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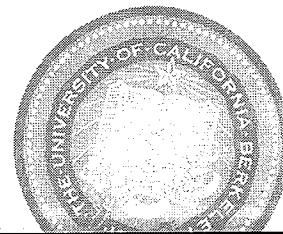
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**DEFENSE INDUSTRY CONVERSION, BASE CLOSURE, AND THE
CALIFORNIA ECONOMY: A REVIEW OF RESEARCH AND
PLANNING ACTIVITIES FOR RECOVERY**

BY

**CYNTHIA A. KROLL
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MARY CORLEY
LYN HARLAN, ET AL**

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Defense Industry Conversion, Base Closure, and the California Economy:
A Review of Research and Planning Activities for Recovery

by

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University of California, Berkeley

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Defense Industry Conversion, Base Closure, and the California Economy

A Series of Working Papers by Ted K. Bradshaw (Project Co-Director), Cynthia Kroll (Project Co-Director), Rokaya Al-Ayat, Mary Corley, Lyn Harlan, Josh Kirschenbaum, and Jason Moody. Judith Innes, Principal Investigator.

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From December 1993 through June 1994, the Institute of Urban and Regional Development (IURD) and the Center for Real Estate and Urban Economics (CREUE) conducted research to provide background for the state's defense recovery strategic planning effort. The research resulted in a final report to the California Trade and Commerce Agency and a set of working papers on prospects for the California economy's recovery from defense cuts. The working papers are jointly published by IURD and CREUE and can be obtained from either institute. The full set of papers includes:

Defense Industry Conversion, Base Closure, and the California Economy: A Review of the Literature and Annotated Bibliography.

This work summarizes existing published research through spring 1994 on the defense industry, military base closure, and recovery efforts, with the primary focus on California. An annotated bibliography is appended to the paper.

Defense Industry Conversion, Base Closure, and the California Economy: A Review of Research and Planning Activities for Recovery

This paper reviews recent recovery efforts in California among counties experiencing defense industry job losses and communities experiencing base closures. The report also identifies ongoing research efforts on defense recovery topics.

Defense Industry Conversion, Base Closure, and the California Economy: The Role of Technology Transfer and Emerging Technologies *

This paper describes technology transfer programs and efforts as they relate to the recovery and restructuring of the California economy.

Defense Industry Conversion, Base Closure, and the California Economy: Critical Issues for a Statewide Strategy

Drawing from the three background working papers, this piece identifies critical needs for recovery and suggests some directions for recovery efforts.

* Also published by Lawrence Livermore National Laboratory (510) 422-8467

Defense Industry Conversion, Base Closure, and the California Economy:
A Review of Research and Planning Activities for Recovery

Abstract

This paper provides a snapshot of local defense recovery efforts and ongoing research efforts underway throughout California in the spring of 1994. The purpose of the paper is to identify existing resources within and beyond California that can be drawn upon as the state begins efforts to recover from losses related to defense spending cuts. Recovery efforts throughout California are shaped by the ways in which communities have experienced defense cuts. Some areas have experienced primarily losses in manufacturing, others are concerned with base closures, while a third type of community may experience impacts on commuting residents rather than on the local job base. Some communities responding to manufacturing losses focused first on assisting in the recovery of defense firms, while others have broadened their recovery efforts to strengthen competitive industries or diversify the economic base. In California, the base reuse process has been time-consuming, complex, and slow to produce results. Reuse efforts have focused on land and facilities rather than the basic economy. Many communities experienced problems getting reuse plans off the ground, and even where consensus can be reached among local groups, the reuse process is often slowed by federal and state road blocks. The reuse process has been smoothest where transfer has occurred to another federal agency, or where a state interest, such as a new university campus, helps to generate agreement for a reuse plan. Academic and nonprofit research centers both in California and out-of-state are continuing to undertake research efforts that can inform the defense recovery process. Research efforts examine local linkages, expand information on industry characteristics, explore worker transition programs and experiences, and evaluate base reuse efforts. The paper concludes that state responses to defense cuts will be most effective if they build from the existing efforts that have begun at the local level.

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Research and Planning Activities for Defense Recovery – A Review of Efforts Statewide

Executive Summary

With funding from the Office of Economic Adjustment (OEA) of the Department of Defense, the California Trade and Commerce Agency began a strategic planning process in Fall 1993 for statewide responses to defense budget cuts. As part of this planning process, researchers from the University of California at Berkeley, Center for Real Estate and Urban Economics and Institute of Urban and Regional Development, prepared this review of existing response activities that are already underway in California. The paper focuses on local area responses and on activities at academic and research institutions. State agency programs are reviewed and summarized in other publications.

Recovery Efforts in Local Communities

Responses in local areas are shaped by the way in which defense cuts have been experienced. Some of the state's largest metropolitan areas are affected primarily by losses in manufacturing sectors. These impacts may occur directly within the metropolitan area, or indirectly by affecting local residents who once commuted to defense jobs in neighboring counties. The impacts of base closures may occur in geographic areas unaffected by defense manufacturing losses. In some cases, however, communities experience losses from both types of defense cutbacks. Whatever the source of impacts, responses tend to require attention to a complex set of factors, ranging from the organizational setting and types of facilities to needs of firms and employees.

Counties Responding to Manufacturing Job Losses

OEA has funded six strategic planning efforts at the metropolitan level throughout California, in counties affected primarily by losses in manufacturing jobs. Los Angeles, Orange, San Diego, Santa Clara, and Ventura counties are each preparing or have prepared a separate plan, and San Bernardino and Riverside counties are preparing a plan jointly. Most of the recovery efforts occurring in these areas have focused on programs oriented to the survival, expansion, and competitiveness of private firms. While some programs focus primarily on defense firms, most areas see "defense recovery" requiring a broader approach of diversifying the entire economy. In addition to a focus on firms, some areas have begun demonstration programs in employee transition and retraining.

Communities Responding to Base Closures

The base reuse process has been time-consuming and complex. Often a great deal of effort is consumed in organizing the planning authority which will develop responses. OEA funding available for reuse projects has varied widely among bases and over time. Base reuse planning has proceeded with limited active participation from state agencies, little coordination among nearby bases, and many roadblocks at the federal level. Programs evolving over the past year have attempted to overcome some of these obstacles and make bases ready for reuse. However, closure has been completed for only four of the 22 bases designated to close, and no property has been formally conveyed from the military to other agencies or entities.

Academic and Research Institutions

Campuses of the University of California system and the California State University system and other academic and research institutions have conducted research and educational programs related to defense impacts for many years. Research funding sources are sometimes directly related to current cutback activities, but often the work is longer-term in scope and is funded by charitable foundations, rather than through the Department of Defense. University and research institution activities include studies of local linkages, expanding information on industry characteristics, understanding worker transition, comprehensive looks at base reuse efforts, and assessing California's economic future. Some campuses are actively involved in education programs related to worker retraining.

A State Role

State responses to defense cuts will be most effective if they build from the existing efforts that have begun at the local level. The state can learn from these efforts and also, in some cases, augment them or improve their effectiveness. Statewide participation could help to expand the results of existing survey efforts by local areas, making the results more comprehensive. A clearinghouse of information at the statewide level would enable local areas to more easily share information and experiences. These efforts could be augmented by programs convening groups from different geographic areas, or working on different immediate problems in the same area (e.g. manufacturing cutbacks and base closures), to encourage further exchanges and the development of joint efforts. A major gap exists in the monitoring and evaluation of response programs. Efforts have been enacted so quickly that there has been little opportunity for oversight or review. A statewide approach to evaluating these efforts could help to identify which are most effective.

Research and Planning Activities for Defense Recovery – A Review of Efforts Statewide

In fall 1993, the state of California Trade and Commerce Agency (TCA) received funding from the Office of Economic Adjustment (OEA) to develop a strategic plan for recovery from defense cuts. As part of this effort, TCA funded the University of California at Berkeley, Center for Real Estate and Urban Economics and Institute for Urban and Regional Development, to provide background information for strategic planning. This effort has included a literature review of earlier studies on defense spending, base closures and California's industry and economy, a review of technology transfer programs, and a review of existing research and planning activity. This paper is a report of our findings on research and planning activity.

Introduction

OEA funding for the state's strategic planning effort for recovery from defense cuts formally began in fall 1993 with the award of a planning grant. However, this effort is neither the beginning of statewide responses nor the initiation of efforts in local areas. Instead, this formal planning process has the opportunity to build on recovery efforts that are already underway at both the state and local levels. Several state agencies are involved in responding to the impacts of defense cuts, despite the absence of a formally adopted strategic response plan. Many local communities also have started research and planning efforts. In addition, a number of universities and private research organizations have had ongoing research programs on defense spending, defense industries, and California's economy that may date back before the first defense spending cuts. A challenge for state agencies will be to develop state-level efforts that are complimentary among state agencies, that make use of existing research, that build upon local activities, and that assist where coordination is needed at the local level.

Ongoing efforts at the state level are well documented in several places (Kroll *et al.*, 1993; Koehler, 1993; California Military Base Reuse Task Force, 1994). An overview of response programs throughout the United States is available in a publication by the Center for Economic Conversion (Michael, 1994). Local programs in California and university activities focusing on California are less well documented in a single source. To help identify building blocks for state planning efforts and existing areas where state activity can be effective, this report examines the types of efforts currently underway in local areas throughout the state and significant ongoing research efforts at academic and other research institutions that address aspects of the defense industry and California's labor force or economy. While the literature review produced as a separate working paper for this project (Bradshaw *et al.*, 1994) describes published material on recovery efforts, this paper highlights ongoing efforts for which there may not be published documents.

I. The Range of Recovery Efforts in Local Communities

The types of recovery efforts emerging in local communities are shaped first by the type of defense impact that has occurred and second by the type of funding available for recovery. Communities impacted by defense cuts are of several types: **Manufacturing Losses** – Some communities have suffered severe losses in local manufacturing employment as funding has dropped to defense contractors. **Base Closures** – Communities facing military base closures are experiencing cutbacks in a range of distributive and service occupations, as well as in some manufacturing activities in the case of shipyards. **Commuter Impacts** – Still other communities are facing the impacts on local residents of cutbacks to employers in neighboring counties. **Combined Effects** – Finally, some communities experience a combination of impacts – most prominent are cases where bases are closing in a county also hit by defense manufacturing losses (eg. Orange County) or where counties experience both commuter impacts and base closures (eg. Riverside and San Bernardino Counties and Alameda County).

The jurisdictional level at which programs occur varies by the type of problem addressed, as does the geographical area of focus. Responses to defense manufacturing job losses are generally addressed by combined county and city or multi-county organizations, and often rely on existing institutions to administer research and planning funds. Base closure responses may be initiated at the city or multi-city level (although in most cases counties also participate), and often require the creation of a new Joint Powers Authority or advisory body to oversee recovery efforts. There is also a wide variation in the timing of efforts – some recovery efforts are just becoming funded while others have moved into a second or third stage of activity – from organization to research and planning to implementation. The types of activities range from background research to planning a recovery strategy to implementing the strategy. Descriptions of programs in each county or at each closing base are attached at the end of this report in Appendices A and B.

II. Counties Responding to Manufacturing Job Losses

Seven California counties have received or are in the process of applying for OEA funding to conduct background research and plan a recovery strategy from economic losses due to cutbacks from DoD contracts to manufacturers. These include Los Angeles, San Diego, Orange, Ventura, and Santa Clara counties, each of which have received separate funding, and Riverside and San Bernardino counties, which are undertaking a joint effort. Two of these counties, Los Angeles and San Diego, have completed their OEA research and have since received implementation funding from EDA. Their implementation strategies are in the early stages of development. Riverside and San Bernardino and Santa Clara counties received funding in late 1993 and have begun the research stage of their efforts. Orange County received funding in January 1994 and Ventura was expecting funding in February or March 1994. A summary of these programs is presented in Table 1.

Table 1

Summary of County Defense Industry Assistance Projects Using Federal Funds

<u>Location</u>	<u>Project</u>	<u>Funding</u>	<u>Timing</u>	<u>Focus</u>	<u>Coordination Opportunities</u>
Los Angeles County	Development & implementation of defense recovery strategy.	Initial OEA/EDA funding--\$?	1990-92	Background research & strategy development	Providing technical assistance to companies beyond county boundaries. Developing statewide information base.
		OEA proposal for \$180,000	1993-96	Establish point of contact, assist impacted companies, product development programs.	
		EDA--\$2.5 Million TCA--\$250,000	1994-97		
Orange County	Research & planning for defense conversion & adjustment.	OEA \$150,000 TCA \$25,000 Local \$25,000	1/94- 9/94	Update study of defense spending; survey employers; establish database on defense firms; strategic plan for recovery	Survey of firms; consider neighboring counties in recovery plan.
Riverside/ San Bernardino	Research & planning for economic recovery & defense conversion.	OEA \$100,000 TCA \$16,650 Local in-kind \$16,650	11/93- 8/94	Identify resources; analyze regional economic development opportunities & constraints; develop economic diversification strategies	Share resources needed to analyze economic cluster areas for development activity.
Ventura	Develop programs for transition of Ventura County defense industries & workers.	Proposed: OEA \$100,000 Local in-kind \$26,000	5 months after start	Assess defense industries' role in Ventura County economy; identify current & future job loss; survey firms & workers; identify resources; strategic plan.	Intends to incorporate research & survey instruments from other counties.
San Diego City & County	I: Background research; employment demonstration project.	OEA/TCA \$150,000 DOL \$470,660	1992-93 1/93- 6/94	Business needs assesment; recovery strategy.	Survey instrument model for use by other areas.
	II: Implement programs to broaden San Diego's economic base & strengthen competitiveness.	EDA \$5.5 million local & state \$3.4 million	1994-96	Retraining & entrepreneurship for engineers; human resource database. Multi-industry economic development program & defense worker retraining program.	Coordination among city & state educational institutions. Cooperation among defense & other industries; one stop shop for worker assistance.
Santa Clara County	Research & planning for defense transition of Silicon Valley	OEA \$125,000 TCA \$50,000	11/93- 8/94	Identify existing resources; survey industry; worker analysis with EDD assistance; market analysis.	Survey of firms; EDD analysis of workers; overall research approaches.

Firm and Workforce Transitions in Los Angeles and San Diego Counties

Los Angeles County, through the Economic Development Corporation and the Economic Roundtable, completed background research efforts in 1992. Their reports concentrated heavily on the aerospace industry, with papers examining the structure of the industry and expected levels of employment, papers concentrating on the organizational structure of firms, and papers focused on the characteristics of defense workers and their needs in transition. The research findings (published in Flaming, ed., 1992) were that expected job loss was large, that barriers existed to the transition of firms to other types of production, and that equivalent jobs were not readily available in other industrial sectors for displaced workers. The recovery strategies recommended focused largely on survival, growth, and evolution of defense firms and other advanced-technology-based industries. Their strategy involves (1) developing a point of contact for firms seeking assistance, (2) providing direct assistance to companies in determining new directions, and (3) focused product development for companies with potential in this area. The programs being developed in Los Angeles County build off of existing programs in many cases. They have defined a network of resource providers who can be approached for assistance depending on the needs of particular firms. Programs at universities within the region (eg. the U.C. Manufacturing Extension Program in Riverside) as well as federally funded programs (eg. Small Business Development Centers, NASA Far West Regional Technology Transfer Center) are being tapped. A portion of the EDC defense recovery organization is now evolving to become the Los Angeles Area Regional Technology Alliance (LARTA) to fulfill state requirements for review of projects applying for federal or state Technology Reinvestment Program (TRP) funding. As LARTA for much of the Southern California region, the Los Angeles EDC will be involved in more coordination among counties in the future.

In planning its early recovery strategy, Los Angeles County has concentrated much less on workforce related programs than on firm recovery programs. They have designed their recovery program based on the conclusion that the creation of new enterprises and the assistance to workers in marketing their skills are more likely to lead to reemployment of defense workers than the traditional employment retraining paths. As the firm-oriented programs develop and strengthen, the LAEDC is also interested in cooperating with the state's Employment Training Panel in their efforts to develop a focused industry approach to retraining.

Efforts in San Diego County, primarily led by the City of San Diego, have focused on both firm recovery and employment retraining efforts. San Diego's defense recovery effort began in early 1990 when the San Diego City Council formed the Economic Conversion Advisory Group. A city/county two-phase conversion plan was developed. Phase I included a series of studies and a re-employment demonstration project. Phase II includes a series of programs aimed at strengthening competitiveness in growing industries.

The research portion of Phase I has been completed and resulted in an economic adjustment program for the city and county. Background research included a defense industry survey focusing on firm

employment expectations and conversion strategies over the next few years, a market analysis identifying potential areas for industrial growth, and a fiscal impact analysis of the effects of defense losses on tax revenues. The program developed from these studies focuses on conversion of the regional economy, rather than solely on defense conversion strategies.

The combination of firm surveys and market analysis also contributed to the formation of a re-employment demonstration project designed specifically for defense workers. The project addresses workers with different needs in different ways. Nontechnical defense workers are trained for industries and occupations identified as growing in the initial studies (eg. biotech, environmental remediation industries). For highly educated workers, the program offers business development assistance rather than traditional retraining programs.

Phase II of San Diego's program draws on a \$5.5 million grant from EDA and additional funding from TCA and local agencies. The project orientation is largely toward firm development and expansion, with an emphasis on high-technology industries and foreign trade. The program includes an advisory body, a resource center, an incubator facility, a seed capital fund, and a World Trade Center. Resources are available not only to defense contractors but to other growing industries.

In San Diego, the city has taken the lead in recovery efforts, but in coordination with county-wide organizations such as the Private Industry Council. More recently, the city has offered its approach as a model to other southern California counties just beginning their research and planning efforts.

Building from Existing Strength in Santa Clara County

Santa Clara County's OEA-funded response is in the initial research stage, but the program is building on existing resources and planning activity throughout the county. County government is administering a contract from OEA, with eight Silicon Valley cities also represented on the oversight committee for the contract. Research is being conducted by Joint Venture Silicon Valley (JVSV), a business consortium which has already been involved in discussing economic strategies for the county and whose purpose is the continued competitiveness of the Silicon Valley economy. The research will produce an inventory of resources and assistance available for defense transition, an industry study (based on focus group meetings and some face-to-face interviews), an employment analysis using EDD and Franchise Tax Board data, and a market analysis of emerging businesses and their links to defense firms, technologies, and people. While much of the background analysis focuses on the defense industry, the market analysis is more broad-based, and reflects the desire of JVSV to build upon the competitiveness of existing firms in the area, rather than to concentrate efforts only on the defense sector.

The type of issues being addressed by JVSV are of clear interest to the state more broadly. The industry survey is scheduled to occur in May, while the employment analysis and market analysis will take place in April. Some type of state interaction, preferably prior to the administration of the surveys, would

be useful (a) to suggest that questions of statewide concern are considered for addition to the analyses and (b) to coordinate this work with later work conducted by the state or by other regions in the state.

Defining the Scope of the Problem in San Bernardino and Riverside Counties

Riverside and San Bernardino Counties are less clearly the victims of defense manufacturing cut-backs than the other counties reviewed here. The majority of manufacturing employment losses at the worksite in these counties are to firms that are not defense contractors or even subcontractors. Employment losses to residents, however, may be significantly defense-related. Much of the population growth of the "Inland Empire" in the 1980s was of commuters to firms in Los Angeles and Orange Counties (often defense contractors). Thus, the loss of defense jobs in neighboring counties has created a demand for replacement jobs in Riverside and San Bernardino Counties, without facilities or infrastructure that might be available for reuse. In addition, Riverside and San Bernardino are experiencing closures of three airforce bases, which also affect the local economy.

The focus of the San Bernardino and Riverside effort is not retrospective. Several analyses exist of the economy of the region, and OEA funding is not being used to duplicate or refine these efforts. Instead, resources are being applied to identify resources for recovery and to strategy development. Broad development of the job base rather than defense conversion is the focus of their effort. The counties are likely to approach the concept of "coordination" cautiously. Because their goals are viewed somewhat differently from recovery goals in neighboring counties, they may see a need for maintaining a distinct recovery strategy. Statewide coordination of regional programs, especially in the area of emerging industries and areas of potential employment growth, would be of great interest to these counties.

Orange and Ventura Counties – Building on the Experience of Others

Orange County is embarking on a local analysis similar to the studies already completed in Los Angeles and San Diego counties. A numerical analysis of defense spending cuts and their impact on the economy already exists (California State University at Fullerton, "The Role of Defense Spending in the Orange County Economy"), and this will be updated. Two surveys of defense employers will focus on preparing a data base of defense firms and on identifying conversion opportunities, efforts, and barriers. This work will also be contracted out to universities within the county.

A strategic plan for recovery is the larger part of the project. Five initial program areas being discussed include export promotion, job training and placement, retention and promotion of high-tech and biotech clusters, retention and promotion of small business and entrepreneurialism, and base closure transition and reuse. Funding for the project began in January 1994 and continues through September 1994. Because the project has just begun, several coordination opportunities exist in the survey work being done, and coordination could also be fruitful as the strategic planning effort continues, with other counties in the region and with the state in its planning efforts.

Ventura County has included coordination of efforts in its proposed approach. The county's proposal to OEA includes pieces similar to those accomplished in other areas— background research on the impacts of defense spending on the local economy, surveys of perceptions and needs of individuals and firms, and a strategic plan. However, their background research also includes a review of strategies underway or proposed in other southern California counties, evaluating them for similarities in situation, applicability to Ventura, and feasibility of implementation. The county may be able to draw from the findings of firm surveys in Los Angeles, San Diego, and Orange Counties and orient its own survey efforts to the particular characteristics that make Ventura County unique. Ventura County's strategy will consider the prospects for developing joint programs and ways of participation in other county's established programs, as a way of creating feasible responses for a small county.

The Status of Community Response to Manufacturing Loss – A Summary

The counties which have experienced the impacts of manufacturing job losses are still situating themselves in their recovery activities. Several have established a clear picture of what has happened to defense manufacturing firms and to the regional economy as a result. Even in these counties, however, the full range of linkages between defense firms and other sectors of the local economy is not well understood. In addition, the consequences of economic changes for defense workers and workers in related industries is only partially documented.

Despite these limitations, several recovery efforts are already underway. Because these efforts are quite new, the recovery programs underway at the county level are untested. Until the basis from which recovery will occur is fully documented (for either secondary firms or workers), it will be difficult to evaluate the success of these programs and to determine their applicability more broadly to other geographic settings or to other economic situations.

III. Communities Responding to Base Closures

Since 1988, 22 major bases have been designated for closure or realignment in California, in 14 counties (see Table 2). A brief summary of each base closure experience is provided in Appendix B. This section takes an overview of these experiences and describes organizational, research, planning, and implementation activities that are relevant to the statewide recovery effort.

