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Defense Conversion in California: Economies in Transition

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Defense Conversion in California: Economies in Transition

A Strategic Plan of the
Defense Conversion Council
for the State of California



February 1996

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Defense Conversion in California: Economies in Transition

Prepared for:

State agencies, the Legislature, and the Governor

The Federal government

Regions and communities impacted by defense downsizing and military base closure

Private industry

Prepared by:

**The California Defense Conversion Council, Julie Meier Wright, Chair
in cooperation with the California Trade and Commerce Agency**

February, 1996

This strategic plan was prepared under contract with the State of California with financial support from the Office of Economic Adjustment, U. S. Department of Defense. The content reflects the views of the Defense Conversion Council and the State of California and does not necessarily reflect the views of the Office of Economic Adjustment.

(Contract No. MR9339-93-01)

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PREAMBLE

It is the mission of the Defense Conversion Council, in a time of diminished resources, to encourage innovation and flexibility in state policies, resources, and programs that address our changing economy. An increasingly diverse economy that is less dependent on defense spending requires state government to improve coordination among its agencies in developing and delivering services; to improve coordination with local, state, and federal partners; and to target resources strategically.

We, the Defense Conversion Council, believe that “defense conversion” in California applies to all companies and communities in defense-impacted areas seeking to diversify and build upon their economic base; that California is positioned to be a major player in the global economy; and that emerging technologies and industries are critical to successful economic transition.

We assert that the future we create for ourselves will be one that is less dependent on federal support and tied more closely to our own ingenuity and attractiveness to generations of resourceful entrepreneurs and workers, who will play a key role in the evolution of that future.

We embrace the belief that government’s role is that of facilitator and partner with the private sector and that “business as usual” cannot and will not serve our mission.

We believe in the strength and vitality of our communities. Our regional partners are empowered to develop, manage, and deliver strategies and programs which further the mission of economic diversification, redeployment, and the re-employment of our workforce.

PREFACE

California businesses, workers, and communities are still recovering from the effects of the decline in national defense spending which began in 1988. The Defense Conversion Council presents this strategic plan as a policy framework intended to guide the State of California over the next five years in designing effective partnerships, programs, and services that generate successful defense industry conversion and military base reuse. Not an implementation plan per se, the strategic plan offers recommendations to the State to: 1) encourage and support business and community economic diversification; 2) enhance base reuse programs; and, 3) rethink workforce training and education. The goals, objectives, and recommendations presented are broad and flexible, specifically designed to reflect the issues of the marketplace. This strategic plan is intended to serve as a resource for all partners and stakeholders concerned with economic and community revitalization, defense industry transition, the reuse of closed military bases, and worker retraining.

While it is important to acknowledge that dramatic changes in the defense budget have resulted in economic dislocations in many parts of California, it is equally necessary to recognize that the overall dynamism underlying California's economy makes this dislocation less threatening than it was just two years ago. In great measure, events have overtaken our collective preoccupation with defense downsizing. We are now faced with the evolution and transformation of an entire economy, one based more on diverse industries and occupations than ever before in our history. In this view, the State's vision of "defense conversion" is a dynamic enterprise, one that goes beyond assistance to individual defense companies to an awareness of whole sectors, industries, and services which need a restructured set of programs, priorities, and policies.

This is not to deny the very real pain felt by individuals and communities as they attempt to cope with the challenges associated with this transformation. Communities affected by base closures, in particular, suffer severe jolts caused by the decisions of the Base Realignment and Closure Commission. In addition, the total job loss attributable to defense downsizing is an awesome figure, and makes the task of nurturing the transition we are experiencing assume great importance.

Far from being a recitation of programs and prescriptions, this plan offers a challenge: since California has experienced prior cycles of defense buildup and downsizing, will state government target resources to minimize future cyclical impacts and build upon structural changes in the economy? Or, in this

era of rapid market changes transcending political and geographic boundaries, will government forever lag behind? Despite diminished resources, government must be a responsive champion: a champion of a business environment and infrastructure that is conducive to dynamic, sustained economic growth. This suggests an evolving, proactive role for our state and local governments, based on partnerships with the private sector that creates or preserves jobs in California.

Finally, this strategic plan is crafted as a complement to, and reflects issues identified in, other statewide planning initiatives currently underway on behalf of the state economy, including the efforts of the Economic Strategy Panel, the State Job Training Coordinating Council, the Employment Development Department, the Department of Education, among others.

Created by legislation (AB 2222 and SB 458) in 1993, the Defense Conversion Council is charged with oversight of and planning and policy guidance for the State's efforts to address the impacts of defense downsizing and base closure. The Council represents a cross-section of those involved with defense adjustment issues, including state agencies, the Legislature, the private sector, and representatives of communities and the Regional Technology Alliances. The Trade and Commerce Agency staffs and chairs the Council.

The preparation of this strategic plan was funded, in part, by a grant from the U.S. Department of Defense, Office of Economic Adjustment. It is the result of a three-phased, two-year-long planning effort involving the Governor's Office of Planning and Research, the State Legislature, and a number of state agencies, and was developed under the direction of the Defense Conversion Council, with the Trade and Commerce Agency serving as lead in the preparation of this document.

The first two phases of the planning effort included intensive primary and secondary research to identify the needs of businesses, workers, and communities, and to identify the state government's role in defense adjustment. In the first phase, the University of California, Berkeley conducted an exhaustive literature review, "*Defense Industry Conversion, Base Closure, and the California Economy*," (1994) documenting strategic approaches in other states and communities and profiling the regional defense adjustment planning activities underway, or soon to be underway, throughout the state. The magnitude of economic impact on businesses, workers, and communities was also tracked to set the stage for developing potential strategies in Phase III. The analysis of economic impact and trends incorporated research from the Governor's Office of Planning and Research, the Assembly and Senate Offices of Research, the California Research Bureau, the Commission on State Finance, and the Employment Development Department, among other entities.

Phase II of the project consisted of community outreach to those affected by defense downsizing. Several techniques were used. Surveys were administered to businesses, communities, and chambers of commerce statewide to gauge the greatest areas of need and identify where the State could best assist. The surveys were followed by focus groups held throughout the state with business and community representatives.

This document represents the completion of Phase III, which synthesizes the results of the research, data analysis, and community outreach efforts conducted during the first two phases of the project, resulting in a series of recommendations. The Council will be responsible for oversight and policy guidance as state agencies develop and implement appropriate actions to fulfill the plan's strategic objectives.

The plan is organized into five chapters: the State's overall strategy and economic need in Chapter I; economic issues and strategies pertaining to business and communities in Chapter II; issues and strategies specific to military base reuse in Chapter III; and, issues and strategies involving the needs of the workforce in Chapter IV. Future follow-up and implementation of the strategic plan is addressed in Chapter V. For the reader's convenience, a glossary of the acronyms contained in this document is included at the end of the report.

The Council wishes to acknowledge the dedicated participation of its members and their staff in the preparation of the plan, particularly those who served as writers and reviewers, including: Ben Williams and Heather Wheeler, the Governor's Office of Planning and Research; Kay Ferrier and Ken Dozier, California Community Colleges/ED>NET; Rohit Shukla, Los Angeles Regional Technology Alliance; Nick Bartsch and Ray Tuvell, California Energy Commission; Barbara Lee, Member of the Assembly and Clyde Macdonald, staff to Barbara Lee; Milt Lohr, MCM Systems; Gerry Geismar, Employment Training Panel; and Secretary Julie Meier Wright and the staff of the Trade and Commerce Agency: Chris Holben, Pat Noyes, Rachel Hazlewood, Paul Hiller, David Dolliver, Tom White, Helene Hiromoto, Steve Jarvis, Jeff Newman, Patrick Valenzuela and Edward Kawahara; Trish Kelly, California Association for Local Economic Development; and the members of the Business Investment Panel, particularly Lee Petillon and Joe Hull. Special thanks and appreciation is extended to Joe Nation, California Data and Analysis, and Ted Bradshaw, University of California, Berkeley for their contribution to this planning effort, and to Tony Gallegos and Mark Braly of the Office of Economic Adjustment for their insightful comments throughout the planning process.

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REPORT OF THE DEFENSE CONVERSION COUNCIL
*Defense Conversion In California:
Economies In Transition*

EXECUTIVE SUMMARY

THE STRATEGY

With the end of the 40 year cold war in 1988, U.S. spending on defense-related employment, infrastructure, research, development, and procurement began a steady and significant decline. In California, the economic impacts of defense downsizing have been harsh for defense-dependent industries, communities, and workers. Approximately 520,000 direct and indirect jobs have been lost as a result of defense industry cutbacks and military base closures, primarily in the Los Angeles, San Diego, Sacramento, and San Francisco Bay regions. With defense-related budget reductions likely to continue over the next several years, California—its communities, businesses, and citizens—must prepare to meet that future.

California has responded to defense downsizing by mobilizing state and local governmental agencies, and forging new regional and statewide public/private partnerships and alliances. The Governor's Office of Planning and Research is the designated lead agency on military base reuse planning and policy and the California Trade and Commerce Agency is the lead on defense industry transition and the development of military base properties. The Defense Conversion Council, consisting of representatives of state agencies, the State Legislature, the private sector, and representatives of regional alliances, was established by Governor Pete Wilson and the Legislature to provide a statewide policy-making forum for defense conversion issues.

The state strategic plan for defense conversion is intended to guide the State in designing and implementing defense industry conversion and base reuse plans and programs over the next five years. In addition, this strategy is developed concurrently with other statewide planning efforts underway that address the economy (the Economic Strategy Panel) and worker training (the State Job Training Coordinating Council), among others.

To ensure the growth of a diversified, globally competitive economy and high-skill, high-value jobs, the State of California, under the auspices of the

Defense Conversion Council, will pursue four objectives: 1) assist industrial transition to private sector markets; 2) strengthen community capacity to conduct economic development; 3) convert closed military bases to productive use; and, 4) provide a comprehensive system of workforce development. Twelve basic assumptions provide the foundation on which California's ability to successfully achieve these objectives is based:

Fashioning the State's role in revitalizing local and regional economies is predicated on an understanding of regional economic and governmental dynamics and relationships.

- The decline in defense spending will continue; recovery is a long-term process
- The State must employ a single voice in interacting with the federal government when economic circumstances call for advocacy
- California is experiencing massive economic shifts due to technological and structural changes occurring throughout private industry worldwide
- Defense downsizing can create opportunity
- Defense-dependent businesses, communities, and workers need focused attention from the State
- The State must employ an industry-driven approach to defense conversion
- The State must focus on strengthening the economy at the regional level
- The State must serve in the role of facilitator in addressing economic issues
- State assistance must be developed and delivered in partnership with both the public and private sectors
- The State must leverage and optimize the use of existing resources and foster interagency coordination
- State planning efforts must be complementary
- The Defense Conversion Council must continue to provide an advisory and oversight function to the State on appropriate defense industry conversion and base reuse policy and planning.

Fashioning the State's role in revitalizing local and regional economies is predicated on an understanding of regional economic and governmental dynamics and relationships. Since the private sector adapts to economic change more rapidly than the public sector, the State will focus on market solutions. At the same time, the State must foster alliances among and between business and local and regional service providers to ensure that assistance efforts meet the needs of defense-impacted workers, businesses, and industry sectors.

INDUSTRY

The negative impact of defense budget cuts on the state economy in terms of reduced investment and job loss is real and pervasive. Economic recovery, stabilization, and growth is stimulated by two conditions: 1) the ability of defense-dependent businesses to transition into new, rapidly changing commercial markets; and, 2) the ability of public-private partners at the local, state, and federal level to foster economic diversification, taking advantage of global market opportunities.

However, defense-impacted firms face a number of obstacles in their conversion to private sector commercial markets, including: inexperience in product marketing; insufficient information on markets, funding, and technical assistance; difficulties in worker retraining; difficulties in converting and commercializing technology; inability to access international markets; lack of funds for business start-up or expansion; and burdensome regulatory and tax obstacles to capital formation.

Defense firms tend to have limited familiarity with commercial markets and lack expertise in product promotion, distribution, and market research. The appropriate type of marketing assistance to provide defense contractors and suppliers depends largely on the strategies they intend to pursue—identifying private sector markets for existing products, or creating and marketing new ones.

Information on markets, funding, and technical assistance is important to transitioning businesses. Severely impacted defense firms require information to support product development, increase market access, and redefine their role in the changing global economy. California's businesses will need to make intensive and innovative use of computer networks in order to communicate externally with suppliers and customers, and internally with departments and divisions.

Responding to the evolving needs of California's industrial employers, many education, employment, and training agencies have made funds available for employer-defined training projects. The direct involvement of employers in training their own workers is critical to helping defense-related businesses make successful transitions to commercial markets.

Federal spending for defense- and space-related research and development and systems production has had a major impact on technology development in California over the last 40 years. The expansion of the California aerospace and electronics industries corresponds with federal expenditures for the Department of Defense, the Department of Energy, and the National Aeronautics and Space Administration in California. This direct federal investment created and sustained the wide variety of technology-based

Defense-impacted firms face a number of obstacles in their conversion to private sector commercial markets.

industry clusters needed to support its programs, and it served as the impetus for new and innovative private sector firms and industries emerging to service evolving industry needs. One result is that California leads the nation in high-technology performance—the state is home to approximately 15 percent of the nation’s high-technology workers, 15 percent of its engineers, and nearly 10 percent of its patents.

In order to mitigate the negative effects of defense-related spending reductions and industry downsizing, many firms have to expand into new markets for their products and technologies. The international marketplace provides unprecedented opportunities for California defense suppliers and technology companies to establish new and expand existing markets. Sharp increases in the international trade volume for products of high technology firms indicate that overseas markets should be emphasized in defense-related industrial transition. Many of California’s major trading partners are emerging as strong growth markets for technology-based products.

Limited access to debt, equity, and venture capital financing for new or expanding businesses constitutes a significant barrier to conversion and broader economic growth. This problem affects many industry sectors engaged in defense transition and technology development. Although many early-stage companies present attractive, job creating, technology-based opportunities with the potential to expand California’s economy, conventional banking institutions are not equipped to fund start-ups.

In addition to investment capital shortfalls, both tax and regulatory obstacles limit capital formation in California. California’s merit review system creates substantial regulatory impediments to private and public offerings of start-ups and early-stage companies, while the perception that California has an unfriendly tax climate slows business investment. Although recent changes to California’s tax code have made the state more tax-friendly for business, more needs to be done.

RECOMMENDATIONS FOR INDUSTRY ASSISTANCE

- *Provide marketing assistance to defense suppliers, especially secondary and tertiary defense contractors.*
- *Expand and coordinate information dissemination efforts.*
- *Link training and education programs to employer needs.*
- *Continue to support cooperative alliances advancing new technology.*
- *Advocate continued state and federal funding for critical technologies.*
- *Support and expand programs improving the competitiveness of small manufacturing businesses.*
- *Increase the effectiveness of technology transfer from the national laboratories to the private sector.*

- *Advocate changes in federal procurement laws to promote greater product diversity.*
- *Support and expand programs improving the access of small businesses to international markets.*
- *Increase access to debt financing for business startup and expansion capital, especially for small and high technology businesses.*
- *Increase access to equity capital for startup and expansion, especially for small and high technology businesses.*
- *Eliminate tax and regulatory obstacles that impede or inhibit capital formation.*

COMMUNITIES

Communities, in collaboration with the state and federal governments, must invest in defense-related economic transition by addressing issues directly impacting local and regional business development. Local business investment concerns include zoning and land use, land availability, permitting procedures, infrastructure availability, access to capital, housing availability, and the size and skills of the labor pool. The State provides vital assistance by resolving issues over which it has control, such as tax and regulatory policy, or education and training programs. The federal government supports local planning and implementation efforts by addressing the laws, policies, and regulations which may act as barriers to economic growth and investment that are under its control.

Many evolving models for economic development emphasize regional linkages based on economic rather than political boundaries. Many organizations focus on fostering network relationships and responding to issues targeted at groups of constituents rather than individuals. The State now partners with these local networks to provide programmatic outreach and technical assistance.

Adequate funding for community defense conversion planning and project implementation requires long-term attention. The federal government has awarded more than \$165 million in planning, infrastructure, and program development grants to California communities, and the State has provided matching grants to communities applying for federal assistance during the last two years. However, local funding needs continue to surpass available funds. While it is primarily a community's responsibility to secure funds for planning and implementation, the state and federal government will be looked to for continued support over the next five years.

