate, and thinking labor force. The two case studies presented in the following section are excellent examples of PBC processes that recognize closing military bases as opportunities to accommodate the new wave of education providers. Providers who can start fresh, establish new links between business and education, and create "smart" campuses to house customized programs to retrain the work force of today for the challenges of tomorrow.

Summary

The preceding was a reminder of the more visible and important steps to cover when proceeding to convert all or part of a closing military installation to an education or vocational training center. The key to a successful program is coordination, coordination, and more coordination. It is getting the right people to commit to the idea and employing a top-down process to secure political and community support for the project and its financing.

SECTION IV

The Federal Public Benefit Conveyance Process

Abstract: The conveyance of surplus military property for educational and vocational training purposes is governed by the Federal Property and Administrative Services Act of 1949, 40 U.S.C. 484, PL 81-152, as amended,²⁰ and the recently enacted National Defense Authorization Act for Fiscal Year 1994 (PL 103-160). This section outlines the public benefit conveyance process for education purposes and the roles of the military department, DoEd, and the LRA.

Introduction

Since the 1940s surplus federal property has been made available for sale or lease to state and local governments, tax-supported medical and educational institutions, and nonprofit institutions exempt from taxation under section 501 (c)(3) of the Internal Revenue Code of 1954. There are three methods by which federal property may be transferred:

- public benefit allowance,²¹
- negotiated purchase of the property to a public body, and
- public bid procedure.

For qualifying educational providers seeking conveyance of closed military base property, it is often to their advantage to use the public benefit allowance procedure. The public benefit allowance makes it possible for the provider to obtain property at a reduced price or, often, without cost. Property conveyed for education purposes is first assigned to DoEd by the military department, which in turn makes the public benefit conveyance. For negotiated purchase or public bid procedures, the military department may directly convey the property to the purchaser.

Definitions and General Terms

Understanding six terms is a prerequisite to any discussion of acquisition methods. The terms are highest and best use; fair market value; public benefit allowance; on- and off-site transfers; related personal

property; and sale price of surplus property. A brief explanation of each term follows.

Highest and Best Use—defined by the General Services Administration (GSA) as “The most profitable likely use, within the realm of reasonable probability, to which real and related personal property can be applied or adapted for which there is a current market.”

Fair Market Value—the amount of money that the property will bring if “exposed for sale in the open market by a seller who is willing but not obligated to sell, allowing a reasonable time to find a buyer who is willing but not obligated to buy, both parties having a full knowledge of all the uses to which it is adapted and for which it is capable of being used.”

This definition, from the GSA Appraiser’s Manual, is used to establish a price for property that a community wants to acquire outright or at less than a 100 percent, public benefit discount. It is a floor price. The law does not authorize a disposal agency to sell the property for less.

Public Benefit Allowances—Nonfederal public agencies, including tax-supported institutions and nonprofit organizations, may secure surplus federal real property for education purposes at a discount provided the property is used for a specified public benefiting purpose.²²

The amount of the discount represents the benefit (determined by DoEd for education conveyances) that has accrued or may accrue to the United States from use of surplus real property for that purpose. Total discounts may aggregate up to 100 percent of the fair market value, as is the case with qualifying education conveyances.²³

On-Site and Off-Site Transfers—An *on-site* transfer consists of land or land with improvements. An *off-site* transfer consists of buildings or other improvements, such as fences, towers, and storage tanks removed from the site for use at another location. Buildings may also be transferred as salvage for use of their material contents for construction purposes, building trades’ classes, etc.

Related Personal Property—consists of items of personal property (other than weapons and implements of war) associated with the government’s on-going use of the

All public benefit transfers for educational uses are subject to certain terms and conditions that remain in effect for a specified number of years.

real property and that is available for disposal with the real property. It can consist of items ranging from vehicles, ground maintenance, and fire fighting equipment, to office furnishings and computers, to kitchen equipment, appliances, dining hall fixtures, utensils, bedding, home furnishings, and so on. Related personal property must be used with the transferred real property and cannot be removed and used elsewhere for five years.

Sale Price of Surplus Property—The sale price of a property is its fair market value at the time of transfer. The actual amount of cash payment required of a successful applicant is determined by applying a public benefit discount allowance against the sale price. Discounts for on-site educational transfers range from 40 to 100 percent. Off-site transfers receive a full 100 percent discount. Related personal property included in a transfer is subject to the same discount as the real property. The total public benefit allowance accorded a transfer will vary depending on the educational use proposed and the degree of need as determined by DoEd.

Public Benefit Conveyance for Educational Purposes

The Federal Property and Administrative Services Act of 1949 gives authority to the secretary of education to sell or lease surplus government property at a price that takes into account the public benefit that has or may accrue to the United States because of eligible educational use. All public benefit transfers for educational uses are subject to certain terms and conditions that remain in effect for a specified number of years. For on-site properties the usual period is 30 years, but could be less. For off-site transfers and related personal property the usual restriction period is five years.

TIP ONE: Early Involvement Works.

It is appropriate for any education and vocational training institution seeking a public benefit conveyance for education to work closely with the community's LRA, the affected military department, the Office of the Secretary of Defense and the Department of Education. Being a part of the reuse planning process from the very beginning can help the institution to achieve its objectives in concert with other community reuse goals.

TIP TWO: Following a Surplus Declaration, Military Base Property to be Transferred Must Have a Fair Market Value Determination Whether Conveyed at Market Value or at Discount.

TIP THREE: The Community Reuse Plan Can Help in Establishing the Highest and Best Use for the Property for Purposes of Determining Fair Market Value.

When property under the jurisdiction of a military department is declared surplus, it must be subjected to a market appraisal by the military department to determine the current fair market value of the property, including improvements, prior to commencement of a conveyance, including negotiated sale or a public bid procedure. The appraisal provides a satisfactory means of determining the basis for negotiated disposals to nonfederal public agencies as well as the most acceptable guide for evaluating the adequacy of bids received in competitive bid sales offerings.²⁴

General Terms and Conditions of Transfer

After property has been transferred from the military department to DoEd, public benefit transfers of surplus government real properties for educational uses are made by quitclaim deed. Property title passes from the United States (DoEd) to the education provider on delivery and acceptance of the quitclaim deed. However, the property is subject to certain terms and conditions throughout the stated restriction period. This period is usually 30 years for on-site transfers, but could be less depending on circumstances. During the restriction period:

- The property must be used continuously for the approved educational purpose(s), either as in the original approved application, or as may be later amended.
- The property cannot be sold, leased, rented, mortgaged, encumbered, or disposed of in any way without the prior written consent of the sponsoring federal agency (DoEd).
- The educational recipient must file a biennial utilization report and certification of compliance with the DoEd.

- The transferee must remain tax-supported or nonprofit and tax exempt as was required at time of transfer.
- The transferee must comply with statutory requirements regarding nondiscrimination.

Conditions (a) through (d) above remain effective throughout of the restriction period. Condition (e) remains effective for so long as the property continues to be used for educational purposes.

To receive a public benefit transfer of federal surplus real property for educational purposes an applicant must work with DoEd to (a) establish eligibility, (b) determine property suitability, (c) demonstrate ability to operate and maintain, and (d) begin operations soon after conveyance, but generally no later than 12 months (see below).

Abrogation of Remaining Federal Restriction Period

It is possible for a transferee to seek an abrogation of the federal restrictions by cash payment or other consideration. The cost to abrogate is determined by the number of months remaining in the restriction period and the property's fair market value at the time of the abrogation. The property's fair market value is adjusted to allow credit for improvements made to the property by the transferee, then divided by 360 to determine the cost to abrogate for each remaining month of restrictions.²⁵

Organizational and Program Eligibility

An eligible applicant must be a state, a political subdivision or instrumentality of a state; a tax-supported institution or entity; a nonprofit organization found by the Internal Revenue Service to be tax-exempt under section 501(c)(3) of Title 26 (for education purposes), or any combination of these entities.

With a few exceptions, only curriculum based education and training programs can be considered, together with programs of use that are in direct support of such programs. The program must be one that is of basic purpose for the applicant, or which the applicant is responsible for providing (either directly or indirectly) and for which the applicant may expend its funds. A list of examples of public benefit transfers of federal surplus real property for educational purposes is included at the end of this section.

Need and Suitability of Property Requested

The type and amount of property requested must be reasonable in relation to the proposed program of use. The amount of property requested must be justified and an immediate or reasonably foreseeable need demonstrated. Suitability of the property for the intended use must also be demonstrated.

Ability to Finance and Operate the Proposed Program

The successful applicant must demonstrate that it has the funds, or ability to obtain those funds, to carry out the proposed program and plan of use for the property requested.

Beginning Use

Property acquired for use as is (or with limited alterations) should be used within 12 months following transfer. Where major construction or renovation is contemplated, the rule is that beginning use occur within 36 months. A successful applicant is responsible for protection and maintenance of a property on receipt of the deed or interim use permit. (See discussion of property maintenance at the end of this section.)

TIP FOUR: U.S. Department of Education Approval of an Application Does Not Assure a Public Benefit Transfer.

The final decision to transfer surplus property rests with the federal agency (in the case of a base closure, the military department) that controls the property. The disposing agency may be required to consider competing requests for the same property. This is why it is important to seek the advice and guidance of the local redevelopment authority (LRA) in the beginning. The inclusion of an education component in an LRA reuse plan can be one of the most important factors considered by the disposing agency relative to property reuse and competing conveyance requests for the same property.

TIP FIVE: Speak Directly With the Federal Department of Education and the Local Redevelopment Authority if You Believe You Qualify for a Public Benefit Allowance.

Who to Contact

Application forms for the transfer of property for education use may be obtained from regional representatives of DoEd. DoEd's Office of Real Property Assistance is based in Washington, DC, with one area office in Boston, Massachusetts. DoEd contacts are listed below:

Washington Office and Western Area

Director, Real Property Group
Office of Federal Real Property Assistance
U.S. Department of Education
600 Independence Ave., S.W.
Washington, DC 20202
Phone: (202) 401-0506
FAX: (202) 401-1033

Eastern Area

Director, Northeastern Area
Federal Real Property Assistance
U.S. Department of Education
J.W. McCormack Post Office and
Courthouse Building
Boston, MA 02019
Phone: (617) 223-9321
FAX: (617) 223-4924

Federal Agency Screening

Federal agency screening occurs at the time the secretary of defense declares military property "excess" to Defense Department needs. This is a window of opportunity for the Department of Education to advise whether or not the excess property holds potential for educational uses. If so, it requests that the property be made available for educational screening should it be determined later to be "surplus."

Essentially, this is an internal federal government flagging stage. Federal sponsoring agencies cannot support a potential applicant at this stage since they must remain impartial until applications are received from all interested parties and final decisions are made.

TIP SIX: Early Coordination with DoED and the LRA is Advantageous.

Qualifying educational providers seeking public benefit conveyance of surplus military base properties are encouraged to seek support and sponsorship from the Department of Education and the LRA during state and local government screening.

TIP SEVEN: Two Opportunities to Seek Public Benefit Conveyances:

State and local government screening: Under the Base Closure Community Redevelopment and Homeless Assistance Act of 1994, the LRA is responsible for

conducting outreach and screening for state and local governments and the homeless. The military department is responsible for advertising the availability of surplus property for state and local government and homeless screening in the *Federal Register* as a prerequisite for the LRA to conduct the screening.

During this screening process a qualifying educational provider may make application with DoEd for its approval of sponsorship. It is advisable that the public benefit conveyance applicant seek community support through the LRA and state and local governments, as well as DoEd, and seek to have its interests incorporated into the community base reuse plan.

TIP FOUR (REPEATED):

Department of Education Approval of an Application Does Not Assure a Public Benefit Transfer.

This tip is worth repeating here. The inclusion of an education component in an LRA reuse plan can be one of the most important factors considered by the disposing agency relative to property reuse and competing conveyance requests for the same property. Technically, in the case of public benefit conveyances for educational purposes, the disposing agency is DoEd. However, for DoEd to secure the property from the military department for subsequent transfer to a qualified recipient, the assigning military department will consult the community's base reuse plan. If the request is inconsistent with the plan, the military department is neither compelled nor required to transfer the property to a public benefit conveyance federal agency (DoEd) just because a request had been made by that agency. The military department will make the final decision based on assessment of all expressions of interest in the property, the local reuse plan, and recommendations of the LRA.