Communities responding to base closures differ from those faced with manufacturing losses in many ways. First, the organizational component tends to be more complicated and time-consuming. Second, the focus of the planning effort tends to be on land development and facility reuse, rather than on broader economic recovery issues. Third, the impact of closures has been far smaller *statewide* than the impact of manufacturing losses, again leading efforts to focus much more on the immediate local area rather than on broader economic issues. Fourth, closure occurred in several distinct pieces, with federal assistance (although at widely varying levels) available at each phase, most often before job loss actually began.

Table 2
Bases Closing through BRAC 1988, 1991, and 1993 Decisions

<u>Base</u>	<u>Location</u>	<u>BRAC Round</u>	<u>Closure Date</u>	<u>Civilian Staff</u>	<u>Military Staff</u>
George AFB	San Bernardino	1988	Closed	506	4,852
Hamilton Army Air Field	Marin	1988	1995	20	5
Mather AFB	Sacramento	1988	Closed	1,012	1,988
Norton AFB	San Bernardino	1988	1994	2,133	4,520
Presidio Army Base	San Francisco	1988	1995	3,150	2,140
Salton Sea Navy Base	Imperial	1988	Closed	0	0
Castle AFB	Merced	1991	1995	1,164	5,239
Fort Ord Army Base	Monterey	1991	1995	2,835	13,619
Hunter's Point Annex	San Francisco	1991	Closed	63	5
Long Beach Naval Station	Los Angeles	1991	1994	833	9,519
Marine Corps Air Station	Orange	1991	1997	348	4,105
Moffett Field	Santa Clara	1991	1994	633	3,359
Sacramento Army Depot	Sacramento	1991	1997	334	3,164
Marine Corps Air Station	Orange	1993	1999	979	5,689
March AFB	Riverside	1993	Realignment	997	2,961
Mare Island Naval Shipyard	Solano	1993	1996	7,567	1,963
Naval Air Station	Alameda	1993	1997	556	10,586
Naval Aviation Depot	Alameda	1993	1997	2,672	376
Oak Knoll Naval Hospital	Alameda	1993	1997	809	1,472
Naval Public Works Center	Alameda	1993	1998	1,834	10
Naval Training Center	San Diego	1993	1998	40	5186
Treasure Island Naval Station	San Francisco	1993	1998	454	637

Perhaps the most evident finding of a review of base closure responses is the uniqueness of each response. There is no fixed pattern in terms of organizational approach, resources provided, or timing of recovery efforts. There has been very little coordination among recovery efforts. OEA has suggested generic milestones of where communities experiencing base closure should be in the planning process relative to the closure date, as shown in Table 3. These milestones do not match the experience of base closure communities in California. For example, a portion of Hamilton Air Field was designated for closure in 1988, but the community is just finalizing the reuse authority and does not yet have a reuse plan. In contrast, Mare Island, designated for closure in 1993, already has established two reuse planning groups and has developed a conceptual reuse plan.

Evolving Organizations in Three Rounds of Base Closures

Issues that have arisen in the initial organization of community base reuse task forces can influence the speed and level of success of reuse planning and implementation. All but two of the 22 major bases designated for closure or realignment during the last six years have initiated a planning authority that was representational of the community affected by the impending closure. These reuse planning bodies were initiated by different levels of government, ranging from federal level Congressional representatives to local economic development corporations. There is also great variation in size and type of membership among the authorities. Some communities include only elected officials, where others incorporate citizens in the process. In sum, no clearly defined community planning model has surfaced from the past experiences, but many options and successful experiments have evolved for communities confronting closures in the future.

The 1988 Round of Closures

Given the novelty of the 1988 closure announcements and the mix of military branches affected by closure announcements, it is not surprising that five different types of reuse planning authorities were developed. Three Air Force bases, two Army fields, and one Navy base were designated for closure. The Presidio and Salton Sea Navy Base present two anomalous cases for community conversion and this is reflected in their planning bodies. Since the Presidio will be transferred from one government agency to another, the National Park Service, rather than the City of San Francisco, was the primary convener of the planning process. Salton Sea's Southern California remote desert location did not entice the local community to plan any reuse for the facility. The 20,000-acre facility is two-thirds submerged in the Salton Sea, and the remaining acreage presents limited options for reuse. Without any community interest, the Navy became the responsible planning entity.

The Hamilton Army Airfield has been subject to multiple closures and community disputes throughout its 20-year conversion history (the base experienced three phases of closure — 1974, 1988, and a final piece occupied by the Navy in 1993). The City of Novato established a reuse commission in 1992

Table 3

Office of Economic Adjustment Milestones for Base Reuse Planning

1988:

- Planning Organizations Funded
- Base Reuse Plans Complete
- Detailed Planning Underway
- Implementation Organizations Funded

1991:

- Planning Organizations Funded
- Base Reuse Plans Complete or Nearing Completion
- Detailed Planning Underway at Some Locations
- Implementation Organizations Funded at Some Locations

1993:

- Planning Organizations Being Formed
 - OEA Processing Grant Applications
-

following the 1988 closure announcement. This body has been recently expanded with the 1993 closure, after pressure by Marin County to make the process more regional.

The formation of the planning bodies at George and Norton Air Force Bases were influenced by state legislation that created redevelopment districts around the bases that initiated Joint Power Authorities (JPAs) to conduct the reuse planning. This effort was more successful at Norton than George. The George planning process disintegrated when one of the potential JPA cities decided to pursue its own planning process. At Mather Air Force Base, the process was initiated by the local Congressman and included significant community involvement. As the planning process progressed, state legislation was initiated to incorporate the base as a redevelopment district with the County Redevelopment Agency finalizing the planning process.

Responses Evolve in the 1991 Closures

Communities impacted by 1991 closures utilized the experience of their predecessors, while at the same time developed new types of planning authorities. Through this round of closures, one Air Force Base, two Army bases, one Marine facility, and three Naval bases were designated for closure. The Fort Ord model emulates the Mather example of Congressional leadership, but the multiple jurisdictions involved in the Fort Ord process make it more complicated. The Fort Ord planning authority was initiated by the local Congressman and involved a high level of citizen participation. Unlike Mather, the Fort Ord

base lay within the jurisdictions of two cities and Monterey County, and three other cities abutted the base. This added complexity to the planning process. The state has intervened and is attempting to establish legislation to create a legal planning body to finalize the reuse planning of Fort Ord because the community was unable to accomplish this task. At Castle Air Force Base, the community was more effective in combining multiple jurisdictions in the planning process. The Cities of Atwater and Merced along with Merced County formed a Joint Powers Authority early in the process to facilitate the reuse planning of Castle Air Force Base.

The City of Sacramento evaluated the processes initiated from the 1988 round of closures and established an effective 11-member reuse authority. The city of Tustin also organized its own planning process, including the county and neighboring cities. The Long Beach Economic Development Corporation took control of the reuse planning process for the Long Beach Naval Station and established a reuse planning body comprised of its members for the city.

The Hunter's Point planning process was influenced by federal legislation similar to the Presidio. Instead of transferring the base to another federal agency or to the state, the Hunter's Point real estate will be transferred to the City of San Francisco. From this impetus the San Francisco Redevelopment Agency has taken the lead on the planning process. The mayor established a 27-member advisory group to assist the reuse planning. The Moffett scenario is another unique case for California conversion, since the Air Field is not closing. The Navy stationed at the base will leave, but the NASA Ames Research Center will remain on-site and become the host tenant. This federal agency will then be responsible for attracting other federal tenants to the base.

Experimenting with New Structures in 1993

The nine 1993 closure communities have the experience of 13 other communities to create a reuse planning process, but the responses have not been uniform or repetitive of their predecessors. The Navy was significantly impacted by this round of closures, with seven facilities designated for closure. Both the Air Force and Marine Corps had one base designated for closure. Increased federal conversion budgets and new programs have greatly influenced the local planning process.

An 18-month Pilot Project to produce innovations in community defense conversion has influenced the reuse planning processes at four bases in Alameda County. The Naval Aviation Depot, Naval Air Station, Naval Public Works Center, and the Oak Knoll Naval Hospital are all part of a regional conversion planning effort initiated by the local Congressman. A 35-member commission has been established to guide the local planning process from a regional perspective. In addition to this body, the Cities of Alameda and Oakland have established their own reuse planning authorities and are investigating establishing regional reuse authorities to conduct and implement the reuse planning.

The city of Vallejo has organized a two-tiered planning system, with one group working on developing a reuse plan and the other addressing legislative needs of the community. The City of San Diego

also initiated its planning body for the San Diego Naval Training Center. Even though March AFB will be realigned and not closed, a regional Joint Powers Authority was formed by the County and three affected communities to facilitate the reuse planning. The El Toro community struggled with incorporating multiple jurisdictions in the early stages of the planning process in Orange County. However, the community was able to resolve its differences and create a three-tiered planning body with a Board of Directors, Executive Council and advisory committees.

The Organizational Process and the Local Nature of Reuse Activity

In sum, the organizational structure evolving around base reuse is influenced by the type of base, the type of community surrounding the base, the number of jurisdictions involved, and other less predictable factors or events. The organizational structure alone does not appear to be a good predictor of the ability to produce a realistic, workable reuse plan. Different types of structure work well (or poorly) for different areas. The greatest level of success seems to come where the organization is established quickly and the level of government responsible for the process is clear. The greatest problems with taking action have occurred where several jurisdictions share authority and they are unable to focus on a single vision for the base reuse. With the wide range of organizations that have emerged, tracking their activities or trying to coordinate actions among areas is likely to be quite complex.

Funding Levels and Reuse Activities

As noted in the literature review (Bradshaw *et al.*, 1994), federal funding for defense conversion increased significantly through the 1993 federal defense appropriations. Bases designated for closure in 1988 and 1991 had significantly less funding for their efforts than their 1993 counterparts. Communities experiencing base closure during the first two rounds were forced to utilize municipal general funds in order to finance early conversion planning. In addition, there was less availability of the planning grants during the first two rounds of closure. Conversion consultants followed a similar course. Given the ten-year hiatus in base closures preceding the 1988 round of closures, there were few consultants familiar with the process to assist communities. Over the last six years, consultants have begun to specialize in the conversion arena and have been retained by multiple communities. However, much of the base closure work has been conducted by local consultants throughout the last six years.

In retrospect, communities experiencing closures prior to the substantial increases in federal conversion funding in 1993 received less federal support for their planning processes. Funding from the Office of Economic Adjustment (OEA) is a good indicator of this trend. Over the last six years, all of the bases designated for closure in 1988 and 1991 (except Fort Ord and Tustin) received less than \$600,000 each from the OEA. In addition to the smaller grants, many of these communities did not receive funding immediately after the base was designated for closure as their counterparts are realizing today. The funding for the 1993 communities has substantially increased. The Mare Island reuse planning authority has received

\$596,000 from the OEA for its planning activities and March AFB received \$177,000 for operational funds. The City of San Diego is negotiating a \$1.0 million grant with the OEA, and the City of San Francisco is applying for \$1.5 million in funding for assisting the reuse efforts at Hunter's Point and Treasure Island. The four East Bay bases were part of a \$500,000 Pilot Program to research innovations in the reuse planning process. This 18-month study was supplemented in 1994 with \$1.0 million. In addition to this study, President Clinton promised that \$3.5 million of OEA funds would be allotted to these bases over the next five years. Approximately \$400,000 of this funding has already been granted. The Mare Island community will also receive \$3.5 million over the next five years. Through these two examples, it is obvious that funding patterns by the federal government through the OEA have dramatically changed, and the communities experiencing closure in 1993 and beyond will be the recipients of these changes.

In addition to planning funds, the 1994 Defense Appropriations have brought earmarked federal funding for proposed projects at California's closing bases. For example, at Mare Island, in addition to the \$3.5 million mentioned earlier, this bill allocated \$2.5 million was allocated for worker retraining in environmental fields, \$250,000 for a shipyard reuse study, and \$750,000 for San Francisco State University's job training activities. Communities experiencing closures prior to 1993 have also benefitted from these increases and attention on behalf of the federal government. The Fort Ord community will receive \$15 million for the development of a California State University System campus and \$5 million for the Monterey Institute of International Studies through the 1994 Defense Appropriations bill.

Research and Planning Activity

A majority of the community conversion funding from the Office of Economic Adjustment is used to hire consultants to perform various tasks ranging from economic impact modelling to conducting environmental investigations to authoring reuse plans. The large number of closures in California has greatly benefitted land use, planning, and economic consultants. Many of the tasks required during reuse planning are not conversion-specific and were undertaken by existing planning and economic consulting firms. Over the last six years, a few firms have begun to specialize in conversion planning and are hired to analyze conditions at many bases. For example, Economics Research Associates has been retained by many communities to conduct fiscal and economic impact analyses, and P & D Technologies has been retained by almost all of the communities endowed with airstrips for aviation feasibility studies. In most cases, however, a majority of the communities impacted by closures select local consultants to perform the required investigations and studies.

The research activity that has been or is being funded through base reuse programs tends to be more land-use oriented and more community-specific than research undertaken for community recovery from manufacturing losses. Typical consultant reports for base reuse studies cover market analysis, a fiscal analysis or business plan, and an environmental analysis (sometimes a full EIR or combined EIS and EIR). The presence of airports or ports give rise to feasibility studies for the reuse of these facilities. Other

research efforts at some bases include a housing analysis (Fort Ord), an economic impact analysis (Mather, Fort Ord), infrastructure or transportation surveys (Sacramento Army Depot, Mare Island), and a supplier survey (Alameda County). In most cases, the analysis is based on understanding how the base can be reused within the fabric of the existing local economy. In contrast, research related to manufacturing losses is more likely to address the broader impacts of defense-related job loss on the surrounding economy.

For many of the earlier base closings, research has already been completed. Some of the larger closures are more recent, however. Consultant contracts have recently been awarded or are under consideration for Alameda County and the Mare Island Naval Shipyard. These research projects may produce economic information of broader use to the state in its recovery planning.

A Limited Set of Reuse Options

All of the communities planning the reuse of former military bases are in some phase of identifying or securing reuse options for the military property. Many ambitious plans have been devised, but the results are very preliminary and still very small. Only four of the 22 bases designated for closure or realignment have been actually closed, and no property has been formally conveyed from the military to other agencies or entities. Interim leases have been signed only at Norton, Castle, and Mather. In addition to the hurdles of community organization, the arduous toxic remediation of base real estate and property disposal processes associated with base closures have inhibited speedy reuse of former bases even after they are closed. The 1988 bases present some of the best candidates for accommodating civilian reuse. However, complications in the reuse planning processes have significantly hindered the redevelopment of the former military bases. Even in the case of Mather AFB, that has endured a fairly efficient process, there is little present reuse of the base that is now closed.

In order to generate short-term economic development, communities have developed interim uses through leases from the military for the bases. Norton was able to secure an interim tenant early in its conversion process. Lockheed introduced a 747 maintenance program at the base. Unfortunately, with Lockheed cutbacks, the entire program has been canceled at the base. Castle and Mather have both negotiated small leases at the respective bases. From this short-term perspective, there has been no significant reuse of former military bases in California.

In contrast to what has occurred on bases so far, the potential for redevelopment of former military bases is enormous. As noted in the Governor's Task Force report, the three rounds of closure will present California with approximately 75,000 acres of land, more than 21,000 units of family housing, 10 airstrips, and five prospective seaport facilities (California Military Base Reuse Task Force, 1994). This potential has been reflected in the ambitious plans created by the impacted communities. Reuse plans from bases designated for closure during all three rounds include aspirations to transform the bases into international cargo airports, environmental centers, new universities, manufacturing centers, and extensive recreational parks. The short-term has produced little success, and little thought has been given to

the long-term potential of these plans. A serious lack of coordination among reuse strategies has emerged from the 22 communities affected by closure and realignment. For example, Mather, Castle, Norton, and George are developing airports that will be competing for each other's share of the market in the central region of the State.

Jurisdictional disputes at the local level over the design of the reuse planning authority and the complicated property disposal procedure linked to the toxic remediation process at the federal level has created an extremely complex process to successfully convert former military bases in a timely manner. This has been clearly demonstrated in California over the last six years. In order to produce more effective and efficient conversions of former military bases, serious attention must be given to the complexity that presently governs this process at all levels of government.

The Status of Base Reuse – A Summary

Base reuse planning has proceeded with limited active participation from state agencies, little coordination among nearby bases, and many roadblocks through the federal reuse planning process. In efforts to make quick decisions and to begin the process of transferring federal property to the local level, reuse plans are being and have been developed often based on a rather narrow understanding of the local economy, without a broader picture of the changing California economy and labor force or of concurrent development in nearby areas. The governor's task force report clearly identifies many of the roadblocks to reuse that have prevented local areas from benefiting from these facilities to date. In addition to removing roadblocks and smoothing the path to reuse of individual facilities, a statewide overview of activities and coordination among competing or complimentary plans could make each local effort more effective.

IV. Defining New Directions for Action Through Ongoing Research

From the point of view of a local area facing base closure of manufacturing job losses, background research is often limited to what is needed to direct the formation of local programs. Thus, counties affected by manufacturing losses have focused on surveys of local firms, while communities with the potential for base reuse have focused on land use and market studies. An effective statewide recovery effort, however, must be based on a broader understanding of economic change and how these local factors—firms, bases, workers—interact with the broader economy. Several academic and research institutions are taking this broader look. Some of their earlier published work is reviewed in Bradshaw *et al.*, 1994. This section of the report gives an overview of ongoing research, much of which is recently or not yet published. Summaries of some of the major academic research programs are provided in Appendix C.

Academic and research institute programs address the questions of defense recovery programs from several directions. Some research expands the understanding of local economic linkages. Other research probes for more details on industry characteristics and recovery activities by prime contractors, subcontractors, and/or suppliers. Some projects focus on worker transition issues— what happens to

displaced workers, on what types of programs do they rely, how effective are these programs? Some institutes specialize in developing an overview of base reuse efforts. In California, another area of research focuses on the state's future economy — what structural changes are occurring and what industries are emerging that will characterize California's growth in the future. Finally, some academic institutions go beyond research activities to offer their educational resources to developing retraining programs for displaced workers or to assist in implementing other types of educational programs related to defense recovery.

Expanding Information on Local Economies

Some southern California universities are working with the local government organizations to provide background economic information for defense recovery planning. San Diego State University (SDSU) faculty are participating in a consortium that includes the City of San Diego, San Diego Gas and Electric Company, and the San Diego Association of Governments in developing a set of integrated inter-regional economic models of the San Diego, Baja California, and larger southern California area. One component of the effort is the tracking of the impacts of defense cuts and conversion dollars on the economy. California State University at Fullerton (CSUF) is providing on-going economic analysis to Orange County in its recovery planning effort. Both SDSU and CSUF are using a combination of input-output, econometric, and survey techniques in their model development. One focus of the San Diego effort is to develop a prototype model which can be used in other southern California counties and to coordinate modeling efforts for San Diego with nearby economies.

Research on Firms

Several groups are continuing research on firm characteristics. The Project on Regional and Industrial Economics (PRIE) at Rutgers University is building current projects on several years of research on the defense industry. In a three-year effort that began in 1993, they are chronicling the present period of conversion and adjustment. As part of this effort, they are conducting a survey of 500 defense companies throughout the country, looking for factors that contribute to successful commercialization within defense firms. PRIE is also conducting case studies in four defense-dependent regions, including Los Angeles, looking at firms, workers, and the institutions that have developed to assist with recovery. At RAND in Los Angeles, as a follow-on to earlier research (Dertouzos and Dardia, 1993), Dardia is conducting a study of small firms (the suppliers and subcontractors to prime contractors) using interviews with large firms to identify smaller firms and Dun and Bradstreet data for information on these firms. The Economic Roundtable in Los Angeles just published a draft report on a survey of large defense firms on their perceptions of defense conversion.

Other studies just getting underway look at defense firms within single counties. Orange County is using some of its OEA funds for a study by California State University at Fullerton (CSUF) faculty of defense firms in Orange County. Firms in San Diego will be surveyed as part of the regional modeling

effort mentioned earlier, and small contractors and suppliers will be surveyed in a separate study, to identify their changing situations and recovery needs. Lawrence Livermore National Laboratory has proposed a study of spinoff activity from the lab itself. This study would identify commercial firms that grew out of lab technologies as individuals left LLNL and would evaluate the extent to which the activity contributes to the local economy, and to what degree such activity could be extended.

In combination, these studies should improve the information available for planning recovery programs. The Economic Roundtable study, for example, has found that defense firms have tended to remain defense-oriented, perhaps even more so than before downsizing began, and that firms tend to be much more interested in reduced federal regulation than in cooperative development programs or other federal direct assistance as an aid to recovery. A preliminary finding from PRIE case studies suggests even defense firms with more modern organizational structures and production practices ("best practice" in manufacturing) work quite differently from their commercial counterparts and find transition difficult. The RAND study will provide a basis for identifying linkages throughout the economy, but because it relies on data rather than surveys will leave many questions about subcontractors and suppliers unanswered. The Orange County, San Diego, and LLNL studies may have the opportunity to begin to address some of these questions for two metropolitan areas and offer the possibility of coordination of this type of research with a larger statewide effort. Further research undertaken by state agencies or others to extend the findings of these studies will be richest if it is built upon the findings and some of the research approaches of these studies.

Workforce Vulnerability and Recovery

PRIE, RAND, and two faculty members at UCLA are doing research on workforce and retraining issues. Earlier work by Ong at UCLA and Mueller at PRIE are reviewed in Bradshaw *et al.*, 1994. Paul Ong, at the Graduate School of Architecture and Urban Planning, is continuing research in conjunction with Chris Erickson of the Anderson Graduate School of Management on the experience of displaced aerospace workers and the institutional response to worker displacement. The two are seeking funding for a study that would extend Ong's statistical analysis of EDD data and would also include interviews of prime contractors, workers, union officials, and government institutions. PRIE case studies, in addition to focusing on firms, also include interviews of workforce representatives and organizations assisting in transitions. RAND is also conducting additional analysis of the data used by Paul Ong, with the addition of Current Population Survey data, to examine how displaced workers fare after job loss.

These three efforts should refine the findings on worker mobility, improve the use which is made of EDD data, and extend information on the organizations and programs assisting in worker transition. Other information gaps will remain in this area. EDD data offers limited information on the occupational and educational characteristics of workers, and additional geographic analysis would be useful on

the location of displaced workers. In addition, new approaches are needed to identify displaced workers who move out of state and to determine the magnitude of this trend.