Communities and regions require various types and levels of technical assistance in conducting defense conversion efforts. Several state agencies provide direct outreach services to communities and regional groups needing technical assistance in a variety of specialty areas, including planning, local

Many evolving models for economic development emphasize regional linkages based on economic rather than political boundaries.

organizational development, marketing military bases, accessing employment training programs, and in recruiting business and industry to the impacted areas. These services need to be examined, coordinated, and enhanced to effectively leverage local efforts.

RECOMMENDATIONS FOR COMMUNITY ASSISTANCE

- *Provide public funding to defense impacted communities for planning, program development, and organizational support.*
- *Provide direct technical assistance to communities and regional alliances in developing and implementing base reuse and defense industry conversion strategies.*
- *Provide a clearinghouse of information to support communities and expand communication between communities and the State.*
- *Strengthen cooperation, coordination, and communication among state agencies.*

While base closures pose negative economic and social consequences, they simultaneously present the opportunity to reshape a region's social and economic structure.

MILITARY BASES

Military base closures strike at the social fabric and economic viability of entire communities. As a result of the base closure and realignment process, 25 major bases in California will be closed and four realigned with a loss of approximately 186,000 jobs and an estimated negative annual economic impact of nearly \$9.6 billion. At risk are jobs, business investment, and economic growth. The recovery of these communities is a state priority.

While base closures pose negative economic and social consequences, they simultaneously present the opportunity to reshape a region's social and economic structure. Closing bases make new land and facilities available for industrial, commercial, recreational, and residential uses. Additionally, many bases possess specialized attributes having immediate commercial application.

Despite recent improvements, the federal property transfer process remains contentious, time-consuming, and complicated. Procedural barriers remain: negotiating maintenance and protection agreements; establishing property value; mitigating toxic clean-up; reconciling local, state and federal permit requirements; and installing or upgrading needed infrastructure.

Toxic contamination at military bases remains one of the major unresolved problems threatening to disrupt base reuse plans. While the federal government accepts responsibility for costs associated with toxic remediation, the funds required to pay these costs have not yet been appropriated. Fortunately, the concept of "parcelization" was created and development is occurring on base property not impacted by toxic contamination.

One of the most difficult problems faced by local reuse authorities is the unsuitability of base infrastructure—water and sewer systems, utilities, roads, and buildings—for civilian and commercial use. Existing military base infrastructure often does not meet state and local building codes, California seismic standards, energy conservation policies, fire and safety standards, and Americans with Disabilities Act requirements. Although some standards may be deferred or waived by local permitting authorities, others carry potential liabilities that cannot be easily dismissed. The statewide cost of bringing all base infrastructure systems into code compliance is estimated at several billion dollars.

Finding the funds for ongoing planning and infrastructure upgrades is another major challenge facing the state's reuse effort. To date, federal funds, primarily from the Office of Economic Adjustment and the Economic Development Administration, have provided the major source of base reuse capital. State and local governments are hard pressed to identify sufficient funding for base reuse infrastructure. Future public investment may take the form of direct funding by the federal, state, or local government (bonds or general fund appropriations), loan or loan enhancement programs, state facilitation of local revenue generation (redevelopment), or direct incentives to businesses.

Although well-intentioned, many federal and state resource and regulatory requirements designed to preserve natural resources and the environment place onerous restrictions on communities that must implement them at a time of considerable economic distress. Local, state, and federal governments must be creative as they adapt resource and regulatory requirements to the realities of military base closures. Base reuse will require a level of regulatory flexibility and creativity not seen in the past due to potential restrictions imposed on the future use of real property because of its status as Public Trust Land, the impacts of the Endangered Species Act, insufficient Air Emission Credits, the requirements of the Historic Preservation Act, Native American claims, or recycling mandates.

Base reuse will require a level of regulatory flexibility and creativity not seen in the past...

RECOMMENDATIONS FOR MILITARY BASE REUSE ASSISTANCE

- ***Revise federal property management and disposal processes to simplify and expedite property transfer.***
- ***Support cost-effective, fast track clean-up of closing and active military bases and evaluate clean-up efforts.***
- ***Permit temporary waiver of building codes where there is no immediate threat to life or health.***
- ***Establish a rapid means of transferring base utility systems to a responsible provider.***

- *Permit utility providers to assume control of base utility systems which are out of compliance with state standards and bring those systems into compliance on a reasonable schedule developed by the utility provider.*
- *Enhance public investment in redeveloping base property and infrastructure.*
- *Convene a military base regulatory reform effort aimed at simplifying and clarifying the planning mandates placed upon base closure communities.*

The quality and rate at which California retrains its former defense workers will have a direct impact on the state's ability to mitigate the effects of defense adjustment and remain globally competitive.

THE WORKFORCE

Economic restructuring in California embodies not only the transition of traditional industries like aerospace and defense, but also the emergence of a diverse range of technology-based industries. Many of these industries demand a highly educated workforce. Since dislocated defense workers are likely to have specific knowledge and skills not directly transferable to commercial enterprises or fields offering wages and benefits similar to their pre-layoff occupations, the quality and rate at which California retrains its former defense workers will have a direct impact on the state's ability to mitigate the effects of defense adjustment and remain globally competitive.

In order to maximize California's scarce resources and build an employer-driven, efficient, and accountable workforce development system, it is necessary to focus resources on improving educational programs relevant to the demands of a technologically advanced society. New and refocused methodologies must meet the rapidly changing job skill needs of employers.

A constantly changing workplace will pose new challenges to workers. Knowledge-based workers will require an open access, learner-focused training/education framework that is perpetual, cost-effective, and convenient. Many will require special technical credentials, proven interpersonal skills, and diverse skill sets. Information paths must be self-assessing and self-paced. Since future workers can expect to enter and exit the workforce many times, they will need to be able to synthesize knowledge and upgrade their skills on the job and just-in-time for required work performance.

RECOMMENDATIONS FOR WORKFORCE ASSISTANCE

- *Develop a comprehensive workforce preparation system that is fully integrated into California's economic development plan.*
- *Integrate and streamline workforce development efforts.*
- *Seek federal workforce funding to increase subsidies to employers, especially for small businesses, to train workers.*
- *Conduct proactive outreach efforts to reach workers in danger of layoff.*
- *Collect information on dislocated worker characteristics to focus assistance programs.*

- *Focus on small businesses to encourage the development of new and innovative global strategies.*
- *Support the development and use of technology in the delivery of training programs and related activities.*

IMPLEMENTATION

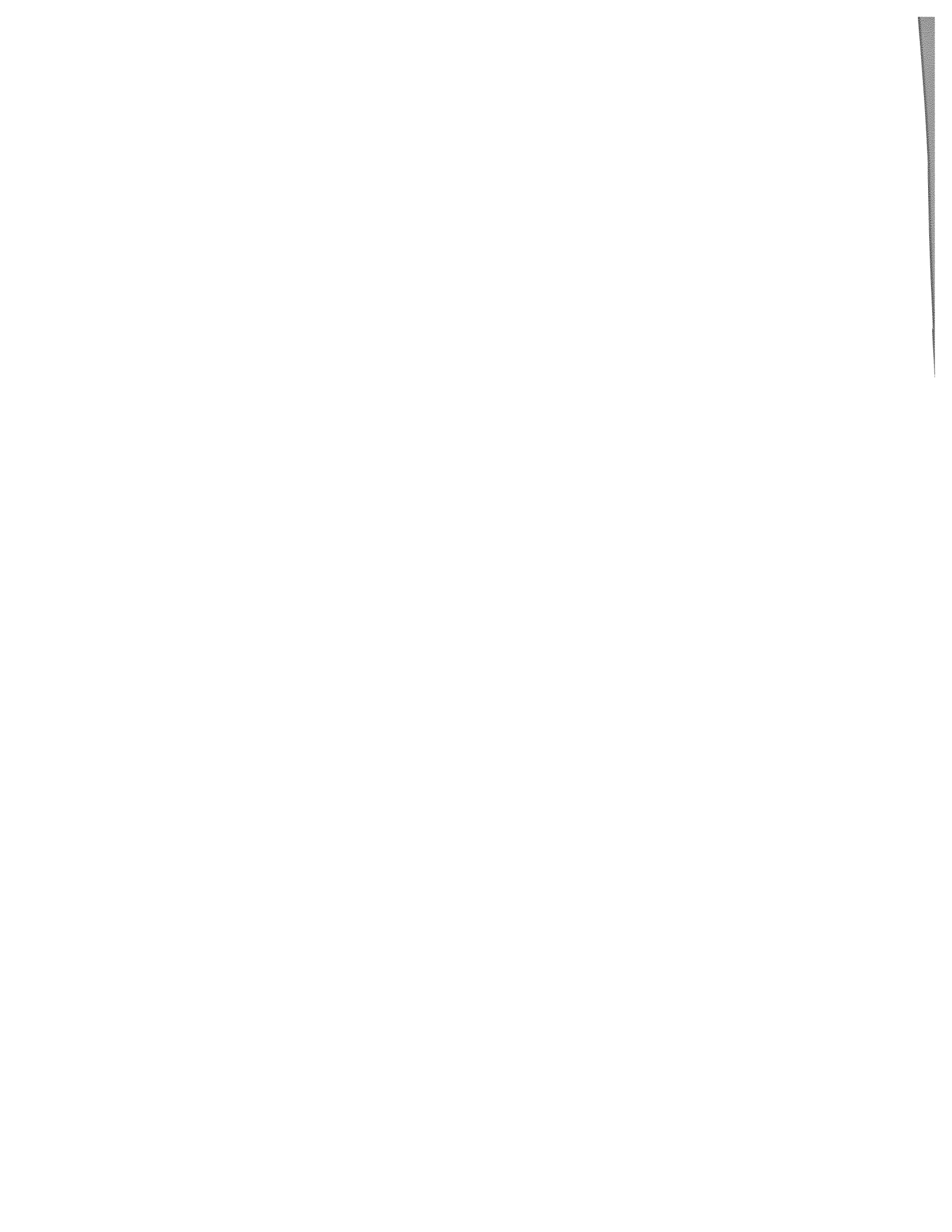
The Defense Conversion Council offers this plan as a guide for California state government's response to the challenges presented by defense adjustment over the next five years. The State will facilitate the process of economic transition in defense-impacted areas of the state on behalf of workers, industries, and communities. These broad policies and strategies create a framework within which state agencies, in partnership with key public and private stakeholders, can initiate, implement, and evaluate focused action plans, programs, and services to mitigate need and optimize emerging opportunities.

The transition to a healthy, sustainable, growing economy—in this instance, the careful integration of the changing defense economy with the emerging, restructured commercial economy—does not happen overnight. It is a complex, dynamic process requiring the effort and commitment of all stakeholders over a long period of time. This economic development process requires:

- Strong leadership at the state and local levels
- Clear focus on vision, goals, and desired results
- Clear understanding and acceptance of roles and responsibilities
- Strong commitment of time and resources
- Access to accurate and timely information
- Good planning and effective programs
- Strong partnerships, collaborations, and communication
- Access to effective expertise
- Adaptability and flexibility.

The challenge to the State for many years to come is the ongoing commitment to lead the defense downsizing response effort in a timely, flexible, coordinated, and creative manner, one supporting and empowering industries, workers, and communities. This strategic plan represents the State's commitment to meet that challenge.

The challenge to the State for many years to come is the ongoing commitment to lead the defense downsizing response effort in a timely, flexible, coordinated, and creative manner...



CHAPTER I

CALIFORNIA'S STRATEGY FOR DEFENSE CONVERSION

Chapter One is divided into four sections: 1) a brief description of the impacts of defense downsizing on California in terms of job losses; 2) a summary of the State's defense conversion response efforts to date; 3) a list of twelve assumptions that guide the State in forming the strategy's goals, objectives, and recommendations; and, 4) a description of the State's goals and objectives for defense conversion and base reuse over the next five years.

IMPACTS OF DEFENSE DOWNSIZING ON CALIFORNIA

The end of the cold war has resonated throughout California, leading to the loss of approximately 520,000 direct and indirect jobs from defense industry downsizing and base closures.¹ This is about 75 percent of the total jobs lost during the recent recession.

The economic impacts of defense downsizing have been harsh for defense and related industries, workers, and communities, and defense budget reductions are likely to continue over the next several years. As evidenced by the 1995 round of base closures, the end is not yet in sight for California.

While national defense outlays have fallen in real terms at an average annual rate of three percent since 1987, defense outlays have fallen more rapidly in California.² This is due to downsizing of military contracting with private firms and national laboratories, as well as base closures. In the defense industry, aerospace has suffered the greatest job loss in California, falling from its 1988 peak of 439,000 jobs to its current level of less than 240,000, a drop of 55 percent.³ Most of the defense industry job losses have occurred in southern California, with two-thirds occurring in Los Angeles County. About 20 percent have occurred in San Diego and Orange Counties, and less than 10

¹"Economic Report of the Governor," Submitted by Pete Wilson, Governor, State of California, 1995, p. 12.

²Outlays refer to the amount disbursed in a given year, in contrast to budget authority, which indicates the amount of obligations that may be incurred. See Appendix A for additional information on Defense Budget Outlays.

³Current Employment Statistics. Bureau of Labor Statistics, Department of Labor.

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percent have occurred in Santa Clara County. The job loss is particularly difficult for California because these are high-wage, high-skilled jobs.⁴

Military bases are also important to California's economy. Prior to the beginning of the base closure process in the late 1980s, California was home to 72 major military installations, employing 336,000 civilian and military persons, excluding reserve personnel.⁵ California job losses from military base closures due to the Base Realignment and Closure (BRAC) process are expected to be 101,000 direct and 85,000 indirect jobs by the year 2001, the anticipated date of the last closure.

CALIFORNIA'S DEFENSE CONVERSION RESPONSE

Since 1993, the State's response to defense industry downsizing and military base closure has been threefold, involving individual agency response, legislation, and the formation of alliances.

Individual agencies across state government have made the defense adjustment response effort a priority, allocating staff and resources to address the needs of businesses, communities, and workers. The Governor's Office of Planning and Research (OPR) is the designated lead agency on military base reuse planning and policy. The California Trade and Commerce Agency (TCA), the state's lead agency on economic development, addresses defense industry transition and the marketing and development of military base properties. The State's response effort includes attracting federal dollars for planning, worker training, and business assistance.

In September, 1993, a bipartisan effort of the Wilson Administration and the Legislature produced a package of initiatives to help revitalize California's economy. AB 2222 and SB 458 established the 21-member Defense Conversion Council (DCC), which acts as a clearinghouse for defense conversion information, is responsible for developing the strategic plan for defense conversion, and makes the final recommendations on the California Defense Conversion Matching Grant program. AB 1246 created the Office of Strategic Technology (OST) within the Trade and Commerce Agency to support the development, application, and commercialization of technology to create jobs, respond to industry changes, and foster competitiveness. SB 268 created the Defense Conversion Matching Grant program, administered by OST, to leverage federal dollars and increase the competitiveness of California-based defense conversion grant proposals.

⁴The UCLA Business Forecast (June, 1994) estimates the 1992 average wage for the aerospace industry was almost \$53,000, higher than any other California industry. This includes not just scientists and engineers, but also secretaries and clerical workers.

⁵For the sake of simplicity, throughout this report the term base closure incorporates both closures and realignments.

Several new alliances have been formed within state government and between the state and communities to foster new initiatives. As an example, Regional Technology Alliances (RTAs) were established in the San Francisco, San Diego, and Los Angeles areas to provide outreach to defense-impacted industries transitioning to commercial markets. Administered through OST and supported by state and local funding, the RTAs are non-profit entities representing numerous community groups in the region. The RTAs offer financial and technical assistance to business, focusing on the development of new technology.

CALIFORNIA'S APPROACH TO A NEW STRATEGY: BASIC ASSUMPTIONS

There are twelve basic assumptions that form the foundation of this strategic plan's goals and objectives, and guide its recommendations. Some are assumptions of fact, while others are values or conditions that the Defense Conversion Council has concluded are necessary to a successful defense conversion and base reuse effort over time.

The decline in defense spending will continue; recovery is a long-term process. The State must foster economic diversification to sustain recovery and protect employment over future cycles of downturn and growth in the defense industry.

The State must employ a single voice in interacting with the federal government when economic circumstances call for advocacy. Many federal policies, regulations, and services shape the state's economy in terms of the defense industry. As part of the recovery effort, federal technical assistance and funding for the state and communities is critical and it is in California's best interest for future economic stability that state government strive to organize and communicate with the federal government in as coordinated and directed a manner as possible. For its part, the federal government needs to identify and agree upon its role in future defense conversion activities. It must commit to follow through on specific obligations that are coordinated with overall state strategies. Federal policies and programs with an uncertain future, or with inconsistent and ad hoc applications, create difficulties at the state and community level which impede recovery efforts. Finally, the California congressional delegation should be responsive to defense industry conversion and base reuse issues.