If (1) there are no competing legitimate interests in the property; (2) the PBC agency has a qualified and acceptable applicant it is willing to sponsor; (3) the LRA has included the proposed public benefit use in the adopted base reuse plan; and (4) there are no outstanding physical property issues that would prevent legal conveyance, then the likelihood of the military department assigning the property to the PBC agency for subsequent conveyance to the PBC applicant is almost certain. However, if any of these conditions is not present, the potential conveyance could become problematic.

TIP EIGHT: Be Aware of Other Interests in the Same Property and Work Through the LRA to Avoid Irreconcilable Conflicts.

During the formal local screening process, another eligible entity interested in the property in question

could apply for all or part of the same property sought by another eligible homeless provider, state or local government. DoD looks to the local LRA to analyze and consider potentially competing requests for public benefit conveyances in the context of the reuse planning goals and objectives, community economic development and job creation opportunities, and the needs of the homeless; and, seek a balance such that the interests of the community, the military department and the goals of the LRA are in balance.

Opportunity for Centralized Management

When an LRA acquires property, it assumes responsibility for common areas maintenance. So also does an education provider under a PBC. By entering into a common areas maintenance agreement with an LRA for centralized management of the former base, the education provider can relieve itself of having to staff and budget for duplicate campus maintenance. It can assure for itself through economies of scale consistency in maintenance at a contracted level of quality consistent with the image desired for the entire campus.

TIP NINE: Where Feasible, Affiliate with an LRA, or Equivalent Entity, for Purposes of Common Areas Maintenance and Upkeep.

A centralized management entity, like an LRA, can provide coordinated maintenance of common areas, including landscaping, signage, snow removal, street lighting, security, and streets and utility upkeep not normally provided by local government. Economies of scale can result in lower cost to association members than if they had to provide for maintenance and upkeep on their own.

However conceived, organized, and orchestrated, the LRA has the ability to collectively coordinate, manage, and maintain a quality living and working environment within a composite community and establish an image conducive to the type of campus desired by educators, business, and industry.

TIP TEN: Continue to Work Closely with the Federal Public Benefit Allowance Sponsoring Agency (DoEd) Throughout the 30-Year Restriction Period.

This manual emphasizes the important and critical roles the LRA and the Military Department play in the property conveyance process. It is equally important to recognize that public benefit conveyances to educational organizations are separate from the LRA and can involve substantial public benefit allowance discounts.

Following transfer of the property through a public benefit conveyance, the educational organization must remain in close communication with DoEd relative to successfully complying with regulations that govern the ownership and use of the property over the course of the 30-year restriction period.

This period may be likened to an "education mortgage" where the federal government, through the DoEd, expects to receive, in consideration for the discounted property conveyance, payment in the form of continued use of the surplus property for public education and vocational training purposes. In this context the idea of DoEd taking back an education mortgage represents a continuing commitment to provide uninterrupted educational service for the public benefit long after the LRA's and military department's roles have ceased. Thereafter, DoEd becomes the sole remaining federal point of contact for the property.

U.S. Department of Education

Public Benefit Transfers of Federal Surplus Real Property

Examples of Eligible Program Uses that are Tax Supported or Nonprofit/Tax Exempt

The following lists eligible activities that could qualify for public benefit transfer of federal surplus real property. The qualifying criteria are based on the Federal Property and Administrative Services Act of 1949, which specifies that surplus federal property may be made available to state and local governments, tax-supported medical and educational institutions, and nonprofit institutions exempt from taxation under Section 501(c)(3) of the Internal Revenue Code of 1954 for sale, lease, or transfer at discount subject to certain conditions. The administering federal agency is the Department of Education.

Eligible Activities:

- Elementary, middle, junior high and high schools (public or private)
- Colleges and universities (including related research and extension programs)
- Central administrative and service facilities, storage, vehicle maintenance, etc.
- School outdoor, forestry, vocational agricultural, marine, and environmental education programs, including agricultural experimental and research stations, etc.
- Continuing and adult education programs
- Alternative education programs
- School athletic, track, stadium facilities
- Vocational, technical, and trade schools
- Schools for the blind and deaf
- Apprenticeship training schools (training trusts, etc.)
- Educational radio and television production/public broadcasting
- Preschool, Head Start, and kindergarten programs (child care per se excluded)
- Student health and welfare programs (cafeterias, infirmaries, primary health care, day care, recreational, etc.)
- Specialized schools and training programs (special education, developmentally disabled, mentally and physically handicapped, exceptional and gifted, schools for blind or deaf, residential training programs, etc.) (sheltered workshops per se ineligible)
- State and local public libraries (tax supported only)
- Educational and science museums (limitations)
- Student, staff, and faculty housing
- Public service training programs (fire, police, public safety)
- Most programs of use that are in direct support of the foregoing

Post-1988 BRAC Case Studies

Lessons Learned

ABSTRACT: This section introduces two case studies of post-BRAC community conversion efforts involving new and expanding educational and training opportunities at closing bases. These are projects in the making and are presented for the purpose of illustrating what post-BRAC communities are doing to muster community support and financial and political resources and to secure control over all or parts of surplus military property for the public benefit of the community.

Case Study No. 1: Lowry Higher Education Center at the Former Lowry AFB Denver, Colorado

Introduction

The former Lowry AFB is located in the Denver, Colorado, metropolitan area within the jurisdictions of the city and county of Denver (to the west) and the city of Aurora (to the east). The portion of the base within Aurora is also within the jurisdiction of Arapahoe County. The base comprises 1,866 acres of land and is predominantly surrounded by residential and commercial land uses.

The area of the base that is under the jurisdiction of the city of Aurora comprises approximately 233 acres (12 percent) while the Denver portion makes up the balance of the base land area (1,633 acres, or 88 percent). Areas adjacent to the base to the north, west, and south within the city and county of Denver are predominantly residential in character, interspersed with small general and neighborhood-serving commercial land uses.

Multiple-family and commercial land uses pre-dominate to the east within the city of Aurora. The main exception is along Colfax Avenue in Old Aurora, and along Mississippi Avenue and South Havana Street, where there are centers of employment and commercial activity.

Lowry Air Force Base²⁶

Lowry AFB was announced for closure in the BRAC '91 round of base closures. It officially ceased operation as an Air Force base on September 30, 1994.

Lowry AFB was located on the site of a former tuberculosis clinic, the Agnes Phipps Memorial Sanitarium, which was donated to the U.S. Army by the city and county of Denver. In 1937 the site became Lowry Field, named after the only Denver aviator killed during World War I, 1st Lieutenant Francis B. Lowry.

The first runway on the Army Air Corps base became active in 1938 to support its training mission. By the end of World War II over 41,000 students had graduated from Lowry. From 1953 to 1955 Lowry served as the summer White House for President Dwight D. Eisenhower. Between 1955 and 1958 the base was the interim site of the Air Force Academy. In 1959 it was designated by the Air Force as the Lowry Technical Training Center (LTTC).

The flying mission at Lowry ceased in the late 1960s due to the encroachment of urban development and increasing local air traffic. However, the base took on additional training missions and was redesignated on several occasions until 1993, when it became known as the Lowry Air Education Training Command. The base provided individual military and technical training for officers and enlisted members of the Air Force, related Reserve and National Guard components, and Department of Defense agencies. Since 1986 the base has been a prime training center for the operation of national space systems.

The Community Reuse Planning Organization

In 1992, one year following the second-round BRAC decision, the cities of Denver and Aurora entered into an intergovernmental agreement (IGA). The purpose of the agreement was to jointly finance and develop (with OEA assistance) a reuse plan and recovery strategy for the closing base. The IGA established a formal reuse planning organization called the Lowry Economic Recovery Project (LERP).

The executive leadership of the LERP was composed of the mayor and a city council member from each of the respective city governments. The advisory group included representatives from the respective chambers of commerce, community leaders, congressional

representatives, base command, and the governor's office. The task assigned to the LERP was to develop a community reuse plan and economic recovery strategy for the base and set the stage for a seamless transition from the reuse planning phase to plan implementation. The plan, including a property disposition strategy, was approved and submitted to the Department of Defense in November 1993.²⁷

The Reuse Plan

A key goal of the reuse plan was to facilitate "local and regional economic development, including local tax-base expansion, education and training, job development, and business opportunity." To meet this goal the plan specified a mixed use approach to redevelopment. Specific development objectives included:

Job Creation: The creation of 3,800 jobs by the end of 1995 and 13,000 permanent direct jobs plus 34,000 indirect jobs by the year 2010.

Business: Establishment of a business and training center area to attract a variety of tax- and job-generating employers.

Education: Creation of a 10,000 full-time equivalent student campus to educate the current and future work force and provide training and support for on- and off-site businesses.

Housing: Development of a full range of housing opportunities in an urban mixed use community setting to serve on- and off-site companies, plus accommodation of a federally mandated program for homeless housing needs.

Recreation: Expansion and development of parks and other recreational amenities to serve the region, residents, and businesses of the Lowry neighborhood. When considered within the context of the surrounding urban fabric, Lowry is characteristic of the composite community described in Section II. It contains all of the elements of a self-contained new town surrounded by higher density urban neighborhoods.²⁸

The reuse theme for the LERP planners was conveniently provided by the base's historic training mission. The challenge to the LERP was not only to build on the historic training mission of the base, but to identify educational providers who could and would be capable of carrying out the educational and training components recommended in the reuse plan.

Educational and Vocational Training Component of the Plan

Early in the process both cities recognized the potential reuse of the former military training center's buildings and grounds for education, technology, and corporate and business uses. The reuse plan called for the establishment of dual campuses. One campus would be devoted to public-sponsored higher education and advanced technology training. The second campus

would be private sector driven and oriented to attracting corporate and business users.

The reuse plan identified the northeast corner of the base, largely within the city of Aurora, as the location for the proposed Higher Education and Advanced Technology Center. This quadrant contained the most modern classroom buildings, dormitories, and congregate eating facilities and became a logical choice for a public-sponsored higher education campus. The State Board For Community Colleges and Occupational Education System (SBCCOESS) was identified early in the process as the appropriate public education entity to sponsor the Higher Education and Advanced Technology Center at Lowry.

The west side of the base within the city and county of Denver was identified as the area most appropriate to accommodate private-sponsored corporate business center activities. This area presented a treed campus setting with the main administrative buildings serving as the focal point of the business center.

Plan Implementation—The Lowry Redevelopment Authority (LRA)

To accomplish the reuse plan's objectives the cities of Denver and Aurora entered into a second intergovernmental agreement (IGA) creating the Lowry Redevelopment Authority (LRA). The LRA became the successor organization to the LERP. It was created in July 1994, eight months following the adoption of the Lowry Reuse Plan. The LRA is charged with implementing the reuse plan. It is chartered to serve an initial three-year period, with automatic renewal for successive three-year periods. The IGA created:

- a board of directors to act as the governing body;
- a community advisory committee to provide input and recommendations from the communities most affected by the base closure to the board of directors; and,
- a coordinating committee composed of elected officials from each city to resolve specific matters of joint interest prior to action by the board of directors.

By the end of the summer of 1994 and the closure of Lowry AFB, the two cities had successfully organized, planned, and begun implementation of the Lowry Reuse Plan and Lowry Disposition Plan.²⁹

The Federal Environmental Impact Statement and Record of Decision

The Federal Environmental Impact Statement (EIS)

In June 1994, about the same time that the LRA was established, the Air Force released the EIS on the "Disposal and Reuse of Lowry AFB."³⁰ The EIS

provided information required to understand the future environmental consequences of property disposal and reuse options.³¹ Incorporated in the EIS was the community's preferred reuse plan.

The Record of Decision (ROD)

In August 1994 the Air Force Base Conversion Agency released the ROD document clearing the way for the Air Force to dispose of surplus Lowry AFB property.³²

The following outlines the public benefit conveyance decisions contained in the ROD.