The California State University and University of California systems are additional resources for tracking the impacts of displacement on workers and the success of retraining programs. U.C. Extension programs throughout the system are currently working with JTPA funding and other sources to provide specialized retraining and transition programs for displaced workers. CONNECT, an extension program of the UCSD campus, has worked closely with the San Diego city and county agencies and has developed a demonstration program providing business start-up training to displaced defense professionals. The California State University system is also strongly involved in retraining activity. Congress appropriated \$7 million in defense recovery funds to be administered by the San Diego State University Foundation. The funding is primarily for worker retraining facilities and programs but also includes some funding for programs related to base reuse activity. San Francisco State University's Career/Pro program has been a resource for retraining activity related to northern California base closures and provides expertise in the areas of environmental technology and clean-up.

Most of the programs that have evolved in the state's two university settings have developed in response to perceived local needs. Many programs are at an early stage— tracking their achievements has not yet occurred, although some have data on the experiences of their early graduates. Monitoring and evaluation of the success of these programs would be helpful at the statewide level, to develop a broader understanding of the effectiveness of these responses, and to provide information for continuing response needs.

An Overview of Base Reuse

Nationally, PRIE has a research project comparing experiences of historic base closures with problems associated with base closures today. They are also doing a special study on shipyard conversion, with San Diego as one of the case study sites. The Institute of Urban and Regional Development (IURD) at the University of California at Berkeley (UCB) has become a focal point for communities and policymakers to access the university and its resources during the base reuse and broader recovery planning process. IURD has worked closely with the East Bay Conversion and Reinvestment Commission, helping to guide and overview the commission's activities. The San Diego State University Foundation program mentioned above, in addition to retraining programs, would develop a statewide data base on base reuse activity and also is scheduled to produce a statewide symposium on the topic in July 1994. These activities provide a strong basis for any proposed statewide coordination of reuse planning at closed bases.

Economic Restructuring

Several research programs address the longer term future of California's economy and defense conversion efforts within this context. Two organizations at the University of California at Berkeley address this issue in ongoing research. At a global scale, the Berkeley Roundtable on the International

Economy has had a long-term interest in research on military conversion and also conducts ongoing research on competitiveness, on telecommunications and their use, and on trends in the electronics industry. With a more statewide focus, the Center for Real Estate and Urban Economics has conducted research on the defense industry and its impacts on the state economy over the past two years and has tracked trends in the California economy for a much longer period. In-house research proposed over the next year would focus on the changing structure of California's industrial base, including changing technologies within industry that will affect growth, land use patterns, and real estate demand in the state.

Research by Allan Scott at UCLA and Daniel Flaming at the Economic Roundtable address various aspects of new industry development and industry transitions. Flaming's work focuses on the examination of potential for and barriers to new industry growth, using the example of fuel cell production. Scott's work includes a recently completed study of transportation industries (specifically ground transportation equipment manufacturing) in southern California, a recently funded study of the technological changes that may occur in lowtech industries in southern California, and a proposed study of southern California's high tech future.

Research at RAND puts California's experience in the broader context of experiences throughout the United States, comparing changing competitive advantages in regions throughout the country that have been dependent on defense spending. Ongoing research at the UCLA forecasting project looks at the future of California's economy broadly, including changing defense spending patterns and economic restructuring as part of their analysis.

Prospects for a Coordinated and Expanded Research Approach

Academic and research institutions have been able to address some of the broader reaching issues that have been neglected by local communities in their focus on implementation. Some areas of research are at a beginning stage, while others are quite far advanced, with the current focus on further refinements rather than expanding into new areas of study. Research on firms is well advanced, but further questions remain on how well firms are making the transition currently, to what extent they are becoming more commercial, which types of programs are most effective, and how large prime contractors differ from smaller firms, subcontractors, and suppliers. Research on the workforce transition is still in an early stage, with many questions remaining unaddressed and unanswered. Extensive research is underway on the structural economic changes, but the implications for California's economy remain to be fleshed out. Finally, with the exception of some informal efforts at PRIE, no work exists that attempts to monitor or evaluate the recovery programs that have been recently made available to firms, and monitoring and evaluation of workforce recovery programs is sporadic and suggestive, not conclusive. Monitoring and evaluation of historic base closures is quite simplistic; a good evaluation of California base reuse programs, as they are implemented, requires a more sophisticated methodology.

Communication of findings to applied settings is a further issue. Organizations developing strategic plans at the local level are not always aware of the research that is conducted at academic and research institutions or of the retraining programs developed by institutions outside the local region. Most local areas and the state could benefit from continuing efforts to translate research results and the outcomes of prototype programs into policy implications and to communicate these findings to the local area.

V. A State Role

The state's planning effort can benefit from the experiences of communities already involved in planning activities, and from ongoing academic research and programs. At the same time, the state may be able to contribute to and augment local planning and university research efforts. Several different types of state interactions may be of use. These include building on existing survey results and designing *statewide surveys* to address unanswered questions, maintaining a *clearinghouse of information* from different regions, and *convening groups* from throughout the state to share information on research and planning activities and to coordinate recovery plans. In addition, the state could work with research organizations to define parameters for *evaluating recovery and base reuse programs* and to use these parameters to monitor recovery efforts.

Building on Survey Efforts

Several different survey efforts as part of local area planning or university research have covered parts of the defense industry in some geographic areas, and in some cases have investigated recovery efforts of firms. However, questions remain on the range of activities undertaken for recovery, the share of employees shifting to nondefense activities, and overall growth (or decline) in response to recovery efforts. In addition, the assertion that conversion or other forms of recovery may be easier for smaller firms, subcontractors, and suppliers has not been well tested. A statewide survey of firms could be designed to address these questions. Such a survey would be most effective if conducted in a coordinated fashion with surveys currently being considered for some areas in the state (eg. Silicon Valley, Orange County, San Diego County, Ventura County) and if it is built on resources developed for earlier surveys or research (e.g. Economic Roundtable respondent list, RAND list of small firms).

Clearinghouse

While extensive studies and plans are being developed throughout the state, the compilation of these activities has been time-consuming and difficult. There is no single repository for the research proposals, consultant reports, recovery plans, and academic research reports being produced under OEA, EDA, and other funding. Even the individual funding agencies do not keep the products they have sponsored easily accessible to other organizations. Costly duplication of effort could be reduced if these materials were categorized and available in a single location, perhaps as part of the state library, and if a single state office were responsible for maintaining and updating the information base.

Information Sharing and Coordination

Many local areas could benefit from the experience of places that have already begun defense transition efforts. Even areas with activities already underway can make better use of their resources if they are aware of the needs and efforts of other parts of the state where recovery programs are just beginning. Especially at military bases, where there is a great deal of overlap among reuse plans at nearby sites, a joint, coordinated effort at several locations may produce a more effective program than individual competing activities. Among counties as well, scarce resources might be used more efficiently if some programs were developed for a multicounty area. State agencies could assist local areas by bringing groups together to present information on different activities and by providing planning or coordination services among groups.

Monitoring and Evaluation

Economic development programs in general have not been subject to careful monitoring and evaluation. "Job creation" is a loosely defined concept. It may be used to include all jobs located to a redevelopment site, even if they are relocated from elsewhere in the community, rather than a "net" measure of new job growth occurring in an area after a program was enacted. For job retraining or job transition activities, outcomes for workers using the programs are not always reported and these workers are rarely compared with workers who do not use transition assistance. This oversight is missing in the current defense recovery response programs, although a good evaluation of these approaches would be very helpful in directing statewide strategies over time. In conjunction with federal agencies supporting economic development activities, the state could take some steps to improve monitoring and evaluation of the success of these programs. These could include working with local agencies to define measures of success of these programs (e.g. net increase in jobs, characteristics of jobs created or saved, characteristics of workers employed in growing enterprises), developing prototype approaches for monitoring and evaluating programs, and instituting monitoring activity in selected areas throughout the state (again, with the participation of and input from the local areas running the programs).

A Comprehensive Approach

While many of the early innovations in responding to defense cuts have occurred at the local level, the state now has the opportunity to apply a broader focus to the problem. Among the most effective activities of the state could be to ensure that effective responses are identified and that communities, firms, and displaced workers throughout the state are made aware of the opportunities offered by these responses. In addition, the state can provide an ongoing overview of the recovery process. By maintaining a focus on what is needed in terms of recovery, where this is being achieved, and how, the state may help shape local efforts towards effective actions. Interactions among local areas within the state can lead to a stronger recovery effort as a whole.

References

- Bradshaw, Ted K., Cynthia Kroll, Mary Corley, Lyn Harlan, Josh Kirschenbaum, Rokaya Al-Ayat, Jason Moody. 1994. *Defense Conversion, Base Closure and the California Economy*. Institute of Urban and Regional Development and Center for Real Estate and Urban Economics, University of California at Berkeley, February.
- California Military Base Reuse Task Force. 1994. *Report of the California Military Base Reuse Task Force to Governor Pete Wilson: A Strategic Response to Base Reuse Opportunities*. Sacramento: Governor's Office of Planning and Research, January.
- City of San Diego and the San Diego Consortium & Private Industry Council. 1993. *San Diego Economic Adjustment Program*. San Diego: City of San Diego, March.
- Cohen, Stephen S., Clara Eugenia Garcia, and Oscar Loureiro. 1993. *From Boom to Bust in the Golden State: The Structural Dimension of California's Prolonged Recession*. Berkeley: Berkeley Roundtable on the International Economy, University of California at Berkeley, BRIE Working Paper 64, September.
- Dertouzos, James, and Michael Dardia. 1993. *Defense Spending, Aerospace, and the California Economy*. Santa Monica: RAND Corporation.
- Flaming, Daniel, and Mark Drayse. 1994. *Technology and Jobs: Defense Conversion in the Los Angeles Region*. Los Angeles: Economic Roundtable.
- Flaming, Daniel, ed. 1992. *Los Angeles County Economic Adjustment Strategy for Defense Reductions*. Los Angeles: Economic Roundtable.
- Joint Venture: Silicon Valley. 1993. *Blueprint for a 21st Century Community*. San Jose: Consolidated Publications, June.
- Koehler, Gus. 1993. *State Government and California University Economic Development Programs*. Sacramento: California Research Bureau.
- Kroll, Cynthia, Mary M. Corley, and Christopher Weare. 1993. *Defense Spending, California Employment and the State's Future*. Berkeley: Center for Real Estate and Urban Economics, University of California at Berkeley, Working Paper No. 93-218, October.
- Michael, Andrew. 1994. *Economic Conversion Update, A Summary of Economic Conversion Activity Around the Nation*, Number 11, Mountain View: Center for Economic Conversion, January.
- Mueller, Elizabeth J., et al. 1993. *Retraining for What? Displaced Defense Workers Come Up Against EDWAA*. Piscataway: Center for Urban Policy Research, Project on Regional and Industrial Economics, State University of New Jersey, Working Paper No. 57, September.
- Ong, Paul M., and Janette R. Lawrence. 1993. *Time of Crisis: Unemployment in Aerospace Industry*. Los Angeles: Graduate School of Urban Planning, University of California at Los Angeles.

APPENDIX A

**COUNTY ACTIVITIES IN RESPONSE
TO DEFENSE MANUFACTURING LOSSES**

Location: Los Angeles County
Organization: Los Angeles County Economic Development Corporation
Contact Person: Rohit Shukla, Director
Phone: (213) 462-5111
Aerospace and High Technology Business
Address: Los Angeles Economic Development Corporation
6922 Hollywood Blvd., Suite 415
Los Angeles, CA 90028

Contract Details:

Client: Los Angeles County
Funding Source: OEA, EDA, TCA
Size of Contract: Original OEA/EDA Strategy contract (amount not available); proposal to OEA for \$180,000 grant to study technology transfer in information technologies.
EDA Technical Conversion and Adjustment Grant (Title IX) – \$5.75 M to Los Angeles County, \$2.5 M to the EDC for three years (the rest to a revolving loan fund)
TCA – \$250,000 for three years, for LARTA (Los Angeles Regional Technology Alliance)
Timing: OEA/EDA, 1st grant, 1990-92
EDA – March 1993-March 1996
TCA – February 1994-February 1997

This is a snapshot of the LAEDC contract activity in January 1994. The organization is continuing to write grant applications that are likely to expand their funding level over the next year.

Subcontractors:

Small Business Development Centers

Exploring relationship with University of California Manufacturing Extension Program (UCMEP, located at U.C. Riverside; no subcontract yet)

Both would assist in implementing LARTA activity.

History of Projects:

The EDC began looking at the impacts of aerospace cutbacks on the Los Angeles economy with an OEA grant in 1990. The grant was used to fund an aerospace task force and to support background research for the development of a recovery strategy. Their report, published in 1992 as a consultant report from the Economic Roundtable, presented detailed discussions on the characteristics of the aerospace industry and its workforce in Los Angeles County and outlined an economic adjustment strategy for the area.

Since the completion of the initial research and strategic planning effort, the EDC has pursued a 3-fold strategy, focused largely on firm recovery, growth and evolution. The three directions include 1) developing a point of contact, 2) direct assistance to impacted companies, and 3) focused product development.

(1) *A Point of Contact*

The EDC created a High Technology Council as the initial point of contact, with representatives from labor, government, industry, and research. The council was proposed as a body to supervise wide-ranging programs, monitor Federal programs, and advocate for local proposals. The council has been put in place, but still is lacking several appointments. It is expected to evolve into LARTA, extending

the functions that were already in place in Los Angeles Counties to several surrounding counties (Riverside, San Bernardino, Ventura).

(2) *Assistance to Impacted Companies*

A second approach is to provide technical assistance through a network of resource providers (who may have overlapping services), called the "Product Development Partnership" (PDP). They are developing a database of organizations and consultants who are available to provide *pro bono* and subsidized consulting advice to firms at the stage of product prototype development. The EDC has memoranda of understanding with Lawrence Livermore National Lab (LLNL), the UCLA Management School, the Department of Engineering and the Entrepreneurial Training Program of USC, the Small Business Development Center (SBDC) network, the Export SBDC, and the NASA Far West Regional Technology Transfer Center (RTTC). In addition to these organizations, the EDC has a database of consultants with specific targeted skills, from which clients can select.

The PDP quickly became involved in the first round of TRP, calling themselves the Los Angeles Regional Technology Alliance (before being named as such by the state later in the year). They focused particularly on several industries, including advanced transportation, alternative energy, environmental technologies, advanced telecommunications, and medical technology products and services.

Since being involved in the TRP process, they have expanded their resources through coordination with other organizations and formalized the review process further. Their technical evaluation committee includes representatives from commercial firms, defense firms, research organizations, UCMEP, venture capitalists, and the Asian and African American Development Banks. They are broadening their network for working with firms through coordination with SBDCs and UCMEP. Assistance includes an initial screening, to separate firms ready to begin prototype development or even commercial development from those at earlier stages, who could benefit from more basic technical assistance, followed by a technical review process which looks in more depth at the potential of product development proposals. They briefly assess the proposed project, the business sense of the company, any gaps, and the probability of success. They may recommend the use of the PDP network to fill in the gaps before the firm seeks further funding for its effort. They may also bring together through the network firms that can be of mutual assistance to each other.

(3) *Product Development*

A third step for EDC will be the establishment of a Focused Product Seed Capital Fund program. The program is to assist in the move to commercial production of products that are beyond the prototype stage. The fund would provide capital at low interest rates for companies at this state of product development.

Other Emerging Activities:

(1) *Statewide Information System*

The EDC has submitted a proposal to EDA to develop a statewide information system called "California Access," that will provide information on technical assistance available to companies. Building on the existing UC Access (which is modeled after an east coast program called Knowledge Express), the system allows companies to assess for themselves technologies available throughout the U.C. system and to use the system to establish collaborative arrangements. California Access would expand this to include the Federal laboratories nationally, utility companies, environmental services companies, and economic development providers.

2) Manufacturing Extension Program

This effort would pull together the disjointed activities of several groups. NASA, UCMEP, the LAEDC, and the California Manufacturing Technology Center in Hawthorne (CMTC) each provide some type of extension service; a more comprehensive manufacturing extension program could coordinate these services.

3) Creation of Consortia

One function of the High Technology Council has been to help in the creation of industry consortia. One in the field of information technology is already in progress— the USC Center for Multimedia Technologies has submitted a grant application to NSF and has sought matching funds from the state. A product-oriented consortium, led by defense companies, is also being considered. The group is also in alliance with other consortia already developed, such as the National Fuel Cell Research Center and Project California.

4) Workforce Related Programs

The LAEDC concentrated initially on firm-related programs, rather than employment retraining. Their approach is shaped by the conclusion that defense workers may be better served by fostering the creation of new technologically based jobs and by assistance in marketing their skills rather than by traditional retraining programs. They are also interested in working with the state's Employment Training Panel to develop a focused industry approach to retraining.

Coordination Opportunities:

The LAEDC is already involved in several coordinating activities — among firms, resource providers, and communities. In taking on the LARTA responsibilities for a multi-county area, they will have the opportunity for further coordination of response strategies. Some of their current efforts involve developing resources that could be of use to the rest of the state, beyond the Los Angeles area. They are also interested in coordination with statewide efforts, particularly in information networking and in workforce retraining activities.

Date: 2/2/24

Location: Orange County
Organization: County of Orange Administrative Office
Contact Person: Bill Gayk
Phone: (714) 834-6203
Address: 10 Civic Center Plaza, Room 341
Santa Ana, CA 92701

Contract Details:

Client: A public/private steering committee and the County of Orange Administrative Office (project manager and staff to the committee)
Funding Source: Office of Economic Adjustment, California Trade and Commerce Agency, local
Contract Size: \$150,000 (OEA), \$25,000 (TCA), \$25,000 (local— \$13,000 in cash and the rest in kind)
Timing: 1/94 through 9/94

Subcontractors:

Orange County (CAO) is writing the RFPs now for four contracts:

Needs Assessment Studies

- (1) Study of Defense Spending in Orange County: An extension and expansion of "The Role of Defense Spending in the Orange County Economy" completed in 1992 by the California State University at Fullerton. It is anticipated that CSU Fullerton will update the study under an intergovernmental agreement.
- (2) Defense and Aerospace Employer Database: It is anticipated that one of the Orange County Universities will conduct this study under an intergovernmental agreement.
- (3) Survey of Defense and Aerospace Businesses: Same as (2).

Strategy for Defense Adjustment and Conversion

- (4) Strategic Plan: This is the biggest piece of the project and will be open to competitive bidding by consultant services.

Project Details:

The overall focus of the Orange County project is to develop a comprehensive defense recovery strategy unique to Orange County's circumstances and opportunities. The primary product, a strategic plan, will be used as the coordinating document for all defense transition activities within Orange County.

First, the plan will assess countywide impacts, needs, and resources. A preliminary study of the impacts of defense spending cutbacks was conducted by the Institute for Economic and Environmental Studies at California State University at Fullerton. This study looked at the Orange County economy up to 1991. The study will be updated and expanded to include an analysis of specific Orange County employers and to project future defense related job losses.

A survey of defense and aerospace companies will be conducted to obtain their views on (1) conversion to non-defense applications and (2) areas of potential conversion opportunities. Data will be collected on the location of the employers, company size, staff cutbacks, company products, primary and secondary contracts, and technology. The product outcome will be a database of all primary and secondary defense and aerospace employers in Orange County.

A survey of defense and aerospace businesses in the county will also be conducted. The focus of the survey is the identification of factors that would encourage conversion to non-defense activities, existing impediments, current potential for conversion (e.g., transferable technologies), opportunities for conversion, and retention factors and incentives. The results of this survey will be used to develop potential programs that will contribute to the accomplishment of the goals and objectives identified in the overall strategic plan.

The needs assessment portion of the project will be sole-sourced to the state universities within Orange County.

The biggest piece of the project is the development of the strategic plan. This plan will identify an overall defense adjustment and conversion strategy; identify specific goals and objectives; identify specific actions to be taken and corresponding organizational responsibilities; and identify a series of promising programs into which county conversion efforts could be focussed.

Five program areas have been initially chosen for consideration: (1) export promotion; (2) job training and placement services; (3) retention and promotion of high-tech industrial clusters (bio-medical, environmental technology, communications, and computer software and peripherals); (4) retention and promotion of small business and entrepreneurialism; and (5) base closure transition and reuse. It is expected that others will emerge through the planning process.

The development of the plan will be guided by a steering committee. The membership of this committee has not been selected. The following membership has been proposed: representatives from the University of California at Irvine or other Orange County Colleges and Universities, the Orange County Private Industry Council, the World Trade Center Association, the Orange County Division of the League of Cities, the Orange County Labor Council, the Base Reuse Committee, the Industrial League of Orange County, and the Orange County Chamber of Commerce. The County of Orange, through the County Administrative Office, will be the project manager and will staff the committee.

Date: 1/31/94

Location: San Bernardino and Riverside Counties
Organization (1): Economic Research Associates (ERA)
Contact Person: Dave Wilcox
Phone: (310) 477-9585
FAX: (310) 478-1950
Address: 10990 Wilshire Blvd, Suite 1600
Los Angeles, CA 90024

Organization (2): Department of Economic and Community Development
Contact Person: Deborah Frye
Phone: (909) 387-4587
Address: 474 West Fifth Street
San Bernardino, CA 92415-0040

Contract Details:

Client: San Bernardino and Riverside counties, as directed by a steering committee and task force from the two counties.
Funding Source: OEA and TCA
Size of Contract: Overall project is for \$133,000, from which \$105,000 has been contracted out by the counties; ERA, the prime contractor, has a budget of \$48,000.
Timing: September 1993-June 1994

Subcontractors:

J.F.Davidson Associates, Inc.
Douglas Shakleton
Heinz Lumpp
(909) 686-0844

Business Opportunities/Location Opportunities: Mr. Shakleton and Mr. Lumpp will identify business opportunities and develop potential growth areas.

Udewitz Associates
Rosalie Udewitz
Richard Stein
(310) 670-7600

Target Markets/Market Growth and Change: Ms. Udewitz and Mr. Stein will assist ERA by providing district and regional overviews of evolving sociodemographics and markets.

Yvonne M. Neal Associates
Yvonne M. Neal
(909) 682-9302

Environmental Resolution/Environmental Constraints: Ms. Neal will take "the current and long look at the continuing complexities at the regional scales of environmental standards and mitigation issues" [?] and define those strategies with the most potential for success.

Jared M. Ikeda
(909) 593-1618

Strategic Locations and Initiatives: Mr. Ikeda will support ERA as a strategic planner with his knowledge of the area and its evolving specialties and opportunities.

Project Details:

ERA's work for San Bernardino and Riverside Counties focuses on resource identification and strategy development rather than background research on the counties. Several studies already exist on the area economy and defense cut impacts. The current project will identify a series of cluster communities (two or more cities per cluster) with common economic directions. Development strategies then would be developed around each cluster.

Identification of clusters will come from interviews with city governments and with groups of businesses. Because they are looking at directions for future growth rather than recent losses, their interviews will cover not only defense firms but also key firms in other sectors, such as utilities, financial firms, communications firms, and manufacturers. An example of the types of clusters they seek to identify are the Temecula and Murietta area, where medical equipment manufacturing is an important potential growth activity. They expect to identify approximately 10 cluster groups.