California is experiencing massive economic shifts due to technological and structural changes occurring throughout private industry worldwide. Private corporations are downsizing and reorganizing to maximize productivity. New firms and product lines show great promise in industry sectors as diverse as electronics, software, biotechnology,

The State must foster economic diversification to sustain recovery and protect employment over future cycles of downturn and growth in the defense industry.

**The State needs
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issues.**

environmental technology, communications, energy, and transportation.⁶ Moreover, these changes are occurring rapidly, presenting a challenge to defense-dependent businesses striving to enter commercial markets.

Defense downsizing can create opportunity. While it is important to encourage defense and military investment in California, it is also important to recognize that the closing of military bases and the downsizing of defense prime contractors and their suppliers can create potential economic opportunity. Closed bases, for example, provide valuable acreage and assets that, when targeted in a community's economic development effort, can be returned to commercial and/or civic use that benefits the region's economy. Similarly, the loss of defense contracts can lead private business to expand into commercial markets with positive net results.

Defense-dependent businesses, communities, and workers need focused attention from the State. The gap between the defense industry economy and the rapidly changing commercial market economy is vast and transitioning companies, communities, and workers require concentrated assistance in many areas.

The State must employ an industry-driven approach to defense conversion. The State needs to focus on market solutions to defense conversion issues. Despite fluctuations in market conditions, business generally responds and adapts to economic change more quickly than government and recognizes the barriers that may impede recovery. It is important, therefore, for the State to tailor its assistance role to match general business needs in defense-impacted areas. This means that the State's response must stay flexible and adapt to changing economic need.

The State must strengthen the economy at the regional level. California's strategy for defense conversion must emphasize a regional approach, recognizing the regional nature of industry behavior. As documented by the Economic Strategy Panel (see insert on the next page for more information on the Panel), the regional economy must be understood in order for the State to develop appropriate assistance programs. In addition, local service providers can be the most effective source for conversion assistance. Regional alliances among businesses and between business and local/regional service providers need to be nurtured.

The State must serve in the role of facilitator in addressing economic issues. Government's appropriate role is that of facilitator and partner. The role may vary from traditional to innovative: from building roads and sewers

⁶Ted K. Bradshaw, et al., *Defense Industry Conversion, Base Closure, and the California Economy*. Institute of Urban and Regional Development, University of California, Berkeley. November 1994: p. 4/1.

THE ECONOMIC STRATEGY PANEL
Collaborating to Compete in the New Economy:
An Economic Strategy for California

The Economic Strategy Panel (ESP) is establishing a biennial, bottom-up process for economic analyses and preparing strategies for statewide economic development for a diversified economy. On a macro level, the ESP completed an exhaustive review of the state's economy and has characterized the nature of economic change occurring within the state and beyond its boundaries. On the micro level, the ESP evaluated the performance and needs of a sampling of industry "clusters" operating in various regions in the state.⁷

The ESP's work is the first of its type ever undertaken in the history of the California state government. It heralds state leadership's recognition that the economy must be a priority in state policy and planning and that economic development is one of the State's most critical tools in fostering prosperity for its residents. The ESP's findings and recommendations will serve as the basis for the Defense Conversion Council's plans, policies, and strategies that address economic diversification in the state's defense-impacted regions.

The Economic Strategy Panel has identified key characteristics of the new economy:

- Rapidly changing markets and industry clusters
- Global, with significant growth in international trade
- Knowledge-based and information driven
- Interconnection between and within companies, organizations, and institutions.

As a result of these findings, the ESP has identified several implications that the new economy presents to state government as it implements economic development, including the need to:

- Develop sustainable, industry-led, regional partnerships to serve as lead organizations for the state's technology infrastructure
- Design education and training programs in direct response to the skill needs of the employer
- Shift from discrete and fragmented service providers to regionally integrated, industry-cluster services
- Implement collaborative programs in historically competitive environments that involve public and private partners
- Integrate public/private/academic requirements for technology development
- Evaluate the State's business-assistance services and delivery systems for effectiveness
- Encourage industry to be proactive in communicating its needs and activities that may help the State design its appropriate facilitative role.

Many of these implications are reflected in the assumptions, goals, objectives, and recommendations of this strategic plan. Long-term economic recovery requires a new way of doing things. The Defense Conversion Council will follow the work of the Economic Strategy Panel as it continues its study of the California economy, and will use its findings as a guide to develop appropriate and effective defense conversion plans, roles, and systems.

⁷The ESP defines a "cluster" as a concentration of complementary industries that generate wealth by exporting from a region. The ESP has found that the economy is increasingly organized around industry clusters concentrated in economic regions of the state. Supporting the clusters are the workers, investors, governments, educational institutions, and other stakeholders that affect the clusters' competitiveness.

to legislating tax incentives; from providing seed capital to streamlining regulations; from sponsoring employment training programs to participating in joint ventures with industry to foster the commercialization of new technology.

State assistance must be developed and delivered in partnership with both the public and private sectors. California's Economic Strategy Panel and the Defense Conversion Council both emphasize creating and strengthening public/private partnerships. Serving as models for change, business and industry are working together as never before to broker new commercial ventures. Many joint business ventures also include participation from community colleges, universities, and the national laboratories. As part of state and local planning and response efforts over the past two years, numerous partnerships involving various levels of government and the private sector (including non-profits) have been generated. Such relationships will be fostered through outreach, communication, and capacity building.

It is critical for the State to coordinate its response to leverage its assets strategically, in partnership with its many stakeholders.

The State must leverage and optimize the use of existing resources and foster interagency coordination. The DCC was created in recognition that both limited resources and complex socio-economic issues require state government to coordinate its internal operations to most effectively devise strategies to mitigate the impacts of defense downsizing. By coordinating efforts among various state agencies, by performing the role of facilitator, and by forming meaningful public/private partnerships, the state's resources will be used to their maximum potential. It is critical for the State to coordinate its response to leverage its assets strategically, in partnership with its many stakeholders.

State planning efforts must be complementary. The biennial planning process developed by the ESP establishes an ongoing methodology for identifying and tracking industry behavior. Additionally, the State Job Training Coordinating Council is the lead entity responsible for the One-Stop Career Center Initiative, which evaluates how to streamline and coordinate the State's employment training services. The planning and implementation efforts of the DCC must take into account and, where possible, complement the efforts of other planning groups.

The DCC must continue to provide an advisory and oversight function to the State on appropriate defense industry conversion and base reuse policy and planning. It is important for the DCC to continue to advise state leadership in addressing defense conversion issues, particularly state agency responses to, and enactment of, this plan. With appropriate cooperation from state agencies, the DCC can continue to provide sound and timely policy, program, and legislative recommendations to state leadership.

THE CALIFORNIA DEFENSE CONVERSION STRATEGY: GOALS AND OBJECTIVES

Two fundamental goals form the basis of this plan. Namely, the State will cooperate with business and with other private and public sector partners on behalf of the defense-impacted areas of California to:

- *ENSURE A DIVERSIFIED, GLOBALLY COMPETITIVE ECONOMY*
- *ENSURE THE GROWTH OF HIGH-SKILL, HIGH-VALUE JOBS.*

In order to realize these goals, the Defense Conversion Council sets forth the following objectives:

1. *Assist defense-dependent companies in transitioning to commercial markets*
2. *Strengthen the capacity of communities and regions to undertake economic development*
3. *Convert military bases into productive economic and/or community use*
4. *Provide continual upgrading of worker skills.*

Objective 1: Assist defense-dependent companies in transitioning to commercial markets.

To assist business in transitioning to commercial markets, the State needs to focus on the following areas in delivering assistance: access to capital, the advancement of new technology, meeting the needs of small business, access to a trained workforce, and entry into international markets. Small business in particular must receive special attention for two reasons. First, small business provides the majority of employment in the state and this trend is expected to continue.⁸ Second, the defense industry is comprised primarily of small firms which have traditionally acted as suppliers to defense prime contractors. In transitioning to a commercial economy, these small businesses have needs involving capital formation, product development, training, and marketing. Emerging industry sectors are also comprised primarily of small firms which have similar needs. In general, it is more difficult for small firms to access resources that meet their needs.

⁸According to Dun and Bradstreet Corporation's, *Sun's 5000 Survey of Employment Expectations*, (1995), over half of all new jobs are expected to come from small business with less than 20 employees, and approximately 85 percent come from firms with less than 500 employees.

Chapter II, Part A will address issues and recommendations affecting transitioning businesses.

Objective 2: Strengthen the capacity of communities and regions to carry on economic development.

California is home to an extensive network of more than 450 public and non-profit organizations at the local level that provide assistance to businesses and workers. This network has grown over the last twenty years in response to local and regional economic issues and because of the success of economic development strategies implemented throughout the state and nation. The ability of a community and/or a region to organize to address the economy is critical for the long-term stability of the region. However, such an undertaking requires a substantial local commitment of time, expertise, leadership, and resources in order for results to occur. Unfortunately, these resources are often scarce.

It is incumbent upon both the state and federal governments to assist community capacity building by providing necessary information, expertise, and funds...

Economic development is a high priority in defense-impacted areas of California. These regions are highly motivated to manage their own futures. At the same time, economic decline has increased the difficulty for local groups to marshal sufficient resources to address change. It is incumbent upon both the state and federal governments to assist community capacity building by providing necessary information, expertise, and funds for activities that communities must undertake to help businesses and workers.

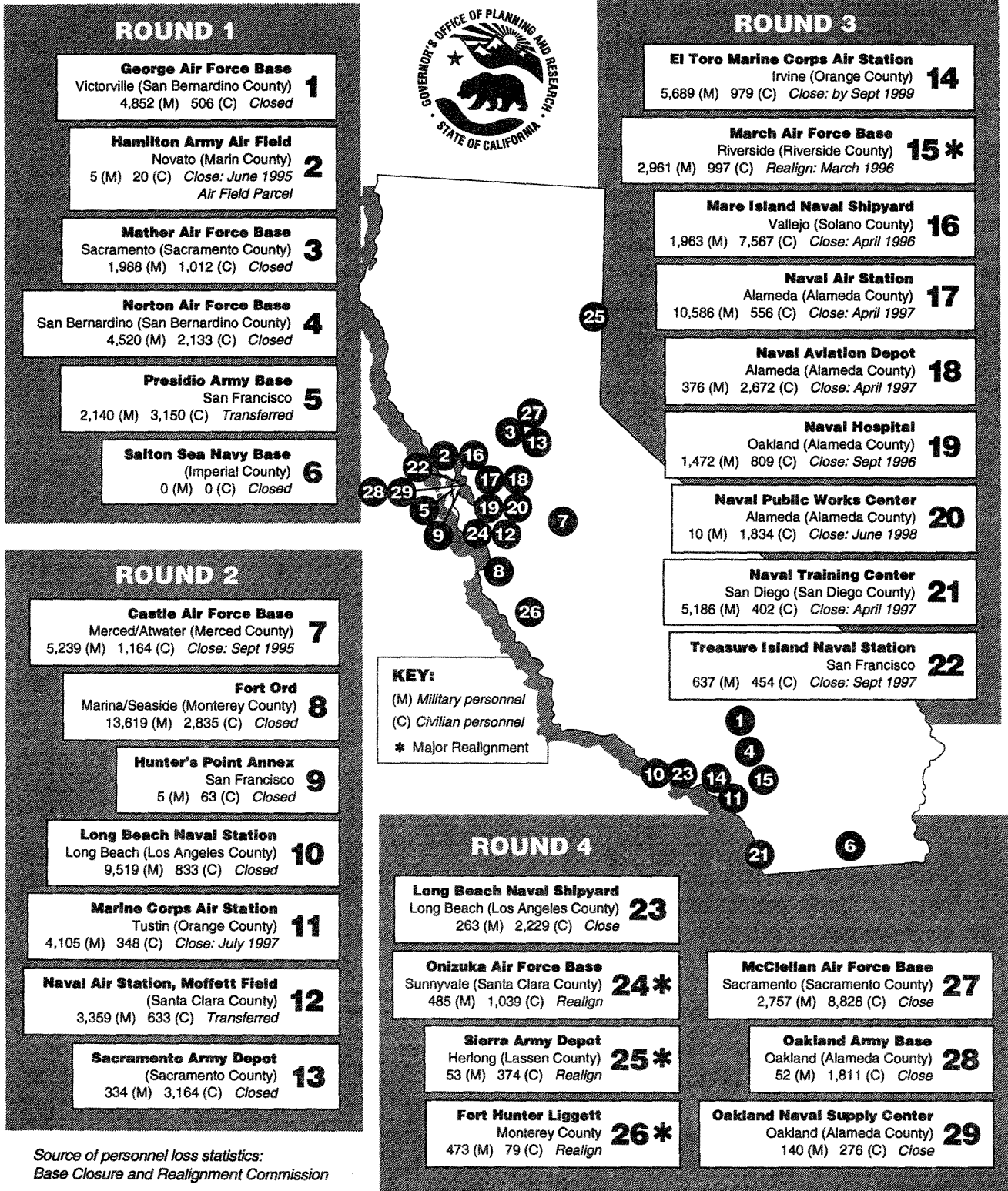
Issues and recommendations for the community are covered in Chapter II, Part B.

Objective 3: Convert military bases into productive economic and/or community use.

Twenty nine major military bases in California were marked for closure or realignment between 1988 and 1995, resulting in the eventual loss of 101,000 direct military and civilian jobs (see next page for a map of the closing and realigning bases in California). Indirect jobs will bring the total employment loss due to military base closure to 186,000 when the closure process is complete. Local, state, and federal government agencies and interest groups are working to resolve issues that place barriers on the productive use of the bases. Each sector of government has a role to play. For example, the federal government has responsibility for environmental clean-up; the State has a role in providing assistance to the local community in marketing, retraining, and planning; and local government must improve infrastructure, define reuse goals, and identify market opportunities.

Important components of state assistance to the local reuse effort include providing access to pertinent information, addressing policies and regulations

Major California Military Base Closures and Realignments



that may create unnecessary barriers to reuse, providing appropriate incentives for business investment, and addressing the health of business in the regions surrounding the bases, in order to sustain and foster economic stability.

The issues and recommendations concerning the reuse of military base properties is discussed in Chapter III.

Objective 4: Provide continual upgrading of worker skills.

California's strategy for defense conversion recognizes the effects of defense transition and other changes in the economy on workforce preparation. These conditions require the State to develop an employer-driven, adaptable, integrated, and coordinated workforce system that can prepare workers for diverse career paths. At present, through the oversight of the State Job Training Coordinating Council, the State is evaluating 22 state-run employment training services and programs to identify methods to streamline and coordinate service delivery.

This new workforce preparation system recognizes the growing importance of information-based management and analytical skills for a rapidly changing economy. The continuous upgrading of worker skills overlaps considerably with other elements of the strategy, such as the growth of small businesses, a focus on technology, and the plan's overall industry-driven approach.

Chapter IV contains a discussion of workforce preparation issues and recommendations.

CHAPTER II

THE ECONOMY

INTRODUCTION

Chapter II describes the need and strategies for enhancing businesses and communities. Businesses and communities are included under the broader heading of the “economy” to denote the linkage between the two. In other words, business development and job creation, retention, and expansion happen in a physical place—the community. Business requires direct assistance from the state and local government to remove barriers to economic vitality. The community and the State share the role of enhancing the business climate and nurturing business survival and growth. Communities have their own needs in organizing to provide business assistance. The state and federal governments can support communities in their efforts by coordinating and leveraging resources to help communities plan and implement economic development services.

PART A. BUSINESS AND INDUSTRY: THE TRANSITION CHALLENGE

Mission Statement

Working collaboratively with public and private partners to establish an industry-driven environment, the State will facilitate the transition of defense-dependent businesses in California to commercial markets, and the creation and growth of high value, globally competitive businesses in defense-impacted areas of California.

CHAPTER II, PART A. SUMMARY OF RECOMMENDATIONS

- *Provide marketing assistance to defense suppliers, especially secondary and tertiary defense contractors.*
- *Expand and coordinate information dissemination efforts.*
- *Link training and education programs to employer needs.*
- *Continue to support cooperative alliances advancing new technology.*

The State must explore new ways to interact with industry in order to define its appropriate role and provide assistance that meets industries' needs.