On the basis of the ROD and subsequent negotiations with the LRA, the Air Force authorized public benefit conveyances (PBC) to several local public entities through sponsoring federal agencies. In all, 425 acres have been identified for PBC, as follows:³³

- U.S. Department of Education (DoEd)—189 acres:
 - State of Colorado Department of Higher Education community colleges and occupational education (148 acres)
 - Colorado Historical Society (2 acres)
 - Wings Over the Rockies Museum (6 acres)
 - The Logan School (15 acres)
 - Child Opportunity, Inc. (6 acres)
- U.S. Department of Interior (DoI)—175 acres:
 - Denver Parks and Recreation Department (147 acres)
 - Aurora Parks and Recreation Department (28 acres)
 - U.S. Department of Health and Human Services (HHS)—61 acres:³⁴
 - University Health Hospitals (9 acres)
 - Del Norte (homeless providers, 1.5 acres)
 - Belle Bonfils Blood Center (15 acres, subject to HHS approval)
 - Colorado Department of Public and Environment Health (6 acres, subject to HHS approval)
 - The American Red Cross (1 acre, subject to HHS approval)

Community Education Needs

The 1993–1998 master plan of the Colorado Commission of Higher Education identified that between the years 1986 and 1991, 32,000 additional students entered the system, affecting all campuses. In particular, the state's community colleges were impacted. In 1992, 14 percent of Colorado residents aged 15–54 enrolled in one or more college courses.

Enrollment projections show a statewide increase in demand for higher education. By the year 2001, the state's universities and colleges will be required to serve an additional 37,000 to 82,000 students. It has been estimated that a new 37,000-student population will demand capital improvements ranging upwards of \$225 million (2.3 million gross square feet) for new

classroom buildings, dormitories, and related support facilities and infrastructure reconstruction.³⁵

The space utilization efficiency of educational institutions located along the urban front range of the Rocky Mountains has been maximized through absorbing the 32,000 additional full-time equivalent students during the 1987–1993 enrollment growth period. Additional capacity will be required to accommodate the projected increase.³⁶

The state of Colorado has been unable to meet the demand for capital construction for new educational facilities. The urgent need for prison construction pre-empted construction of new educational facilities as the state's priority.³⁷

The state's postsecondary education master plan forecasts that Colorado's year 2000 work force will require approximately 31,200 subbaccalaureate and 18,300 baccalaureate degrees annually. In contrast, Colorado's public and private colleges are expected to produce just 50 percent of the subbaccalaureate and 90 percent of the baccalaureate degrees by the year 2000.³⁸

The former Lowry AFB presented an opportunity for the state to secure 148 acres of the former Lowry AFB facility as a higher education center. The center would become the focus of advanced technology, education, and training through a public benefit, educational conveyance to the State Board of Community Colleges and Occupational Education.

The Higher Education and Advanced Technology Center at Lowry (HEAT)⁴⁰

The Vision

Most economists, public policy makers, and business and industry leaders agree that the economic health of any state must be based on the diversification of its business and industry bases. With defense downsizing this becomes particularly important to local governments who have come to rely on defense industry as the community's basic industry.

Public education nationally is struggling with resource issues. Associated with this is the ability to accommodate the new education and training standards necessary to provide the private sector with a work force capable of functioning in today's work environment (see Section II).

The Lowry center, through a collaboration of the metro area higher education community and in concert with the private sector, has set about establishing at the former military base a new learning environment that will have a strong technology applications base.

The Higher Education and Advanced Technology Center programming strategy is keyed to the Center's vision to create a learning environment that in part is focused on work force development requirements in support of advanced technology industries located

in or seeking to locate in Colorado, as well as on academic or degree programs.

The HEAT Center will have a Technology Advisory Council that will recommend advanced technologies and related programs to meet the needs of business and industry in the Denver metropolitan community, the state, and the nation.

The vision is for participating institutions not to duplicate each other's programs at Lowry. Each institution will offer its own degree, but the lack of duplication of courses and programs is expected to enhance coordinated degree program offerings.

The Community College of Aurora (CCA) and the Community College of Denver (CCD) are the lead institutions at the lower division level and are coordinating their programs through joint staff and advisory council meetings with assistance from the CCCOES staff. Other community colleges will be invited to offer advanced technology offerings that are not part of CCA or CCD programming. State four-year colleges and universities will offer programs as needed through extension studies.

The Campus Master Plan

The SBCCOES received \$200,000 for campus planning for the HEAT Center from the state legislature. Concurrent with the need for campus planning, the LRA prepared a detailed development plan for the entire Lowry complex. Where possible, the planning funds for the two entities (the LRA and HEAT) were pooled to provide maximum cost-effectiveness and coordination between the HEAT Center and the balance of the former military base.

The coordinated planning between the HEAT Center and LRA will ensure proper traffic flow, infrastructure, connectivity, fire and police protection, open space, and most important of all, coordinated planning between the HEAT Center and the adjacent business park.

The LRA has agreed to recruit targeted industries whose technology needs are parallel to those that will evolve from the HEAT Center. This will further maximize business and industry partnerships with the HEAT Center.

The Business Plan⁴¹

In preparing for the application to DoEd for a public benefit conveyance (PBC) the CCCOES identified two fundamental financing aspects requiring attention: ongoing operations and capital improvements. Capital improvements were further subdivided into current needs (e.g., furniture, fixtures, equipment *infrastructure*) and future needs (e.g., building improvements, infrastructure, equipment). A primary consideration in establishing a new educational campus in the state involved the ability to meet continuing financial responsibilities without burdening the existing tax base.

The Lowry campus was faced with three issues:

- The U.S. Department of Education criteria for reuse of surplus military property at Lowry requires that buildings be occupied within 18 months, unless scheduled for major renovation.⁴² To occupy buildings without a critical mass of students, however, is inefficient.
- The state is facing a deficit of higher education space and a shortage of controlled maintenance funding to preserve state campuses. While Lowry AFB presents a positive business deal, initially there are no assurances that state funding can be made available on an ongoing basis for maintenance and renovation.
- The Joint Budget Committee of the state legislature has expressed concern about trying to fund operating budgets from unlimited growth in higher education. Some limits on growth will be provided by having a ceiling on tuition collected under the state tax limitations imposed by Amendment One.⁴³

The solutions seemed to be more in keeping with a business approach than with an educational plan, so a business approach was adopted by the CCCOES. Aided by the Denver Mayor's Office of Economic Development and the Aurora Economic Development Council, a series of focus group meetings was held that included developers, planners, architects, and engineers to develop a business plan and strategy to respond to each of the issues identified as potential impediments to the orderly implementation of the Higher Education Center at Lowry.

From the focus group discussions the following five principles became the model and operating framework for campus financial planning and development:

- Minimum front-end capital investment
- Rapid front-end growth to utilize buildings
- Initial occupancy by other educational users
- Enrollment management once capacity is reached
- Self-funded capital development after four years

Assumptions concerning the five principles included the following:

- Initial, one-time, capital funding from the state in the amount of \$4.8 million will be required to initiate the first phase of the implementation process. The funds would be used to enable initial occupancy, meet the Uniform Building Code requirements, retrofit the ground floor to meet the Americans with Disabilities Act (ADA) access requirements, water tap fees, parking lot lighting costs, and annual installments on infrastructure costs.

One-time funds were authorized by the Colorado General Assembly in 1994 to jump-start the conversion of the Lowry site to the new HEAT Center campus.

- A second phase of the business plan included a more comprehensive modification to each of the initial 10 buildings and additional handicapped access for multistory buildings. Phase II costs included annual infrastructure payments, landscaping, energy conservation upgrade, interior road improvements. High-bay labs that were converted to classrooms are to be carpeted and retrofitted to accommodate classroom use.

The table below reflects the basic lease rate schedule to support operation and capital reserve funds.

An underlying premise of the conversion process for the Higher Education Center included the recognition that the campus needed to be staged to respond to growth in student population and growth in sustaining revenues to support the initial developmental phases. Each occupant of the Higher Education Center will be charged a lease rate to cover the costs of controlled maintenance and tenant finish, operating costs, management, and capital reserve.

This business plan model is designed to respond to the self-sufficiency requirements identified during the focus group discussions. The underlying principal is that after four years the campus will be self-sufficient, without the need for additional financial support from the Colorado General Assembly.

Operational*	\$ 6.00 gsf**
Control, Maintenance, Tenant Finish	60
Capital Reserve***	2.00
Administrative Costs (@6%)	50
Base Rate for Long Term Lease	\$ 9.10 gsf

Notes:

- * Includes maintenance, custodial, grounds, utilities, motor pool, security, audio visual support
- ** Gross square feet of floor area (gsf)
- *** This capital reserve provides self-funding after four years for infrastructure assessments, building renovation, contingencies, parking, etc.

On the basis of this premise, the state legislature appropriated \$4.8 million as a one-time grant to CCCOES to underwrite the start-up of the Lowry Higher Education Center. A total of \$1.8 million was set aside as part of the first year appropriation. An additional \$1.0 million was pledged for each of the succeeding three years. At the end of the four years the HEAT is expected to be self sustaining based on revenues from student fees and charges and leases from participating colleges and educational institutions.

The business plan represented a model approach and sincere effort on the part of the CCCOES, the business community, and the participating colleges to exhibit due diligence in addressing the funding constraints placed on the state of Colorado. The highlight of the model is self capitalization after four years of self-managed growth.

The Lowry Higher Education Center: Public Benefit Conveyance Application

On November 30, 1993, the CCCOES submitted to the federal DoEd an application for the public benefit conveyance of 148 acres and 30 buildings located in the northeast quadrant of Lowry AFB. The application not only sought land and improvements, but the personal property contained in the buildings as well.

On May 20, 1994, the DoEd Real Property Assistance Program advised the president of the Community College of Aurora that the application of the State Board had been approved, subject to a favorable ROD. In the letter of approval, DoEd indicated that it would recognize a public benefit discount allowance of 100% for the real and personal property under the application. DoEd added that the review and evaluation of the application "resulted in a total 'scoring' of 140%, which doesn't often happen."⁴⁴

Real Property Conveyance

On the issuance of a FOST, the Air Force may assign the property to DoEd for subsequent transfer as a public benefit conveyance to SBCCOES. In the mean time, 148 acres of land, including 30 buildings and 500,000 square feet of classroom, laboratory, and office space, in addition to two dormitories, a recreation center, and related auxiliary space have been leased to the SBCCOES in furtherance of conveyance.

Currently, three buildings are in use. All received minor renovation in the summer of 1994 in anticipation of use by the National Civilian Community Corps (NCCC) and CCA. Other buildings will be remodeled generally according to the schedule contained in the master plan. The remodeling schedule will be governed somewhat by lease income generated by present and future occupants.

Personal Property

Critical to the success of many PBC applications is obtaining the transfer of related personal property. Personal property is most often in the form of desks, computers, furniture, fixtures, and related items that will enable the buildings to be occupied and used with the least amount of initial capital outlay. The initial inventory supplied by the Air Force enabled the consortium to completely furnish two dormitory buildings and also included grounds and road maintenance equipment and vehicles.⁴⁵

Metrology Institute: An example of the value of personal property to an educational institution involves the Air Force's metrology laboratory located on Lowry. The lab closed with the base and the metrology equipment was declared surplus to the military mission. All of the precision engineering measurement lab equipment was conveyed to the Community College of Aurora. This equipment, valued in excess of \$1.0 million, has become the heart of the metrology program. The metrology program is planned as the centerpiece of the campus. It will enhance other advanced technology programs and provide area manufacturers access to a state-of-the-art metrology lab.

As more and more businesses and industries market their products internationally, the need for uniform standards of precision measurement increases. Those who do business in Europe will need to meet ISO 9000 standards. The North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT) also will increase the need for precision engineering standards in manufacturing. The HEAT Center metrology program has the potential of being a national model for the expanding market.

Other Public Benefit Conveyances for Education Purposes

The Record of Decision on Lowry AFB included a number of independent applications for public benefit educational conveyances. A total of 73 acres was identified for conveyance to 7 educationally related activities. The activities range from a museum to primary education. Even though these conveyances are separate from the Higher Education Center application, they represent educational institutions seeking to benefit from close association with one another and the a quality of the facilities made available through the base closure process.

Lowry Employment Campus

The Lowry Reuse Plan gives equal weight to job retention, education, training of the current and future work force, and job creation. The Corporate Business Center represents the third employment-based anchor planned for Lowry.

The first anchor is the Higher Education Center composed of the consortium of colleges. The second is the retention of the Defense Finance and Accounting Service (DFAS) and the Air Reserve Personnel Center (ARPC). Over 3,000 jobs were saved by the decision to retain these two federal facilities at Lowry. DFAS will serve as an example to other financial services companies seeking a viable location at Lowry.