Once the clusters are identified, ERA will forecast which clusters are likely to grow quickly naturally and which will grow more slowly. Any economic development strategies recommended will distinguish between strategies to help slower growing clusters and those appropriate to faster growing areas. They will also identify the type of development that is most appropriate for each cluster. Strategies for cluster areas could involve a consolidated effort by a set of firms and cities to marshal federal and state resources towards specific goals or programs, increasing their effectiveness over single-city or single-firm efforts.

Underlying the work are some assumptions that may distinguish the Riverside/San Bernardino area from other parts of California. Local representatives estimate that 75 percent of losses to "defense" firms in the area are due to the general recession rather than to defense cuts. They would like to see a strategy to weather the recession, not only defense cutbacks. A second point is that impacts of cutbacks at firms may be indistinguishable from the effects of closures at three air force bases; the goal is to create a recovery strategy that doesn't attempt to separate the two types of losses but works from both. For example, underutilization of the Ontario airport is an important factor to consider in reuse plans for military air fields.

Third, job development is the focus of their strategy because of the particular impacts of the recession on the area's commuting population. Because the two counties are geographically adjacent to the Orange County and Los Angeles County areas, layoffs in defense firms in the coastal counties have tended to leave many household heads without income in the San Bernardino/Riverside area. When workers are reemployed, they may find a significant increase in an already long commute time.

Further shaping their approach to planning in this area are concerns that have arisen from past experience. They are approaching the technology transfer issue very cautiously, because the feasibility of many proposals is unproven. They are cautious about high-end job training efforts, because there is little experience with the effective use of JTPA money to retrain and redirect highly skilled defense workers into other types of employment. The county would like to see successful programs of this type emerge.

Other concerns have arisen over experiences with base reuse. One concern has arisen over the short life cycle of reuse activities at some bases. (Wilcox gave the example of a Lockheed lease at Norton AFB where Boeing 747s were being retrofitted; the activity produced a three-year bubble of employment, but closed down with the recession.) A second concern is that some firms or business consortia may take advantage of the eagerness of communities to bring in business by extracting financial support for projects that are not well-defined and have no track record of success.

Coordination Opportunities:

Coordination among local areas within the two counties is an underlying part of the project. They would like activities specific to subregions of their counties to be coordinated with the programs currently being developed. The counties possibly would be interested in some coordination with

activities happening elsewhere in the state and would definitely be interested in communication among projects. The SBDECD has made copies of survey forms being used in research available to the state.

Related Work by ERA and Others:

In California, ERA has worked on projects related to the reuse of several military facilities, including Castle AFB, George AFB, Norton AFB, March AFB, Tustin MCAS, El Toro MCAS, and Fort Wyneme NCEL property. ERA also is under contract with the South West division of NABFAC in San Diego County for miscellaneous work covering the Southern California and Arizona areas.

Other defense conversion related projects in the Riverside/San Bernardino area, as referred to by Wilcox, include:

- A UC Riverside project on technology transfer.
- A GTE-Contel project on telecommuting in the Victorville Area
- A project by SRI (with Southern California Edison) to look at the Garment industry.
- A project by David Freedman to survey firms; looking at how to pull together like minded firms with common needs to produce economies of scale in the use of state resources or in negotiating on state tax or regulatory issues.
- Reuse of GOCO facilities (e.g. two General Dynamics plants to be vacated because of Hughes buy-outs of the project lines and relocation of contracts to Tuscon, Arizona)

Date: January 25, 1994

Location: City and County of San Diego (1- Historic)
Lead Organization: Economic Development Services
Contact Person: Kurt Chilcott
Phone: (619)236-6551
Address: City of San Diego Economic Development Services
Civic Center Plaza
1200 Third Avenue, Suite 1620
San Diego, CA 92101-4199

Other Participants: SANDAG, San Diego Chamber of Commerce, San Diego Economic Conversion Council, San Diego Economic Development Corporation, UCSD CONNECT Program, Economic Conversion Advisory Group (San Diego)

Contract Details:

Client: City of San Diego
Funding Source: OEA and TCA
Size of Contract: \$150,000
Contractor: San Diego Consortium & Private Industry Council (SDC/PIC)
Contract Contact: Tom Miller (no longer with SDC/PIC)
Timing: May 1992-May 1993

Background: In early 1990, San Diego's City Council formed the Economic Conversion Advisory Group. This group established a network of local business, education, and labor entities that developed a two-phase conversion plan. Phase I included the creation of a series of studies, including a defense industry survey, market analysis, and a fiscal impact analysis. (Phase I also included a re-employment demonstration project, which is described in Task I of this study.) The City of San Diego obtained funding for the Phase I studies from both the OEA and TCA, then contracted with the Consortium and Private Industry Council (PIC) to undertake the study.

Project details: The final product, a report titled *San Diego Economic Adjustment Program*, is a 40-page report describing the San Diego defense economy and summarizing the defense firm survey. The report's extensive appendix includes: (a) the fiscal analysis model used; (b) the survey methodology; (c) and (d) compilations of the survey results, by SIC code; (e) a skills training directory which matches field of study with regional education facilities; (f) a list of participating regional organizations classified by the service or product they provide; and (g) numerous related local and federal training and business funding program descriptions such as the Department of Transportation's ISTE, Los Angeles' CALSTART, and NIST's Advanced Technology Program. The second part of the appendix provides the city's FY93-94 economic development strategic plan, which describes more fully the industries the city wishes to promote. The last section of the appendix (Appendix II), is a copy of the *San Diego Region Business Resource Guide*.

Survey: From a list of 500 defense companies, the PIC team randomly selected 20 percent to participate in a survey and follow-up interviews. Of the 103 companies chosen, 59 participated. A detailed description of their survey methodology is provided in "San Diego Economic Adjustment Program." The survey consisted of five parts, including a request for detailed information of the firm and forecasts for future years' employment and sales. Another section requested marketing and sales information related to customers (including DoD), subcontractors, and suppliers and the location of those entities. Two sections dealt with business climate issues and requested suggestions for ways to improve business. The last section focused on firm strategic planning and defense conversion issues.

Fiscal Impact Analysis: In forecasting the fiscal impact of payroll taxes, sales taxes, and personal income taxes lost, an employment loss multiplier of 1.71 was applied to 1991 defense jobs lost. A three-year forecast (1991 to 1993), of 28,300 defense (and related) jobs lost and a total of \$5,164,442 local revenue lost, is provided.

Project Outcome: Although this project began with the formation of an Economic Conversion Advisory Group, it should be noted that the city council and others saw defense cutbacks as only one contributing factor to the region's overall economic recession. Therefore, the remedies offered and the training programs being developed as a part of "economic conversion" may be seen as an economy, and industries, in transition. San Diego has been successful in garnering federal and state defense conversion funding to assist in this process. The San Diego Economic Development Services have recently received a grant of some \$5.5 million for their "economic adjustment program" from the EDA (see accompanying synopsis: *San Diego 2*).

Coordination Opportunities: Coordination among local entities has taken place since the inception of the project. Additionally, the Office of Economic Adjustment has promoted the idea of San Diego coordinating and sharing information with other Southern California counties. At this time, coordination is in the discussion stage.

Date: February 2, 1994

Location: City and County of San Diego (2– Present and Ongoing)
Lead Organization: Economic Development Services
Contact Person: Kurt Chilcott or Gonzalo Lopez **Phone:** (619)236-6551
Address: City of San Diego Economic Development Services
Civic Center Plaza
1200 Third Avenue, Suite 1620
San Diego, CA 92101-4199

Other Participants: San Diego Chamber of Commerce, San Diego Economic Conversion Council, San Diego Economic Development Corporation, UCSD CONNECT and California Manufacturing Extension, San Diego Community College (Center for Applied Competitive Technologies (CACT)), San Diego Consortium and Private Industry council and the Federal Laboratory Consortium, CDC Small Business Finance Corporation, and San Diego District Export Office of the International Trade Administration.

Contract Details:

Proponent: City of San Diego Economic Development Services
Funding Source: EDA/TCA
Size of Contract: \$5.5 million; additional local, state and in-kind funding: \$4.5 million
Project title: EDA Economic Adjustment (Title IX) Program SSED Component

Timing: Three-year program beginning January 1994

Background: Over the last four years, the city of San Diego has aggressively pursued an economic adjustment and recovery program on several fronts. Following an extensive industry survey, a fiscal impact study and a market analysis (described in San Diego I), the city drafted and submitted a grant proposal to the DOC's EDA for SSED funding. Harnessing the participation and resources of a number of agencies, educational institutions, and industry groups, the city proposes to create (a) a Technology Business Advisory Committee; (b) a High Technology Resource Center; (c) a High Technology Incubator; (d) a Seed Capital Fund; and (e) a World Trade Center. The overall goal of this program is to address the defense cutbacks with a two-pronged approach. First, the program provides support for defense contractors who require technology conversion assistance and export market help. Second, Kurt Chilcott notes that the EDA recognizes defense recovery will not come from defense contractors alone. Many defense workers can be retrained to work in other growing industries. However, because of the weakened economy, these industries, including health, biomed, biotech, transportation, energy, software technology, and electronics, will need financial, technological, and market assistance. Therefore, worker retraining, new business start-up and small business assistance, and export trade development are large components of San Diego's recovery effort funded by this grant.

Project details:

Technology Business Advisory Committee: Civic, business, and higher education leaders will make up the Technology Business Advisory Committee that will address policy issues and promote new initiatives for dealing with the economic impact of the cutbacks in defense spending. The Committee will meet at least quarterly, and, while monitoring the other initiatives mentioned above, will also serve as the focus for broader policy concerns and the efforts being made by APRA, NIST, and other TRP participating agencies.

EDA funding: \$810,000; local cash and in-kind: \$247,000

High Technology Resource Center: This will be a one-stop center for all forms of business and technical assistance to San Diego's manufacturing and high technology firms. The emphasis of Center capabilities will be to encourage the development of "dual use" technologies and manufacturing. The majority of

Center activities will be conducted through outreach services, including on-site assessment and direct operational assistance provided by teams from participating partners.

Center participating partners include: City of San Diego Economic Development (managing office), San Diego Economic Development Corporation, Center for Applied Competitive Technologies (CACT) at SDCC, CONNECT and California Manufacturing Extension-UCSD, and San Diego Supercomputer Center.

High Technology Incubator: The high technology incubator will work in conjunction with the High Technology Resource Center and managed by the Center for Applied Competitive Technologies (CACT), a federal and state regional center for manufacturing. The goal of the incubator will be to support up to 20 startup companies over the course of the grant, creating as many as 100 high-skill, high-paying jobs.

Along with CACT, other programs at SDCC will serve the incubator, including Office Information System, Marketing, Business, Accounting, Computer and Information Science, Quality Assurance, and Logistics.

Seed Capital Fund: The Fund will establish loan/grant/guarantees to defense-related and the high-tech incubator firms to develop new products and markets. The San Diego CD Small Business Finance Corporation will administer the Fund.

World Trade Center: The World Trade Center (WTC) would benefit small businesses lacking resources to research and market foreign markets. The creation of the WTC is part of a larger international trade strategy that includes the Port of San Diego, the World Trade Association, and the San Diego District Export Office of the International Trade Administration. Services provided will include business plan counseling, market research services, and product export counseling. Additionally, the WTC will produce seminars and conferences on international trade topics.

Coordination Opportunities:

Both EDA and OEA see San Diego's programs as models for other regions. San Diego may have a role in the greater Southern California region's recovery efforts.

Date: February 21, 1994

Location: Santa Clara County
Organization: Joint Venture Silicon Valley (JVSV) Network
Contact Person: Eric Rosenfeld
Phone: (408) 271-7215
FAX: (408) 271-7214
Address: 111 Almaden Blvd., 8th Floor
San Jose, CA 95113

Contract Details:

Client: Santa Clara County, with 8 Silicon Valley cities also represented on the steering committee
Funding Source: Office of Economic Adjustment, California Trade and Commerce Agency
Size of Contract: \$125,000 (OEA), \$50,000 (TCA), \$50,000 in-kind contribution (JVSV)
Timing: November 1993-August 1994

Subcontractors:

Center for the Continuing Study of the California Economy, under Dr. Robert Arnold, is doing the economic analysis.

Project Details:

JVSV is under contract to complete four different types of analysis for Santa Clara County and OEA. These include, briefly:

1. An inventory of resources and assistance available for defense transition.
2. An industry survey, relying primarily on focus groups and limited face-to-face interviews.
3. An employment survey, with the cooperation of the California Employment Development Department (EDD) and the Franchise Tax Board, examining where jobs have gone and where new job growth will occur.
4. A market analysis of emerging markets and businesses, and their linkages to defense firms, technologies, and people.

The contract also requires the project to include community and business outreach, which will be accomplished through existing JVSV forums, such as the Silicon Valley Defense Space Consortium, the Software Industry Coalition, the Environmental Partnership Workforce Task Force, and Smart Valley (a communications industry group). The output will also include a transition plan to inform policy decisions. The work emphasizes constituency and consensus building over in-depth analysis, and relies equally on qualitative information as on quantitative research.

Information on resources and assistance will be obtained from reviewing material from the Center for Economic Conversion, the Assembly Office of Research, the California Research Bureau, the Defense/Space Consortium, the Enterprise Network, and other local and state organizations. The results are scheduled to be available by the end of March.

Background on the current situation will be developed using data from the Bureau of the Census, EDD, and the Franchise Tax Board. To analyze recent and historic trends, they are trying to get an advanced look at the 1992 Census of Manufacturing tape. They are also working with EDD to produce special runs summarizing employment by industry clusters. EDD will draw data from their tapes to give them information on the characteristics of UI claimants (by industry, age, gender, occupation, earnings, and race), and reemployment patterns within the defense industry. EDD will work with the Franchise Tax

Board to expand coverage to include self-employed workers. They will also work through OEA to get a census of defense contracts to firms in the area, to identify prime contractors.

The industry survey will be accomplished primarily through key informant interviews and through focus groups. They will do 10 to 15 interviews each of prime contractors and subcontractors (and will send us a list of those interviewed when it is available). They will conduct focus group meetings of suppliers and secondary businesses, drawing primarily from JVSV participants or from meetings at local chambers of commerce. The survey is scheduled for completion by the end of May.

JVSV does not expect to conduct interviews of workforce representatives, but a workforce taskforce is forming in conjunction with this research project that includes training providers, human resource managers from industry, and AFL-CIO representatives. This group will act as a focus group on workforce concerns for the project and is expected to continue operating beyond the life of the research project. The workforce analysis is scheduled for completion by the end of April.

At this point in the research, JVSV does not anticipate doing any extensive survey work. More likely, they will develop a survey instrument or list of questions to be administered as a follow-on to the current contract. They would be very interested in a coordinated effort with the state and with other regions, in this survey work and more generally in their research on defense transition.

For the market analysis, JVSV will review existing studies of principal markets for Silicon Valley industrial clusters and will refine the analysis using focus groups and face-to-face interviews. They will produce a description of world market opportunities and new technologies of importance to the future growth of Silicon Valley and also relevant to technology transfer from the defense industry. This portion of the study is scheduled for completion by the end of April.

JVSV's work already involves coordination among government groups and with some other organizations. The county and eight cities work together as a steering committee for the project. CCSCE is a subcontractor, and the Center for Economic Conversion has shared background resources with JVSV for the project. In addition, JVSV sees the building of community relationships and a community consensus for action as an important output of the project.

A final report will be prepared summarizing the four areas of analysis, recommendations, and strategies. The report will include appendices describing results of interviews and focus groups. The final report will be available from JVSV or from Santa Clara County in August 1994.

Date: 1/18/94

Location: Ventura County
Organization: County of Ventura Chief Administrative Office
Contact Person: Mary Walsh
Phone: (805) 654-2690
Address: 800 So. Victoria Ave. #L1940
Ventura, CA 93009

Contract Details:

Client: County Council on Economic Vitality Defense Adjustment Strategy Committee (public/private partnership), with the assistance of the County of Ventura Chief Administrative Office
Funding Source: Office of Economic Adjustment, California Trade and Commerce Agency
Contract Size: Proposed \$100,000 (OEA), \$26,000 (local \$13,000 cash and \$13,000 in kind), and additional matching funds from TCA
Timing: Five months after commencement

Subcontractors:

Ventura County's project has not yet been funded by OEA as of January 1994 and is still in the proposal stage. The majority of the project (planning activities and the creation of a strategy) will be carried out through competitively selected consultant services.

Project Details:

The project proposal is to develop a countywide defense adjustment strategy to address the impact of military downsizing and cuts in defense spending. The main objectives are to (1) develop strategies and programs to facilitate the transition of displaced and unemployed workers and at-risk businesses to a post-cold war economy, and (2) to identify specific activities which would provide for new job and industry creation in the future.

The majority of the project will be carried out by a consultant who will work through the County Council on Economic Vitality and its Defense Adjustment Strategy Committee. This committee includes representatives of military institutions, aerospace and high-technology firms, aerospace and high-technology worker associations, and public entities. It is anticipated that after the development process begins, participation and representation on the committee will be expanded to include other stakeholders.

The project, as proposed, has three areas of focus. First, information about the impacts of defense cutbacks in Ventura County will be gathered and analyzed. This will include a historical perspective and assessment of the military and defense industry role in the Ventura County economy; the identification of total permanent job losses and future permanent job losses due to military downsizing and cuts in defense spending; and an assessment of the direct and indirect impact that prior, current, and projected job losses have had and will have on the Ventura County economy.

Also, a thorough review of other Southern California counties (San Diego, LA, Orange) will be undertaken for similarities, applicability, and feasibility of implementation in Ventura County. A summary of findings and strategies of these counties will be made with a view toward incorporating other areas' survey instruments and methodology into the Ventura County project.

Second, the project will identify perceptions and needs through a survey of impacted individuals and firms in Ventura County. This will include extensive discussions with the private sector and a survey of at risk businesses. An assessment will be made about who needs help, where help is needed, and what kind of help is needed.

Third, the project will develop strategies and identify programs that will most effectively meet the immediate and long-term needs of workers and industry in Ventura County. This will include the development of immediate, short, and long-term strategies to transition displaced workers and businesses; an assessment of resources available to the county as a region to implement these strategies as well as the constraints; the identification of joint programs and participation in other regions' established programs; and an implementation plan for the strategies identified as most feasible and viable for Ventura County.

Coordination Opportunities:

Communication among projects with other Southern California counties is already occurring. Coordination with these areas is an underlying part of the project. Ventura County intends to make significant use of applicable research and methodology from these area's projects. Coordination with the State is also welcome.

Date: 1/28/94

APPENDIX B

BASE CLOSURE RESPONSES

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1988

Base	County/City	Key Community Contact	OEA Project Manager	Labor Force		Closure Date
				Civilian	Military	
George AFB	City of Victorville San Bernardino Co.	Peter D'Errico, Director Victor Valley Economic Development Authority (619) 246 6115	Col. Joe Gorman (703) 695 3492	506	4,852	Closed
Hamilton Army Air Field	City of Novato Marin County	Vi Grinstainer, Director Community Development, City of Novato (415) 897 4341	Tony Gallegos (916) 557 7365	20	5	1995
Mather AFB	Sacramento Co. Community of Rancho Cordova	Robert Leonard, Director Military Base Conversion (916) 440 7991	Tony Gallegos (916) 557 7365	1,012	1,988	Closed
Norton AFB	City of San Bernardino San Bernardino Co.	William Bopf, Director Inland Valley Development Agency (909) 885 4832	Col. Joe Gorman (703) 695 3492	2,133	4,520	1994
Presidio Army Base	San Francisco San Francisco Co.	Alison Kendall, Presidio Planning Coordinator City of San Francisco (415) 558 6290 Mai-Liis Bartling, Project Coordinator Presidio Project - Golden Gate National Recreation Area (415) 556 0245 ext. 220 Craig Middleton, Dir. of Government Relations Presidio Council (415) 556 5944	Patrick O'Brien (703) 697 3022	3,150	2,140	1995
Salton Sea Navy Base	Imperial County	Bob Henderson, Base Closure Manager Southwestern Division: Navy Facilities Engineering Command (619) 556 0606	None	0	0	1998

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1988

Base	Type of Reuse Planning Body	Funding Sources	Reuse Alternatives	Innovative Planning
George AFB	County initiated; JPA formed between three cities and the county to administer a redevelopment district around the base; minimal citizen participation	OEA: \$256,148 EDA: \$78,000 FAA: \$118,00	Commercial Services Airport with an industrial park	None: intense competition among jurisdictions that severely delayed the planning process; Eaves Legislation
Hamilton Army Air Field	City initiated with county representation, includes a core planning authority with a citizen advisory body	Applying for \$750,000 from the OEA	Housing; an airport reuse is not politically feasible at this time; wetland restoration	Jurisdictional disputes have delayed the planning process
Mather AFB	Congressman initiated with regional representation; the County Redevelopment Agency is now responsible for planning	OEA: \$578,000 DOI: \$2.0 million (Implementation) HUD: \$12.8 million (Implementation)	Airport with cargo facility; center for business and education; environmental park	Senate Bill 915 - designated the base as a redevelopment district
Norton AFB	County initiated with a redevelopment agency of three cities and the county; an airport authority was also formed	OEA: \$465,000 EDA: \$6.825 million for infrastructure needs	Commercial Airport with mixed use industrial office development	Eaves Redevelopment legislation to create a redevelopment district around the base
Presidio Army Base	National Park Service initiated with support from the City and the Presidio Council	The Park Service has funded its planning process. The City has been unable to get assistance from the OEA. The Presidio Council has been funded by private foundations (\$250,000)	Global Environmental Showcase	Direct transfer of the base from the Army to the National Park Service
Salton Sea Navy Base	No reuse planning initiated by the local community; planning conducted by the Navy	None	Wildlife reserve; recreation area	No community involvement