- *Advocate continued state and federal funding for critical technologies.*
- *Support and expand programs improving the competitiveness of small manufacturing businesses.*
- *Increase the effectiveness of technology transfer from the national laboratories to the private sector.*
- *Advocate changes in federal procurement laws that promote greater product diversity.*
- *Support and expand programs improving the access of small businesses to international markets.*
- *Increase access to debt financing for business startup and expansion, especially for small and high technology businesses.*
- *Increase access to equity capital for business startup and expansion, especially for small and high technology businesses.*
- *Eliminate tax and regulatory obstacles that impede or inhibit capital formation.*

Defense manufacturing historically has been and will continue to be an important economic contributor to California. Nonetheless, the relative importance of aerospace, a useful surrogate for defense employment, is less than in other states and has been decreasing since the late 1980s. In 1994, aerospace employment accounted for less than two percent of total non-farm jobs in California. At the same time, aerospace employment represented 3.4 percent of the civilian labor force in Washington state and 2.5 percent in Kansas.

While the relative size of the defense sector in California's economy may be small, the negative impact of defense cuts on the state economy in terms of reduced investment and job loss is real and pervasive. Economic recovery, stabilization, and growth will be stimulated by two conditions: 1) the ability of defense-dependent businesses to transition into new, rapidly changing commercial markets; and, 2) the ability of public/private partners at the local, state and federal level to foster economic diversification in defense-impacted regions of the state, taking advantage of global market opportunities.

To meet the first condition, it is important for the State to understand the special circumstances of defense-dependent industry, and to identify and mitigate transition barriers. To meet the second condition, the State needs to understand the competitive commercial marketplace at the regional level, and work with partners to identify and mitigate barriers to economic diversification. Overall, the State must explore new ways to interact with industry in order to define its appropriate role and provide assistance that meets industries' needs. For its part, industry must work with government to develop appropriate policies and programs.

CHARACTERISTICS OF DEFENSE-RELATED BUSINESSES AFFECTED BY DOWNSIZING

Various research studies on defense firms have uncovered a number of differences between defense industry firms and other commercial enterprises that constrain transition efforts.⁹ Many of these differences are outlined in Table 1 below. The defense industry is characterized by a monopsony market (one buyer), with military goods sold to a single buyer, the federal government, rather than to multiple customers. Performance is a primary criterion of DoD awards, leading to a tendency of defense contractors to have high overhead and engineering costs as they build expensive products to high standards.¹⁰ The defense contractor typically has little familiarity with commercial markets and limited experience with large production volumes.

Table 1

DIFFERENCES BETWEEN DEFENSE AND COMMERCIAL INDUSTRIES

Characteristic	Defense Industry	Commercial Industry
Customer	One	Many
Product origin	Customer requirement	Firm, market
Product specialization	Very high	Low
Development time	Long	Short
Production quantity	Low	High
Price	Cost-driven	Market-driven
Overhead costs	High	Low-medium
Marketing	Little	Much
Risk/reward	Low-medium/low	High/high
Regulation	High	Low

Source: Based on Michael N. Beltramo, "Defense Contracting and the Los Angeles Economy," Economic Roundtable, *Los Angeles County Economic Adjustment Strategy for Defense Reductions*, Los Angeles, March 17, 1992, p. 19.

Production strength for the large, specialized defense prime contractor is in technological sophistication rather than cost competitiveness.¹¹ The structure of defense firms tends to make them less flexible and innovative in their production processes. The large scale, long time frames, and restrictive

⁹Studies include a California Trade and Commerce Agency survey, conducted from August through September, 1994, of approximately 300 defense contractors and suppliers impacted by defense downsizing, and followed with focus groups. Seventy-five percent of the survey respondents had less than 100 employees; only three percent had over 500 employees. Ninety-five percent sold products to both military and civilian markets. Fifty-six percent of the companies reduced their employee strength between 10 and 60 percent over the last five years. See Appendix B for complete survey results.

¹⁰Bradshaw, et al., p. 1/6.

¹¹Bradshaw, et al., p. 1/7.

requirements placed on contracts have led to the concentration of military prime contracts in a small number of very large firms.

Limited research has been conducted on the defense subcontractor. However, it is generally understood that their business environment is more competitive than the prime contractor, although product specialization limits the number of direct competitors.

OBSTACLES TO CONVERSION

Due to differing market structures, defense firms generally have found it difficult to transition to commercial products.

Due to differing market structures, defense firms have generally found it difficult to transition to commercial products. In addition to lacking commercial industry characteristics, defense-impacted firms face a number of obstacles that include the following:

- Inexperience in product marketing
- Insufficient information about markets, funding, and assistance programs
- Difficulties in retraining their workforce
- Difficulties in converting and commercializing technology
- Lack of access to international markets
- An inability to access business capital, particularly for small business, start-ups and seed stages
- Burdensome regulatory and tax obstacles to capital formation.

Marketing Needs

The appropriate type of marketing assistance to provide to defense contractors and suppliers depends, to a great extent, on the strategies that the businesses intend to pursue. A survey of defense companies in southern California, conducted by A.T. Kearney for the Economic Development Corporation of Los Angeles County, identified different approaches among prime contractors, subcontractors, and suppliers. Table 2 demonstrates the varying strategies based on type of defense firm. Prime contractors indicated their preference to remain within DoD markets. This is supported by the consolidation taking place in the defense industry among prime contractors, such as the mergers of Lockheed and Martin Marietta, and Northrop and Grumman. On the other hand, subcontractors and suppliers revealed aggressive approaches in developing new commercial markets.¹² The State's

¹²The TCA survey found similar results—radically different approaches were used depending on whether firms were prime contractors, subcontractors, or suppliers. That is, prime contractors expressed the intent to remain in military markets. Subcontractors and suppliers, on the other hand, were looking to move into new markets.

focus in this plan remains on defense subcontractors, suppliers, and emerging technology firms rather than prime contractors.

Table 2

MARKETING STRATEGIES BY FIRM TYPE

Contractor Objective	Prime Contractors	Secondary and Subcontractors	Tertiary Subcontractors and Suppliers
Staying primarily within DoD markets	80%	25%	10%
Finding other government customers	10%	46%	29%
Finding commercial markets	10%	29%	60%

Source: A.T. Kearney and Los Angeles Economic Development Corporation, "An Industry in Transition," June, 1993, p. 11.

In general, defense firms have limited familiarity with commercial markets. Those firms that already have experience in commercial production are able to transition more easily to the commercial sector. To commercialize their products, defense firms must identify private sector markets for existing products, or they need to create and market new products. Due to the long time frames typical for defense production, the transitioning firm must learn to respond quickly to rapidly changing market conditions. Defense firms typically lack knowledge and experience in product promotion, distribution channels, and market research.

Recommendation: Provide marketing assistance to defense suppliers, especially secondary and tertiary defense contractors.

The State can assist defense suppliers, particularly secondary and tertiary contractors, in developing marketing expertise that will enable them to access new markets for their products and services. The State should target existing marketing programs and services to defense suppliers, thereby leveraging and optimizing the use of these resources.

One of the most extensive programs that already exists to train businesses in marketing is the Small Business Development Centers (SBDCs). The SBDC program is funded and administered jointly by the U.S. Small Business Administration (SBA), TCA, and the California Community College Chancellor's Office. The extensive network of 27 SBDCs and numerous regional outreach centers provides management assistance, training, and counseling to present and prospective small business owners at no cost.

While many of the SBDCs offer programs targeted to aid specific industry sectors, most of their services are generalized. However, through

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U.S. Small Business Administration grants, three SBDCs now offer programs targeted to companies transitioning from defense dependence. Although these programs provide much needed assistance, they are not focused on providing marketing services to defense suppliers. Furthermore, secondary and tertiary defense suppliers, because of their limited experience in marketing, may not be aware of programs such as the SBDCs that offer marketing training.

In order to assist secondary and tertiary suppliers in transitioning to commercial markets, the SBDC program and other relevant programs, should be expanded to provide targeted marketing assistance to the defense supplier. Additionally, outreach should be conducted to defense suppliers to increase their awareness of SBDC programs, as well as other marketing services offered by the State. As is required with all programs, evaluation criteria should be developed to monitor success in assisting the suppliers.

Information Needs

Information on markets, funding, and assistance is important to businesses in their transition efforts. For example, businesses have expressed a desire to have government contracts and grant information provided on-line for public consumption, as well as a need for information about venture capital, particularly for small companies.¹³

A growing number of California businesses already make intensive and innovative use of computer networks in order to communicate externally with their suppliers and customers, and internally between departments or divisions or other geographic locations. A recent study by CommerceNet and Nielsen Media Research found that some 55 percent of the 18 million World Wide Web users in the United States and Canada search for information on products or services, and 60 percent search for information on companies or organizations.¹⁴ In the public sector as well, computer networks have become widely used to share resources and to communicate with constituents.

Both the fortunate and unfortunate consequence of the electronic age is the proliferation of information. Generous amounts of information are available on almost any topic, but sorting through it can be problematic, if not impossible. Businesses need a way to choose the right sources and types of information in a timely and efficient manner. For example, defense industries that have been severely impacted in the last five years require information to widen product development, increase market access, and redefine their role in California's changing economy. Information on federal, state, and local

¹³TCA survey and focus groups. See Appendix B, Table I for more detailed information.

¹⁴"CommerceNet/Nielsen Announce Internet Study Results," Business Wire, October 30, 1995.

programs can make an important difference in providing for economic transition and economic development.

Recommendation: Expand and coordinate information dissemination efforts.

The State should assist businesses by effectively disseminating information, including developing resource and agency points of contact, serving as an information clearinghouse, and conducting outreach on available government programs.

While there is no shortage of information on programs, services, and opportunities available to business, an effective system to disseminate this information to business is lacking. Most businesses do not have the time to sift through extensive catalogs of resources or make numerous telephone calls to identify points of contact. The State should develop points of contact for its business assistance programs which are accurately promoted and clearly understandable so that targeted constituents are able to quickly identify appropriate resources.

Although it would be unrealistic to expect one point of contact to be completely versed in all aspects of business resources, the State could better identify existing information, then broaden interagency awareness of the resources by training staff and sharing, coordinating, and distributing information on behalf of business.

Clearinghouse efforts are currently underway at a number of state agencies. One such endeavor is the establishment of the California State "home page" on the World Wide Web. The home pages provide information on state agencies, programs, and resources. Other sources of information are available at the non-profit and regional level, such as through CommerceNet, a business-to-business network established by Joint Venture:Silicon Valley Network. A number of on-line resources for business and industry are described in Appendix C.

The Education and Training Link

Many education, employment, and training agencies have made the employer their number one customer, realizing that to create and retain jobs for the future, they must partner with business. The Employment Training Panel, the Employment Development Department, and the California Community College System all have programs for employers and state initiatives requiring a link with economic development. For example, the Employment Training Panel (ETP) funds training projects defined by the employers—whether for training new employees or for retraining current workers. Businesses tailor the training for their specific needs by identifying

Many education, employment, and training agencies have made the employer their number one customer, realizing that to create and retain jobs for the future, they must partner with business.

**California leads
the nation in
high-technology
performance.**

trainees, types of training, and the trainers. The direct involvement of employers in training their own workers plays an important role in helping defense-related businesses transition to commercial markets.

At the federal level, education reform of traditional academic-based learning is requiring career tie-ins with strong industry input. If the federal government provides “block grants” for training in lieu of traditional categorical types of funding for client groups, California will have more flexible pools of training funds for employers.

The California Community Colleges, Employment Development Department (EDD), and ETP will continue to bridge the gap with education and training programs to support economic development. For example, state law (AB 3512) designates the community colleges as the primary provider in fulfilling the vocational education and training needs of California business and industry. The mission is to strengthen leadership, communication, and liaisons with the private sector, as well as with the public sector education and training providers. The colleges work with businesses and employers to identify workforce education and training needs, including the needs of small business, and create networks of service providers that meet needs in the most cost-effective and timely manner.

Recommendation: Link training and education programs to employer needs.

The State should support and expand training programs that are industry-driven. It is important that employer needs drive the development of training curricula and delivery systems. The DCC urges continued responsiveness to the needs of the workplace in developing retraining programs.

Chapter IV contains additional recommendations related to workforce preparation.

Technology Development and Commercialization

High-technology development is an important part of the state economy—California leads the nation in high-technology performance. The state is home to approximately 15 percent of the nation’s high-technology workers, 15 percent of its engineers, and nearly 10 percent of the nation’s patents.¹⁵ The University of California ranks only behind Massachusetts Institute of Technology in the number of patents awarded over the last quarter century. High-technology firms continue to be among the fastest growing firms in the state; almost 30 California technology firms were listed in Inc. magazine’s 1995 “100 Fastest Growing Firms,” as measured by sales growth.

¹⁵Bradshaw, et al., p. 3/22.

The expansion of the California aerospace and electronics industries corresponds with federal expenditures for the Department of Defense (DoD), the Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA) in California. This direct federal investment created and sustained the wide variety of technology-based industrial clusters needed to support its programs and served as the impetus for new and innovative private sector firms and industries emerging to service evolving industry needs.

Regional Technology Alliances—An Industry-Driven, Regional Model

Many programs have been developed to decentralize the delivery of state services, resources, and programs to ensure that decision making authority remains at the local level. The Regional Technology Alliances (RTAs) demonstrate an important role in providing an example of the industry-driven, technology-based, regional approach to economic development. Established without federal assistance through the leadership of the California Trade and Commerce Agency and in partnership with the private sector, California's RTAs are developing a broad range of programs and activities which address the following goals:

- Creation and retention of jobs
- Creation of new and expansion of existing businesses
- Development of new commercial or dual-use products
- Establishment of industry partnerships and consortia
- Demonstration of productivity enhancements within key regional industries
- Participation of small businesses and minority, women, and disabled-veteran owned businesses.

The three established RTAs, located in the Los Angeles, San Francisco and San Diego areas, develop and manage a portfolio of regionally significant, industry-driven initiatives. The RTA boards of directors provide industry representation in the implementation of the State's strategies for defense conversion. The RTAs seek funding for projects from industry and other sources, including matching grants from the State. Specific industry cluster technologies that RTAs are supporting include environmental technology, advanced transportation, telecommunication, software, multimedia, information displays, and healthcare technology. The RTAs decentralize the delivery of state services, resources, programs, and activities and, in turn, ensure that decision making authority remains at the local level.

Federal spending for research and development (R&D) has had a major impact on technology development. The federal R&D budget for 1992 was approximately \$70 billion, more than 40 percent of all R&D spending in the nation.¹⁶ Nearly 60 percent of federal R&D spending, \$41.5 billion, was for

¹⁶Bradshaw, et al., p. 3/4.

military R&D. California ranks in the top ten U.S. states in terms of research and development spending as a share of gross state product.¹⁷

The role the national laboratories play in technology development has had a significant effect on the nation's economy. The San Francisco Bay Area is home to three of the ten U.S. Department of Energy (DOE) multi-program laboratories: the Lawrence Berkeley National Laboratory, the Lawrence Livermore National Laboratory, and the California division of Sandia National Laboratories. Other government laboratories are located in California, including DoD laboratories such as China Lake and San Diego Naval Research, and NASA laboratories, which include the Ames and Jet Propulsion Laboratories. The federal laboratories play an important role in meeting both the state's and the nation's R&D priorities, including leadership in science and engineering, national security, improved environmental quality, education, job creation, and economic growth.

Private sector leaders should be involved in the creation of public policy on business to ensure it is responsive and relevant to business concerns, especially to small business.

During the past few years, the DOE and its laboratories have been working with major corporations in several industry sectors (for example, the Semiconductor Industry Association and initiatives with the steel, oil, and gas industries) to identify technology areas where the laboratories have competencies that can be appropriately applied. There is a need to extend these collaborations to small- and medium-sized firms.

California's plan for defense conversion continues this emphasis on technology and research, acknowledging the importance of technology (in addition to labor and capital) in future economic growth. The support for technology and research is evidenced by the establishment of Regional Technology Alliances by the Trade and Commerce Agency, as well as a number of state programs that emphasize the interaction of technology with California's manufacturing base. For more information on the Regional Technology Alliances, see the insert on the previous page.

Recommendation: Continue to support cooperative alliances advancing new technology.

The State must continue to support and strengthen the Regional Technology Alliance partnerships as an effective outreach tool to industry making the transition from defense to commercial markets. Moreover, it is important for the State to continue to form new RTAs in the state, as needed.

Private sector leaders should be involved in the creation of public policy on business to ensure it is responsive and relevant to business concerns, especially to small business. One way to involve the private sector is to seek private representation on advisory panels.