The third anchor is the proposed Corporate Business Center. The decision to locate the National Civilian Community Corps (NCCC) at the college campus will have a direct impact of providing 300 jobs in the first year following closure. It is proposed that the Business and

Training Center will be the largest single job creation center on Lowry, followed closely by DFAS and ARPC.

The Business Center will initially target industries in the telecommunications, biomedical, computer software, education training, and financial services fields. By targeting specific industries that are known to be interested in the Denver region, the LRA hopes to accelerate job creation. The objective is to create approximately 5,300 jobs in the Business and Training Center. The educational and training component of the center is planned to generate between 500 and 700 employees of the center.⁴⁶

The education campus (HEAT) and the neighboring employment campus represent a balancing of private employment opportunities with public education designed to generate additional business attraction, jobs, and housing for future employees.

Analysis

Lowry AFB-EIS and ROD

The reuse planning and implementation processes at Lowry AFB appear to have proceeded in an orderly fashion. In April 1993 the community developed its draft reuse plan and disposition strategy in time to be considered in the draft EIS.

The Air Force conducted preliminary surplus screening in October 1993. The LERP adopted the community's preferred reuse plan and disposition strategy in November 1993 and forwarded it to the Air Force.

The EIS was completed in June 1994, the same time the LRA was established and empowered to press forward with property acquisition and plan implementation. In August 1994 the Air Force issued the ROD, clearing the way for property to be transferred to over 15 users for educational, economic development, housing, public parks, and recreation purposes.

The closure of the base on September 30, 1994, and its conversion to caretaker status has enabled the Higher Education Center to begin operation in leased buildings, pending conveyance by the Air Force. These successive stages from organization to planning to implementation helped to move the EIS and the reuse plan on parallel courses and contributed to the issuance of a timely and compatible ROD.

Formula for Successfully Converting Closing Military Bases to Educational and Vocational Training Institutions

The conversion of parts of Lowry AFB to multiple reuse opportunities ranging from single and multifamily housing units to commerce and business to education and vocational training centers represents a successful community-wide effort among both complementing and competing interests.

A single formula for success will not be found in this case study. What is represented here is a picture of multiple preclosure interests that came together to

define a composite community. The Air Force, respective city governments, base closure office, neighborhood interests, and educational providers partnered to define a comprehensive reuse plan and economic recovery strategy for the entire 1,800 acre installation.

To a great extent the growing success of the Lowry AFB conversion process rests with the establishment of a significant education campus serving as major anchor activity and attraction for complementing business and industry.

Case Study No. 2: Education, Research, and Training Consortium, Former Williams AFB, Mesa, Arizona

Introduction

Williams Air Force Base (AFB) is located within the corporate limits of the city of Mesa, Maricopa County, Arizona. Other nearby incorporated communities include Queen Creek, Apache Junction, Gilbert, Chandler, and Tempe. Collectively the area is known as the East Valley. Twenty miles to the west is the city of Phoenix.

Williams Air Force Base

Williams AFB was established in 1941 as an Army Air Corps training facility. This training mission continued under the aegis of the United States Air Force, and for many years Williams was known as the largest air pilot training facility in the free world.

Williams is situated at the leading edge of the rapidly expanding Phoenix metropolitan area. The areas to the east and south of Williams AFB are predominantly agricultural and natural desert. However, to the north and west are the burgeoning cities of Gilbert and Mesa. It is just a matter of time before the former Air Force base will be entirely surrounded by urban development.

The Reuse Plan

Williams AFB formally ceased operations as an Air Force base in September of 1993. In anticipation of the closure, the governor of Arizona appointed a Base Economic Reuse Advisory Board. The board consisted of a core nine-member advisory board supported by professionals from the fields of urban planning, economic development, and engineering. Community organizations, such as the Greater Phoenix Economic Council, the Air Force; and governing bodies from surrounding counties, cities, and towns also served on the advisory board in an ex officio capacity. The "Williams AFB Reuse Plan Team Structure," as it came to be called, represented a very important first step in organizing potentially affected interests to deal with

the issue of closure of a major military installation and its resulting impact on the economy of the region.

In August 1992 the Governor's Reuse Advisory Board, and with federal funding assistance, produced the "Governor's Economic Reuse Plan" for Williams AFB.⁴⁷ The plan provided a community consensus and blueprint to guide future public and private decisions regarding specific areas of the base. More importantly, the reuse plan provided the framework that has enabled the community-based planning process to proceed in an orderly and deliberative manner.

In September 1992 the Reuse Board recommended that Williams AFB be made into a major educational-industrial complex focused on the conversion of the former military airfield to general aviation, air cargo, and passenger service.

Community Educational Needs

A year earlier the Arizona Board of Regents funded a study to determine higher education needs in Arizona by the year 2010.⁴⁸ The study projected 150,000 new college students through 2010, including 95,000 community college and 55,000 new university students.

Arizona State University⁴⁹

Arizona State University (ASU) currently has an enrollment of 43,600 students located on two campuses. The study conducted by the board of regents indicated that ASU's student population could exceed 75,000 (43,600 plus 36,000) by the year 2010. The ASU Main campus is located in Tempe, Arizona. The ASU West campus is situated in Phoenix near Glendale. ASU plans to cap its Main campus enrollment at 39,000 students and split the remaining projected 40,000 students between its existing West campus and a new East campus.

Maricopa County Community College District (MCCCD)⁵⁰

The current student enrollment in the MCCCD system is 87,000 full- and part-time students (40,000 to 45,000 full-time student equivalent). Approximately 65 percent of MCCCD graduates continue their education at ASU.

MCCCD has 10 campuses located throughout Maricopa County. In addition, the Community College District provides classes in 230 locations across the East Valley. The MCCCD is highly responsive to the needs of the students, and its curriculum is customer oriented, often tailored to the needs of business and industry. Each of MCCCD's satellite campuses serves an area a roughly 17-mile radius containing an estimated resident population of 250,000 persons.

MCCCD is the fastest growing community college system in the country. Enrollment in the district's colleges is projected to increase yearly by 10,000 students. Demand for continuing education is expected to reach over 50,000 students by the end of the decade—necessitating the establishment of additional campuses in the MCCCD system.

*Science and Technology Regional High School*⁵¹

The board of regents' 1991 study also identified a need for a four-year high school to provide instruction for part-time and temporary students from other high schools within the East Valley. In addition, it contemplated that a science and technology regional high school be established to act as a magnet serving the East Valley.

The East Valley Think Tank

The East Valley Think Tank (EVTT) was created in 1989 to collaborate in the design of programs to meet the academic and training needs of the future East Valley work force. The EVTT was the inspiration of Mesa Community College President Larry Christiansen. As an educational consortium, the EVTT consists of 18 elementary, secondary, and postsecondary public institutions serving more than 250,000 students in the East Valley.

The Closure of Williams AFB

With the announced closure of Williams AFB, Dr. Lattie Coor, president of the Arizona State University (ASU) noted that the base could serve as an additional campus for the university. He also saw the closing military base as an "opportunity that went beyond an 'ASU East.'"⁵² Dr. Coor was interested in creating a new model for delivering public education. He called on the EVTT to assist in the collaboration and design of programs for kindergarten through Ph.D. Williams AFB, he believed, could serve as the potential location and center for an education, research, and training (ERT) complex.⁵³

The Education, Research, and Training Consortium

From the EVTT came the ideas for an education, research, and training (ERT) consortium consisting of seven institutions under the lead of ASU and MCCCDC, and including Embry Riddle Aeronautical University, Armstrong Laboratories, University of North Dakota Aerospace Foundation, and the East Valley Think Tank K-12 partners.

The ERT concept was likened to a "shopping mall" with educational and vocational training services to benefit all segments of education from elementary through Ph.D., including adult training. Dr. Coor envisioned a partnership among diverse providers of education offering opportunities to enhance the technological skills of students of all ages and abilities.⁵⁴

With \$427,000 in funding assistance from the Economic Development Administration, the consortium proceeded to work with the Williams Redevelopment Partnership to develop a more refined and integrated multi-institutional "ERT Consortium Campus Master Plan Development Program."⁵⁵

The New Williams Campus and Home to the ERT Consortium

The physical condition of buildings on Williams, as well as the relatively compact layout, makes the former military training center well suited to educational, research, and aviation training activities. Both the Governor's Economic Reuse Plan and the ERT Consortium Master Plan called for the ERT center to collocate ASU and MCCCDC on the former Williams AFB. The education center, to be called the "Williams Campus" would consist of three separate but functionally integrated campuses comprising approximately 700 acres. The Williams Campus would be owned by ASU East; MCCCDC; and the Maricopa Regional School District

Proposed ASU East Campus and Academic Programs

The ASU East campus is planned to accommodate up to 20,000 students under full development, including several aerospace and flight training programs to be offered through the Education, Research, and Training Consortium. ASU expects the East campus to grow to accommodate at least 10,000 students by the year 2010.

ASU's academic programs will take advantage of the composite community character at Williams and certain programs at ASU Main in Tempe and ASU West to ASU East. ASU will move the School of Technology, which includes a Department of Aeronautical Technology, a Department of Electrical and Computer Technology, a Department of Manufacturing, and a Department of Industrial Technology, from ASU Main.

ASU also will move, in its entirety, the School of Agribusiness and Resource Management to ASU East.

ASU's proposal includes expanding programs in the College of Extended Education and four new residential academic villages with a liberal arts emphasis. Additional on-site courses will be offered in liberal arts and sciences including applied sciences and mathematics. ASU East expects to have over 1,000 students when it opens in the Fall of 1996.

Proposed MCCCDC Campus and Continuing Education Programs

The Maricopa Technology Center (MTC) will offer general education and occupational programs that initially will be the basis for MCCCDC's presence on the Williams Campus. The MTC will include a full range of lower division courses for students intending to transfer to four-year institutions. Currently, Maricopa Community Colleges provide lower division courses for approximately 50 percent of all graduates at ASU. In addition, the MTC will offer a full range of occupational education courses and will serve as the regional site for customized training programs for business and industry. It is planned that the technology center will attract and serve approximately 5,000 students within 5 years.

The MTC would offer special programs in aviation, vocational, occupational, and technical areas. The collocation with a major university campus will make available to MCCCDC students and faculty joint use of teaching laboratories, classrooms, and student support facilities that otherwise might not be financially justified.

The Science and Technology High School

The third element of the ERT consortium campus is a proposal to convert an existing building at Williams to a science and technology high school that would serve the region. It is planned to share the same laboratory facilities with the community college and university students.

The ERT Consortium Planning Process

The initial phase of the planning process commenced in May 1994 with a vision setting meeting designed to promote the exchange of ideas and concepts held among consortium members. The primary goal was to develop a shared vision of a multi-institutional campus. The process has progressed to the stage where a non-competitive, interinstitutional, educational and training program has been identified among participating institutions.⁵⁶

A Multiple Team Approach to the Campus Master Plan

Two teams were formed to work in tandem. They were (1) ASU personnel and regents and (2) representatives of other institutions in the EVTT. The EVTT was able to bring into the process businesses, governments, and private educational institutional interests. The initial emphasis of the teams was on program offerings that were matched against land and buildings available at the base. Land and ownership of buildings were also issues that had to be resolved early. Five community colleges in Maricopa County came together under the sponsorship of the MCCCDC to anchor the community college portion of the combined campus. Through collaboration the community colleges were able to bring their finest programs to ERT.⁵⁷

The Property Conveyance Process

ASU assumed the role of lead institution and will maintain and manage the consortium campus. On June 30, 1993, the Arizona Board of Regents on behalf of ASU submitted to DoEd an application seeking DoEd sponsorship for a public benefit conveyance for educational purposes. The application requested conveyance of approximately 600 acres of the former Williams AFB for use as the ASU East campus. The conveyance request included 83 buildings, 656 single-family homes, 6 dormitories, recreational facilities, existing roads and parking areas, and open space for future development.

On the same date MCCCDC submitted a companion public benefit conveyance application. The application was on behalf of five of its community colleges: Chandler Gilbert, Gateway, Mesa, Rio Salado, and South

Mountain Community Colleges. MCCCDC requested 58 acres of Williams, including buildings, open space, streets, and parking areas to accommodate a new campus for the community college system. The complementing public benefit conveyance applications called for two joined and functionally integrated campuses that would represent the ERT consortium.