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1991

Base	County/City	Key Community Contact	OEA Project Manager	Labor Force		Closure Date
				Civilian	Military	
Castle AFB	City of Atwater Merced Co.	Richard Martin, Executive Director Castle Joint Powers Authority (209) 357 3370	Joe Gorman (703) 695 3492	1,164	5,239	1995
Fort Ord Army Base	City of Seaside City of Marina Monterey Co.	Joe Cavanaugh, Coordinator Fort Ord Reuse Group (408) 384 0605	Patrick O'Brien (703) 697 3022	2,835	13,619	1995
Hunter's Point Annex	San Francisco	Larry Florin, Manager - Base Conversion San Francisco Redevelopment Agency (415) 749 2532	Tony Gallegos (916) 557 7365	63	5	Closed
Long Beach Naval Station	City of Long Beach Los Angeles County	Gerald R. Miller, Manager Economic Development Bureau (310) 570 3851	Bryant Monroe (703) 695 1802	833	9,519	1994
Marine Corps Air Station, Tustin	City of Tustin Orange Co.	Christine Shingleton Assistant City Manager, City of Tustin (714) 573 3107 Dana Ogdon, Senior Planner, City of Tustin (714) 573 3116	CAPT Dave Larson (703) 614 8529	348	4,105	1997
Naval Air Station, Moffett Field	Santa Clara Co.	Michael Falarski, Chief Moffett Field Development Project (425) 604 0901	None	633	3,359	1996
Sacramento Army Depot	City of Sacramento Sacramento Co.	Mark Kraft, Project Manager Army Depot Reuse Commission (916) 264 8116	Tony Gallegos (916) 557 7365	334	3,164	1997

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1991

Base	Type of Reuse Planning Body	Funding Sources	Reuse Alternatives	Innovative Planning
Castle AFB	JPA among two cities and Merced County with a 7 member regional board and 13 community task forces	OEA: \$435,000 (1993-4) FAA: \$115,000 Local Match: \$253,000	Aircraft maintenance and training with light industry; agricultural research park	JPA formed early in the process
Fort Ord Army Base	Congressman initiated with regional representation and citizen involvement; state legislation has been initiated to form a reuse authority	OEA: \$1.4 million EDA: \$1.55 million CDBG: \$210,00 (OEA and EDA match) TCA: \$200,000 (OEA and EDA match) \$20 million direct 1994 DoD Appropriations	University; Army Enclave; Private business; natural preserve	Since the involved jurisdictions could not agree on a reuse authority, the state has intervened with legislation to do so
Hunter's Point Annex	The City Redevelopment Agency is the lead authority on reuse in conjunction with a citizens advisory group	The City has applied for \$2.2 million (\$1.5 million from the OEA and \$700,000 from the EDA) for planning activities at Treasure Island and Hunter's Point.	No solid reuse plans	None to date
Long Beach Naval Station	City of Long Beach Economic Development Commission	City general fund and Port of Long Beach: \$1.0 million Applied for \$650,000 from the OEA	Expand Cargo capacity of Port; University research and training; retail center	None to date
Marine Corps Air Station, Tustin	City of Tustin with regional representation of a 17 member body	OEA: \$830,00 Applying to the EDA for funding for a market study	Education facilities; military enclaves; regional park	Combined the EIR/EIS process into one procedure
Naval Air Station, Moffett Field	NASA Ames Research Center is the host agency for identifying federal tenants to occupy the base	NASA Ames Research Center is funding the reuse planning	NASA Ames Research Center; military enclaves; FAA; National Guard	Federal to federal agency transfer
Sacramento Army Depot	The City initiated an 11 member regional reuse authority	OEA: \$199,000 EDA: \$100,000 TCA: \$12,500 (match for EDA)	Industrial uses; heavy commercial; employment center	Effective and efficient reuse planning authority

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1993

Base	County/City	Key Community Contact	OEA Project Manager	Labor Force		Closure Date
				Civilian	Military	
Marine Corps Air Station, El Toro	Orange Co. City of Irvine	Ernie Schneider, County Administrative Officer Orange County (714) 834 6200 Jack Wagner, Senior Staff Analyst County Administrator's Office (714) 834 6758	CAPT Dave Larson (703) 614 8529	979	5,689	1999
March AFB	Riverside County	Stephen Albright, Executive Director March Joint Powers Authority (909) 655 3504	Joe Gorman (703) 695 3492	997	2,961	Realignment
Mare Island Naval Shipyard	City of Vallejo Solano County	Alvara da Silva Community Development Director (707) 648 4579 Craig Whitrom, Economic Development Specialist (707) 648 4444	Tony Gallegos (916) 557 7365	7,567	1,963	1996
Naval Air Station - Alameda	City of Alameda Alameda County	Don Parker, Director Alameda Base Reuse Advisory Group (510) 263 2870 Carl Anthony, Chair East Bay Conversion & Reinvestment Commission (510) 834 6928	David MacKinnon (703) 614 4656	556	10,586	1996
Naval Aviation Depot Alameda	City of Alameda Alameda County	Don Parker, Director Alameda Base Reuse Advisory Group (510) 263 2870 Carl Anthony, Chair East Bay Conversion & Reinvestment Commission (510) 834 6928	David MacKinnon (703) 614 4656	2,672	376	1996

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1993

Base	Type of Reuse Planning Body	Funding Sources	Reuse Alternatives	Innovative Planning
Marine Corps Air Station, El Toro	County initiated with a regional board of directors and a 50 member executive council with advisory committees	Issued RFQ to write OEA grant. Possible FAA grant	No solid options; but possible airport	None to date
March AFB	Riverside County along with three cities formed a JPA to conduct reuse planning	OEA: \$177,000 JPA: \$63,000 (match)	No solid options	Early formation of a JPA
Mare Island Naval Shipyard	City initiated with two planning groups - Legislative and Reuse Planning - both are staffed by the City of Vallejo	OEA: \$596,000 Vallejo: \$207,000 DOL: Submitted \$8.0 million grant 1994 DoD Appropriations: \$750,000 (SFU); \$500,000 (Shipyard reuse); \$2.5 million (worker retraining)	Draft conceptual plan has been created. Industrial manufacturing, vocational campus; housing, and open space	Fast track reuse timeline
Naval Air Station - Alameda	Congressman initiated regional advisory body and a City initiated advisory group	OEA Pilot Project: \$500,000 1994 Authorization: \$1.0 million (Pilot supplement) City Council: \$950,000 (general fund) Note: The Pilot project funding is for all four bases in Alameda County along with the Naval Supply Center and the Livermore Lab.	Environmental Industry and a high tech industrial city	Pilot Project for innovations in defense conversion
Naval Aviation Depot Alameda	Congressman initiated regional advisory body and a City initiated advisory group	OEA Pilot Project: \$500,000 1994 Authorization: \$1.0 million (Pilot supplement) City Council: \$950,000 (general fund) Note: The Pilot project funding is for all four bases in Alameda County along with the Naval Supply Center and the Livermore Lab.	Environmental Industry and a high tech industrial city	Pilot Project for innovations in defense conversion

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1993

Base	County/City	Key Community Contact	OEA Project Manager	Labor Force		Closure Date
				Civilian	Military	
Oak Knoll Naval Hospital	City of Oakland Alameda County	Viola Gonzales, Policy Advisor, Mayor of Oakland Oakland Base Closure/Conversion Task Force (510) 238 3141 Carl Anthony, Chair East Bay Conversion & Reinvestment Commission (510) 834 6928	David MacKinnon (703) 614 4656	809	1,472	1996
Naval Public Works Center, S.F. Bay	City of Oakland Alameda County	Viola Gonzales, Policy Advisor, Mayor of Oakland Oakland Base Closure/Conversion Task Force (510) 238 3141 Carl Anthony, Chair East Bay Conversion & Reinvestment Commission (510) 834 6928	David MacKinnon (703) 614 4656	1,834	10	1997
Naval Training Center, San Diego	City of San Diego San Diego Co.	Michael Stepner, Special Projects Coordinator (619) 236 5518	Patrick O'Brien	40	5,186	1998
Treasure Island Naval Station	San Francisco San Francisco Co.	Larry Florin, Manager Base Conversion San Francisco Redevelopment Agency (415) 749 2532	Tony Gallegos (916) 557 7365	454	637	1998

CALIFORNIA MILITARY BASES DESIGNATED FOR CLOSURE

1993

Base	Type of Reuse Planning Body	Funding Sources	Reuse Alternatives	Innovative Planning
Oak Knoll Naval Hospital	Congressman initiated regional advisory body and a City initiated task force	OEA Pilot Project: \$500,000 1994 Authorization: \$1.0 million (Pilot supplement)	None	Pilot Project for innovations in defense conversion
Naval Public Works Center, S.F. Bay	Congressman initiated regional advisory body and a City initiated task force	Note: The Pilot project funding is for all four bases in Alameda County along with the Naval Supply Center and the Livermore Lab. OEA Pilot Project: \$500,000 1994 Authorization: \$1.0 million (Pilot supplement)	None	Pilot Project for innovations in defense conversion
Naval Training Center, San Diego	City initiated with regional representation	Note: The Pilot project funding is for all four bases in Alameda County along with the Naval Supply Center and the Livermore Lab. OEA: \$1.0 million application	None	None to date
Treasure Island Naval Station	The San Francisco Redevelopment Agency is facilitating the reuse process	The City has applied for \$2.2 million (\$1.5 million from the OEA and \$700,000 from the EDA) for planning activities at Treasure Island and Hunter's Point.	None	None to date

George Air Force Base

Key Community Contact:

Peter D'Errcio, Director
Victor Valley Economic Development Authority
P.O. Box 3007
Victorville, CA 92393-3007
(619) 246-6115

Mary Scarpa, Mayor
City of Adelanto
P.O. Box 10
Adelanto, CA 92301
(619) 246-2300

OEA Project Manager:

Col. Joe Gorman
(703) 695-3492

BRAC Announcement Date:

1988

Closure Date: 1993

Labor Force: *Civilian*

506

Military

4,852

Jurisdiction(s) encompassing the base: County of San Bernardino

Note: The base is abutted by the Cities of Victorville and Adelanto.

Type and Structure of Reuse Planning Authority:

When the closure was announced in 1988, the County Supervisor responsible for the jurisdictions surrounding George AFB convened the *George Air Force Base Reuse Task Force*. The County Supervisor chaired this multi-jurisdictional body with representatives of the four cities most proximate the base. The elected officials and the professional staffs of Adelanto, Victorville, Apple Valley, and Hesperia comprised the task force. This task force had a short life, as a Joint Powers Authority consisting of the Cities of Victorville, Apple Valley, and Hesperia was formed in September of 1989. This JPA, known as the Victor Valley Economic Development Authority (VVEDA), acted as the redevelopment agency for the base reuse. Special state legislation was created in 1989 to create this agency and a similar agency around Norton Air Force Base. The George AFB redevelopment agency's region of influence included the base and an eight-mile radius around it. The city of Adelanto felt that it would not be adequately represented on the JPA and formed its own reuse planning process to plan the reuse of George AFB. The Adelanto City Council empowered itself as the *Adelanto-George Air Force Base Reuse Commission* and proceeded to plan the reuse of George AFB in competition with the VVEDA process. The Adelanto group funded its planning through the city's redevelopment funds, where the VVEDA process received support from the OEA and other federal departments. The competition among the planning bodies was intense and has been mired in litigation. The federal government has awarded 2,300 acres of the base to the VVEDA for airport reuse, but Adelanto has filed over 25 lawsuits against the VVEDA process and no redevelopment has taken place even though the Air Force vacated the base in 1993.

Funding Sources:

VVEDA:	OEA	\$256,148	Reuse Planning and Market Analysis
	EDA	\$ 78,000	Market Studies
	FAA	\$118,000	Airport Reuse Plan (1991)

Adelanto: Redevelopment funds from the City's existing Redevelopment Area

Note: Millions of dollars have been spent by both planning authorities on litigation.

Problems with Funding:

VVEDA did not receive federal funding for the planning staff of VVEDA. The Adelanto planning effort was not funded by federal government sources. The city was forced to fund its planning through existing redevelopment funds.

Consultants Retained:

Economics Research Associates	Business Plan – Market Analysis
P & D Technologies	Airport Plan
URS	Grant Applications – Demographic work
RSG	Reuse Plan
Tom Dotson and Associates	EIR
Urban Futures	Redevelopment Plan

Reuse Process:

Both the Adelanto and the VVEDA planning processes developed reuse plans with airport reuse as the anchor tenant. Adelanto proposed to redevelop the airstrip as a international superport with international service that would relieve the congested airspace of Southern California, where the VVEDA team pursued a more modest commercial airport reuse approach based on market forces and reflecting community growth.

Presently, a commercial services airport is being pursued by the VVEDA. This facility will serve local cargo needs and will be a terminal for troop rotation needs for the remaining Southern California bases. In addition to the airport reuse, the redevelopment agency will develop the remaining acreage as an industrial park. To date, no property has been leased.

Innovative Procedures:

Since the Victor Valley community could not reach consensus on a regional planning body, the entire reuse planning process was mired in dispute and litigation. The lack of a single planning authority has forced policymakers to understand the importance of developing a single entity early in the process to facilitate reuse planning.

Hamilton Army Air Field

Key Community Contact: Vi Grinsteiner, Director
Community Development Department, City of Novato
901 Sherman Avenue
Novato, CA 94945
(415) 897-4341

OEA Project Manager: Tony Gallegos
(916) 557-7365

BRAC Announcement Date: 1988 **Realignment:** 1995

Note: Hamilton Air Field has experienced three closures over the last 20 years. The base was first designated for closure in 1974 and 450 acres of the property were declared surplus in 1979. This property is presently being developed for jobs and housing by a private developer. The 1988 closure announcement designated 700 acres, including the airstrip, to be closed. The Navy retained an additional 500 acres, and this area was designated for closure in 1993.

Labor Force: *Civilian* 20 *Military* 5

Jurisdiction(s) encompassing the base: City of Novato

Type and Structure of Reuse Planning Authority:

The City of Novato established the *Hamilton Reuse Commission (HRC)* in 1992 to begin planning the reuse of the Army Air Field. This group was comprised of nine citizens and was staffed by the City. With the announcement of the closure of the Navy enclave in 1993, the HRC was expanded to include 25 members (after the County of Marin pressured the group to have more regional representation). In addition to the expansion of the citizen planning body, a core multi-agency planning body including Council members and County Supervisors will be formed to direct the planning process with the expanded HRC as the advisory body. A multi-agency Technical Advisory Committee will also be formed.

Funding Sources:

No money has been provided to the Hamilton community for reuse planning. The Office of Economic Adjustment requested that the local political differences be resolved before funding is administered. The HRC has applied for \$750,000 from the OEA for reuse planning.

Problems with Funding: None to date

Consultants Retained:

Robert Bein, William Frost, and Associates have been retained to assist the general planning and engineering needs of the community.

Reuse Process:

No reuse options have been identified at this time. The community is in the process of identifying reuse options. The reuse of the airstrip appears politically unrealistic, and wetland restoration is being considered.

Innovative Procedures:

The Hamilton reuse planning process has been troubled by political disputes since a portion of the base was designated for closure in the early 1970s. The community's inability to reach consensus for reuse of this part of the base for 20 years has made the present process initiated by the 1988 and 1993 announcements more difficult.

Mather Air Force Base

Key Community Contact:

Robert Leonard, Director
Military Base Conversion
700 H Street, Suite 7650
Sacramento, CA 95814-1280
(916) 440-7991
Angela Verbaere, Assistant to Robert Leonard
(916) 440-7992

OEA Project Manager:

Anthony Gallegos
(916) 557-7365

BRAC Announcement Date:

1988

Closure Date:

1993

Labor Force:

Civilian

1,962

Military

5,652

Jurisdiction(s) encompassing the base: County of Sacramento

Type and Structure of Reuse Planning Authority:

Throughout the six-year planning process that has evolved around the closure of Mather Air Force Base, there were three primary advisory bodies that superseded the Redevelopment Agency that is presently responsible for the reuse planning. When the base was first designated for closure in 1988, Congressman Robert Matsui, in conjunction with the County Board of Supervisors, formed the *Sacramento Area Commission on Mather Conversion (SACOM-C)*. SACOM-C was comprised of 45 members and four committees with an active participation of 150 persons from the county. SACOM-C completed its mandate of generating reuse alternatives for the County Board of Supervisors after two years and then was disbanded. The County Board of Supervisors created the *Mather Internal Study Team (MIST)*, comprised of County staff members, to refine the work of the SACOM-C process and generate solid reuse alternatives for the base. In order to implement the work of the MIST team, the Board of Supervisors established the Mather Redevelopment Survey Area and began to initiate legislation to have the entire base designated as a redevelopment area, with the assistance of the Sacramento Housing and Redevelopment Agency. In order to supplement the actions on behalf of the Redevelopment Agency, the *Mather Committee on Redevelopment (MCR)*, a citizen advisory committee to the Board of Supervisors with 14 community representatives, was convened. As a result of these efforts, the state approved Mather Air Force Base to qualify as a redevelopment area. The Sacramento Housing and Redevelopment Authority and MIST comprise the reuse planning team associated with the redevelopment area.

Funding Sources:

OEA: \$578,000 for Conversion planning
Department of the Interior: \$2.0 million for Park Development
Department of Housing and Urban Development: \$12.8 million for transitional housing development

Problems with Funding: None

Consultants Retained:

Economics Research Associates	Fiscal Impact
ROMA Design Group	Land Use Plan
EIP Associates	Environmental
KPMG Peat Marwick	Airport
Hodges and Schutt	Airport
Corning and Associates	Economic Impact
Lee Fisher	Airport – Financial
Kaiser Marston	Redevelopment
P & D Technologies	Airport

Reuse Process:

The Mather reuse plan includes a center for business and education and a regional environmental park, including a recreational area. The airport facility is envisioned to become the northern California hub for air cargo and Pacific Rim distribution. Included in this plan is an aircraft manufacturing and maintenance center. The main base will be developed into a center of business, education, culture, and recreation that will support the aviation uses. This would include job training facilities and a complex to research environmental remediation technologies. Finally, a regional park consisting of preserved open space, housing, resort and conference complex, and other recreational activities is planned for the base. The Cordova Park and Recreation District recently signed a six-month lease for the existing recreational facilities on the base.

Innovative Procedures:

Senate Bill 915, sponsored by Patrick Johnson, entitled *Redevelopment: Military Base Closure Redevelopment Agencies*, was signed into law on October 8, 1993. As summarized, "this bill would add to the Community Redevelopment Law provisions establishing a Mather Air Force Base Redevelopment Project Area in the territory included within Mather Air Force Base on the effective date of the bill." It must be noted that this legislation is different than that initiated for the reuse of Norton and George Air Force Bases. At these bases, the entire base and surrounding community was included in the Project Area, where the Sacramento example only permits the base real estate to be designated part of the Project Area. If this Redevelopment concept proves effective, similar legislation might be enacted throughout the state.

Norton Air Force Base

Key Community Contact: William Bopf, Director
Inland Valley Development Agency
201 North E Street, Suite 203
San Bernardino, CA 92401-1507
(909) 885-4832
Alex Estrada, Project Manager

OEA Project Manager: Colonel Joe Gorman
(703) 695-3492

BRAC Announcement Date: 1988 **Closure Date:** 1994

Labor Force: *Civilian* 2,133 *Military* 4,520

Jurisdiction(s) encompassing the base: City of San Bernardino

Type and Structure of Reuse Planning Authority:

Inland Valley Development Agency – The IVDA is a redevelopment agency formed in 1990 to mitigate the impacts of the closure of Norton Air Force Base. The Project Area of this agency includes areas within a three-mile radius around Norton Air Force Base. Special state legislation was created in 1989 to create this agency and a similar agency around George Air Force Base. IVDA is comprised of four governmental agencies: the County of San Bernardino and the Cities of San Bernardino, Colton, and Loma Linda. In 1992 the *San Bernardino International Airport Authority* (SBIAA) was formed to receive airfield facilities including runway, support facilities, and a portion of the base for airport-related development as Public Benefit Transfer. A 55-year lease was signed with the Air Force in January 1994.

Funding Sources:

OEA: \$465,000 through 1992 for planning.
EDA: \$6.825 million for infrastructure needs.

Problems with Funding: None

Consultants Retained:

URS Consultants, Inc.

Master Plan:

Johnson Fain and Pereira Associates
Hamilton, Rabinovitz and Alschuler
Linscott Law and Greenspan
ASL Consulting Engineers
Aviation Systems Associates
Cotton Beland Associates
PHH Fantus

Reuse Process:

The master plan is complete and the agency is presently working on obtaining land use entitlements. The City has defined its reuse options to be as follows:

- Commercial Airport
- Mixed-Use industrial office development with emphasis on international trade and commerce
- Lockheed commercial aircraft maintenance program for 747 aircraft
- General Aviation

Innovative Procedures:

The IVDA redevelopment agency was formed through special state legislation that permitted the formation of a redevelopment district that exceeded the boundaries of the base. This was only permitted at George Air Force base. These redevelopment districts are anomalies in the California conversion process, and recent legislation has only permitted redevelopment districts that maintain boundaries within the base limits (i.e. Mather AFB).

Presidio of San Francisco

Key Community Contact:

Alison Kendall, City Planner
City of San Francisco
(415) 558-6290

Craig Middleton, Director of Government Relations, Golden Gate National Park Association
Presidio Council
Building 201, Fort Mason
San Francisco, CA 94123
(415) 556-5944

Mai-Liis Bartling
Presidio Project
(415) 556-0245 ext. 220

OEA Project Manager:

Patrick O'Brien
(703) 697-3022

BRAC Announcement Date:

1988

Closure Date:

1995

Labor Force: *Civilian*

3,150

Military

2,140

Jurisdiction(s) encompassing the base: City of San Francisco

Type and Structure of Reuse Planning Authority:

The reuse planning process of the Presidio of San Francisco is unique. Unlike the other 21 bases designated for closure around the state, the base real estate will not be transferred to the local community. When the Army vacates the base, the property will be transferred to the National Park Service within the Department of the Interior. The Park Service established the *Presidio Project* planning team as an agency of the Golden Gate National Recreation Area to coordinate the Department of the Interior's objectives. The City of San Francisco's City Planning Department has assisted the Park Services efforts along with the *Presidio Council*. The *Presidio Council* was created under the auspices of the Golden Gate National Park Association (a non-profit cooperating association of the National Park Service) to bring national attention to the planning process initiated at the Presidio.

Funding Sources:

The City of San Francisco has not been able to obtain funding for its planning efforts from the federal government. The City is presently in the process of writing a grant to fund the planning activities at the Presidio, Hunter's Point, and Treasure Island.

The Presidio Council is a non-profit corporation that has been funded through philanthropic foundations. The agency has received approximately \$250,000 for its efforts.

The *Presidio Project's* planning has been funded through the National Park Service.

Problems with Funding:

The City of San Francisco has not been able to secure funding for planning from the Department of Defense.