¹⁷National Science Foundation, *Science and Engineering Indicators*, 1993.

An example of a successful public/private partnership is the relationship the RTAs have established with industry through their Peer Review Panels, which were created to evaluate proposals submitted for the State's Defense Conversion Matching Grant (DCMG) program. Industry experts are not only able to assess the technologies supported through the DCMG program, they are able to evaluate the project teams and business plans. The public/private partnerships and alliances formed by this program are unprecedented in achieving levels of success in leveraging limited state general funds and forming a comprehensive foundation for partnerships, consortia, and business expansion.

The State should explore other areas for private involvement and encourage the development of public/private partnerships to obtain valuable expertise. If the State is to be responsive to the needs of business, especially to small business, it needs to establish open and regular channels of communication.

Recommendation: Advocate continued state and federal funding for critical technologies.

The new Congress has reduced or eliminated a number of important programs targeted to technology-based defense conversion. Recissions threaten current and future collaborative projects in California. The Governor's Washington, D.C. office and the state's congressional delegation should advocate funding of technology programs that require collaboration with the states. Furthermore, the State should support its own technology programs, such as the Defense Conversion Matching Grant program, that sustain a competitive advantage for California high-technology companies.

At the same time, California should seek to establish measures of effectiveness for collaborative projects, such as the National Institute for Standards and Technology (NIST) programs. Both the state and federal government have invested hundreds of millions of dollars in these collaborative efforts, yet little has been done to determine their effectiveness. Clearly defined project outcomes should also be established, and continued public sector support should be predicated on project success.

Recommendation: Support and expand programs improving the competitiveness of small manufacturing businesses.

Numerous technical assistance programs for business are supported by the State. These programs offer valuable assistance to increase the competitiveness of California businesses. The State should target their efforts to assist small defense contractors and suppliers. Furthermore, state agencies should coordinate their services to ensure minimum duplication and the most effective application of services.

California should seek to establish measures of effectiveness for collaborative projects...

An example of coordinated state resources is presented by two programs, the California Manufacturing Extension Centers (CMECs) and the Centers for Applied Competitive Technology (CACT). The CMECs are a major building block in the statewide plan to restore competitiveness to an industrial sector severely impacted by recession and the radical downswing of the aerospace industry. The CMEC's major customer base are the small manufacturers directly impacted by the defense drawdown. CMECs help small aerospace manufacturers develop dual-use and/or commercial products.

California must make effective use of the talent and resources contained within the national laboratories located in the state.

The CACTs provide a broad range of business assistance services, including manufacturing extension services, to small- and medium-sized manufacturers. These resources will be leveraged to expand current efforts to provide technology deployment services to small high technology and aerospace manufacturing firms. A secondary target population is the over 8,000 small manufacturers in Orange, Riverside, and San Bernardino Counties. Technology is transferred from the CMEC to the CACTs so state-of-the-art training can continuously be available to meet the demands of manufacturers and the service industry linked to manufacturing.

Another tool assisting small business, including manufacturing, high technology, and others, is the "business incubator." Business incubators allow several businesses to share costs for common functions, such as communications and other administrative tasks, to minimize these expenses. In addition, business incubators generally offer valuable technical assistance such as advising the business on accounting systems, management, and business planning.

The State should continue to expand funding and/or technical support to programs like those described above and continue to seek new ways to support the development and commercialization of technology by small California companies.

Recommendation: Increase the effectiveness of technology transfer from the national laboratories to the private sector.

California must make effective use of the talent and resources contained within the national laboratories located in the state. The three DOE laboratories alone account for nearly 15,000 jobs and an annual operating budget of about \$1.5 billion for the benefit of the state and the nation.

The Governor's Washington D.C. office and the state's congressional delegation should advocate changes in federal guidelines that provide:

- Enhanced access of laboratory-based technology by the private sector
- Improved flexibility in transferring technology
- A focus on industry-driven R&D

- Better coordination and cooperation with other government agencies.

The Governor's Washington D.C. office and the California Congressional Delegation should also support reductions in red tape that inhibit the authority of DOE laboratories to approve time-sensitive collaborations with industry partners.

The D.C. office and the congressional delegation should also advocate for the establishment of advisory boards at the national laboratories to facilitate the transfer of technologies to the commercial market. The boards should include a majority of members from the private sector.

Laboratories should be encouraged to work with organizations like the TCA's Office of Strategic Technology, the RTAs, CACTs, and SBDCs. Closer coupling can be accomplished by allowing management representatives from each of the laboratories to serve on regional boards and committees.

In addition, collaboration between national laboratories and other government agencies remains limited. The D.C. office and congressional delegation should advocate for changes in federal guidelines that permit collaboration so that problems relating to energy, environment, transportation, and education can be addressed. This advocacy should ensure that the national laboratories are also able to collaborate with local, regional, and state partners.

Recommendation: Advocate changes in federal procurement laws that promote greater product diversity.

DoD procurement regulations inhibit commercial product development and should be modified. Most defense firms find that DoD requirements for manufacturing products greatly restrict their ability to produce defense and commercial products side-by-side. One consequence of these DoD requirements is high business overhead. The Secretary of Defense, William Perry, has estimated that military specifications may cost \$30 billion annually—equivalent to 40 percent of total DoD procurement funding.¹⁸ The Governor's Washington, D.C. office and the California Congressional Delegation should accelerate their efforts to achieve reforms that remove this barrier.

International Trade

Sharp increases in the volume of international trade, and trade growth in a number of products produced by many high technology firms, indicate that

Most defense firms find that DoD requirements for manufacturing products greatly restrict their ability to produce defense and commercial products side-by-side.

¹⁸Perry estimates that paperwork costs are 10 percent in industry. "Acquisition reform is vague," *Defense Conversion*, Vol. 2, No. 9, May 10, 1993, p. 2.

trade should be emphasized as a tool for economic and defense transitions. Trade liberalizations benefit California more than other American states, and many of California's major trading partners, such as Taiwan, Singapore, South Korea, and Hong Kong are emerging markets and are expected to grow rapidly. The North American Free Trade Agreement (NAFTA), the General Agreement on Tariffs and Trade (GATT), and extension of Most Favored Nation status for the People's Republic of China indicate continued trade growth. The international marketplace provides unprecedented market opportunities for California defense suppliers and technology companies.

The international marketplace provides unprecedented market opportunities for California defense suppliers and technology companies.

California's exceptional export volume places the state far ahead of any other state in the nation and surpasses most other countries' trade performance. Between 1987 and 1994, California merchandise exports escalated from \$34 billion to over \$81 billion, accounting for nearly one-fifth of total U.S. exports, and almost double its share of twenty years ago.¹⁹ Los Angeles Customs grew from \$6.2 billion in 1972 to \$121 billion in 1992. Exports are vital to California's continued economic growth, representing approximately ten percent of California's gross state product. According to the U.S. Department of Commerce, every \$1 billion in exports supports approximately 19,000 direct and indirect jobs.

Table 3

TOP CALIFORNIA EXPORTS

Rank	Export sector	Value (\$ million)	Change 1994 - 1993 (YTD) ^a	Percent of U.S. ^b
1	Electronics & electrical equipment	21,177	27.6%	27.5%
2	Industrial machinery & computers	19,049	18.5%	26.0%
3	Transportation equipment	9,424	10.4%	9.2%
4	Instruments/related products	5,873	12.6%	26.6%
5	Food products	5,056	-0.4%	31.4%
6	Agricultural production	3,367	27.4%	15.6%
7	Chemicals	3,032	24.4%	11.1%

^a Compares the first quarter of 1995 to the first quarter of 1994.

^b Share based on 1993 exports.

Source: Office of International Trade and Investment, Trade and Commerce Agency

Many of the fastest growing sectors also overlap with defense industry sectors: electronics, electrical equipment, industrial machinery, and instruments (see Table 3 above). The aerospace industry produces a significant amount of exports in the instruments group, which includes search and navigation equipment and other devices used for aerospace.

¹⁹Trade statistics are from TCA's Office of International Trade and Investment.

Recommendation: Support and expand programs improving the access of small businesses to international markets.

International trade provides opportunities for small businesses to expand their markets and should be emphasized as a tool for economic and defense transition. Several programs exist at the state level supporting California companies' expansion into the international marketplace. The State should continue to support these programs, while directing them to assist small businesses' entry into global markets.

Two examples of export development programs serving small- and medium-sized businesses are offered by TCA. The California Export Finance Office helps exporters finance their export sales by providing working capital loan guarantees to financial institutions on behalf of exporting California companies. The Office of Export Development offers an array of export marketing services to California companies, including coordinating California visits of foreign buyer delegations, publishing California trade directories and product catalogs, and directing foreign trade inquiries to qualified California vendors.

Another export development program that assists California businesses is the community college Centers for International Trade Development (CITD). Since 1989, the CITDs have helped more than 10,000 businesses compete in the global marketplace. Experienced international trade professionals provide many training and support services to business. Such programs should target their assistance services to defense-impacted firms to address their unique needs.

Numerous studies cite lack of debt and equity financing as barriers to developing commercial products.

Capital Formation

Numerous studies cite lack of debt and equity financing as barriers to developing commercial products.²⁰ This problem exists across a wide range of industries, particularly for small- and medium-sized businesses and for those involved in technology development. One study of economic development loan programs reported that 96 percent of small businesses have credit needs the programs cannot meet, especially in start-up and early-stage businesses.²¹ In general, banks are not equipped to fund start-ups from their commercial loan divisions. They may provide consumer loans to small start-ups based on the credit of the individual, or through credit cards and home equity loans. Indeed, small business loans are less readily available than they have been in the past. In the last decade, bank loans to small companies have

²⁰Nine percent of TCA survey respondents identified debt financing and four percent identified equity financing as barriers to conversion.

²¹High Technology Council of EDC of Los Angeles County, "Venture Capital and Technological Innovation in Southern California," p. 9.

fallen by more than 40 percent while loans to large companies have risen by the same percentage.²²

Venture capital funding for early-stage financing of new businesses is also not readily available. It is commonly accepted that the number of start-up and early-stage ventures able to obtain funding from venture capital sources is about one percent.²³ The threshold requirements firms must meet for serious consideration by venture capital funds include fast growing, extensive markets; a strong proprietary position by the investor in the company's technology; a proven management team; a 35 to 50 percent internal rate of return; and other factors giving the firm an unusual competitive edge.

Many early-stage companies, ...present attractive, technology-based ventures that could significantly add to California's economy and employment base.

Professor William Wetzel, Director of the Center for Venture Research of the University of New Hampshire, estimates that the job-generating entrepreneurial economy needs about \$60 billion per year of high-risk, patient equity capital. Of this, venture capital supplies \$3 to \$4 billion in funds to about 3,000 ventures. High net worth, qualified investors, also known as "business angels," supply between \$10 and \$20 billion a year to over 30,000 ventures, leaving an annual equity capital gap of between \$35 and \$45 billion. California alone is estimated to have a gap of between \$3 and \$4 billion annually.

It is believed that many early-stage companies, although "below the radar" of the venture capital funds, nevertheless present attractive, technology-based ventures that could significantly add to California's economy and employment base. This shortfall of funds is particularly acute for early-stage companies in southern California.²⁴

Recommendation: Increase access to debt financing for business startup and expansion, especially for small and high technology businesses.

In terms of access to debt financing, nearly all state and federal direct or guarantee loan programs require that funding pools have very conservative

²²High Technology Council. p. 9.

²³In a "Wall Street Week" interview, Louis Rukeyser asked the general partner of a leading venture capital fund in northern California how many proposals were looked at and how many investments were made. The general partner indicated that the fund reviews about 1,000 proposals a year, and invests in between 10 and 20 of them.

²⁴According to the Price Waterhouse National Venture Capital Survey for the Fourth Quarter of 1994, initial/seed financing accounted for only 78 investments out of a total of 643, for a total investment amount of \$201 million or 13 percent of the total venture capital investments of \$2.48 billion invested during the Fourth Quarter. Of this national total, Los Angeles and Orange County accounted for only 13 investments, totaling \$62 million or four percent of the national total; San Diego accounted for 10 investments, totaling \$78 million or 5.2 percent of the national total; whereas Silicon Valley accounted for 85 investments for a total of \$319 million or 25 percent of the national total.

loan/loss ratios on their portfolios. That means that government is holding borrowers to credit standards that are in line with private banking standards. This practice does two things—it minimizes loan defaults, and it creates incentive for private bank participation. There are several ways to accelerate lending activity, including:

- Allow more flexibility in loan/loss ratios on government funds (local/state/federal), thereby expanding lending opportunities to riskier ventures. Such funds can even target start-up ventures. The SBA DELTA loan program²⁵ applies this strategy creating a loan/loss reserve supported by the Department of Defense (DoD) which attracts riskier ventures.
- Increase access of small businesses to government funds that guarantee bank loans. In addition to reducing a bank's risk, the bank can sell a guarantee on the secondary market and make a substantial profit.
- Design government loan programs that offer loans in amounts under \$25,000—the level at which most small businesses need start-up and working capital. Private banks rarely lend in amounts under \$100,000.
- Provide timely access to technical assistance in identifying capital resources, including financial packaging.

Recommendation: Increase access to equity capital for startup and expansion, especially for small and high technology businesses.

Various initiatives aimed at stimulating the flow of investment capital to industry are being implemented by the federal government and by many of the states. These activities complement and supplement capital provided by the organized venture capital firms and the private investor community. The State of California should cultivate an environment to ease access to capital for small, growing, and innovative businesses, particularly those companies engaged in developing and commercializing new technologies.

The State can use its organizational resources and its legal, regulatory, and tax powers to create an environment that channels additional capital into growing, small businesses and directly and indirectly mobilizes the private sector funds required to alleviate the capital access problem. These recommendations include:

- Provide initiatives to increase the formation of SBIC-type firms

²⁵DELTA, Defense Loan and Technical Assistance program, is similar to the SBA 7(a) program but specifically targets small business that are dependent on defense contracts and are adversely affected by defense reductions.

The State of California should cultivate an environment to ease access to capital for small, growing, and innovative businesses, particularly those companies engaged in developing and commercializing new technologies.

- Investigate ways to remove barriers inhibiting investment by business angels in small and emerging technology companies
- Initiate a study defining the State's role in stimulating the availability of equity financing.

One example of a federal initiative stimulating capital investment in small business is the broadening of scope of the Small Business Investment Corporation (SBIC) program by the U.S. Small Business Administration. The SBA will provide to licensed SBICs additional investment funds on a leveraged basis for use in providing equity capital to small business. The State should evaluate ways of increasing the number of SBIC-type firms investing in California businesses. This is one example of an initiative aimed at increasing the amount of equity capital available to small business.

Small businesses have special financing needs, in particular for patient, high-risk equity capital for start-up and early stage phases of business development.

In order to improve the efficiency and effectiveness of the business angel funding process, the Small Business Administration is working to: 1) find ways to better network entrepreneurs and investors; and 2) remove or reduce obstacles and barriers inhibiting and discouraging business angel investors from supplying early-stage equity financing. Compared to other states, a large number of Californians fall into the business angel category of investors. Removing these obstacles and improving the funding process will increase the flow of early-stage equity capital to business ventures.

Small businesses have special financing needs, in particular for patient, high-risk equity capital for start-up and early stage phases of business development. The State's study should establish a role for the State in encouraging the accessibility and availability of equity capital to small and emerging technology companies. The study should evaluate current initiatives and programs underway in other states and apply suitable "lessons learned" in California.

Regulatory and Tax Obstacles to Capital Formation

The Defense Conversion Council, through the Trade and Commerce Agency, sponsored the formation of a Business Investment Panel to examine issues specific to capital formation in California. The Panel found that in addition to investment capital shortfalls, there are both tax and regulatory obstacles to capital formation in California, particularly as applied to the business angel capital source. It is believed that these obstacles inhibit businesses' access to capital, particularly for the small company.

Blue Sky Laws. In the United States, there are two principal types of state securities or "blue sky" laws—disclosure and merit review. Disclosure laws require full disclosure on all securities offerings made in the state. A merit review system is based on the statutory discretion given to the securities

regulator to allow or deny securities offerings based on the “merits” of the offering as determined by, in this case, the California Department of Corporations.

California’s merit review system creates substantial regulatory impediments to private and public offerings of start-ups and early-stage companies. The Small Corporate Offering Registration rules, adopted in 41 states, permit an exempt public offering from federal registration of up to \$1 million a year.²⁶ Its purpose is to help small businesses raise capital by selling shares of the company to its customers and vendors. Despite the availability of this seemingly attractive alternative available in California since it was enacted in 1992, only 14 permit applications have been submitted and five permits granted. Four of these companies ended the offering because of high costs or too few investors, leaving just one company completing the process. The restrictions in the California merit review statute and regulations inhibit the widespread use of this capital formation procedure.