The combined proposals stressed a unique cooperative educational complex not readily found elsewhere in the country. In addition to ASU East, the complex will include an aerospace campus to be built in partnership by six postsecondary institutions. The six institutions include the Williams Education Center that will be a regional training center for general and occupation education and a Center for Historic Preservation to train students in the understanding and preservation of archaeological sites and artifacts. The campus will include joint use space for housing, cafeterias, book stores, and so forth, which supports economic efficiencies among all participating institutions.

The Federal EIS and ROD

The Federal EIS

The Williams AFB EIS was filed with the EPA and made available to the public on June 3, 1994. In addition to the analysis in the EIS, the Air Force also studied the socioeconomic effects resulting from the closure and reuse of the base. This latter document was made available to the public on October 8, 1993.

The RODs

On February 17, 1995, the Air Force released the ROD for Williams AFB. The ROD focused on:

- how the property is to be divided into parcels for disposal,
- the method of parcel disposal, and
- the environmental mitigation, if any, covering the disposal and reuse of property.

On August 8, 1995, the Air Force issued a supplemental ROD. Both the original and the supplemental ROD involved the disposal of approximately 4,035 acres and the federal retention of 249 acres of the former AFB. Cooperating federal agencies included Health and Human Services (HHS), Federal Aviation Administration (FAA), Bureau of Indian Affairs (BIA) and Department of Education (DoEd).

The decision involved 929 buildings including 700 single-family housing units. The disposal of Williams will be in a manner that will enable the development of a reliever airport with the capacity for commercial and industrial development.

The ROD did not correspond specifically to the proposed action in the EIS, but incorporated portions of the General Aviation and Education Alternative.

This resulted in a composite disposal plan that assisted the affected communities in developing productive uses of the property for economic recovery. The primary impact was the inclusion of a general aviation component to the proposed action and elimination of the residential component from the general aviation and education alternatives.

Approximately eight acres will be retained for the Armstrong Laboratory for the Aircrew Training Research Facility.

The following outlines the decisions by disposal method as represented in the ROD.

- **To be made available for federal transfer by perpetual easement or in fee (261 acres):**
 - Federal Aviation Administration (FAA), 249 acres
 - NEXRAD, 1.0 acres
 - U.S. Army Reserve Command, 11 acres
 - BIA to be held in trust, 144 acres
- **To be transferred by public benefit conveyance (3,066 acres):**
 - U.S. Department of Education (DoEd), 657 acres
 - Arizona State University—East, 600 acres
 - Maricopa County Community College District (MCCCD), 62 acres
 - Maricopa County Accommodation District, 20 acres
 - Federal Aviation Administration (FAA), 2,347 acres
 - Williams Gateway Airport, 2,347 acres
 - Health and Human Services (HHS), 16 acres
 - Homeless Providers:
 - House of Refuge, 6 acres
 - Community Housing Partnership, 10 acres⁵⁸

The MCCCD application to DoEd sought 58 acres in PBC. However, the ROD called for 62 acres to be transferred to DoEd for subsequent conveyance to the District.

The third PBC conveyance request for education purposes was to the Maricopa County Accommodation District, which operates an alternative high school on the former AFB.

Analysis

The Williams ERT Consortium represents a clear example of a well thought out program involving the appropriate actors and institutions. They are dedicated to achieving a consolidated and integrated, multiple institutional campus devoted to higher education and *training for the East Valley labor force*.

The following assesses the ERT Consortium relative to the model approach presented in Section IV of this manual.

Organization

1. **Identify the players and seek their support:** The Arizona Board of Regents' 1991 report recognized the need for expanded educational opportunities in the East Valley. The announced closure of Williams

AFB helped to establish a consensus among East Valley Think Tank participating institutions that Williams would be an appropriate location for the ERT campus.

2. **Identify issues that are important to the players and how they see themselves connected with other educational and/or vocational training systems in the region:** Early in the process, before the announced closure of Williams AFB, the leadership from ASU and the educational providers of the East Valley had identified the need for additional capacity to accommodate the growth in student population projected in the Arizona Board of Regents' 1991 report. This was a major factor that helped to move the ERT Consortium concept forward.
3. **Obtain commitment and support from the CEO level and bring in the chief elected officials as equal partners:** The East Valley Think Tank under the leadership of the president of ASU early-on established the forum for CEOs from the educational institutions and local government to meet and discuss the future educational needs of the East Valley. From this association came the CEO group consisting of the executive director of the Williams Redevelopment partnership, the president of Mesa Community College, the city of Mesa Community Development director, and ASU vice president for University Relations.
4. **Formulate a series of projects that brings faculty and administration into the mix along with community leaders and CEOs:** This important step was accomplished with the EVTT and reinforced by the ERT Consortium concept. The consortium consists of CEOs, chief elected officials, faculty and administration from the participating institutions, and the William Redevelopment Partnership. In the beginning over 23 entities were involved in the ERT Consortium. Today, seven educational institutions⁵⁹ remain committed to establishing a presence on the former Williams AFB.
5. **Spend time sharing ideas and concerns, brainstorming for the future, and most important of all—NETWORK:** Between the inception of the ERT Consortium and today, there have been continuing meetings, brainstorming sessions, consultant reports, and networking among members of the consortium, local elected officials, the surrounding communities, Department of Education, and the Williams Redevelopment Partnership. The ERT Consortium has received continuing support and encouragement from the community in recognition of the need to establish additional educational facilities in the region and the possibilities the ERT concept has to meet the broad spectrum of individual educational and training needs.

The MTC would offer special programs in aviation, vocational, occupational, and technical areas. The collocation with a major university campus will make available to MCCCDC students and faculty joint use of teaching laboratories, classrooms, and student support facilities that otherwise might not be financially justified.

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The combined proposals stressed a unique cooperative educational complex not readily found elsewhere in the country. In addition to ASU East, the complex will include an aerospace campus to be built in partnership by six postsecondary institutions. The six institutions include the Williams Education Center that will be a regional training center for general and occupation education and a Center for Historic Preservation to train students in the understanding and preservation of archaeological sites and artifacts. The campus will include joint use space for housing, cafeterias, book stores, and so forth, which supports economic efficiencies among all participating institutions.

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The decision involved 929 buildings including 700 single-family housing units. The disposal of Williams will be in a manner that will enable the development of a reliever airport with the capacity for commercial and industrial development.

The ROD did not correspond specifically to the proposed action in the EIS, but incorporated portions of the General Aviation and Education Alternative.

6. **Find a leader who believes in the program:** From the beginning ASU assumed the role of lead institution. With resources provided from the Arizona State Legislature, governor's office, and the Federal Economic Development Administration the ERT was able to hire a full time planner to press the project while coordinating among the active ERT participants, military, and local governing bodies.
7. **Organize a steering committee of leaders; appoint and empower them:** From the beginning this has been a team approach under the leadership and coaching of ASU. The ERT has actively pursued the planning for the consortium campus to the point where the introduction of the first courses began in Spring 1995. In November 1994 ASU established formal offices on the proposed campus at Williams and began its marketing program to announce the availability of nearly 50 college level courses.

Planning

1. **Secure start-up planning and programming resources from federal, state, and local government and private sources:** Under the leadership of ASU and MCCCDC, the ERT Consortium received \$2.1 million and \$750,000, respectively, in seed money from the Arizona Legislature and \$427,000 in planning funds from the Federal Economic Development Administration. This enabled the program to proceed through the planning phases to the point where classes commenced in Spring 1995.
2. **Develop the programmatic details first:** Soon after forming the ERT Consortium, the group developed the Williams ERT Consortium Campus Master Plan Development Program. This detailed planning effort resulted in the identification and coordination of multiple institutional education and training programs conceptually tied together to avoid overlapping and duplicative classes. This is a "must do" step in orchestrating a multiple institutional campus.
3. **Establish the permanent institutional organization that will take charge and manage the educational center and support the educational and vocational training programs:** From the beginning ASU and MCCCDC jointly assumed this responsibility to implement and manage the multiple campus concept. In November 1994 the ERT Consortium produced the campus master plan development program.⁶⁰ It is a precursor to the development of a more detailed and programmatic campus master plan.
4. **Work with the LRA to incorporate the campus concept into the base reuse plan:** The initial Williams AFB Economic Reuse Plan identified Williams AFB as a "potential opportunity to

provide for the projected student demand at little or no cost to the State of Arizona."⁶¹

5. **Build on the LRA's base reuse plan and develop a more detailed campus plan:** The ERT Consortium has completed a detailed master plan including programmatic and phasing elements leading to full implementation of a multiple institution campus reflecting the ERT Consortium concept.

Implementation

1. **Obtain the written approval and commitment of support from all participating entities responsible for implementation of each element of the campus plan:** This phase of the implementation process came to a conclusion with the issuance of the ROD by the Air Force on February 17, 1995. The ROD decision was based on the Environmental Impact Statement that was completed in June 1994.
2. **Submit to DoEd a formal application for public benefit conveyance pursuant to established law and regulation:** Public benefit conveyance applications were submitted to the Department of Education on June 30, 1993. During August DoEd approved the dual applications for public benefit conveyance for educational purposes.
3. **Press the affected military department to convey the property pursuant to the approved application for public benefit conveyance:**⁶² Even though the application for public benefit conveyance was approved by the DoEd in 1994, DoEd must agree to accept the transfer. DoEd's policy is that no transfer can be accepted until all environmental issues have been remediated and the property declared clean.

To date, transfers have taken place to the Maricopa Community College District and the Maricopa Accommodation School District (MASD). ASU East is on site on a lease basis until a FOST can be issued and the property transferred to DoEd for subsequent deed to ASU. This is expected to occur in the Fall of 1996.
4. **On transfer of the property to the education and or vocational training institution, the institution(s) proceeds with the orderly development of the campus pursuant to the implementation plan and terms and conditions of the public benefit conveyance:** The Williams ERT Consortium is well on its way to accomplishing this goal. As noted, some real and personal property has transferred to MCCCDC and MASD. What remains is for the Air Force to complete its environmental documentation, issue a FOST for all or parts of the property remaining to be conveyed, for DoEd to accept property found to be suitable for transfer and convey title to ASU East.

Summary

ASU, MCCC, and the Williams Redevelopment Partnership have assumed the lead. With resources from the state legislature, federal sources, tuition, and student fees and charges it is expected that the campus will be fully operational by the 1996–1997 academic years. In the mean time over 50 classes have begun offering a spectrum of college level courses in engineering, applied sciences, and liberal arts. ASU has executed an interim lease with the Williams Redevelopment Partnership for much of the campus as part of the campus start-up strategy.

What remains is for the consortium to execute an agreement between the homeless providers, the community, and the Gila River Indian Nation to share the campus in a way that is mutually benefiting for all interests. The ROD stipulated the order in which property was to be offered for public benefit conveyance. It was to be based on the EIS, community reuse plan, and applicable federal law.

Acknowledgments

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Case Study No. 1 Interviews with Lowry Higher Education Center Proponents

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Case Study No. 2 Interviews with Williams ERT Members

Dr. Charles E. Backus
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Mr. Terry Isaacson
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SECTION VI

Pre-BRAC Community Conversions to Education Centers

ABSTRACT: This section reviews seven pre-BRAC closure projects where educational and technical institutions have been established, how they came into being, and experiences to be shared.

Historical Context

The conversion of military bases to centers of education and vocational training is not new to military base closures. Since 1961, when the Office of Economic Adjustment was established within the Department of Defense, information on base closures and conversions has been maintained and periodically updated. In September 1993 OEA published an updated compendium on Civilian Reuse of Former Military Bases⁶³ covering the years 1961–1993. This work was part of a comprehensive picture of civilian reuse of former military bases by state and community of impact.