Consultants Retained:

A. Block and Associates
Architectural Resources Group
Backen, Arrigoni, and Ross
Bendix Environmental Research, Inc.
Daniel Quan Design
Don Holyfield
Glen Isaacson and Associates
Hughes, Heiss and Associates
Keyser Marston Associates, Inc.
Dean Macris
Morrison and Foerester
R. Neihaus and Associates
Sextant Consultants

Anshen and Allen
Arthur Anderson and Company
Bay Area Economics
Dale Satror
David M. Dornbush Co., Inc.
Graphic Guides, Inc.
Harding Lawson and Associates
Jones and Jones, Inc.
Land and Community Associates
McKinsey and Company
Nolte Associates
Robert Peccia and Associates
Urban Ecology

Reuse Process:

The vision for the Presidio contained in the *Draft General Management Plan Amendment: Presidio of San Francisco* stipulates that the Presidio will be converted into a global center for exchanging ideas on critical environmental and societal challenges. Four general guidelines were established to direct future development. These include: (1) stewardship and sustainability; (2) cross-cultural and international cooperation; (3) community service and restoration; and (4) health and scientific discovery. In addition to these program areas, three basic directions were included in the draft plan recommendations.

- Expand and improve the quality of open space, forested areas, and recreational opportunities.
- Preserve and reuse significant buildings that are important to the Presidio's history and contribute to its status as a national historic landmark.
- Put buildings to use that advance world efforts to improve environmental, social and cultural conditions.

Using these guidelines, the five marketing clusters of uses were defined and include:

- *Science and Research Education Center* - utilize the Letterman complex for science educational uses.
- *Global Center and Visitor Activity Area* - maintain the character of the Presidio's main post through developing the global center
- *Conference and Lodging Facility* - develop Fort Scott and the Public Health Service Hospital for conference and lodging uses.
- *Residential Area* - rent available housing to contribute to the Presidio's operation costs.
- *Concession/Retail Services* - generate revenue from a retail complex at the global center, three gymnasiums, a swimming pool, tennis courts, a bowling alley, a theater, and a golf course.

Innovative Procedures:

The National Park Service took advantage of the federal agency to federal agency property transfer to embark on creating a global center for exchanging ideas on critical environmental and societal challenges.

Salton Sea Navy Station

Key Community Contact: Bob Henderson, Base Closure Manager
Southwestern Division
Navy Facilities Engineering Command
1420 Kettner Blvd., Suite 507
San Diego, CA 92101
(619) 556-0606

OEA Project Manager: N/A

BRAC Announcement Date: 1988 **Closure Date:** 1995

Labor Force: *Civilian* 0 *Military* 0

Note: In 1987 the Navy left the base and it was then formally designated for closure in 1988.

Jurisdiction(s) encompassing the base: County of Imperial

Type and Structure of Reuse Planning Authority:

Imperial County or the surrounding communities of the base did not initiate a planning process in the wake of the base closure announcement. The Southwestern Division, Navy Facilities Engineering Command, is the lead agency for the reuse of the base.

Funding Sources:

The Navy has not requested any funds for the reuse planning of Salton Sea Navy Base.

Problems with Funding: None

Consultants Retained:

Bechtel National Inc. Preparation of BRAC Clean-Up plan

Reuse Process:

No local public or private parties have expressed an interest in the Salton Sea facilities. However, three agencies within the Department of the Interior have expressed interest in the base real estate. These include:

- U.S. Fish and Wildlife Wildlife reserve
- Bureau of Land Management Recreation area
- Bureau of Reclamation No present plan

Innovative Procedures:

The lack of a community planning process is interesting to note. This base encompasses almost 20,000 acres (two-thirds of which are under water) of Imperial County. Since the base is remotely located in the desert on the Salton Sea, the closure did not stimulate any community planning process similar to the other 21 bases designated for closure in the state. The Navy has maintained the responsibility to covert this base for civilian occupation.

Castle Air Force Base

Key Community Contact: Richard Martin, Executive Director
Castle Joint Powers Authority
2721 Winton Way
P.O. Box 547
Atwater, CA 95301-0547
(209) 357-3370

OEA Project Manager: Colonel Joe Gorman
(703) 695-3492

BRAC Announcement Date: 1991 **Realignment:** 1995

Labor Force: *Civilian* 1,164 *Military* 5,239

Jurisdiction(s) encompassing the base: Merced County and the City of Atwater

Note: A corner of the base is in the City of Atwater, including the Air Museum and the Hospital. The single-family housing is also in the city.

Type and Structure of Reuse Planning Authority:

The reuse organization for Castle is the *Castle Joint Powers Authority*, made up of the cities of Atwater and Merced and Merced County. Immediately after the pending closure was announced, the three jurisdictions came together and formed *Castle 2000* to save the base; after official announcement of the closure was made, the three governments formed the Joint Powers Authority, developed bylaws, and started work. The JPA is governed by a Board made up of two city council representatives from each of the two cities, and two County Supervisors, as well as the ex-officio membership of the Congressman from the area— Gary A. Condit. Thirteen community task forces were formed to generate local input around the issues of aviation, recreation/youth, minority issues, Chamber/tourism, nonprofits, environment, agriculture, real estate/housing, professional, manpower/training, business and industry, education, and military retirees.

There was a history of cooperation around Castle AFB. In 1989 the Merced County Association of Governments completed a comprehensive land use plan that would protect areas near the base against non-compatible land uses and protect the ability of the base to function as an airport without exposing the public to harm from aircraft noise and airport-related hazards, and to ensure that structures did not affect navigable airspace.

Funding Sources:

OEA:	\$435,000 in 1993-4
FAA	\$115,000
Local match	\$253,000

Problems with Funding: Funding for planning and organizational support is adequate at present. However, the Joint Powers Authority foresees great fiscal challenge through the closure and transition period. Major infrastructure projects, such as replacement of the gas distribution system, may be required. Additionally, airport capital projects and operating expenses will be difficult to fund in the early years before revenue streams develop.

Consultants Retained:

Coffman Associates, Phoenix
EDAW Inc., In association with
Economics Research Associates
Larsen Ohlinger and Homes INC
John E. Lynch
Ted K. Bradshaw, through Merced Office of Economic Development

Reuse Process:

The JPA contracted with EDAW Inc to prepare the reuse plan. A Draft Preliminary Reuse Plan was completed in November 1992 and is currently in the process of being elaborated and completed as a final reuse plan. The preliminary plan's preferred alternative is for emphasis on aircraft maintenance and training with mixed-use of the facilities. The plan assumed that the site would be too large for single-use, and thus a range of local and national organizations, both public and private, could be attracted for both manufacturing and commercial uses. Light industry could be attracted to industrial parks, and base facilities could be used for public benefit, including the hospital, chapel, recreation facilities, and daycare centers. Another option would be to use the facility for educational activities, including a university or Job Corps center. An agricultural research park is also considered. The JPA is currently negotiating with a number of potential users who expressed interest in reusing the base facilities. One potential large user has been identified, Pegasus Technologies Inc., which has proposed using base facilities for detecting composite fatigue in commercial aircraft. However, this is a new technology. The base has entered into two small leases already to use base facilities. One firm ships Ragu tomato paste, warehousing it on base and then loading it on trains. The second lease is with Pegasus for some office space (one-year lease).

Innovative Procedures:

Castle has benefited from strong unified local leadership. The JPA has built good public support and has been a venue for cooperation. In addition, other efforts in Merced County have supported the JPA's efforts, including several grants received by the Merced County Department of Economic and Strategic Planning, the community and economic development department of the county, which received a grant from the California Department of Commerce (now Trade and Commerce Agency) Sudden and Severe Economically Distressed program. The grant provided the funds to conduct an impact study to estimate job and economic loss, and local response to base closure. In addition, the Department received a grant from the Department of Labor to assist local communities with their economic response planning. The Joint Powers Authority is pursuing other options, such as certification as a LAMBRA zone.

Fort Ord

Key Community Contact: Joseph Cavanaugh, Coordinator
Fort Ord Reuse Group
445 Reservation Road, Suite E
Marina, California 93933
(408) 384-0605

OEA Project Manager: Patrick O'Brien
(703) 697-3022

BRAC Announcement Date: 1991 **Closure Date:** 1995

Labor Force: *Civilian* 2,835 *Military* 13,619

Jurisdiction(s) encompassing the base: Monterey County, Cities of Seaside and Marina

Type and Structure of Reuse Planning Authority:

Fort Ord Community Task Force – Local Congressman Panetta responded to the closure announcement by establishing the FOCTF. Along with the Congressman who chaired the task force, state legislators, county supervisors, all of the county's mayors, and two retired military personnel comprised the 21 member task force. The task force maintained seven advisory groups that incorporated broad community involvement. The FOCTF developed a strategy for the reuse of Fort Ord in June of 1992.

Based on the work of the task force, the *Fort Ord Reuse Group* was formed in October of 1992 to create an initial reuse plan. This group was formed after it was realized a formal planning body could not be formed, given the many jurisdictions involved in the planning process. This group is presently comprised of Monterey County and the Cities of Marina, Seaside, Del Rey Oaks, Sand City, Monterey, and Salinas. The FORG planning process operates on a three-tiered system with the elected officials as the decision making body and a working group comprised of city staffs. Coordinating between these two layers is a managerial level consisting of city and county administrators. The project coordinator orchestrates the process.

Funding Sources:

OEA: \$200,000 for FOCTF staffing, housing market analysis and reuse plan development in January of 1992.
OEA: \$1.2 million in 1993 to continue reuse planning along with a habitat mitigation operations plan, GIS planning and a health services study.
EDA: \$50,000 EDA grant (1991) for an initial economic impact analysis.
\$1.5 million (1993) for infrastructure planning and an economic development analysis.
1994 DoD \$5 million – Monterey Institute of International Studies
Appropriations: \$15 million – California State University System
CDBG: \$210,000 (1993) for OEA and EDA match.
TCA: \$200,000 (1993) match: \$100,000 for EDA and \$100,000 OEA

Problems with Funding: None

Consultants Retained:

Sedway and Associates	Housing Analysis
Williams-Kuebelbeck and Associates	Economic Adjustment Plan (Seaside and Marina)
RKG and Associates	Economic Impact Analysis
Zanders and Associates	Biological Consultant
Reimer and Associates	Infrastructure
Angus McDonald	Financial
UCSC	Economic Development
Kuhn and Grimm	Impact Analysis
P & D Technologies	Airport

Reuse Process:

The Fort Ord community has established solid reuse options and is in the process of implementing these concepts through a reuse plan. A preliminary draft of the *Summary of Base Reuse Plan* was released on January 14, 1994. A habitat management plan and an infrastructure plan will be released in June 1994. The reuse plan contained three strategic goals, (1) environmental protection; (2) economic development; and (3) education. Highlights of the reuse plan include:

- 16,000 acres for natural preserves and habitat management
- 2,400 acres for University uses (California State University System and University of California at Santa Cruz)
- 2,000 acres for an Army enclave
- 3,000 acres for private business development

Innovative Procedures:

The multiple jurisdictional nature of the Fort Ord planning process has initiated state legislation by Senator Mello. Senate Bill 899 authorizes the formation of specified agencies (Monterey County, Cities of Seaside, Marina, Del Rey Oaks, Monterey, Sand City, Salinas, Carmel, and Pacific Grove) to establish a Fort Ord Reuse Authority to prepare, adopt, implement, and finance a plan for the future use of the territory occupied by the Fort Ord military base in Monterey County. This is the first of such legislation by the state government to develop a reuse planning authority.

Hunter's Point Annex

Key Community Contact: Larry Florin, Manager
Base Conversion
San Francisco Redevelopment Agency
770 Golden Gate Avenue
San Francisco, CA 94120
(415) 749-2532

OEA Project Manager: Anthony Gallegos
(916) 557-7365

BRAC Announcement Date: 1991 **Closure Date:** Closed

Labor Force: *Civilian* 63 *Military* 5

Jurisdiction(s) encompassing the base: City and County of San Francisco

Type and Structure of Reuse Planning Authority:

In 1989 legislation was initiated by Congresswoman Pelosi to provide the City of San Francisco with the first right of refusal of the base when it was designated for closure. When the base was slated for closure, the San Francisco Redevelopment agency took the lead agency administering the reuse planning process of Hunter's Point Naval Shipyard. A citizen's advisory body known as the *Hunter's Point Shipyard Reuse Advisory Committee* was created by the Mayor. This body, consisting of 27 members from the City, will work in conjunction with the Redevelopment Agency and the San Francisco City Planning Department to develop a reuse plan for the base. The County Board of Supervisors has a Select Committee on Base Closures which will also be involved in the planning process. This body was created to assist the redevelopment of the Presidio, Hunter's Point, and Treasure Island.

Funding Sources:

None to date. The City is applying for \$1.5 million from the Office of Economic Adjustment and \$700,000 from the Economic Development Administration to fund the planning efforts at Treasure Island and Hunter's Point. The Redevelopment Agency is in the process of issuing a RFP for a community facilitator. This will be a \$60,000 contract with funding provided the Redevelopment Agency.

Problems with Funding: None to date

Consultants Retained:

EIP Environmental

Reuse Process:

The City is developing reuse options and has not defined any solid options at this point.

Innovative Procedures:

The City is developing a non-profit corporation to assist with the interim management of the base.

Long Beach Naval Station

Key Community Contact: Gerald R. Miller, Manager, Economic Development Bureau
Business Development Center
200 Pine Avenue, 4th Floor
Long Beach, CA 90802
(310) 570-3851

OEA Project Manager: Bryant Monroe
(703) 695-1802

BRAC Announcement Date: 1991 **Closure Date:** 1996

Labor Force: *Civilian* 833 *Military* 9,519

Jurisdiction(s) encompassing the base: City of Long Beach

Type and Structure of Reuse Planning Authority:

Naval Properties Re-Use Committee – This Committee was formed by the Long Beach Economic Development Commission, and its members are selected from this body. The Economic Development Commission was an existing information body that formed the Re-Use Committee to assist the city in its planning efforts.

Funding Sources:

To date, the City of Long Beach has received no federal funding. The City estimates that it has spent approximately \$1.0 million on the reuse planning effort. These funds have been derived from the Long Beach general fund and the Port of Long Beach. The City has submitted a grant request to the Office of Economic Adjustment for \$650,000.

Problems with Funding: No comment

Consultants Retained:

Terranomics and Retail Services	Retail Analysis
Keyser and Marsten	Economic Analysis
Kenneth Leventhal and Co.	Accounting
Vickerman, Zachary and Miller	Port Planning
Dames and Moore	Engineering

Reuse Process:

The City has defined its reuse options to be as follows:

- Retail Center
- California State University, Long Beach Research and Training Center
- Grand Prix Race Circuit
- High School and Middle School
- Expand Cargo capacity at the Port of Long Beach

Innovative Procedures:

The Long Beach Economic Development Commission was the lead agency in the reuse planning process.

Innovative Procedures:

Since the impacts of base reuse and disposal are subject to both NEPA and CEQA requirements, the city has prepared a Reuse Plan/Specific Plan with a combined EIS/EIR. As stated in Christine Shingleton's presentation to the Military Base Reuse Task Force, "the specific plan and joint environmental impact statement and report (EIS/EIS) will provide the necessary development regulations and environmental documentation so that any development proposal in conformance with the plan may proceed without a requirement for new or additional environmental documentation, representing a time savings of approximately 3-5 years in the Orange County development arena."

Reuse Process:

The city is generating reuse alternatives and developing a strategic plan. Through this process, the City has outlined its goals for consultant services on a Comprehensive Reuse Plan. They are as follows:

- Development consistent with Industrial General Plan Designation
- Development consistent with Heavy Commercial General Plan Designation
- Development consistent with the existing area
- Industrial Commercial-Office "Employment Center" development

Innovative Procedures:

The 130-member reuse Commission is comprehensive in its membership, along with maintaining an efficient structure which promotes timely and effective reuse planning.

Mare Island Naval Shipyard

Key Community Contact: Alvaro da Silva, Community Development Director
City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590
(707) 648-4579
Craig Whittom, Economic Development Specialist
(707) 648-4444

OEA Project Manager: Tony Gallegos
(916) 557-7365

BRAC Announcement Date: 1993 **Closure Date:** 1996

Labor Force: *Civilian* 5,726 *Military* 1,255

Jurisdiction(s) encompassing the base: City of Vallejo

Type and Structure of Reuse Planning Authority:

Mare Island Futures Project (MIFP): The city of Vallejo created the MIFP, consisting of two planning groups – the Mare Island Futures Work Group and the Mare Island Futures Legislative Committee. The Mayor is the chairperson of each group. The Legislative Committee has representation from local, state, and federal elected officials. Its mission is to ensure that federal, state, and local legislative issues are addressed in a timely and effective manner. The Work Group has the responsibility for the development of a reuse plan for Mare Island. This group consists of city and county elected officials, education representatives, labor representatives, planners and designers, and business leaders. Six resource groups were formed to advise the Work Group. These groups are staffed by the City of Vallejo.

Funding Sources:

OEA: \$596,000 for November 1993 to October 1994 as part of a \$3.5 million, five-year commitment to the city
EDA: The MIFP expects to apply by the Spring of 1994
DOL: Submitted a \$8.0 million DDP application
City of Vallejo: \$207,000 city funds for December 1993 to June 1994

1994 DoD Appropriations:

\$750,000 – San Francisco State University California Economic Recovery and Environmental Restoration Project (not Mare Island- specific)
\$250,000 – Shipyard Conversion/Reuse Study
\$2.5 million – Mare Island Worker Retraining for Environmental Restoration

Problems with Funding:

The city is concerned about obtaining the 1994 Appropriations. To date, there is no mechanism to distribute this funding.

Consultants Retained:

Harder Kibbe
Urban Land Institute
EDAW

Human Services
Conceptual Plan Assistance
Infrastructure, Land Use, Transportation

The city is in the process of soliciting proposals for a consultant team to conduct market feasibility and fiscal studies.

Reuse Process:

The MIFP has developed a conceptual plan with future land use designations for the reuse of Mare Island, but solid reuse candidates have not been determined. ULI made strong recommendations against promoting the ship repair and building industry. Industrial manufacturing, a vocational campus, housing, and extensive open space were encouraged.

Innovative Procedures:

The Mare Island Community wants to create a model of successful timely conversion and capitalize on every opportunity to generate new employment. In turn, the MIFP has developed an ambitious timeline of developing a final reuse plan by June of 1994.

Marine Corps Air Station, El Toro

Key Community Contact: Ernie Schneider, County Administrative Officer
Orange County
10 Civic Center Plaza
P.O. Box 2041
Santa Ana, CA 92709
(714) 834-6200
Jack Wagner, Senior Staff Analyst,
County Administrator's Office
(714) 834-6758

OEA Project Manager: CAPT Dave Larson
(703) 614-8529

BRAC Announcement Date: 1993 **Closure Date:** 1999

Labor Force: *Civilian* 979 *Military* 5,689

Jurisdiction(s) encompassing the base: County of Orange (95 percent) and City of Irvine (5 percent)

Note: The City of Lake Forest abuts the base.

Type and Structure of Reuse Planning Authority:

El Toro Reuse Planning Authority – A three-tiered reuse planning body has been established. The County of Orange and the Cities of Irvine and Lake Forest have formed the core body through a nine-member board of directors. This board is comprised of five county supervisors, three Irvine city council members, and one city council representative from Lake Forest. There is a 50-member Executive Council with representatives from each city within Orange County, unincorporated areas of Orange County, Orange County, business, and higher education representatives. Finally, there are advisory committees that have yet to be formed.

Funding Sources:

None to date. The ETRPA has issued a Request for Qualifications for a consultant to write an OEA grant for the region's planning activities. The community is also applying for an FAA grant for a feasibility study of civilian aviation uses.

Problems with Funding: None

Consultants Retained: None

Reuse Process: The community has just finalized organizing its planning process.

Innovative Procedures: None

East Bay Bases:

**Alameda Naval Air Station, Alameda Naval Depot, Oak Knoll Hospital,
Naval Public Works Center**

Key Community Contact: Carl Anthony, Chair/Principle Administrative Officer
East Bay Conversion and Reinvestment Commission
530 Water Street, 5th Floor
Oakland, CA 94607
(510) 834-6928
Bill Tuohy, Project Director

Don Parker, Base Conversion Director
Alameda Base Reuse Advisory Group
Naval Air Station, Postal Directory, Bldg. 90
Alameda, CA 94501
(510) 263-2870

Viola Gonzales, Policy Advisor for the Mayor of Oakland
Oakland Base Closure/Conversion Task Force
505 14th Street, #411
Oakland, CA 94612
(510) 238-3141

Note: The East Bay Conversion and Reinvestment Commission was established through a Department of Defense – Office of Economic Adjustment Pilot Program in the 1993 Defense Budget. This is a regional body that controls the funding for the local planning efforts initiated in the cities of Alameda and Oakland.

OEA Project Manager: David MacKinnon
(703) 614-4656

ALAMEDA NAVAL AIR STATION

BRAC Announcement Date:	1993	Closure Date:	1997
Labor Force: <i>Civilian</i>	566	<i>Military</i>	10,586

Jurisdiction(s) encompassing the base: City of Alameda

ALAMEDA NAVAL AVIATION DEPOT

BRAC Announcement Date:	1993	Closure Date:	1997
Labor Force: <i>Civilian</i>	2,672	<i>Military</i>	376

Jurisdiction(s) encompassing the base: City of Alameda

OAK KNOLL HOSPITAL

BRAC Announcement Date:	1993	Closure Date:	1997
Labor Force: <i>Civilian</i>	809	<i>Military</i>	1,472

Jurisdiction(s) encompassing the base: City of Oakland

NAVAL PUBLIC WORKS CENTER

BRAC Announcement Date:	1993	Closure Date:	1997
Labor Force: <i>Civilian</i>	1,834	<i>Military</i>	10

Jurisdiction(s) encompassing the base: City of Oakland

Type and Structure of Reuse Planning Authority:

East Bay Conversion and Reinvestment Commission— The EBCRC was initially formed to implement a Pilot Project on Defense Conversion for Alameda County. The 1993 Defense Authorization Act directed the Department of Defense to develop and test new approaches of community adjustment programs in four regions throughout the United States where the local economy would be significantly affected by layoffs by defense contractors, changes in the use of a national laboratory previously needed for the testing of nuclear weapons, and/or the closure of a military installation. Since Alameda County is impacted by multiple base closures and the downsizing of a National Laboratory, it was selected as one of the four Pilot Project areas. This Pilot Project will develop and test methods of innovative economic adjustment and diversification in Alameda County. The project was initiated in June 1993 and will be completed in December 1994.

In conjunction with the innovative Pilot Program activities, the EBCRC will oversee the conversion processes that are transpiring in Alameda County. The EBCRC will administer the funding for the local reuse planning processes in the cities of Alameda and Oakland.

The EBCRC is comprised of 35 Commissioners, each representing various stakeholders in Alameda County. Broad categories of membership include: Congressman Dellums' office, State Assembly members, county supervisors, mayors of the affected cities, national laboratories, education institutions, labor, community groups, ethnic communities, and business leaders. Congressman Dellums picked the original members and the Commission expanded its membership to its present size. In addition to the Commission, there are 10 committees that will perform a majority of the Commission's objectives.