Corporate Taxes. A significant obstacle to economic growth in California is the perception that California has an unfriendly tax climate for businesses. This perception is not unfounded. According to the Report of the Task Force on California Tax Reform and Reduction (1993), California’s corporate taxes were found to be the highest of any western state.²⁷ California ranks fifth in the nation in corporate income taxes as a percentage of personal income, a full 50 percent above the national average for states with such a tax. California’s top marginal rate is higher than all but eight other states, and all but one large industrial state.

California has made some changes in recent years to make the state more tax-friendly for business. These changes include easing the requirements for making a waters-edge election,²⁸ introducing a tax credit for the purchase of manufacturing equipment, expansion of the research and development tax credit, reducing the tax on capital gains for investments in small businesses, and reinstating a partial net operating loss carryover. Nevertheless, more needs to be done.

California has made some changes in recent years to make the state more tax-friendly for business... Nevertheless, more needs to be done.

²⁶Rule 504 of the Securities Act of 1933.

²⁷Task Force on California Tax Reform and Reduction, *Building A Better California: The Tax Reform Component*.

²⁸The waters-edge election is a concept whereby a corporation with subsidiaries located in the U.S. and in foreign countries can choose from two alternate methods as to how the corporate tax is computed. The choice depends upon many factors such as sales, payroll etc. In either case, it is a sensitive issue with California corporations involved in international business.

Recommendation: Eliminate tax and regulatory obstacles that impede or inhibit capital formation.

As indicated above, a number of regulatory obstacles limit the flow of capital to start-up companies. The State should pursue regulatory and tax changes which include the following:

A simultaneous, companion effort must take place to diversify the economic base of impacted areas.

- Eliminate the duplication of complex and different exemptions under federal and California securities laws
- Exempt small company offerings from the merit review standard, with a provision to strengthen investor protection
- Adopt an exemption from qualification for “test-the-waters” solicitations, which are solicitations of indications of interest permitted under the federal rules for Regulation A offerings
- State certify “qualified investors” to encourage business angel investment
- Enact state rules to make it easier to match up qualified investors, i.e., business angels, with small companies seeking capital
- Amend the California Securities Law to make small offerings more feasible for small companies
- Advocate changes in federal regulations to amend the Securities Exchange Act of 1934 and NASD rules to create a special class of brokers/dealers who would specialize in offering securities of small business issuers and make markets in such securities
- Advocate changes in federal regulations to allow venture capital firms to sell securities to the public without having to register under the Investment Company Act of 1940 as a regulated investment company
- Reduce the capital gains tax on property owned for more than one year
- Expand the R&D tax credit
- Cut the corporate tax rate.

CALIFORNIA’S STRATEGY FOR FOSTERING ECONOMIC DIVERSIFICATION

The recommendations presented above are intended to guide the State’s efforts to help defense-related companies transition to commercial markets. A simultaneous, companion effort must take place to diversify the economic base of impacted areas. The State’s most critical partners in facilitating economic diversification are industry and the local community. The role of the community is discussed in Part B of this chapter.

Economic diversification requires several factors: 1) public/private leadership and collaboration; 2) a clear understanding of the marketplace and its potential; 3) knowledge of the region's assets and liabilities; 4) a sound understanding of the needs of industry in the region; and, 5) a local plan of action, with stakeholder roles clearly defined.

The state strategy for defense conversion does not specifically address diversification strategies per se, for two reasons: 1) research on full market potential in the regions was not conducted as part of this strategic plan; and, 2) such research has been conducted as part of the Economic Strategy Panel's mandate. The work of the Panel should serve as a fundamental guide to the Defense Conversion Council as the DCC develops defense conversion plans, policies, and strategies.

PART B. IMPACTED COMMUNITIES: GOVERNMENT'S ROLE IN FOSTERING TRANSITION

Mission Statement

Working cooperatively with local government and community groups, the State will build the capacity of defense-impacted communities to sustain economic activity, foster a diversified economy, and convert military bases to productive uses.

CHAPTER II, PART B. SUMMARY OF RECOMMENDATIONS

- ***Provide public funding to defense impacted communities for planning, program development, and organizational support.***
- ***Provide direct technical assistance to communities and regional alliances in developing and implementing base reuse and defense industry conversion strategies.***
- ***Provide a clearinghouse of information to support communities and expand communication between communities and the State.***
- ***Strengthen cooperation, coordination, and communication among state agencies.***

Local government and community groups are strong collaborators with the state and federal government in the defense conversion process. Communities must invest in the transitioning economy and address issues that directly impact business development occurring in the community, as well as in the region at large. Community issues that impact business include local zoning, land availability, permit procedures, infrastructure, access to capital, access to suppliers, available housing, and the size and skills of the labor pool.

State government has a role to play in improving community capacity to address business development issues, for example, by providing technical assistance and funding for planning and infrastructure development. The State also provides vital assistance by attempting to resolve issues only the State has control over, such as revising tax policy and regulations, or offering effective education and employment training programs.

Finally, the federal government's role is equally critical in that it can provide support to local planning and implementation efforts, as well as address its own laws and policies that may act as barriers to economic improvement in communities. For example, this includes the federal government funding the environmental clean-up of closed military bases.

For the state and federal government to be effective partners with communities in advancing economic development, it is critical to have an

accurate understanding of the nature and extent of community need. As indicated in Table 4 below, three regions (including twelve counties) and four separate counties outside of these regions have been heavily impacted by defense downsizing. Los Angeles, San Jose, and San Diego have been greatly affected by losses in their manufacturing sectors. Base closures have hit primarily urban communities, especially the San Francisco Bay Area. Although only 16 of the state's 58 counties are included on this impact list, these counties include 78 percent of the state's population. These numbers do not include impacts in contiguous counties such as Contra Costa or Napa.

Table 4

REGIONS AND COUNTIES HEAVILY IMPACTED BY DEFENSE DOWNSIZING

San Francisco Bay Area	Greater Los Angeles	San Diego	Non-regional Counties
Alameda County San Francisco County San Mateo County Santa Clara County Solano County	Los Angeles County Orange County Riverside County San Bernardino County Santa Barbara County Ventura County	San Diego County	Merced County Monterey County Sacramento County Lassen County

Source: California Trade and Commerce Agency

There are more than 450 local and regional organizations representing nearly all of the state's 58 counties providing some level of economic development services.

ECONOMIC DEVELOPMENT AT THE LOCAL LEVEL

The State's most vital partner in providing economic development services to communities and business in California is the statewide network of professional economic development organizations. This network has grown substantially in the last ten years and exists at the community, county and regional levels. The California Association for Local Economic Development (CALED) conducted a statewide survey of defense-impacted cities and counties to identify the numbers and types of economic development programs.²⁹ CALED found that there are more than 450 local and regional organizations representing nearly all of the state's 58 counties providing some level of economic development services.

Local economic development programs are configured in many different ways and perform a variety of functions. These functions include: permit streamlining, business liaison, loan programs, diverse business incentives, business retention, expansion, and attraction, and infrastructure development. The traditional public/private sector regional economic development organization is the non-profit economic development corporation (EDC),

²⁹“Building Economically Competitive Communities,” California Association for Local Economic Development, March, 1995.

which typically covers one or more counties, with financial support primarily from the public sector.

Many regional models for economic development are emerging to deal with regional issues of common interest such as base closures, regulatory reform, infrastructure, and emerging technologies. While continuing to perform many of the traditional functions of EDCs, these evolving models tend to emphasize linkages based on regional economic boundaries rather than political ones. Organizational functions focus on fostering network relationships and developing initiatives which respond to specific issues identified for groups of users, rather than for individual businesses. One such locally organized regional group is Joint Venture: Silicon Valley Network, comprised of representatives from high technology firms located in the greater San Francisco Bay Area.

The challenges presented by defense downsizing and global economic restructuring have gone beyond the ability of many communities to adapt as well and as quickly as desired.

OBSTACLES TO DEFENSE CONVERSION

In spite of the delivery system in place, the challenges presented by defense downsizing and global economic restructuring have gone beyond the ability of many communities to adapt as well and as quickly as desired. The extent of community need has been documented from a variety of sources.³⁰ This research shows that community needs can be grouped broadly into three categories:

- Adequate funding for local planning, program implementation, and organizational development
- Technical assistance in organizational development and planning, business retention and attraction, and in attracting business to closing military bases
- Information on federal and state policies and programs.

Funding for Planning, Implementation, and Organizational Development

Adequate funding for defense industry conversion and base reuse planning and implementation is a critical prerequisite for successful transition. It enables communities to determine long-range needs, to identify realistic development paths, and to provide the necessary community framework for business attraction and recovery. Several case studies suggest that communities which establish recovery plans early are the most likely to succeed in their conversion efforts. However, according to CALED's survey, of those communities who perceive themselves to be defense-impacted, only

³⁰Bradshaw, et al.; community applications to the Defense Adjustment Matching Grant program; Trade & Commerce Agency Community Survey, detailed in Appendix D.

30 percent have a defense adjustment plan or impact study. Of those without one, only 27 percent plan to develop one in the future due to limited funding or internal technical capacity to do such planning.³¹

Although communities increasingly recognize the importance of having program capacity to deal with structural economic change, many have limited resources to support such programs or to hire outside experts to do so. According to CALED's survey of defense-impacted communities, more than 70 percent of existing programs have two or fewer staff, only 18 percent of communities report three or more funding sources for economic development—typically redevelopment, general or private sector funds, memberships, and/or sponsorships.

With regard to local funding opportunities, one of the most viable resources—and sometimes the only resource—is tax-increment financing, i.e., redevelopment. Redevelopment is the most flexible and powerful financing tool within the control of local government. However, each defense-impacted community has its own unique capacity to use that tool, and increased state limitations constricting redevelopment use raise some barriers to its application.

In addressing the reuse of military bases, local officials must make difficult decisions concerning reuse and property transfers assisted by limited, and often inexperienced staff. At the time of CALED's survey, only 26 percent of communities in the 14 defense-impacted counties surveyed had a defense transition coordinator. At the Sacramento Army Depot, for example, the City of Sacramento had to designate the Sacramento Housing and Redevelopment Agency as property manager because of the City's staff shortage. The need for local organizational capacity will continue as communities move from planning into long-term implementation programs and services.

Through TCA's Defense Adjustment Matching Grant program, the State has been providing matching grants to communities applying for federal planning and implementation funds for the last two years.³² One and a half million dollars was awarded in fiscal year 1994/1995 and communities are competing for an additional one million dollars in matching funds in fiscal year 1995/1996. Demand for such community seed capital will continue for the next several years.

In terms of federal resources, the Office of Economic Adjustment (OEA) has made planning grants available to local base reuse authorities, although

Of those communities who perceive themselves to be defense-impacted, only 30 percent have a defense adjustment plan or impact study.

³¹“Assessment Findings of Defense Impacted Communities,” California Association for Local Economic Development, March 1995, p. 7-8.

³²For information on the Defense Adjustment Matching Grant program, please see Appendix E.

they are often in amounts that are less than what is needed to complete a successful planning effort. In all, offices of the federal government, including OEA, the Economic Development Administration (EDA), and the Federal Aviation Administration have awarded more than \$165 million in planning, infrastructure, and program development grants to local California communities. Appendix E lists grants awarded to California communities to address the economic effects of defense cuts and base closures. Assistance, at least at the level provided from 1993 through 1995, needs to continue.

A funding gap remains which government must address if a firm basis for industrial recovery and growth is to be established.

The need for funds will remain an issue for many years and requires long-term attention. While it is evident that all levels of government are investing resources into local planning and program development, a funding gap remains which government must address if a firm basis for industrial recovery and growth is to be established. The challenge to the State is to work closely with the federal government to fill these funding gaps.

Recommendation: Provide public funding to defense impacted communities for planning, program development, and organizational support.

The State needs to leverage the local investment of public and private dollars by ensuring that communities have access to state and federal funding for program planning and implementation. Public investment may take several forms, including direct funding by the state, state support for federal base reuse and defense industry conversion funding, and state assistance in generating local revenues.

State Funding Programs. State programs that provide seed funding to communities for their defense conversion planning and program efforts, such as the Defense Adjustment Matching Grant program, should receive priority consideration in the State's budget process. State funding for this program should be expanded and allocated through the next five years. With adequate annual funding from the California legislature, the need for seed capital can be met.

Redevelopment. As current redevelopment law does not recognize the special needs brought on by base closure, the Wilson Administration has proposed state legislation to establish special provisions for application of California redevelopment law to closing military bases.³³ The State must ensure that communities impacted by defense industry downsizing and base closure are afforded access to, and flexible application of, redevelopment law for planning and project financing.

³³ The ability of the local reuse authority for Norton Air Force Base to access tax increment funds under California redevelopment law has been a primary contributor to its success in attracting private development to that base.

Finally, through the Wilson Administration, the State Legislature, and the California Congressional Delegation, the State must continue to lobby the federal government to continue funding for defense downsizing and base reuse planning and program implementation efforts, over the next five years.

Technical Assistance

Communities have indicated the need for a range of technical assistance in the following areas:

- Technical assistance in planning and program development
- Technical assistance in business attraction, particularly to closed or closing military bases.

Technical Assistance in Planning and Program Development. Almost 50 percent of CALED survey respondents indicated a desire for technical assistance in both defense adjustment and overall economic development techniques and strategies. In addition to CALED's outreach services and professional conferences, the State's technical assistance to communities for developing economic development and base reuse strategies is provided on an ongoing basis through the TCA's four regional field offices, the Office of Strategic Technology, and the Office of Business Development. Field staff have been added in the regional offices to work with communities on base reuse issues. In addition, the Office of Planning and Research assigns two staff to work with base closure communities. These positions are currently supported with state and federal funds, but longer-term funding is needed. Other state agencies have assigned staff to assist with community planning, including the state's institutions of higher education and EDD.

Technical Assistance in Marketing. Government at the state and local level, in partnership with industry, is making every effort to compensate for the loss of economic activity at closed military bases with public and private sector enterprises. Key to this replacement activity is the need to market military base properties to potential public and private sector users. Through TCA, the State will accomplish this with participation of the organizations presented in Table 5 on the next page.

One way these organizations are in partnership to market California's closing and realigning military bases is through the Statewide Military Base Marketing Association. Members of the Association share resources and information to recruit business and industry to base closure communities. Potential projects could include advertising in targeted industry publications, attending trade shows, and developing a Geographical Information System to market properties via the Internet.

Almost 50 percent of CALED survey respondents indicated a desire for technical assistance in both defense adjustment and overall economic development techniques and strategies.

Table 5

STATE ORGANIZATIONS MARKETING MILITARY BASES

Organization	Task
TCA regional offices	Provide technical assistance and marketing services through offices in Sacramento, San Jose, Los Angeles, and San Diego
TeamCalifornia	Network of economic development officials that performs outreach for bases
Office of Small Business and Small Business Development Centers	Conduct outreach efforts to small business clients
TCA foreign offices and Office of Foreign Investment	Conduct outreach efforts to foreign markets
Utility companies	Partnering with Local Reuse Authorities and TCA to market bases
California Film Commission	Targets base properties as potential sites for the film industry
Office of Planning Research	Publishes newsletter and maintains updated military base status report

The goal is to conduct an effective and efficient outreach effort to as many prospects as possible. Two issues make the marketing effort difficult—physical and logistical barriers to the reuse of the bases (Chapter III addresses these issues in detail) and a lack of marketing funds. Marketing efforts on the scale proposed require a significant funding commitment from public entities which can leverage private sponsorship.

Recommendation: Provide direct technical assistance to communities and regional alliances in developing and implementing base reuse and defense industry conversion strategies.

Priority must be given to supporting state efforts to provide direct outreach services to communities and regional groups requiring technical assistance in program planning and implementation, local organizational development, marketing military bases, and recruiting business and industry to the impacted areas. The State needs to provide longer-term funding to staff these outreach efforts while the state undergoes the adjustment to defense downsizing. In addition, the state and federal governments need to provide funding for marketing the military bases as a statewide endeavor, supporting the efforts of the Military Base Marketing Association.

Access to Information

One of the legislated responsibilities of the Defense Conversion Council is to serve as a clearinghouse for exchanging information with communities on defense industry conversion and base reuse activities, issues, and resources. TCA, as staff to the DCC, and OPR, charged with overseeing base reuse policy, are lead agencies in providing defense conversion and base reuse information to the public. However, many other state agencies also employ systems through which communities can access information and assistance on issues highly relevant to base reuse and defense conversion.