In the 1993 report OEA surveyed 97 military installations closed between 1961 and 1993. Of those surveyed, 28 converted to centers of postsecondary education; 10 to vocational and/or technical centers; 5 to Job Corps or similar training; and 7 to secondary and special educational and correctional centers. Estimates based on the survey indicate capacity was created on former military bases to support over 145,000 students at more than 50 locations throughout the United States, Puerto Rico and Guam.⁶⁴

This period between 1961 and 1993 was rich in examples of how pre-BRAC closure communities responded to the challenges that base closures presented. From among the 50 communities, OEA selected 7 as case studies for this community guidance manual.⁶⁵

Case Studies

The selected case studies are based on information obtained through a survey instrument and interviews with principles involved in the educational institutions and former military bases. From among the centers studied, four are postsecondary education institutions, and three are technical institutions devoted to continu-

ing education and corporate, business, and vocational training. These seven institutions were selected as case studies based on their years of operation, enrollment and faculty, and relative success as centers of higher education and vocational training.

From each of the seven case studies a lesson has been identified that could assist institutions or communities seeking to establish education or vocational training centers on a closing military base.

The process of closing military bases and converting to civilian reuse was less complex for pre-BRAC closure projects. For instance, there was no homeless screening requirement, no disposal EIS requirements, and fewer eligible public benefit conveyance programs.

Between 1963 and 1988 nearly 50 bases converted in part to some type of private or public education or vocational training center. Since 1988, however, the process of conversion has become more complicated, involving 154 major military bases within the United States.

Today, communities and base commands must deal with more stringent and complex environmental clean up requirements. For post-BRAC '88 closures, General Services Administration (GSA) has delegated property disposal at closing bases to the Secretary of Defense (SecDef) under the authority of the BRAC laws. The SecDef in turn delegated the responsibility to the secretariats of the host military department (Air Force, Army, or Navy).

By delegation, the respective military departments are responsible for the final property disposal action and reserve to themselves final authority to sell or lease surplus property at fair market value or at public benefit discount, depending on the planned nature of the activity and the degree of public benefit.⁶⁶

Case Study No. 1 University of South Alabama-Brookley USA Center Campus, Formerly Brookley Air Field Mobile, Alabama⁶⁷

In 1969 the U.S. Air Force closed Brookley Field in Mobile, Alabama. Shortly thereafter the University of South Alabama established a campus on a portion of the former air base. Today, the campus is accredited

by the Southern Association of Colleges and Schools and offers among its curriculum certificate and diploma programs for paramedics, general continuing education units, and hazardous materials training. The Brookley Center is a campus of the University of South Alabama.

The Brookley campus provides continuing education opportunities to business, industries, corporations, and government clients. The Center provides for over 20,000 conference participant days annually and employs approximately 125 faculty, administrators, and support personnel.

When the campus was first established in 1969, it consisted of 293 acres and 414,500 gross square feet (gsf) of floor area in the form of dormitories and buildings, including the former officer's club, cafeteria, bowling alley, and related structures. At the time of its establishment GSA was the Federal property disposal agency.

Today the campus center consists of approximately 425,000 gsf and includes dormitories, classrooms, research, and support buildings. Some of the buildings were relocated from other locations on the former base following conversion.

In addition to the main campus, GSA leased approximately 34 additional acres of the former base to Brookley Manor, Inc., an Alabama Corporation. This acreage contained the original 170 "Wherry" housing units. The Wherry housing project was subsequently purchased from GSA by the university in October 1977. The units continue to be occupied predominantly by low-income families. These residential units provide to the campus a sustaining source of income to partially support the continuing educational programs at the Center.

Early Bird Reuse Planning

In 1969, shortly following the closure of Brookley Air Field, the University of South Alabama stepped forward as the state sponsor seeking a public benefit conveyance of part of the base for educational purposes. In support of the conveyance request, a community reuse plan was prepared by the city of Mobile and the University of South Alabama and submitted to the General Services Administration. At that time GSA was the property conveying agency of the federal government for closing military bases. It operated under the 1949 Property and Administrative Services Act, As Amended. The Department of Health, Education and Welfare (HEW)⁶⁸ supported the request for public benefit conveyance and the 293 acres were transferred by quit-claim deed at 100 percent discount. The campus has been in continuous operation for 25 years and has processed over 250,000 students through its continuing education and vocational training programs.

Lessons Learned

In the case of the Brookley Center, the University of South Alabama dealt directly with HEW (now DoEd).

The Air Force was not a party to the final disposition agreement. According to Brookley representatives, the process was smooth and effective. The university continued to support the new Brookley Center until programs developed and matured, and the Center became more self supporting.

The conversion and renovation of DoD facilities to academic use generated previously unidentified costs that further impacted the economical operation of the campus. Buildings that were transferred often were not designed or constructed with energy conservation in mind. Consequently, utility costs became a burden for the Center to overcome.

Absent from the Brookley conversion process was a business plan that anticipated the full costs to adapt former DoD buildings to efficient academic use and residency. Out of this experience has come advice to potential recipients of surplus federal property that they should expect tenant rollovers until a successful tenant is found. It is more of an evolutionary process until a niche is identified and viable permanent reuse activities established that can sustain the costs of operating an educational campus.

In the case of the Brookley Center there was no federal financial support to help in the start-up costs or in sustaining the operation of the Center. Primary support came in the form of revenues generated on the Center and from the university.

Case Study No. 2 Madison Area Technical College Formerly Truax Field, Madison, Wisconsin⁶⁹

The Truax Field in Madison, Wisconsin, was converted from military use in the 1950s. It was not until the early 1960s that the Madison Area Technical College (MATC) District leased land from the county to establish its new campus.

Truax Field was first conveyed to the city of Madison by the FAA in the 1960s under a public benefit conveyance. It was subsequently transferred to Dane County in 1974 and continued in operation as a commercial airport. In 1983 Dane County Regional Airport secured a deed of release from the FAA to permit the airport to lease for 99 years 150 acres to MATC. Proceeds from the lease are used for airfield capital improvements. MATC reserved the right to purchase the 150-acre site at the end of 50 years. MATC opened its campus in 1984.⁷⁰

Even though the decision to locate MATC at the former Truax AFB was not driven by the base closure, it is, nevertheless, a case study worthy of note.

MATC provides technical, vocational, and general education programs and courses for approximately 18,000 credit and 37,000 noncredit students annually. It is accredited by the North Central Association of Colleges and Schools within the Wisconsin Technical College System to confer associate degrees, diplomas,

and certificates. MATC has been in existence since 1911 and is recognized for its concentration in technical and industrial programs that include, among others, agriculture and diesel equipment technology, machine tooling, and electronics.

The Truax campus is one of seven instructional sites owned by the district. It consists of an educational building, an administration building, and a separate fire training center.

Lesson Learned

It is possible to obtain property for use for educational purposes after the former military base has been conveyed to a local entity. In the case of Dane County, the original plan was to use the land now occupied by MATC for industrial park development to support airfield operations.

Case Study No. 3 Sowela Regional Technical Institute Formerly Chennault AFB, Lake Charles, Louisiana⁷¹

Chennault AFB was located in Lake Charles, Louisiana. It closed in 1961. It was not until 1973 that Sowela Regional Technical Institute (SRTI) took title to 180 acres of the former Air Force base as a PBC for education. SRTI was founded in 1939 as a state-supported postsecondary school. The first classes were held in 1940 on its original campus located in downtown Lake Charles.

In 1968 an aviation department was formed on the former base by SRTI to train personnel from two aircraft companies repairing damaged aircraft being returned from Vietnam. At that time there were three instructors and approximately 50 students. The aviation department continued to operate in leased facilities that formerly had been the base motor pool.

At the time the airpark was formed, Boeing Aircraft Corporation landed a contract with the U.S. Air Force for modification and refurbishing KC-135 aircraft. SRTI provided training for virtually everyone employed in the facility, numbering some 2,500 persons. This was accomplished through three shifts of classes, operating the facility 24 hours a day.

When the five-year contract terminated, the Grumman Corporation (now Northrop Grumman) became the new tenant on the one million square foot complex, building the new J-Star aircraft based on the Boeing 707 airframe. Again SRTI provided training and retraining for all employees of the plant.

The excellent relationship between SRTI, Chennault Airpark Authority, and its tenants has prompted the Authority to incorporate the institution's administration in meetings with prospective tenants because of the highly desirable feature of having an on-site training facility capable of responding to tenant needs for on-the-vocational training.⁷²

The property that eventually became the SRTI shifted from one agency to another with little maintenance or improvement. In 1973 the property transferred to HEW, which in turn deeded it to the state of Louisiana, acting on behalf of SRTI. In all, 180 acres were transferred to SRTI. In 1986 all restriction on this property and many other PBCs at Chennault were released by the U.S. Congress. Of the 180 acres, 130 were subsequently transferred to the Chennault Air Park Authority.

SRTI offers technical training in aviation, electronics, instrumentation, drafting and design technology, data processing, auto technician, industrial engines, machine shop, nursing, culinary, and commercial art. Current year enrollment is 3,500 students with a faculty and administrative staff of 65 full-time and 30 part-time persons, and 25 support staff.

The campus is located on 50 acres and consists of eight buildings totaling over 230,000 gsf of floor area that combined represents offices, labs, classrooms, and storage. Each building is dedicated to a department that concentrates in a particularly technology area.

SRTI awards Associate of Arts degrees in applied technology, diplomas, and certificates of competency. SRTI is accredited through the Southern Association of Colleges and Schools and has affiliated with the Louisiana Technical Institute System.

For nearly 10 years following the closure of Chennault AFB, the base sat idle with little lease activity. This contributed to deterioration of physical plant and equipment. In 1973 title to the property was transferred to the city of Lake Charles, then it reverted back to GSA, which in turn conveyed the 180 acres, through the Louisiana Department of Education, to the state and Sowela Regional Technical Institute. There was no transfer of funds as the property was conveyed as an educational public benefit conveyance. State capital funds were secured to assist in improving and demolishing obsolete buildings on the campus. Today, SRTI is a successful technical school providing postsecondary educational and vocational training opportunities.

Lessons Learned

The biggest obstacle to the reuse of Chennault AFB was the 10 years of relative inactivity that allowed buildings to deteriorate and presented from the beginning substantial liability for any redeveloper. However, just as time appeared to be an obstacle to the rapid reuse of the base's assets, it also provided to be an opportunity that helped SRTI identify and secure funding.

A major lesson learned is to try to secure property as early as possible in the process to prevent deterioration of assets that could result in costly demolition of deteriorating structures. Unlike the pre-BRAC closures, the current base closure process is oriented to rapid base closure, environmental assessment and remediation, and rapid transfer of property.

Case Study No. 4

Texas State Technical College Amarillo

Formerly Amarillo AFB, Amarillo, Texas⁷³

In 1968 Amarillo AFB closed. In 1970 the Texas State Technical College (TSTC) system established a new campus at this former military base. The TSTC offers coeducational, two-year residential programs. Course offerings include studies in technical and vocational education. TSTC Amarillo is accredited through the Southern Association of Colleges and Schools, and the campus has affiliated with three other TSTC campuses located in Waco, Harlingen, and Sweetwater, Texas.

Not a Public Benefit Conveyance

The president of the TSTC Waco campus was a prime mover behind the establishment of the Amarillo campus. He discussed the idea of creating a college in the Texas Panhandle with state and local community leaders, educators, business leaders, and elected officials from the governor to state legislators to congressional representatives. From these meetings came the Mid-continent Foundation to assist in local support for the Amarillo campus.

Following several months of negotiations with state legislators, the GSA, and government officials the Texas Legislature appropriated \$3 million for the purchase of property from GSA and the start-up of the campus. Continuing support for the campus comes from sustaining appropriations from the state legislature.

When it opened the Amarillo campus provided course offerings to 254 students. Today enrollment has risen to 520 resident students. The academic programs are supported by 54 faculty, 17 administrative, and 94 maintenance and support personnel.

The campus consists of 1,567 acres of land and has grown over time from 9 buildings and 336 residential housing units and barracks with a resident capacity of 543 persons, to 16 buildings and 4 dormitories with a resident capacity of 207 units.

The Amarillo campus is based on the TSTC model used to establish the Waco, Texas, campus. The Waco campus is located on the former James Connally AFB. The Amarillo campus was established as an expansion of the existing statewide college system under the aegis of the then Board of Regents, Texas State Technical Institute, now the TSTC system.

The TSTC concentrated early on educational and vocational training needs as well as local and regional needs identified through business and industry surveys and focus group discussions.

Lessons Learned

From among the pre-BRAC educational conversions studied in this report, the Amarillo and Aquadilla (see Case Study No. 7) campuses stand out as examples

of GSA negotiated property purchases as opposed to discounted public benefit conveyances.