The *Alameda Base Reuse Advisory Group* (BRAG) was formed by the Alameda City Council in the Fall of 1993 as an advisory group to assist the conversion of the Naval Air Station and the Naval Depot within the city's jurisdiction. Eleven core members were appointed by the City Council. Each of these members chair one of 11 sub-committees. The total membership of the planning body is estimated at 200 persons.

The Oakland City Council created the *Oakland Base Closure/Conversion Task Force* (OBC/CTF) through City Council action in the Winter of 1993. This body is comprised of 30 members, each appointed by

the City Council, with three sub-committees. The Mayor of Oakland, two Council members (OBC/CTF co-chairs), the three sub-committee chairpersons, and the Economic Development Director comprise the seven-person executive committee. The Task Force will act as the City's local response to base closure and related issues to ensure that Oakland's interests are served in the regional planning effort which is being undertaken by the EBCRC.

Funding Sources:

The East Bay Conversion and Reinvestment Commission is the funding liaison for the County's defense conversion activities. The OEA has recognized this entity as the single point of contact for Alameda County. In turn, funding for the BRAG and OBC/CTF is filtered through the EBCRC.

The EBCRC received \$500,000 from the OEA to implement the 18-month Pilot Program in June 1993. This was supplemented with an additional \$1.0 million in 1994. This money will be used to create and test innovative defense conversion strategies solely through the Commission's work. In addition to the \$1.5 million, Alameda County will receive at least \$3.5 million over the next five years from the OEA for defense conversion planning. \$400,000 has already been allocated to the EBCRC for the reuse planning aspects of its work. This money will be distributed to the Alameda and Oakland planning organizations through requests to the Commission.

The Alameda City Council appropriated approximately \$950,000 of its municipal budget to fund the City's conversion planning efforts. The City has also made a request to the Office of Economic Adjustment for \$1.5 million for planning efforts and is evaluating funding opportunities from the Department of Commerce.

Problems with Funding: None

Consultants Retained:

Bay Area Economics with the Center for Economic Conversion and Mason Tillman Associates— This consulting team was retained by the EBCRC to create a Scoping Report for the Pilot Project. This report, published in November 1993, detailed 37 activities that were crucial to fulfilling the Commission's mandate and included an implementation schedule for these activities. Based on this report, 13 RFPs were released for consultant assistance to conduct the activities designated in the scoping report. These RFPs included: Project Monitor, Data/Library, Legal Research, WBE/MBE New Access, Environmental, Fiscal/Finance, Supplier Survey, Jobs and Technology, Homeless Services, Land Use and Facilities, Public Involvement, Regional Transportation, and Airport Reuse. The RFPs were due on January 28, 1994. Consultants will be selected by March 1994 and the work will be completed by August 1994.

The City of Alameda has retained Towill, a mapping and database consultant, to inventory the facilities at the Naval Station.

Reuse Process:

The Alameda County Community is in the process of generating reuse alternatives. No solid options have been determined at this time. The Commission has endorsed the Alameda Center for Environmental Technologies. This project, in its conceptual stages, will attempt to develop an environmental industry in Alameda County at the Navy facility.

The Alameda BRAG group is evaluating both small individual tenants and larger projects such as Science City. The Science City project proposed to develop the entire Navy base as a high-tech city to commercialize the technologies developed at the neighboring national laboratories.

No uses have been proposed for the Oak Knoll Naval Hospital or the Public Works Center.

Innovative Procedures:

The planning structure developed around the EBCRC presents a unique regional planning consortium. Principles of cooperation must be developed between the two cities that retain land use control over the respective facilities and the Commission that controls the funding for reuse planning.

San Diego Naval Training Center

Key Community Contact: Dan McAllister, Mayor Susan Golding's Office
200 C Street, 11th Floor
San Diego, CA 92101
(619) 236-7747
Michael Stepner, City Planner, City of San Diego

OEA Project Manager: Patrick O'Brien
(703) 697-3022

BRAC Announcement Date: 1993 **Closure Date:** 1998

Labor Force: *Civilian* 402 *Military* 5,186

Jurisdiction(s) encompassing the base: City of San Diego

Type and Structure of Reuse Planning Authority:

San Diego Naval Training Center Reuse Planning Committee— This Committee was established and presently chaired by San Diego Mayor Susan Golding in November 1993. It includes 25 members from the greater San Diego area, who were appointed by the Mayor. Other members include the 49th District Congressional Representative, City Council Representative, Commander of the Naval Training Center, San Diego State University Representative, business leaders, and civic representatives.

Funding Sources:

To date, the City of San Diego has not received any funding from federal or state sources. The City is negotiating a \$1.0 million grant with the OEA to fund its reuse planning process.

Problems with Funding: None

Consultants Retained: None

Reuse Process:

The planning Committee is in the process of getting itself up to speed on the base conversion process and the NTC facility. The Committee is still in the information-gathering process.

Innovative Procedures: None to Date

Treasure Island

Key Community Contact: Larry Florin, Manager
Base Conversion
San Francisco Redevelopment Agency
770 Golden Gate Avenue
San Francisco, CA 94120
(415) 749-2532

OEA Project Manager: Anthony Gallegos
(916) 557-7365

BRAC Announcement Date: 1993 **Closure Date:** 1999

Labor Force: *Civilian* 454 *Military* 637

Jurisdiction(s) encompassing the base: City and County of San Francisco

Type and Structure of Reuse Planning Authority:

The San Francisco Redevelopment agency is the lead agency administering the reuse planning process of Treasure Island. No formal reuse advisory body has been organized at this time. A citizen's advisory body (similar to the one at Hunter's Point) will soon be established. This body will work in conjunction with the Redevelopment Agency and the San Francisco City Planning Department to develop a reuse plan for the base. The County Board of Supervisors has a Select Committee on Base Closures which will also be involved in the planning process. This body was created to assist the redevelopment of the Presidio, Hunter's Point, and Treasure Island.

Funding Sources:

None to date. The City is applying for \$1.5 million from the Office of Economic Adjustment and \$700,000 from the Economic Development Administration to fund the planning efforts at Treasure Island and Hunter's Point.

Problems with Funding: None to date

Consultants Retained: None

Reuse Process:

The City is still organizing its planning process and has not identified any reuse options.

Innovative Procedures: None to Date

APPENDIX C

**RESEARCH AND TRAINING ACTIVITIES
AT UNIVERSITIES AND RESEARCH INSTITUTIONS**

CALIFORNIA STATE UNIVERSITY CAMPUSES – SOME EXAMPLES

Organization: Institute for Economic and Environmental Studies
Address: California State University at Fullerton (CSUF)
Fullerton, CA 92634
Respondent: Anil Puri, Institute Director and Chair, Department of Economics
Phone: (714) 773-2509 **FAX:** (714) 773-3097

Research Topic:

Puri has conducted studies of the impacts of defense spending cuts on the Orange County economy. He has been asked by Orange County to extend some of this research as part of their defense recovery planning effort.

Funding Source:

Funding for earlier research came from CSFU internal funds. Funding for the more recently proposed research comes from an OEA grant to Orange County.

Timing: 1994

Other Contacts: Social Science Research Center, (714) 773-3185

Scope of Research:

Earlier research consisted of two efforts, an analysis of the impacts of the El Toro base closure on Orange County, using an input-output model, and an analysis of the impacts of defense contract levels since 1987-88 on different industrial sectors and on income and employment in Orange County. The industrial sector analysis also is based on an input-output model.

Research commencing this year will be an analysis based on a longer, 20-year period of defense contracts in Orange County. The research involves identifying prime contracts awarded to Orange County, comparing the county with the state level of contracts and other counties, and isolating contracts by SIC codes. Input-output modelling and econometric models will be used to estimate the level of impact on the county of different contract levels./ Interviews with prime contractors will be used to refine the results of the modelling efforts.

Another research center at CSUF, the Social Science Research Center, will create a database on prime contractors and subcontractors and will conduct a survey for Orange County of their responses to changes in funding levels from the Department of Defense.

Coordination Opportunities:

The research is being coordinated within Orange County only. However, the CSUF researchers are willing to coordinate work with state efforts, and to share lists of respondents, interview questions, and survey forms.

Date: 3/25/94

Organization: San Diego State University Foundation
Address: San Diego State University
San Diego, CA 92192
Respondent: Daniel Leonard
Phone: (619) 594-4524 **FAX:** (619) 582-9164

Project:

The Defense Conversion Center is a consortium of universities, directed out of the San Diego State University Foundation offices, that applies university resources to several types of defense cut recovery efforts. Proposed efforts are primarily related to employment retraining; the project will also produce an information clearinghouse for base reuse.

Funding Source:

The center has been established through a \$7 million congressional appropriation. The funding will be distributed through the Department of Defense.

Timing:

The bulk of the effort will be expended during 1994 and 1995, after which many of the programs may be incorporated into the regular framework of the university system.

Other Contacts:

Roger Caves, Professor of City Planning in the School of Public Administration and Urban Studies at SDSU, heads the information clearinghouse activity. Phone: (619) 594-6472; FAX: (619) 594-1358.

Scope of Effort:

1. Retraining Program

The bulk of the funding will support facilities and programs for the retraining of workers with education below the doctoral level. The focus is on retraining workers to industries that are growing in the San Diego area and in other parts of the state. Programs will be developed in biotechnology, three areas of engineering (telecommunications, material engineering, and engineering computer skills), and the health sciences (in particular, public health). Courses of study will last up to 15 months. Pilot program classes will be small – 15 to 20 people – with classes expanding to about 100 in subsequent phases. Pilot classes will be offered in San Diego, but interactive television will allow the program to expand to other parts of the state in later phases. In addition to classroom work, enrollees will gain experience working as interns for nearby companies. The project will follow the progress of the initial enrollees as they move into internships and become available for permanent employment.

2. University Consortium and Information Clearinghouse

The proposal also includes the establishment of a consortium of state university and University of California campuses. The consortium will participate in developing a database to serve as a clearinghouse on base reuse activities. Other anticipated activities include case studies of closures or realignments, pilot surveys of community attitudes and citizen perceptions, out-of-state experiences with closures, business and industry surveys, community forums, economic development assistance, monitoring of reuse activities, and establishing a statewide advisory board. These aspects of the project are in the formative stage. The individual university campuses will make proposals for small projects to the SDSU Foundation as the funding becomes available.

Date: 4/25/94

Organization: Department of Economics
Address: San Diego State University
San Diego, CA 92182
Respondent: Dr. Norris Clement, Professor
Phone: (619) 594-5860 **FAX:** (619) 594-5062

Research Topic:

An analysis of defense-related interindustry interregional flows for the San Diego/Tijuana region. This is part of a larger, collaborative project that is developing a set of integrated interregional economic models for policy analysis in the San Diego/Baja California region.

Funding Source:

The modelling effort is supported by a consortium consisting of the City of San Diego, San Diego Gas and Electric Company (SDG&E), the San Diego Association of Governments (SANDAG), and San Diego State University (SDSU). Initial efforts have been funded by SDG&E. SANDAG will be adding additional funding soon, and the City has applied to the Department of Defense, Office of Economic Adjustment (OEA), for further funding of the defense portion of the project.

Timing: Databases will be compiled by late 1994 or early 1995; models will be running by mid-1995.

Other Contacts:

Matthew B. Herndon, San Diego Gas & Electric Co., (619) 696-4046
Eduardo Zepeda, Department of Economic Studies, El Colegio de la Frontera Norte, Rosarito, BC, (526) 613-3535

Scope of Research:

The goal of the larger study is to integrate several different regional models of San Diego, Baja California, and the larger southern California area for the purpose of policy analysis. The San Diego model will build on existing input/output (I-O) models but will use surveys to refine the model parameters where the estimates are inconsistent among the different I-O models. The San Diego model will be constructed in consultation with university and planning groups in other parts of southern California, to ensure that the model produced is compatible with existing or to-be-developed models of other parts of southern California. The San Diego model will then serve as a prototype for other areas. The Baja California model is being developed concurrently with the San Diego model, although with a longer time frame.

Surveys of about 1,000 firms will be used to refine the parameters of existing models of the area and to refine the understanding of linkages among regions. Model refinements will also be made based on the findings of a separately funded SDSU study of small defense contractors and subcontractors (see summary of John Weeks' project).

Econometric equations will be used to link together models of different subareas within the southern California border region (i.e. the models for San Diego, Baja California, and other southern California areas). The models will be of use for both impact analysis and forecasting.

The goal of the defense industry portion of the analysis is to construct an analytical framework to be used to analyze impacts of past defense cutbacks and future conversion efforts as they ripple through the San Diego region itself, Baja California, and the entire southern California region.

Coordination Opportunities:

This modeling effort is designed to fit into a more extensive effort to identify economic structure and linkages in other parts of the southern California/Baja California border region. Results of a city-sponsored study of small defense contractors and subcontractors, conducted by the SDSU geography department, will also be incorporated into the parameter estimates.

Date: 3/24/94

Organization: Department of Geography
Address: San Diego State University
San Diego, California 92182
Respondent: Dr. John R. Weeks, Professor of Geography and Director, International
Population Center
Phone: (619) 594-8040 **FAX:** (619) 594-4938

Research Topic:

Proposal for a survey of small prime contractors and subcontractors dependent on defense work. This is a follow-up to a study of large defense prime contractors within the city conducted by the City of San Diego and the Private Industry Council. The survey will examine how defense cuts are affecting smaller contractors and subcontractors and their needs in adjusting to changing levels of funding.

Funding Source: Proposal has been submitted to OEA.

Timing:

Funding may begin as early as April 1994, with the project lasting for eight months. A first-phase pilot study of the east county area will be completed in the first four months of the project.

Scope of Research:

1. The project will establish a database of small defense-related firms within San Diego County. Firms will be identified through EDD lists by SIC code, from procurement lists from DOD, and from published directories.
2. In-depth interviews will be conducted on a random sample of 200 firms. Questions will focus on:
 - a. The importance of defense work to the firm.
 - b. The product or service offered.
 - c. Expectations for future defense work.
 - d. Adjustments being made to changing contract levels.
 - e. Capitalization needed for new dual use/commercial products.
 - f. Sources of capital.
 - g. The market for the product.
 - h. Whether the firm has a marketing plan.

Coordination Opportunities:

The project will produce a prototype methodology that can be adapted for use in other regions. The San Diego team has discussed the possibility with OEA, Trade and Commerce and several counties of integrating this research into a larger multi-county effort, including Los Angeles, Ventura, and Orange counties in southern California and possibly Santa Clara County in northern California.

Date: 3/23/94

Organization: Career/Pro
Address: The Urban Institute
San Francisco State University (SFSU)
1600 Holloway Ave.
Administration Building 556
San Francisco, CA 94132
Respondent: Gilbert Robinson
Phone: (415) 338-6419 **FAX:** (415) 338-0587

Activities: Employment training, research, and partnership building.

Funding Sources:

Defense recovery activities have been funded by SFSU and California State University funds and by small grants from the William and Flora Hewlett Foundation and the Levi Strauss Foundation. Further funding has been earmarked by Congress for expansion of these efforts.

Timing: Ongoing

Scope of Work:

Career/Pro was originally established as an environmental technology training program. It has since expanded into a variety of other activities, several of which involve responding to the impacts of defense budget cuts. They are helping to guide the service delivery process in the Mare Island closure. The chair of their counseling department is directing graduate students and working with Solano and Napa County PICs on a demonstration program for transition assistance. In other partnership-building efforts, they have worked with community colleges to bring specific training programs to base closure sites. For example, one program involves environmental technology training for the Hunters Point community, to provide trained local workers for environmental clean-up tasks. This effort also includes workshops to provide information and training on base closures, job impacts, and the environment.

Career/Pro is also involved in related research. With other academic institutions in the Bay Area, they are conducting a small survey of environmental technology firms. They are working with EDD on their information-gathering process, to encourage data collection to help track changing employment demand and labor force supply. In addition to research activities, Career/Pro has helped to draft legislation. For example, they contributed to the drafting of a bill that allocated \$20 million to the Department of Defense to be distributed for retraining purposes.

Coordination Opportunities:

Career/Pro is interested in and active in regionwide collaborations.

Date: 5/5/94

UNIVERSITY OF CALIFORNIA SYSTEM – SOME EXAMPLES

Organization: Anderson Graduate School of Management
Address: University of California at Los Angeles
405 Hilgard Ave.
Los Angeles, CA 90024-1481
Respondent: Chris Erickson, Assistant Professor
Phone: (310) 825-1697 **FAX:** (310) 206-2002

Research Topic:

Erickson has done published work on the bargaining relationship between aerospace workers and companies. He is now seeking funding (with Paul Ong of the Graduate School of Architecture and Urban Planning) for a study of the experience of displaced aerospace workers and the institutional responses to worker displacement.

Funding Source: Private foundation

Timing: If funding is received, the work would take place in 1994 and 1995.

Scope of Research:

The research would involve statistical analysis, using EDD data, and case study work based on key informant interviews. The statistical analysis would use EDD data to examine the displacement and reemployment history of aerospace workers. Case study work would involve interviews at companies (primarily prime contractors), of workers, of union officials, and of government institutions.

Coordination Opportunities:

If the state is also interested in this type of research, this project may lend itself to coordination of interview activity in terms of companies and groups contacted and questions asked.

Related Research:

Erickson's work on labor relations in the aerospace industry is published in "Wage Rule Formation in the Aerospace Industry," *Industrial and Labor Relations Review*, Volume 45, No. 3, pp. 507-522, April 1992, and will also appear as a chapter in a research volume published by the Industrial Relations Research Association entitled *Collective Bargaining in Private Industry*.

Date: 3/8/94

Organization: Berkeley Roundtable on the International Economy (BRIE)
Address: 2234 Piedmont
University of California at Berkeley
Berkeley, CA 94720
Respondent: Stephen Cohen, Professor, Department of City and Regional Planning
Phone: (510) 642-2808, (510) 642-3067 **FAX:** (510) 643-6617

Research Topic:

BRIE has a long-term interest in research on military conversion. The organization also conducts ongoing research on competitiveness and on telecommunications and their use, and it monitors the electronics industry.

Funding Source:

BRIE's funding sources are primarily national foundations. They have worked with the Department of Energy and the Department of Commerce on questions related to military conversion.

Timing: Ongoing; no specific contract dates.

Scope of Research:

In the area of military conversion, work is primarily in the form of consultation and advice rather than research reports, although one analytic piece was published in fall 1993 on the importance of defense spending to the California economy (Stephen S. Cohen, Clara Eugenia Garcia, and Oscar Loureiro, *From Boom to Bust in the Golden State: The Structural Dimension of California's Prolonged Recession*, BRIE Working Paper 64, University of California at Berkeley, September 1993). At the national level, they consult on the conversion of major military facilities such as the national labs, and on the conversion of technical capabilities and human resources. They also focus on the overall California economy, from a structural viewpoint.

Coordination Opportunities:

Beyond work specifically focussed on defense conversion, BRIE also conducts research on industries that have formed part of California's strength in the past, such as electronics and telecommunications. This research would be very relevant to state planning efforts on recovery strategies.

Date: 3/8/94

Organization: Center for Real Estate and Urban Economics (CREUE)
University of California at Berkeley
Address: 2680A Bancroft Way
Berkeley, CA 94720
Respondent: Cynthia Kroll
Phone: (510) 643-6105 **FAX:** (510) 643-7357

Research Topic:

Impacts of defense spending on the California economy. Characteristics and recovery efforts of defense contractors, subcontractors, and suppliers. Restructuring of the California economy and implications for future growth and development activity.

Funding Source:

Funding for initial research and some future research is through CREUE internal funds. Current research is supported by a grant from the Department of Defense, Office of Economic Adjustment (OEA), through the California Trade and Commerce Agency (TCA).

Timing: Ongoing

Scope of Research:

CREUE tracks trends in the California economy that affect development activity. Since 1992, the Center has focused on impacts of the decline in defense spending on employment levels and real estate markets in the state. Much of the research is summarized in Kroll, *et al.*, *Defense Spending, California Employment and the State's Future*, Working Paper No. 93-218, Center for Real Estate and Urban Economics, University of California at Berkeley, October 1993. CREUE is currently completing a contract for the state Trade and Commerce Agency, of which this report is a part. The contract will be completed in April 1994, and several working papers will result from this effort.

Two additional research activities are in early stages of conceptualization. CREUE may participate in statewide survey efforts of smaller defense-linked firms – subcontractors and suppliers. This research would be funded by TCA, OEA, and the university and would be coordinated with other surveys currently in the planning stages in local areas of the state. CREUE also has a long-term interest in emerging technologies and their relationship to the changing economic structure of the state. Research on this topic is likely to begin in mid-1994 and continue through 1995.

Coordination Opportunities:

CREUE is working with TCA to coordinate research activity throughout the state.

Date: 3/25/94

Organization: Graduate School of Architecture and Urban Planning
University of California at Los Angeles
Address: 1125E Perloff
University of California at Los Angeles
Los Angeles, CA 90024
Respondent: Paul Ong, Associate Professor
Phone: (310) 825-4390 **FAX:** (310) 206-5566

Research Topic:

How best to use administrative data to analyze labor market problems (not only on defense problems).

One PhD student is working specifically on aerospace data, both extending Ong's earlier analysis and doing some political/institutional analysis as well.

Funding Source:

EDD and the Department of Social Services have funded some of his research and has provided the administrative data. Ong and UCLA have contributed time and resources as well.

Timing: Research is ongoing; some is already published or forthcoming in varying sources.

Scope of Research:

Broadly, Ong aims his work at building a capacity for doing ongoing research within state agencies. He observes that many agencies appear to need to "relearn" the use of data with each new question to be studied.

We discuss the findings of Paul Ong's published research on aerospace workers in our literature review (Paul Ong and Janette R. Lawrence, *Time of Crisis: Unemployment in Aerospace Industry*, Graduate School of Urban Planning, University of California at Los Angeles, 1993). Ong's current research is on two topics. The first is a study of South East Asians and welfare; an in-house working paper has been prepared and a write-up will be published in a book appearing in May. The second study is of neighborhood effects of welfare usage; no published material is available on this yet.

Ong has also completed other relevant research projects. The one most relevant to defense recovery is a paper published through UCLA on the history of reemployment of laid-off aerospace workers. Other recent studies include the workforce in the Central Valley (published in a book issued by the Agricultural Issues Center at U.C. Davis) and a study of semiconductor workers (published as articles in *Industrial and Labor Relations Review*, *Industrial Relations*, and a forthcoming issue of *Black Political Economy* edited by Don Mar at the economics department, San Francisco State).

Research by Others:

Ong suggested looking at research by several others including:

Researchers at RAND, who are using EDD data in their research

David Freeman at Pepperdine

Los Angeles Economic Roundtable

UCLA Forecasting Group

Chris Erickson, School of Management, UCLA (he and Ong worked together on other studies);

Erickson is doing work with corporations and unions.