There are two challenges to the State's ability to provide accurate information: continual accuracy and targeting constituent information needs. Both the state and federal governments are committed to providing access to accurate information at the local level; however, information gaps remain. Many communities lack information on federal policies and programs, some lack knowledge of state services, and still others seek information exclusively on base reuse issues.

Traditional Information Systems. There are two kinds of information exchange systems—traditional and electronic. Traditional systems include phone, fax, mail, publications, meetings, workshops, and conferences. There are many traditional information/outreach systems in the state. OPR provides a bi-monthly newsletter, *California Base Closure News* to a readership of over 800, as well as a monthly publication, *Current Status of Reuse Efforts*. OPR also convenes “roundtables,” bringing together local reuse authorities to examine critical issues and “network” with one another. The Governor's Office of Planning and Research also sponsors statewide conferences on issues of interest to base reuse communities, in co-sponsorship with other state agencies such as the California Environmental Protection Agency (Cal/EPA). Topics have included transitioning utility systems, integrating the California Environmental Quality Act and the National Environmental Protection Act (NEPA) requirements, preserving air emission rights, and dealing with public trust issues.

Other state agencies also provide newsletters, workshops, and conferences on issues important to defense-impacted communities. TCA's TeamCalifornia networking program provides newsletters and meeting forums on economic development issues in the state. Such venues for information dissemination and exchange are important and should remain a significant part of state defense industry conversion and base reuse strategies. The challenge to a clearinghouse is staying informed of available information sources offered by the state and federal government, and coordinating dissemination whenever possible.

Both the state and federal governments are committed to providing access to accurate information at the local level; however, information gaps remain.

Electronic Information Systems. Communities differ widely in their capacity to access information through electronic systems. Most communities continue to obtain defense conversion information by phone, fax, and mail.³⁴ The number of users of on-line services is expected to expand considerably in the near future as access to electronic communication systems grows in California.

The issues for electronic information systems are clear: 1) electronic systems require an investment of time and money in training the audience in how to use them; and, 2) information must be timely and accurate to be of any value, which requires a long-term investment of organizational resources.

Currently, most state agencies have some form of electronic information system in place that is used to provide a variety of data to the public.

Currently, most state agencies have some form of electronic information system in place that is used to provide a variety of data to the public. The California Resources Agency offers the California Environmental Resources Evaluation System (CERES), a well-established World Wide Web-based system which shares information on many aspects of environmental and resource issues. CALED also has an electronic database system for its members to access information on economic development.

Nearly all state agencies have a home page on the World Wide Web. The California Economic Diversification and Revitalization (CEDAR) electronic information system, developed collaboratively by TCA and the California Research Bureau of the California State Library, was funded by the State and the federal Economic Development Administration. CEDAR is designed to provide information specifically on defense industry conversion and base reuse issues and resources. It provides communities and businesses with an electronic link via the Internet to national defense conversion and economic development databases, federal and state program information, university and federal laboratory technology transfer networks, and regional and community databases. State base reuse information, including the base reuse status reports and the *California Base Closure News*, is routinely incorporated into the CEDAR electronic site.

At the federal level, the Department of Defense's Office of Economic Adjustment and other agencies have established similar information systems. The U.S. Department of Commerce has established an Office of Economic Conversion Information (OECI) which acts as a federal clearinghouse. The State must ensure that it has ready access to these information systems. Appendix F provides a sample listing of local, state, and federal electronic information sources for communities.

³⁴In the TCA survey of communities, only 23 percent of the communities that responded stated they "often use" a modem to access information on-line. See Appendix D for complete community survey results.

Recommendation: Provide a clearinghouse of information to support communities, and expand communication between communities and the State.

The Defense Conversion Council must continue to serve as a clearinghouse of information on defense conversion issues on behalf of its membership, state agencies, state leadership, and communities. Each state agency needs to more sharply define its own clearinghouse role in working with the DCC and other state agencies. While the Trade and Commerce Agency and the Office of Planning and Research should continue to serve as lead agencies in implementing the defense conversion clearinghouse services, their efforts must be part of a well coordinated effort involving all appropriate state agencies and partners, including the existing economic development network.

Furthermore, the State needs to place a high priority on outreach to communities and expand the use of all information delivery systems to reach appropriate audiences with accurate information in a timely manner. Emphasis must be placed on information exchange and sharing so that the State's information outreach creates a dynamic networking relationship with communities.

The State must provide information using the most effective delivery systems possible. Therefore, the State must continually evaluate the effectiveness of electronic systems and be willing to abandon systems that are unused by their constituents. On the other hand, the State must be willing to invest in systems that are "user friendly," and which are cost effective for both the user and the State. It is critical that the State invest in training its employees in system use and in keeping information current.

The State needs to advocate access to an effective system in the federal government which provides accurate and timely information on base reuse and defense conversion issues, available to both the state and communities. The State should also seek funding from the federal government to help in the development of the State's clearinghouse function.

Recommendation: Strengthen cooperation, coordination, and communication among state agencies.

In addition to its clearinghouse function, the DCC needs to coordinate the defense conversion efforts of its members' organizations. The value of the DCC is that it provides a venue for shared perspectives, experiences, and knowledge among diverse agencies; it raises awareness of state programs and services among agencies, thereby creating opportunities for collaboration and support; and it provides a high level forum for policy development and decision making.

Emphasis must be placed on information exchange and sharing so that the State's information outreach creates a dynamic networking relationship with communities.

Partnerships among state agencies must be fostered. Many examples of successful collaborations can be pointed out, with the establishment of the DCC as the most apparent. Others include the partnership the Office of Planning and Research has formed with Cal/EPA to handle the transfer of military property. TCA and the Employment Training Panel have an interagency agreement to market ETP training funds to eligible businesses, resulting in successfully identifying and funding training in several defense-transitioning businesses. A high priority needs to be placed on such collaborations for service delivery.

CHAPTER III

MILITARY BASE REUSE

Mission Statement

Assuming an aggressive leadership role and working in tandem with the federal and local government, the State will remove logistical, technological, physical, and regulatory barriers to the reuse of closed, closing, and realigning military bases in California.

CHAPTER III SUMMARY OF RECOMMENDATIONS

- **Revise federal property management and disposal processes to simplify and expedite property transfer.**
- **Support cost-effective, fast track clean-up of closing and active military bases and evaluate clean-up efforts.**
- **Permit temporary waiver of building codes where there is no immediate threat to life or health.**
- **Establish a rapid means of transferring base utility systems to a responsible provider.**
- **Permit utility providers to assume control of base utility systems which are out of compliance with state standards and bring those systems into compliance on a reasonable schedule developed by the utility provider.**
- **Enhance public investment in redeveloping base property and infrastructure.**
- **Convene a military base regulatory reform effort aimed at simplifying and clarifying the planning mandates placed on base closure communities.**

Military base closures strike at the social fabric and economic viability of the entire community. Large numbers of families lose their means of support, businesses face declining sales, and local governments face the specter of 'ghost towns' in their midst. The recovery of these communities must be a high priority of the State.

ECONOMIC IMPACT OF BASE CLOSURES

As a result of base closures and realignments, 25 major bases in California have been marked for closure and four bases for realignment in closure rounds 1988, 1991, 1993, and 1995. Due to base closures, California will eventually lose 65,900 military and 35,600 DoD civilian jobs, and secondary losses will

account for an additional 85,000 jobs. The estimated total annual economic loss is nearly \$9.6 billion. California's losses have been disproportionate—the state has absorbed 60 percent of all Base Realignment and Closure (BRAC) job losses while being home to less than 15 percent of DoD personnel. Table 6 demonstrates the job losses California has sustained from the BRAC rounds compared to those of the entire nation.

Table 6

**NET PERSONNEL LOSSES FROM BASE CLOSURES IN
CALIFORNIA AND THE U.S.**

Closure Round	California	United States	CA/U.S.
BRAC I (1988)	17,353	29,069	60.0%
BRAC II (1991)	31,452	58,438	53.8%
BRAC III (1993)	33,322	38,007	87.7%
BRAC IV (1995)	19,372	43,448	44.6%
Total (4 rounds)	101,499	168,962	60.1%

Source: Governor's Office of Planning and Research

California's losses have been disproportionate—the state has absorbed 60 percent of all Base Realignment and Closure (BRAC) job losses while being home to less than 15 percent of DoD personnel.

OPPORTUNITIES FOR RECOVERY

Base closures pose negative economic and social consequences, yet they simultaneously present the opportunity to reshape a region's social and economic structure. Closing bases make new land and facilities available for industrial, commercial, recreational, institutional, research, educational, and residential uses in California. The first three BRAC rounds accounted for the following:

- 74,000 acres of unsubdivided land, much of it in growing urban areas
- 21,000 units of family housing and more than 15,000 dormitory rooms
- 10 airfields
- 5 seaport facilities.

Military bases present other types of opportunities as well. Many bases have specialized structures, equipment, worker skills, or technologies that may have immediate commercial application. McClellan Air Force Base, for example, has state-of-the-art composites fabrication, communications equipment repair, non-destructive aircraft inspection facilities, and personnel who are expert in their design and operation. Onizuka Air Force Station has some of the most sophisticated satellite tracking and monitoring equipment in the world. Several bases are being examined as possible testing grounds for new environmental technologies. Opportunities such as these could be used to promote other related types of reuse on the bases if properly cultivated, as

well as provide business development opportunities outside base property that would diversify the local economy.

THE FRAMEWORK: REPORT OF THE GOVERNOR'S MILITARY BASE REUSE TASK FORCE

California developed a strategy for successful military base reuse from the framework outlined in the *Report of the California Military Base Reuse Task Force*. The Task Force was created by Governor Pete Wilson in 1993 to examine the reasons for the demonstrable lack of success in base conversion efforts in the state. The fifteen members of the Task Force held nine public hearings throughout California, receiving comments from over 100 individuals and groups, including all of California's local base reuse authorities and many federal officials. In February, 1994, the Task Force presented its report to the Governor. The report included 48 recommended changes in federal and state laws, policies, and practices. These recommendations were based on the following principles:

- Closing military bases must be viewed as economic engines for job creation, not simply as surplus or unneeded property
- Base reuse decisions should be made by local officials, but the State should actively assist in the process and evaluate potential uses, such as airports and seaports, that may have overriding state or regional importance
- Adequate financing is critical to achieve productive, job-creating reuse of closing military bases
- Regulatory processes need to be streamlined or the State faces the danger of stifling local efforts to devise workable base reuse plans
- The federal government must clean up bases as quickly as possible, to a level appropriate to the uses envisioned in the local base reuse plan and consistent with long-term resource protection goals
- The federal government must assume primary responsibility for a smooth transition of base properties from federal to local control.

Closing military bases present a unique opportunity to shape the future of development in California communities.

SUCCESSSES IN BASE REUSE

The Military Base Reuse Task Force was unequivocal in its view that closing military bases present a unique opportunity to shape the future of development in California communities. There have been a number of early indications that the Task Force was correct in its assessment.

The most spectacular success to date in reuse of a California military base has been the Sacramento Army Depot, which is now the worldwide

headquarters of computer manufacturer Packard Bell. Described in more detail later in this chapter, success was possible only because of the quick, decisive actions of city, state, and federal officials. Unfortunately, economic development projects the size of Packard Bell are rare.

In San Bernardino, the former Norton Air Force Base has become the center of an industrial renaissance within that portion of the city. Most of the facilities on the base are leased or under lease negotiation, and ground-breaking may soon take place on a new world trade center that could house up to 5,000 employees within two years.

Similarly, Fort Ord has become the focal point for new development on the Monterey Peninsula, spearheaded by the fall, 1995 opening of the newest California State University campus, and the initial steps toward creation of a research and business park under the direction of the University of California. Major federal funding, totaling over \$50 million, was provided for the project, mostly for California State University campus construction.

The sites comprising the former Long Beach Naval Station have given rise to the first new major shopping complex in that city in several years, and will soon house a university-sponsored business incubator, a new high school, and a homeless housing and job training center.

These examples have provided encouragement to other communities facing the uncertainties of base conversions. Unfortunately, under present circumstances such successes are more the exception than the norm. Numerous problems and barriers exist, making successful base conversion a difficult goal to attain. The State's defense conversion strategy must deal with this reality.

IDENTIFYING CURRENT PROBLEMS

Even after substantial federal and state efforts, the reuse process remains slow and cumbersome, with communities contributing increasing amounts of scarce resources to procedures and negotiations. A number of problems persist, and solutions remain elusive. The Base Reuse Task Force report initiated many necessary changes, but additional reform is needed. A new agenda of reform should address issues raised by the following observations which have emerged from contacts with local base reuse officials:

- The federal property transfer process remains slow, cumbersome, and in some cases, unclear
- Financial resources may be inadequate to address needed toxic remediation, endangering prospects for rapid reuse of facilities

Even after substantial federal and state efforts, the reuse process remains slow and cumbersome, with communities contributing increasing amounts of scarce resources to procedures and negotiations.

- Base infrastructure is inadequate for civilian and commercial purposes, and the cost of bringing it to acceptable standards is considerable
- Financial resources for planning and redevelopment are not adequate to meet known requirements
- Resource and regulatory requirements have emerged as significant barriers to base reuse. These include “public trust” issues, air credits, endangered species laws, preservation of historic properties, recycling mandates, and Native American claims.

Property Transfer Process

Implementation of a smooth federal real estate transfer process remains elusive. Despite improvements in recent years, federal property transfer procedures continue to be arcane and challenging. Great strides have been made through the enactment of the Community Environmental Remediation Facilitation Act (CERFA), the Pryor Amendment, and last year’s Base Closure Community Redevelopment and Homeless Assistance Act, but procedural barriers remain.

Federal real estate disposal actions are primarily guided by the Federal Property and Administrative Services Act of 1949. The 1949 Act, which has governed most federal property disposal actions since the end of World War II, dictates a hierarchy of claimants with sale to private parties being the last resort.

The 1990 Base Closure and Realignment Act makes a few significant modifications to the process by assigning the Secretary of Defense, rather than the General Services Administration (GSA), as the disposal agent. The Secretary of Defense has delegated this responsibility to the individual service secretaries, causing the Navy, Air Force, and Army to act individually as disposal agents for base closures in California. Each Secretary operates in a unique environment, with little coordination between the services. Disposal policies differ from base to base as each service operates under broad policy guidelines. In response to some of the inconsistent interpretations among the services, the Secretary of Defense has recently begun taking more active central oversight of the process, including issuance of uniform base reuse guidelines.

The Pryor Amendment to the 1994 Defense Authorization Act attempted to smooth out the base transfer process to accommodate the needs of local communities and stimulate community reinvestment and job creation. The Amendment, reinforced by subsequent laws and policies, places paramount importance upon the community’s base reuse plan, integrating all public benefit conveyance requests and homeless assistance requirements into its

Disposal policies differ from base to base as each service operates under broad policy guidelines.

structure. Despite the refocusing of responsibilities, several procedural issues remain for subsequent resolution.

Homeless Assistance. The McKinney Homeless Assistance Act of 1987 allowed homeless providers first right to acquire government property after it was declared surplus by the U.S. Government, even if in conflict with a community's plan to create jobs through economic development. The situation was most acute at Alameda Naval Air Station where over 25 homeless providers expressed interest in property scattered throughout the base's 1,734 acres. OPR and the Governor's office in Washington D.C. worked with other interested parties to convince Congress to remove this obstacle by permitting the reuse plan to go forward as long as it recognized the needs for homeless assistance in that community. This reform applied to all future base closings, and allowed pre-1995 base closure communities to implement the new program on an optional basis. Nevertheless, homeless assistance planning remains a difficult, and potentially costly, mandate for base closure communities.

Maintenance and Protection. Under maintenance and protection agreements the Local Reuse Authority (LRA) or a private contractor provide for protection and upkeep of base property after closure. Negotiations for the agreements can be time-consuming and funding may only cover the interim period before final disposal of the base real estate. Such agreements allow the military to phase out defense activity and more smoothly transition the property when the contract is with the LRA. Norton Air Force Base, a 1988 closure, developed one of the state's first such agreements, covering base maintenance and interim utility service. However, negotiations can be complex and agreement is not certain. At Mare Island Naval Shipyard, a 1993 closure, negotiations have been underway for a year without agreement. Negotiations at Mather AFB were not successful so the Air Force ultimately contracted with a private firm rather than Sacramento County.