The choice of negotiated purchase over public benefit conveyance was premised on the TSTC being able to sell off areas of the campus to produce income to support on-site activities. TSTC is fully supported by the state of Texas.

Most military bases facing closure today were built and used years before current environmental laws were in effect. Today these laws govern the disposal of hazardous materials, including asbestos, military ordinances, and petroleum products contaminating the ground and water resources.

Obstacles encountered by the TSTC on the Amarillo campus involved the removal of obsolete barracks. This took several years to accomplish, at an estimated cost of \$100,000. Today the costs of demolition of over 70 buildings, including hazardous materials removal, would approach \$450,000, representing a four-fold increase.⁷⁴

The adage "don't bite off more than you can chew" became a real scenario in the Amarillo case study. The former Air Force base was a major installation that had been neglected between closure and transition to civilian reuse. Many of the former military buildings were not built to be used as instructional facilities. In addition, there are more buildings on the former base under the ownership of TSTC than can be or will be used for educational purposes. Extensive renovation and demolition became a major cost factor to the TSTC system, a cost factor that continues to this day.

Assuming control over too large a campus with buildings that could not be immediately adapted for educational uses presented a major problem for campus planners and administrators. Today the campus continues to downsize and consolidate buildings and reduce the walking time between buildings to 10 minutes.

Educational institutions and communities contemplating converting military bases to education and vocational training centers should approach the issues from the standpoint of a business investment. Understanding from the beginning the total costs of conversion, including demolition of obsolete structures, retrofitting structures to meet the Americans with Disabilities (ADA) requirements, local building and life safety codes, infrastructure conversions and upgrades, security lighting, and so forth, is a major requirement of an effective and comprehensive business plan.

Hidden in all property negotiations are unspoken liabilities and responsibilities that can surface and become major obligations for either the seller or buyer prior or subsequent to property conveyance. Hazardous materials disposal and contamination issues are more understood today than in the past. Still little understood is the obsolescence of buildings and the costs to adaptively change a building and its infrastructure to accommodate new uses.

This is the logic behind the need for a professionally staffed redevelopment authority capable of preparing community reuse plans and economic recovery programs based on sound business and investment strategies.

Case Study No. 5 Indiana University, Purdue University at Columbus, and the Indiana Vocational and Technical College Formerly Backalar AFB, Columbus, Indiana⁷⁵

Backalar AFB closed in 1969. Three years following closure the Indiana University and Purdue University (IUPUC) at Columbus moved into a vacant barracks building, and two years later it occupied the 46,000 square foot headquarters and training building. Today the university is situated on a 30-acre campus that occupies part of the former AFB. Also located on the former base is the Indiana Vocational and Technical College (IVTC). It constructed an 80,000 square foot building in 1982 to offer vocational and technical courses of instruction.

IUPUC, as the university is now known, offers four-year Bachelors degrees, Associate degrees, and certificate programs in a broad range of academic and vocational training areas. IUPUC is accredited through the North Central Association and is a campus of both Indiana University and Purdue University. IVTC is a separate but collocated institution.

At its opening IUPUC enrollment approached 400 students with 3 faculty and administrative support staff. Today the IUPUC enrollment exceeds 1,800 students and 120 faculty and support staff.

At opening, the university campus consisted of one classroom building. Today the university campus is housed in two buildings occupying 80,000 gsf of floor area. IVTC occupies a separate building consisting of 80,000 gsf of floor area.

Not a Public Benefit Conveyance

Conveyance of the property to the university was sponsored by the Board of Trustees of Indiana University. No federal funds were involved in establishing the campus. Transfer of the property was obtained through direct discussions with the Federal Aviation Administration (FAA) and Department of Defense (DoD) officials based in the Pentagon. IVTC leases its land from the city.

The state of Indiana provided \$2.5 million for renovation and expansion and \$1 million for equipment to jump-start the campus. Financial support is continuing in the form of federal student aid and approximately \$1.8 million in annual state appropriations.

Lessons Learned

The process enjoyed the support of community leaders and organizations. An individual took the lead to make the project happen, working with elected officials and industry leaders. The chamber of commerce committed

its resources in support of the conversion effort. The state legislature committed modest appropriations, and a delegation of elected officials and community leaders met with military and FAA officials to secure releases of title and allow the project to go forward. Early and active community involvement was key to the success of the conversion effort.

Case Study No. 6 Kansas State University at Salina Formerly Shilling AFB, Salina, Kansas⁷⁶

Shilling AFB closed in 1964. One year later Kansas State University established a presence on the former military air base on 182 acres. The College of Technology (CoT) is the ninth college of Kansas State University and the principal tenant on the campus. The CoT provides for the education of technicians and technologists in the fields of aeronautics, engineering, information management, and science. The college also provides training in related technical and occupational fields.

The property was conveyed to Kansas State University by DoEd (formerly HEW) in 1966 as a public benefit conveyance with restriction expiring, by their own terms, on November 15, 1986. In 1987 the property was transferred to the state of Kansas. The cost to the state was the customary transfer fees. Kansas Board of Regents of the State University was the sponsor who oversaw the property negotiations. The board of regents continued to support the campus by budgeting for equipment and furnishings and supporting continuing federal and state financial aid.

The CoT is accredited through the Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (ABET) and the Federal Aviation Administration (FAA). It is affiliated with Kansas State University. Four-year Bachelor's degrees, two year Associate degrees, and certifications are offered at CoT.

At opening, 169 full-time equivalent (FTE) students enrolled in the CoT and were supported by a 14-member faculty, administrative, and support staff. Today enrollment has exceeded 1,000 FTEs, and the faculty has grown to over 100 staff members.

The Original Campus

In 1965 the campus comprised 60 buildings, including dormitories, classrooms, laboratories, and support buildings. Today that number has been reduced to 20 buildings, including three new complexes—an aeronautical center, a technology center, and a new dormitory.

The size of the original campus also was reduced to 112 acres (62%) of its original size in 1985. These adjustments in the size of the campus and number of buildings enabled the campus to be reconfigured into a single property. Before, it had occupied several noncontiguous parcels, creating commuting and operational problems.

Organizing and Securing Support for the College

In preparing for a new campus on the former military base, the Kansas Engineering Society and the Kansas Chapter of the American Society of Certified Engineering Technicians conducted a survey to establish a basis for documenting a need for persons with education and experience to work in the field of engineering technology. The survey revealed the potential employment of engineering technicians in Kansas through the period 1965–1975. A study was also made of the technology curricula and courses that might be available for the education of engineering technician students.

A needs questionnaire was sent to 400 employers and potential employers of engineering technicians. These employers included industries, consulting engineering firms, and governmental agencies at all levels. In addition, an availability questionnaire was sent to 90 educational institutions in and near Kansas. These included state universities, colleges, private colleges, junior colleges, and vocational technical schools. Analysis of the results of the two surveys revealed a need for a curriculum based on training individuals in the emerging field of engineering technician.

With strong support and leadership from the local chamber of commerce, the Salina Airport Authority, Kansas Wesleyan University, the city of Salina, community leaders, the Kansas Engineering Society, the Kansas Society of Certified Engineering Technicians, and Kansas State University, the community became energized and convinced the board of regents that a college devoted to training engineering technicians made both vocational training and business sense.

Growing Pains

In 1965 the Kansas General Assembly enacted legislation establishing at the former AFB the Schilling Institute. Over time the name of the new institution changed to the Kansas Technical Institute, to the Kansas College of Technology, and finally, to Kansas State University—Salina, College of Technology. The college's start-up budget in 1965 was \$260,000. Today the budget is \$5.4 million.

The continuing success of the college is attributed to the centralization strategy that took place at the end of the 20-year public benefit restriction period. Once title to the property conveyed to the state university, noncontiguous parcels were sold to various interests generating revenues to be reinvested in campus development.

Lessons Learned

The initial success of the CoT at Salina and the former Schilling AFB is attributed to a community-wide team effort involving, among others, Kansas State University, Salina Airport Authority, and the Kansas State Educa-

tion Authority. Putting the right team together was the first lesson learned in securing community and state support for the Salina campus. A successful team is one that is represented by a wide spectrum of interests and is committed to making the college a reality.

A strong team-based approach with dedicated community leaders can harness the political and business communities; it can generate a level of energy and a "can do" attitude that can convert a vision into reality. The concept of a college devoted to furthering technology and career training became infectious and quickly earned the community's complete support.

Hiring the right individuals who are devoted to making things happen within fiscal, planning, and time constraints is a prerequisite for success. The assistant dean of engineering at Kansas State University became the first president of the Institute.

Even with wide community support and the endorsement of academia, business, and industry set-backs can be expected. In the case of CoT, the college almost closed its doors until it merged with Kansas State University.

Case Study No. 7

University of Puerto Rico, Aquadilla Regional College Formerly Ramey AFB, Aquadilla, PR⁷⁷

Ramey AFB closed in 1973. Two years after the base's closure the University of Puerto Rico established a new campus on 31 acres of land on the former Air Force base. In 1989 three additional acres of land were purchased by Aquadilla Regional College (ARC) from the federal government.

When the University of Puerto Rico established its ARC campus, it offered a two-year program concentrating on technological careers oriented to the needs of the region. In addition, the ARC offered the first two years of transfer programs in the natural sciences, education, secretarial sciences, humanities, and social sciences.

Besides the original Associate degree and transfer programs, the college now offers baccalaureate degree programs in quality control in manufacturing, office systems, and business administration. In addition to degree programs, the college offers short programs, courses, and educational activities through the Continuing Education and Extension Division.

ARC is accredited through the Middle States Association of Colleges and Schools. It is one of six units within the Regional Colleges Administration of the University of Puerto Rico system.

At its opening in 1975 the college had a student population of 372 students and a faculty and administrative staff of 77 persons. Today the college's enrollment has exceeded 2,100 students supported by a faculty and administrative staff of 226 persons.

The 34-acre campus accommodates five classroom buildings, athletic, administration, and library facilities totally 67,077 gross square feet of floor area.

Organizing and Securing Support for the College

Political and economic support for the establishment of ARC was secured through traditional channels. The state legislature assigned start-up resources. The University of Puerto Rico system integrated the college into the educational financial programs of the university.

At the outset efforts were directed toward the community to identify immediate education and vocational training needs. The College Monitoring Board was established to advise and collaborate on the development of programs and activities to respond to community and regional needs. Community groups such as the Monitoring Board visited organizations, attended civic club meetings, and rallied community support for the college.

Lessons Learned

If we were to describe five obstacles encountered by the college in establishing itself on the former military base, they would be, in order of importance:

1. Facilities acquired were not designed for educational purposes and required adaptation and remodeling.
2. Public transportation was negotiated with local private providers to make the campus accessible for students.
3. Lack of security of the campus and buildings resulted in a fence having to be built around the campus.
4. Accreditation presented a challenge to the college that was overcome by accreditation in 1976 and reaccreditation in 1991 by the Middle State Association of Colleges and Schools.
5. Enrollment and retention of students presented a challenge to the college. Dissemination activities in area high schools, careful planning and assessment of programs based on community needs, and the development of a sound reputation for academic quality all contributed to helping the college overcome initial enrollment and retention difficulties.

The greatest lesson for success was the commitment of all constituents to making the college a reality. Faculty and staff worked together in physical plant improvement projects. Strong state support and affiliation with the University of Puerto Rico system helped to establish the campus and contributed to its recognition and reputation for excellence.

For the community, it meant that a small, progressive institution was made available to students whose parents had obtained a high school education or less, but who aspired to obtain postsecondary education as a means to brighten their future and prepare for the workplace of tomorrow. The ARC stands today as testimony to a vision that became a reality largely due to the persistence of the community and its recognized need for higher education and vocational training opportunities for its residents. The fact that it involved the reuse of portions of a former military base contributed to overall cost savings for all affected interests.