Date: 1-27-94

Organization: Institute of Urban and Regional Development (IURD)
Address: 316 Wurster Hall
University of California at Berkeley
Berkeley, CA 94720
Respondent: Josh Kirschenbaum, Defense Conversion Coordinator
Phone: (510) 642-4874 **FAX:** (510) 643-9728

Project:

Research on base conversion topics and coordination of campus activities related to the Bay Area economic effects of military facilities. Major projects include:

- Coordination activity drawing faculty into the effort to convert the Bay Area economy and military facilities.
- Joint study with the Center for Real Estate and Urban Economics providing background for the state strategic planning effort for recovery from defense cuts.
- A variety of studies of military base conversion experiences in California.

Funding Sources:

Funding for coordination and outreach efforts has been through the Chancellor's office. Research for state strategic planning has been provided by the California Trade and Commerce Agency (TCA) from an OEA grant. The high-tech development feasibility study was supported by the Center for Real Estate and Urban Economics, and the Urban Habitat Program is funding the community development work.

Timing: Ongoing

Scope of Work:

IURD has become a focal point for communities and policymakers to access the University and its resources for defense conversion activity. The goal of this defense conversion effort is to coordinate faculty research in the defense conversion arena, while linking these research interests to the needs of the region.

Through this process the Institute has been actively engaged in three research projects and is assisting the development of other research projects in various departments on- and off-campus. In addition to coordinating on-campus research projects, the Institute maintains the following resources to facilitate the development of future projects:

- An electronic database of campus faculty and their interests and expertise.
- Updates on state and federal legislation that is relevant to defense conversion.
- Documentation of community reuse planning processes and plans in the Bay Area, along with files on major projects and proposals, important articles, and studies.

The Institute publishes a defense conversion newsletter to disseminate relevant information to faculty, researchers, and the community.

Research projects in progress at IURD include:

- Background information for TCA's strategic plan for recovery from defense cuts (with the Center for Real Estate and Urban Economics). The study is based on a literature review, input-output analysis, interviews with local and academic organizations engaged in defense recovery efforts, and initial efforts at policy analysis.
- IURD Co-Director Edward Blakely has completed a study assessing the feasibility of high-tech development options for facilities at the Naval Air Station. This study examines the match between the demand for facilities and land by high-tech enterprises and the supply available through military base conversion.
- The Institute has been contracted by the Earth Island Institute in San Francisco to contribute its geographic information systems capacities to a working paper that will describe base closures in the context of community development for disadvantaged communities, people of color, and affected workers.

The Institute has published a series of three working papers on military base conversion in California, including Working Paper 601, *Sustainable Communities Workshop: A Case Study of Base Conversion—Treasure Island* by Edward Blakely; Working Paper 602, *Which Impact? The Local Impact of Base Closure Needs Closer Examination*, by Ted Bradshaw; and Working Paper 603, *War Games: Evaluating the California Military Base Conversion Process*, by Josh Kirschenbaum and Dwayne Marsh.

Other Research Organizations working with IURD:

- *A Study of Displaced Defense Workers* – The Survey Research Center on the Berkeley Campus has done substantial preparatory work for a long-term study of displaced workers from the bases. This survey will assess strategies followed by workers to get new jobs and the effectiveness of job training and placement centers, and will compare how women and minority workers do in the job market in relation to others.
- *Job Training and the High-Performance Workplace* – Researchers at the Institute of Industrial Relations on campus are developing a program that will establish, along with job training programs, a set of models for high-performance work places where workers will play significant roles in self-management.
- *Food Stamps and the Nutritional Effects on Children of Base Closures* – Professor Sylvia Lane of the Agricultural and Resource Economics department is finalizing a proposal to evaluate the nutritional effects on children of unemployment due to base closures. The study will investigate the use of the Food Stamp Program.

Community Activities

IURD Co-Director Judith Innes serves as U.C. Berkeley's representative to the East Bay Conversion and Reinvestment Commission, established by Congressman Ronald Dellums to oversee conversion efforts in Alameda County. She participated in the design of this Commission, and played a primary role in the design of a pilot innovation project in which the Commission is now engaged. She serves as Chair of the Technical Advisory Committee to the Commission.

Dr. Innes has been advising and assisting the local chapter of the American Institute of Architects (AIA) in its plans to conduct a RUDA/T. This regional workshop would give communities in the Bay Area an opportunity to look at the alternative uses for military facilities in a regional context, avoid wasteful competition, and help identify uses best suited to each of the facilities.

Date: 3/30/94

Organization: Lawrence Livermore National Laboratory (LLNL)
Address: 7000 East Drive, Mail Stop L-156
P.O. Box 808
Livermore, CA 94550
Respondent: Rokaya Al-Ayat, Associate Division Leader
Phone: (510) 422-8467 **FAX:** (510) 422-3013

Research and Planning Topics:

In addition to its federally funded work of national interest for the Department of Energy and Department of Defense, and its cooperative development agreements with companies, LLNL provides assistance to the local region (the San Francisco Bay Area) and other parts of California through a number of different projects. Key topics and programs include:

1. Small business assistance program
2. Base-closure-related programs (e.g. Alameda Center for Environmental Technology, Science City)
3. Technical assistance to regional technology alliances
4. Consortium with Joint Venture Silicon Valley on microelectro-mechanical systems, bringing together users and suppliers.
5. Research on the impact of LLNL on the regional economy (e.g. how to encourage spinoff business development; the effects of the changing mission of the lab and possible changes in size on the regional economy)

Funding Source:

Funding is primarily from the Department of Energy. Additional sources of funding may be needed to expand some of the lab's more successful programs, such as the small business program.

Timing: Ongoing

Scope of Research:

The scope of projects involving LLNL vary widely. The various technical assistance projects are described in more detail in Al-Ayat *et al.*, *The Role of Technology Transfer and High Technologies in California's Economic Recovery*, Berkeley: Institute of Urban and Regional Development and Center for Real Estate and Urban Economics, University of California at Berkeley, 1994. In addition to the technical assistance projects, LLNL will be conducting some small research projects on its relationship to the Alameda County and California economies. One is a study of companies that have spun off from LLNL. Through a survey, the lab will examine how this process occurs and how it might contribute to healthy economic growth. A second study involves the analysis of how the changing mission of the national laboratories and of LLNL in particular may be felt through its linkages throughout Alameda County.

Coordination Opportunities:

LLNL's technical assistance projects are often accomplished in cooperation with cities, counties, and economic development organizations. Some programs, such as the assistance to small business, might be good candidates for statewide assistance and participation, to allow the programs to expand.

Date: 3/29/94

Organization: Lewis Center for Regional Policy Studies
Address: Graduate School of Architecture and Urban Planning
University of California at Los Angeles
Los Angeles, CA 90024-1467

Respondent: Allen Scott
Phone: (310) 825-7344 (direct); (310) 206-4417 (Center)
FAX: (310) 825-1575

Research Topic:

Scott has a number of publications on the aerospace industry and on the location of other high-tech regions in Southern California. Several of these are reviewed in the literature review that precedes this paper or are cited in the accompanying bibliography. His current research falls into three areas:

- 1) Transportation industries
- 2) Low-tech industries
- 3) Does Southern California have a high-tech future?

Funding Source/Level of Effort/Timing:

1. MTA results are forthcoming shortly; electric vehicle work is being published in *Environment and Planning A*; MTA project is being published through the Lewis Center.
2. California Policy Seminar; 12-month project, through 1994.
3. Currently writing a proposal.

Scope of Research:

1. Transportation Industries: Scott's research assesses the potential for ground transportation equipment manufacturing activities in Southern California. As part of this activity, they consider rail cars, electric vehicles and components, and intelligent vehicle and highway systems. They examine the characteristics of each industry and the competitive position of Southern California with regard to the industries. The study includes an examination of MTA procurement policies and of other actions that could be taken to promote development of the industry in Southern California. A report on the study was recently published through the Lewis Center.
2. Low-Tech Industries: Scott will focus on Furniture, Textiles, Clothing, Movies, Jewelry, and probably some Machinery Sectors. The method of approach involves producing summary statistics by industry, for the Los Angeles area, and surveys of firms. Policy analysis will examine technological changes which could improve the competitiveness of these industries and create higher wage occupations within the industries.
3. High-Tech Future: The study will look at the prospects for Southern California transitioning to new high-tech industries and at the policies that would be needed to support the transition. Their focus is on biotech, medical instruments, electric cars, software, and other civilian high-tech industries. Because the project is in the proposal state, the methodology is still being determined, but industry studies are a likely part of this work, as well.

Coordination Opportunities:

Scott would be willing to make questionnaires and information on respondents available as their research progresses.

Date: 1-27-94

Organization: University of California Extension Programs
Task Force on Defense Conversion and Workforce Education
Address: U.C. Extension
University of California at Santa Cruz
3120 De La Cruz Blvd.
Santa Clara, CA 95054
Contact: Dale Stansbury
Phone: (408) 748-7380 **FAX:** (408) 748-7388

Timing:

Extension programs are ongoing; the task force overseeing this activity was established for the July 1993 through June 1994 period. A communications network will be maintained beyond June 1994.

Activities:

University of California Extension has become a significant player in the effort to retrain displaced defense industry workers and in other aspects of defense conversion. Several types of programs are being generated:

1. *Workforce Retraining:* Retraining programs for displaced workers— The workers displaced from defense industries and from some military base activities have very different retraining needs from the workers typically displaced from declining industries. They are generally highly trained, and need skills to fill in technical gaps that may be far more sophisticated than has been provided in other job training programs. The U.C. Extension programs are filling in some of these technical gaps, with courses in areas such as business management, environmental technology, and information systems technologies.
2. *Technology Transfer:* Certificate programs in business management or economic development, designed for employees of a specific company or for businesses in transition to commercial markets.
3. *Business Conversion:* Seminars and short courses on topics relevant to military base conversion and economic development.
4. *Base Reuse:* Participation in education and retraining aspects of base reuse programs— For example, several proposals for reuse of the Alameda County bases slated for closure include participation by U.C. Extension in developing education and training programs.

A summary of the programs undertaken by U.C. Extension at each campus has been provided on a quarterly basis by the staff of the Task Force.

Coordination Opportunities:

The University of California system, as well as the California State University system and community college systems, are resources for the technical retraining needs generated by displacement in the defense industry. Coordinated activities have already begun in many local areas among city and county governments, private industry councils, and nearby colleges and universities.

Date: March 29, 1994

Organization: UCSD CONNECT
University of California at San Diego (UCSD)
Address: UCSD Extension 0176
La Jolla, CA 92093
Respondent: Abigail Barrow, Special Project Coordinator
Phone: (619) 534-3435 **FAX:** (619) 534-7385

Activities:

The UCSD CONNECT program was established to foster the growth of high-technology and biotechnology industry in San Diego through assistance to small entrepreneurial companies and through networking with local service providers. Over the past four years, some CONNECT programs have been specifically designed to meet the needs of defense companies trying to diversify into new commercial markets.

Funding Source:

Funding primarily comes from sponsors (150 larger high-tech companies and service providers), members (200 small firms), and program revenues. Two projects are currently being funded by a federal grant from the Department of Labor.

Timing: Ongoing (the program is about eight years old)

Scope of Work:

The CONNECT is designed to assist small entrepreneurial firms with management education and identification of funding sources. CONNECT also works with service providers to educate them on the needs of high-tech companies.

Their assistance to defense companies has taken several forms:

1. A main goal of their efforts has been to help defense firms find new markets for their technologies and skills. This may be provided through a concentrated briefing on a commercial area, which then allows the company to decide whether or not it makes sense to pursue the new market area.
2. CONNECT has offered five defense conversion roundtables which provided briefings for defense companies on opportunities in commercial industries (including new transportation technologies, commercial electronics, biomedical, telecommunications, and, most recently, environmental technology). The information presented will include what is happening in the industry, technical gaps between defense production and commercialization, and a case study of a defense company making the transition.
3. Assistance to small defense firms planning to convert, primarily in helping to find funding and commercial partners.
4. CONNECT has run an entrepreneurial training program funded through the Department of Labor's Defense Conversion Adjustment funds. The program took 19 displaced defense workers who wanted to start commercial high-tech companies and provided them with seminars on how to start a company, workshops where the participants presented ideas to each other and a panel of experts, introductions to mentors in existing high-tech companies, and individual counseling on business management, networking, and financing. Because many of the displaced workers are highly skilled, extension programs such as CONNECT have found themselves better placed than the traditional job-training programs to assist and redirect displaced workers.

Coordination Opportunities:

CONNECT is a partner in a successful consortium of city government, non-profit organizations, and universities that is cooperating to help San Diego work towards defense recovery. The consortium, with the City of San Diego as the lead agency, was recently awarded \$5.8 million by the Department of Commerce to implement a variety of defense conversion initiatives. The city has asked CONNECT to assist in starting up the area's regional technology alliance.

Date: 3/29/94

**RESEARCH ORGANIZATIONS UNAFFILIATED WITH CALIFORNIA UNIVERSITIES
– SOME EXAMPLES**

Organization: Center for Economic Conversion
Address: 222 View Street
Mountain View, CA 94041-1344
Respondent: Michael Closson
Phone: (415) 968-8798 **FAX:** (415) 968-1126

Research, Planning, and Community Organizing Activities:

The Center for Economic Conversion is a resource center and clearinghouse for economic conversion efforts nationwide. The center distributes information and materials on conversion theory and practice. Its staff helps public officials, labor organizations, and citizen's groups to design and implement conversion plans at the facility, community, and regional levels. The organization is a member of several consortia including, in northern California, the Bay Area Base Conversion Project. The goal of that project is to facilitate effective public involvement in base conversion planning to ensure that the outcomes are socially, economically, and environmentally beneficial.

Funding Source:

The Bay Area Base Conversion Project is funded at the level of approximately \$200,000 by private foundations.

Timing: 1994-1995

Scope of Effort:

The Bay Area Base Conversion Project is primarily an educational and community organizing activity. The project works with and monitors official conversion planning efforts, reviews and critiques conversion proposals, prepares reports and fact sheets on various conversion-related topics, presents programs on critical base conversion issues, and acts as a clearinghouse of information on base conversion in the San Francisco Bay Area. Other organizations involved in the Bay Area Base Conversion Project include the Urban Habitat Program and the Arms Control Research Center.

Coordination Opportunities:

This organization may be able to provide information to a statewide clearinghouse.

Date: 4/4/94

Organization: Economic Roundtable
Address: 315 West 9th Street, Suite 310
Los Angeles, CA 90015
Respondent: Daniel Flaming
Phone: (213) 892-8104 **FAX:** (213) 892-8105

Research Topic:

The Economic Roundtable is a nonprofit, tax-exempt research organization, with a board consisting largely of university people. They do public policy research related to economic self-sufficiency, job opportunities, labor markets, and environmental policy interactions with industrial structure. They are the authors of the *Los Angeles County Economic Adjustment Strategy for Defense Reductions*, published in March 1992. They also published a report in 1993 on the transition from aerospace to surface transportation manufacturing (the study included a survey of 400 firms). An additional report, published in February 1994, reports the results of a survey of industry perceptions of defense conversion (*Technology and Jobs: Defense Conversion in the Los Angeles Region*).

Follow-on research to these three studies includes:

1. A study currently underway on fuel cell production;
2. Stakeholders and constraints at the city level (rather than regional or state level);
3. A focus on the interest of industries in regulatory stability.

Funding Source:

Their funding is generally project-specific, but the most recent report was produced from the Economic Roundtable budget, rather than for a project. Funding sources for current research include the Air Quality Management District, the Metropolitan Transportation Authority, the Southern California Gas Company, and some city government funding.

Timing:

The fuel cell production study began in 1993 and will be completed in 1994. Other studies are getting underway just now.

Scope of Current Research:

The fuel cell project involves both technical analysis and organizational work. They are conducting an input-output analysis of the linkages between fuel cell production and the local economy (working with a modification of an existing input-output table). They are producing a technology analysis in the form of a cost and feasibility time line of the introduction of fuel cells into public transit vehicles. Other aspects of the project include organizing a buyer's consortium, educating local manufacturers about component requirements, and enlisting cities as supporters of local participation in a manufacturing network.

A project currently in the conceptual stage would attempt to quantify local benefits and interests in creating manufacturing jobs. The work would make use of existing databases and of new and existing survey data. It would also involve meeting and talking with people.

Outputs of these research projects include written reports but also include the process of getting people talking to each other, through stakeholder meetings or less formal means.

Coordination Opportunities:

Through subcontracting arrangements, the Economic Roundtable works with university researchers and organizations such as the Lewis Center for Regional Policy Studies at UCLA and the U.C. Davis Transportation Institute. In addition, the Economic Roundtable would be very receptive to the idea of some type of coordination with state agencies concerned with these topics.

Date: March 4, 1994

Organization: Project on Regional and Industrial Economics (PRIE)
Address: Lucy Stone Hall B119
Livingston Campus, Rutgers University
New Brunswick, NJ 08903
Respondent: Michael Oden
Phone: (908) 932-4587 (general number), (908) 932-4589 (Oden direct)
FAX: (908) 932-2253

Research Topic:

This group has been doing research on the defense industry and conversion efforts from a variety of viewpoints. Their goal is to create a detailed record of conversion and adjustment during this present period of cutbacks. They also provide a clearinghouse function and some problem-solving assistance to community groups and defense firms.

Their major research effort currently is a study of conversion and regional adjustment activity in four aerospace-related regions, Los Angeles, Seattle, St. Louis, and eastern Long Island. They have completed research and written up their work on St. Louis, have completed field work in Seattle, and plan to conduct interviews in Los Angeles in June.

They are also doing a national survey of 500 defense companies, looking for factors that contribute to successful commercialization within defense firms. They will begin the survey (letters with telephone follow-up) in March.

Funding Source: Private foundation, approximately \$120,000/year

Timing: Three-year effort, begun in 1993

Scope of Research:

For each of the four case study areas they are covering, they are conducting secondary research, cataloging programs, and completing an extensive case study. Beyond a secondary review of the geographic area and its economic background, they focus primarily on firm activity. The research on firms concentrates on the identification of factors that they hypothesize lead to successful defense conversion efforts, including (a) the degree of proprietary control over technology, (b) ownership and management structure of the firm, and (c) whether "best practice manufacturing" characteristics are present. They will do key informant interviews in each case study area, as well as a national survey of 500 firms. In the Los Angeles area, interviews will cover eight to ten prime contractors, 30 suppliers and subcontractors, workforce representatives, and community development specialists.

In both the case study interviews and the national survey, they wish to reach small and medium-sized defense firms as well as larger firms, because they have found that this is where the most significant conversion activity is occurring. Their national sample will be stratified, with extensive interviews with each defense division of the top 25 contractors and a survey instrument for the rest of the sample. The sample will be a weighted selection based on SIC codes, region, and ownership structure of the firm. Oden mentioned that in general they are finding firms much more open in responding to interviews and surveys than they were five years ago. They would be willing to make their survey questionnaire available after completing the survey and would also make the list of respondents available at that time, if the respondent agrees to disclosure.

Oden mentioned some interesting preliminary findings from their research. In their investigation of firm structure and operations, they are finding that nominally, defense firms show signs of formally incorporating "best practice" into their operations - the development of linkages within the company and with suppliers, modern technological processes, and strong and transparent incentives and stakeholding throughout the workforce. However, this often is implemented quite differently than in successful commercial companies, with a focus on meeting specifications rather than on cost-cutting or increased competitiveness.

The firms' abilities to transform from defense to civilian "best practice" is an important element in conversion success.

In the section of the study that focuses on the labor force, they are examining the labor market, the types of public intervention, and firm strategies. They look at interconnections between labor, firms, and the public sector, and ask firms which public programs are most effective. The research includes an evaluation of strategies and their potential for success.

Related Research:

Katherine Hill, of PRIE, is researching base closures, comparing experiences with historic base closures with the problems associated with base closures today. She is doing a special study on conversion of shipyards, focussing on Seattle, Boston, San Diego, and Rhode Island.

PRIE is also monitoring the TRP process, looking at who has received grants, how the grants have been monitored, what are the criteria for success, and how the process is working. Oden has been critical of the TRP process as an inefficient use of R&D funds (and has published a critique in *Positive Alternatives*, a publication of the Center for Economic Conversion). He feels what is most needed by diversifying firms is access to capital for restructuring and technical assistance in restructuring management and in marketing.

PRIE also has an NSF grant for a study of new industrial districts. Led by Ann Markusen they are looking at the characteristics of high-growth regions (including the San Jose area). Their interview and survey work is being completed and is not yet in working paper form.

Date: 2/14/94

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Research Topic:

With James Dertouzos, Michael Dardia published a study, *Defense Spending, Aerospace and the California Economy*, in 1993 (reviewed in Bradshaw *et.al.* 1994). Dardia is continuing research on three topics touched on in the 1993 paper. These include:

1. A comparison of industry mix effects and changing levels of advantage in California with similar defense-dependent regions elsewhere in the country.
2. An examination of impacts on workers displaced from aerospace.
3. A study of small firms (i.e. suppliers and subcontractors to prime contractors).

Funding Source: Department of Defense

Timing: March 1993-Spring 1994

Scope of Research:

1. Shift-Share Analysis: The 1993 paper included a shift-share analysis which analyzed the difference between California's rate of growth and national rates in terms of the influence of national trends, industry mix, and the changing "advantage" (or disadvantage) California held over other parts of the nation. In the current work, they examine the industrial mix effect and changing advantages in other defense-dependent regions and find trends similar to those found in California.
2. Using Current Population Survey data and EDD unemployment records, they are examining how displaced workers (sorted by age and occupation) fare after job loss. They are analyzing the same data used by Paul Ong in more detail, looking at the effects of age and occupation on such questions as whether workers remained in aerospace or were reemployed elsewhere.
3. Small Firm Study: They are using Dun and Bradstreet data to analyze the characteristics of small firms whose customers are defense prime contractors (looking at size, location, products). They are not doing a survey because of funding limitations but feel that this would be important in expanding information on the impacts of cuts and the responses of suppliers.

Related Research:

RAND has resources for two possible future areas of research, should funding be available.

1. A supplier survey – the database developed for their small-firm study would provide a useful basis for the design of a supplier survey.
2. RAND has a database on ARC-INFO with extensive information on bases throughout the country. This could be used as background to evaluate the impacts of base closures and reuse opportunities.

RAND also does research in other areas related to general economic factors in California, such as water policy, immigration, and health policy.

Coordination Opportunities:

RAND's databases on small firms and on military bases are resources that could be very useful in future state research efforts. For example, a survey of suppliers could be accomplished building on the RAND database and analytic capabilities and using state offices for survey administration.

Date: 3/11/94