Acknowledgments

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Footnotes

1. U.S. Library of Congress. Congressional Research Service. *Defense Economic Adjustment and Conversion After the Cold War. Selected, Annotated References 1990–1994*. CRS Report no. 94–317 E. By Edward Knight, Economics Division, and Robert S. Kirk, Library Services Division. March 15, 1994, p.4; and The Defense Base Closure and Realignment Commission Report to the President, dated June 30, 1995.
2. United States Defense Base Closure and Realignment Commission. *Defense Base Closure and Realignment Commission: 1993 Report to the President*. July 1, 1993 and June 30, 1995.
3. *Ibid.*, p. v.
4. DoD. Listing of “Major Base Closures: 1988–1993,” and Base Closure Commission Report 1995.
5. DoD. Office of Economic Adjustment. *1961–1993 Civilian Reuse of Former Military Bases—Summary of Completed Military Base Economic Adjustment Projects*. September 1993. p.4.
6. National Association of Manufacturers (NAM). *Today’s Dilemma: Tomorrow’s Competitive Edge—Learning from the NAM/Towers Perrin Skills Gap Survey*. Nov. 1991. Note: The NAM survey found that:
 - (a) The average manufacturer rejects five of six applicants for jobs because the applicant can’t read or write adequately (20% can’t read well enough to fill out a job application), or because of poor communications and math skills.
 - (b) More than half the companies report major skills deficiencies in their employees in areas of basic math, reading, and problem-solving. Twenty-five percent said they couldn’t upgrade product quality because their workers lacked the needed skills to use new technology. Thirty percent said they couldn’t reorganize work activities because workers couldn’t learn new jobs.
 - (c) Sixty percent of new jobs will require more than a high school education. However, 70 percent of new entrants into the work force will have less than a high school diploma. Thus, the group entering the labor pool will not be able to provide the skills businesses need to expand.
7. Marion Pines and Anthony Carnevale. “Employment and Training,” in *An Economic Strategy for the ‘90s: Human Capital and America’s Future*. David A. Hornbeck and Lester M. Salamon, eds. Baltimore and London: Johns Hopkins Press, 1991. p. 242.
8. Note: By “composite community” we mean a community that is relatively self contained, economically diversified, socially and ethnically balanced, and provides the components that together create a quality living, business, and working environment. Reston, Virginia; Columbia, Maryland; Fort Collins, Colorado, and Las Calinas, Texas, are examples of composite communities of the 1970s and 1980s.
9. Examples include the former Williams AFB in Mesa, Arizona; Lowry AFB in Denver, Colorado; and Fort Ord in Monterey, California.
10. U.S. Dept. of Labor, Bureau of Labor Statistics. *Occupational Outlook Quarterly—A Special Issue on the American Work Force, 1992–2005*. Vol. 37, No. 3; *Monthly Labor Review*. Vol. 118, No. 11; and *Employment Outlook: 1994–2005* (Bulletin 2472). Selected topics, observations, and conclusions relevant to this manual either have been replicated in their entirety or summarized where appropriate.
11. *Ibid.* Note: Assumptions made by BLS that will have an impact on BLS projections include: the federal deficit would be brought under control, foreign trade would be brought into balance, the unemployment rate would trend toward 5.5 percent, productivity growth would be higher than during the past decade, and the armed forces would shrink to its smallest size since 1945.
12. Note: This is the occupational group having the highest proportion of workers with college degrees and the highest median earnings for full-time wage and salary workers.
13. Interview with Dr. Larry Carter, president, Community College of Aurora, 1994.
14. DoEd. Mr. David Hakola, director, Real Property Group, 1996.
15. Note: Reuse Planning Organization and Local Redevelopment Authority (LRA) are terms to describe the community’s official base reuse planning entity and are used interchangeably throughout this manual.
16. Note: Soil and water contamination from petroleum products is not regulated by CERCLA 120.
17. U.S. Congress, Public Works and Economic Development Act of 1965, PL 89-136, 42 U.S.C. 3241, 3243, 3244, and 3245
18. Note: The seven institutions include ASU, Chandler-Gilbert Community College, Mesa Community College, University of North Dakota, Maricopa County Regional School District, Armstrong Laboratory, and Embry Riddle.
19. Federal funding of campus planning has occurred through the Economic Development Administration of the Department of Commerce. Funding for the Williams ERT Consortium planning process under the sponsorship of Arizona State University, and the University of California in its efforts to plan a new campus on parts of Fort Ord, are cited as recent examples.
20. U.S. Congress. The Federal Property and Administrative Services Act of 1949, 40 U.S.C. 484. PL 81-152.
21. Note: A public benefit conveyance is often at 100 percent discount from fair market value, provided certain conditions are met.
22. Note: Other public benefit conveyances are recognized under the 1949 Act. They include public health, park and recreation, historic preservation, homeless assistance, correctional facilities, public airports and seaports, wildlife and conservation, public highways, and economic development. Some uses of surplus federal property are eligible for conveyance without consideration or at 100 percent discount. They include parks and recreation, correctional facilities, airports and seaports, and highways. The reader is encouraged to consult the individual public benefit conveyance sponsoring federal agency for details concerning the conveyance of surplus federal property.
23. In the case of public benefit transfers for whatever purpose under the 1949 Act, a determination of fair market value would only be necessary where the amount of public benefit allowance to be accorded the transfer is less than 100 percent and is necessary to determine the amount of cash payment the transferee would be required to pay to the public benefit conveyance sponsoring agency.
24. CSA. Disposal of Surplus Real Property. April 1988. p. 3.
25. Note: Transferee accrues 1/360th “equity” for each month of use.
26. U.S. Air Force. *Final Environmental Impact Statement: Disposal and Reuse of Lowry Air Force Base, Colorado*. Vol. 1: June 1994. pp. 3-1 through 9.
27. Lowry Economic Recovery Project (1993). *Recommended Lowry Reuse Plan and Lowry Disposition Plan*. Prepared by HOH and Associates, Inc., et al., November 1993.

28. Note: Among Lowry's attributes as a self-contained community are an assortment of ready-to-use improvements. The inventory of built assets includes office buildings, education and training facilities, warehouses, vehicle and equipment maintenance shops, resident dormitories, 867 residential structures, a commissary and base exchange, restaurant and minimal, churches, health care facilities, child care centers, commercial banking institutions, a recreation center, an 18-hole golf course, ball fields, swimming pool, picnic areas, officer and enlisted clubs, restaurant, and museum.
29. Lowry Economic Recovery Project (1993).
30. U.S. Air Force (1994).
31. Note: The options available to the Air Force included transferring real property to another federal agency, assignment of real property to other federal agencies for public benefit conveyance (PBC), Economic Development Conveyance (EDC) to a local redevelopment authority (in this case LRA), negotiated sales for real property to eligible public bodies, or public sale.
32. Air Force Base Conversion Agency (1994), p. 1.
33. Note: The ROD is one of the most important documents required in the chain of plans and official statements concerning a base closure. Without the ROD, federal property cannot be conveyed. The ROD is based on the EIS that is to include the community's preferred reuse plan. The EIS analyzes the community's preferred reuse plan and its reuse options and assesses the relative environmental consequences of each disposal consideration.
34. Note: The August 1994 ROD-assigned 30 acres to HHS-approved providers is subject to continuing negotiations between the providers and the LRA, with the caveat that the Air Force will begin assigning property to HHS for the "approvable" homeless providers should the McKinney Act Applications not be withdrawn. To date the LRA has successfully negotiated with all but one of the related homeless providers. This will result in the transfer of land to the LRA under the provisions of the Economic Development Conveyance. The homeless providers will receive Lowry property and/or funding to develop housing off-base. For other PBC-HHS sponsorship, failure of HHS to approve an applicant(s) will result in the parcel(s) being offered to the LRA for negotiated sale. If the LRA does not wish to negotiate the sale, the parcel(s) will be offered for public sale.
35. Interview with Dr. Larry Carter, president, Community College of Aurora, June 29, 1994.
36. State Board for Community Colleges and Occupational Education (1994). Lowry Higher Education Center Business Plan. March, 1994.
37. Op. cit., Carter (1994).
38. Op. cit., State Board (March 1994).
39. Ibid.
40. State Board for Community Colleges and Occupational Education. Higher Education and Advanced Technology Center at Lowry—Master Plan. Dec. 1994.
41. Op. cit., State Board (March 1994).
42. Note: Normally the time frame expected for occupancy is 12 months. However, in the case of the Lowry campus, 18 months was approved by DoEd.
43. Op. cit., State Board (March 1994).
44. Letter from Mr. George E. Hoops, director, Western Division, Federal Real Property Assistance Program, U.S. DoEd, to Dr. Larry Carter, president, Community College of Aurora. May 20, 1994.
45. Op. cit., State Board (December 1994).
46. LRA (1994).
47. Governor's Economic Reuse Advisory Board. Williams AFB Economic Reuse Plan. Prepared for the board by EDAW, Inc. et al. Aug. 1992.
48. State of Arizona. Board of Regents, "Arizona Demand for Higher Education: 1990-2010: Future Scenarios." Prepared for the Arizona Board of Regents by Carol Frances and Assoc., Oct. 1, 1991.
49. Interview with Dr. Charles E. Backus, Arizona State University East, provost. Sept. 1994 and February 1995.
50. Interviews with Mr. Bernie Ronan, director of Research and Planning at Maricopa Community College and Mr. Arlen Solochek, manager, Maricopa Community College. Sept. 1994.
51. Board of Regents (1991).
52. AACC *Journal*. "Building Educational Partnerships: The East Valley Think Tank and the Closing of 'Willie'." by Bernie Ronan. May 1994; p. 46.
53. Ibid.
54. Ibid.
55. Williams Redevelopment Partnership. Williams ERT Consortium Campus Master Plan Development Program. Prepared for the ERT Consortium Campus Steering Committee by HOK, Inc. and Associates. Dec. 1994.
56. Ibid.
57. AACC *Journal* (1994) p. 46.
58. Subject to HHS approval. If not approved, the 40 acres will be made available to ASU East.
59. Note: The seven institutions include ASU, Chandler-Gilbert Community College, Mesa Community College, University of North Dakota, Embry Riddle, Maricopa County Regional School District, and Armstrong Laboratory.
60. Op. cit., Williams ERT Consortium Campus Master Plan Development Program.
61. Governor's Economic Reuse Advisory Board. "Williams AFB Economic Reuse Plan." (1992), p. 41.
62. Note: By "military department" we mean the host military branch that controls the disposition of surplus military property and can act on behalf of the Department of Defense. This assumes that a ROD has been made by the military department based on the EIS and is consistent with the approved parceling plan and LRA reuse plan. Further, that the Department of Education has approved and has agreed to sponsor the public benefit conveyance of the property and buildings for educational purposes to the institution(s) applying for the conveyance.
63. Office of Economic Adjustment. 1961-1993 Civilian Reuse of Former Military Bases—A Summary of Completed Military Base Economic Adjustment Projects. Sept. 1993.
64. Ibid.
65. Ibid.
66. National Defense Authorization Act for FY 1994.
67. Interview with Mr. Fred Rees, director of the USA Brookley Center. Nov. 1994, Survey Instrument Dec. 1994.
68. Note: When HEW was divided, the portion devoted to education became the Department of Education (DoEd).
69. Survey instrument and follow up conversations with Mr. Bob McNamara and Charles Peterson, Dane County Airport Authority; and Dr. Augusta Julian, MATC. Jan. and Feb. 1995.
70. Interview with Mr. Pete Drahn, airport director, Dean County Regional Airport. March 1995.
71. Interview with Mr. Colin F. Fake, assistant director, SRTI. Jan. 1995, and Survey Instrument, Dec. 1995.
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Common Acronyms and Abbreviations

ADA	Americans with Disabilities Act
AFB	Air Force Base
ARPC	Air Reserve Personnel Center
BRAC	Base Realignment and Closure Commission
BTC	Base Transition Coordinator, Department of Defense
BTO	Base Transition Office, Department of Defense
CEO	Chief Executive Officer
OEA	Office of Economic Adjustment, Department of Defense
DFAS	Defense Finance and Accounting Service
DoD	Department of Defense
DoEd	Department of Education
DOI	Department of Interior
DOT	Department of Transportation
EDC	Economic Development Conveyance under the Pryor Amendment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
GSA	General Services Administration
HUD	Department of Housing and Urban Development
IGA	Intergovernmental Agreement
LRA	Local Redevelopment Authority
NCCC	National Civilian Community Corps
NEPA	National Environmental Policy Act
pre-BRAC	Base Closure Projects that pre-date 1988
BRAC	Base Closure Projects that are after 1988
PBC	Public Benefit Conveyance
RAB	Restoration Advisory Board
ROD	Record of Decision

Appendix A

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