Valuation of Assets. The 1990 Base Closure Act created an incentive for the military to maximize property sales by allowing the DoD to deposit the proceeds into a special base closure account. These funds could be used to offset base closure and clean-up costs. Because of the continued emphasis on returning funds to the DoD budget through real estate sales and a general commitment by the military to provide value to the taxpayers, determination of fair market value has been an ongoing area of contention between the military departments and local reuse authorities. This is particularly the case where negotiated purchases or economic development conveyances are proposed. Local reuse authorities often complain that DoD appraises property in the abstract, disregarding the overall state of the infrastructure, regulatory restrictions, necessary upgrades, and general market conditions.

Local reuse authorities often complain that DoD appraises property in the abstract, disregarding the overall state of the infrastructure, regulatory restrictions, necessary upgrades, and general market conditions.

The LRAs may even claim the property has a “negative value” because of the need to remove obsolete infrastructure and demolish structures.

The “Savior” Solution. Seemingly, all of these procedural complexities may be overcome on those rare occasions when a major corporation offering a large number of jobs expresses a serious interest in locating at a closing military base. This situation occurred at the Sacramento Army Depot when Packard Bell, working with a Trade and Commerce Agency Red Team, decided to relocate its southern California assembly plant, which was damaged in the Northridge earthquake.³⁵ Packard Bell’s successful relocation to the Army Depot resulted from an extraordinary partnership between the state and federal government, the City of Sacramento, and the company. The deal was cemented when a special enterprise zone designation for the Depot was enacted by the California Legislature, enabling Packard Bell to secure up to \$5 million in tax credits including:

- Sales and use tax credits against earned income
- 40 percent business expense deduction for property
- Five year hiring tax credit
- 100 percent net operating loss deduction
- Net interest deduction.

Additionally, the City of Sacramento agreed to underwrite \$26 million in loans to Packard Bell, to be used to refurbish the property and to pay for moving expenses.³⁶ The Army advanced its plans to transfer the property to the City from the original 1997 date to March 3, 1995, when an interim “master lease” was signed. A toxic clean-up plan for the Depot was approved by federal and state agencies, the first such approval in the nation covering an entire closed military base. By agreement with DoD, state and federal regulators have 30 days to review clean-up documents. In the case of the Depot, these reviews were done on an expedited basis, sometimes overnight.

Recommendation: Revise federal property management and disposal processes to simplify and expedite property transfer.

The federal property transfer process remains a stumbling block to rapid redevelopment of base property because it is contentious, time consuming, and arcane. Local reuse authorities are severely taxed trying to deal with the many aspects of interim leasing and property transfers. Until final transfer occurs, the military services are party to every lease, either directly or

Until final transfer occurs, the military services are party to every lease, either directly or indirectly.

³⁵Red Teams are public/private task forces that seek to retain businesses that are considering leaving the state.

³⁶Of the amount loaned, \$9 million was provided by the Bank of America which insisted on accepting non-Depot city property as collateral, since its appraisal indicated that the Depot had no net commercial value.

While the federal government has agreed to accept the costs associated with toxic remediation, clean-up is a long-term prospect and the funds required to pay these costs have not yet been appropriated.

indirectly. Property should be moved more rapidly to local control, who can then serve as master lessors or agents for final property disposal.

- DoD should act more quickly to enter into maintenance and protection agreements with LRAs on favorable terms, allowing the LRA to assume control of utility and other systems so that final property transfers can be expedited.
- DoD should make greater use of economic development conveyances, utilizing shared revenue sales over a period of time rather than lengthy negotiated sales at an arguably unrealistic fair market value (based upon questionable appraisals and unrealistic assumptions).
- DoD should accept in-kind services on any portion of a closing installation in lieu of cash rent for leases of property.
- DoD should be permitted to enter into long-term leases of base property while any phase of environmental restoration is underway, so long as adequate protections are included to protect the lessee from liability.

Environmental Clean-up

While the federal government has agreed to accept the costs associated with toxic remediation, clean-up is a long-term prospect and the funds required to pay these costs have not yet been appropriated. According to the California Environmental Protection Agency, total estimated remediation costs for California bases closed in the first three BRAC rounds is approximately \$3.4 billion (DoD estimates are lower). However, only \$2.3 billion had been allocated nationally to the BRAC environmental account through 1995. The BRAC account, which totaled \$9.5 billion from 1990 to 1995, not only pays for toxic clean-up but also for new military construction. New construction costs have taken priority within DoD because units realigned as a result of a BRAC decision cannot move until receiving facilities can accommodate them. This means that most BRAC funds are being used for military construction, rather than the environmental remediation that will open the bases for economic reuse and community benefit.

As indicated in Table 7 below, only 39 percent of base real estate on BRAC 1988 and 1991 bases has been certified "clean" and ready for transfer under the Community Environmental Remediation Facilitation Act (CERFA). The remaining real estate either requires additional study or has been determined to require toxic remediation. Evaluation is still underway at 1993 and 1995 closure sites. CERFA, enacted by Congress in 1992, requires DoD to identify all base parcels that have never been subject to storage or release of toxic contamination. These parcels may be transferred immediately without additional environmental certification or monitoring.

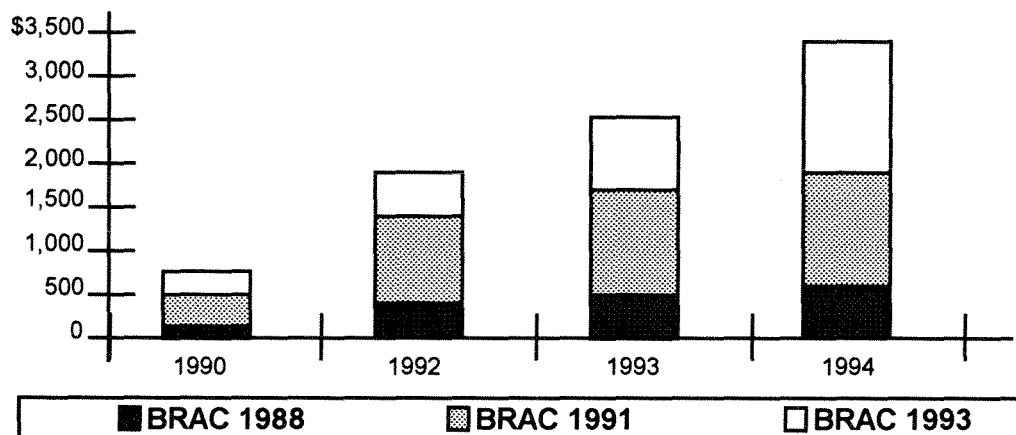
Table 7
CERFA^a "CLEAN" ACREAGE ON BRAC 1988 AND 1991 BASES

Base	Total Acreage	CERFA Acreage	Percent CERFA	"Clean Parcels"
Castle AFB	2,777	270	10	2
Fort Ord	28,057	13,123	47	60
George AFB	5,073	1,270	25	12
Hamilton Army Air Field	702	500	71	8
Long Beach Naval Station	155	0	0	0
Mather AFB	5,716	2,850	50	8
MCAS Tustin	1,569	0	0	0
Norton AFB	2,127	320	15	12
Presidio of SF	1,480	530	36	68
Sacramento Army Depot	485	73	15	12
Totals	48,094	18,936	39	182

^aCommunity Environmental Remediation Facilitation Act
 Source: California Environmental Protection Agency

Toxic contamination at military bases remains one of the major unresolved problems that threatens to disrupt base reuse plans. Cost estimates for cleaning up California BRAC bases have increased continually, demonstrated in Figure 1, as additional contamination has been discovered and the extent and complexity of the necessary remedial work has increased.

Figure 1
**CLEAN-UP COST ESTIMATES
 FOR CALIFORNIA BRAC BASE CLOSURES**
 (in millions of dollars)



Source: California Environmental Protection Agency

Clearing these properties for new development will be critical to a state strategy that encourages making the best possible use of existing resources.

Although DoD has consistently stated its commitment to complete clean-up of all bases, its own budget projections bring its ability to fulfill this commitment into question. DoD's seven-year BRAC funding plan indicates sharp declines in environmental funding after fiscal year 1996. At the rate of expenditures planned by DoD during the fiscal years 1998 to 2001, the clean-up of California's BRAC bases (excluding asbestos and unexploded ordnance) will not be completed until at least 2029 if no additional contamination or cost increases are encountered. Because several individual base estimates appear conservative, this completion date would seem optimistic. The Table in Appendix G details current clean-up cost estimates at California BRAC bases.

Clearing these properties for new development will be critical to a state strategy that encourages making the best possible use of existing resources. The successful clean-up and reuse of the nation's closing bases will remain in jeopardy unless the federal government makes adequate clean-up funding available in a timely manner.

There appears to be reason for optimism, owing largely to the efforts of a California-led interagency environmental group. Recognizing the need for objectivity and creativity in the area of toxic remediation, Governor Wilson issued Executive Order W-21-91 in December, 1991, creating the California Base Closure Environmental Committee. The Committee, renamed the California Military Environmental Coordinating Committee (CMECC) in 1995, was the first forum for bringing state and federal interests together to expedite environmental restoration at base closure sites. Membership includes representatives from Cal/EPA, U.S. EPA, the Governor's Office of Planning and Research, the Department of Defense, and the individual military departments. The CMECC developed the concept of "parcelization" at base closure sites, along with related procedures and documentation, allowing the bases to be subdivided into "clean," "slightly contaminated," and "heavily contaminated" parcels, thereby allowing immediate transfer of some parcels and quicker transfer of others.

The CMECC has responsibility not only for remediation issues on closing bases, but also for air quality and other regulatory problems that hinder the military mission in California, and make it a less attractive location for the military departments. It is hoped that CMECC actions will improve the ratings of California bases in future rounds of base closings. CMECC deliberations have resulted in a tentative agreement regarding procedures for National Environmental Protection Act and for California Environmental Quality Act compliance on certain hazardous waste permits for active military bases, regulatory cost reductions for the State, and enactment of legislation (AB 531) to exempt the military from regulation of certain portable motors on active military bases. CMECC networking has resulted in early warnings of

potential permitting problems at Naval Air Station Alameda and elsewhere, thereby averting delays in reuse opportunities.

Recommendation: Support cost-effective, fast track clean-up of closing and active military bases and evaluate clean-up efforts.

Through its Washington, D.C. office and the congressional delegation, California should continue to support adequate appropriations for remediation of contamination at closing bases to ensure the availability of property for reuse, and at active bases to protect surrounding communities.

Through the CMECC, RTAs, and other technology programs, California should foster innovations that will reduce the cost and improve the effectiveness of environmental remediation. One effort that should be supported immediately is the Chemical Data Quality and Cost Reduction project undertaken by CMECC, which promises to reduce remediation costs by as much as 30 percent through more extensive use of field measurement techniques and standardized laboratory protocols.

CMECC and Cal/EPA should develop measurement techniques that will enable better evaluation of toxic clean-up in general, along with evaluation of specific methodologies. An effort currently under development by the Department of Toxic Substances Control of Cal/EPA using existing data could be expanded and completed to fulfill this need. Funding for this project is currently uncertain.

The statewide cost of bringing all base infrastructure systems into full usability and compliance is several billion dollars, financed over a period of 40 years or more.

Base Infrastructure

One of the most difficult problems faced by local reuse authorities is the unsuitability of base infrastructure—water and sewer systems, utilities, roads, and buildings—for civilian and commercial use. The statewide cost of bringing all base infrastructure systems into full usability and compliance is several billion dollars, financed over a period of 40 years or more. Finding necessary funds, and ways to reduce costs, will be one of the critical challenges of base reuse.

Building Rehabilitation. The total cost associated with bringing buildings up to code and commercial standards has never been estimated. Some individual studies have been made at selected bases, such as:

- A study by CB Commercial at Naval Air Station Alameda found that 82 percent of non-housing structures had no reuse potential
- A detailed building-by-building study at Norton estimates demolition cost at \$92 million

- A detailed building-by-building study, conducted jointly by the Navy and the City of Vallejo at Mare Island, found that 28 percent of buildings were “Level 6” (no reuse potential; probably must be demolished), and another 38 percent were “Level 4” (reuse not likely within two years; mothballing required).

Buildings on military bases are designed according to the standards used by the military at the time of their construction. State and local standards are seldom taken into account, and even federal requirements are sometimes waived. As a result, these buildings often do not meet state and local building codes, including California seismic standards, energy conservation policies, fire and safety standards, and Americans with Disabilities Act (ADA) requirements. Although some standards may be deferred or waived by local permitting authorities, others may carry potential liabilities that cannot easily be dismissed.

...Buildings often do not meet state and local building codes, including California seismic standards, energy conservation policies, fire and safety standards, and Americans with Disabilities Act requirements.

California base closure sites are subject to compliance with seismic codes, a consideration not critical in some other parts of the country. The importance of this issue is illustrated by an Office of Economic Adjustment funded grant to the City of Oakland to analyze options for reusing the base's hospital structure. The Naval Hospital site is close to a major earthquake fault and state seismic codes would not allow for the building's reuse as a hospital, and its reuse as an office building might also be prohibitively expensive. In addition, fire and safety codes, not in effect when many base structures were constructed in the 1940s, must be considered today.

Current DoD policy is to leave lead-based paint and asbestos in place so long as they are not released into the environment. Lead-based paint is present on most closing California bases. At Mather Air Force Base, lead-based paint was used at the child care center, where it must now be removed. Asbestos containing materials have also been used at all California bases and pose an expensive hazard if the structures are to be remodeled or demolished.

Exposure to liabilities arising from out-of-code buildings and infrastructure is of increasing concern as base real estate is conveyed to local communities. With 'ghost towns' as the only other alternative, California communities have been taking on this exposure to potentially high upgrade costs. It is unlikely that lease revenues will be sufficient to cover these costs, especially during the early years after the base closes.

Recommendation: Permit temporary waiver of building codes where there is no immediate threat to life or health.

In 1995, the Legislature enacted SB 81, which permitted local governments to adopt special base closure building ordinances for property that is under interim lease from the federal government. In effect, this allows

waiver of some building standards during the lease period. The bill includes a one year sunset for enactment of such ordinances. The City and County of San Francisco plans to enact an ordinance, and several other jurisdictions are considering similar options. The Legislature should consider extending the measure and expanding it to include property covered by deed transfers.

Utility Systems. Utility systems at base closure sites pose a difficult dilemma. The military departments feel that base utility systems are in working order, that they have value, and should be purchased by local utility providers. However, in almost every case these systems do not meet existing California code requirements, having been built to military specifications to serve the limited needs of the military. Private utility companies, operating as monopolies in the public interest and governed by California Public Utility Commission (CPUC) regulations, may not operate systems unless they meet the required level of safety. A private company or local government taking possession of an out-of-code system faces a substantial investment and huge potential liability. The CPUC and ratepayer protection organizations are likely to object to utility providers simply passing costs on as part of their rate base. Moreover, increasing competition makes this a questionable business option for the utilities.

In almost every case these (utility) systems do not meet existing California code requirements, having been built to military specifications to serve the limited needs of the military.

At the Sacramento Army Depot, one of the smallest closing bases in the state with 485 acres, the Corps of Engineers estimated infrastructure requirements totaling \$21 million for water, sewer, rail, gas, electric, and telephone utility upgrades. Comparable estimates are \$36 million at Marine Corps Air Station Tustin, \$17 million at Norton Air Force Base, and \$109 million at Mather Air Force Base. The cost of utility upgrades varies depending on when the utility system was installed and the type of its configuration. At Castle Air Force Base, the decision to close the base was partly due to the fact that the original 1940s utility system needed to be rebuilt. At Naval Air Station Alameda, the 50 year old water system was to be replaced by the Navy at a cost of \$7.5 million before the base was targeted for closure.

Utility upgrade costs, especially for gas, electric, and telephone services, must be examined in light of base reuse prospects and potential revenue. Where there is immediate reuse, and therefore an adequate utility revenue stream, a utility company will make the required investment. However, where reuse is speculative, the CPUC may refuse to allow an investor-owned utility company to make a substantial upgrade investment which would put ratepayers at risk.

Another issue arises concerning easements and rights-of-way. Utility companies do not want to make a substantial investment on a military base

unless they are assured of adequate passage rights for their new lines, especially where reuse is uncertain. The Army originally negotiated with Pacific Gas & Electric (PG&E) for rights-of-way at Fort Ord, much to the displeasure of the reuse authority, which believed that only the LRA should grant easements and rights-of-way, as is customary in California. Subsequently, the Fort Ord Reuse Authority (FORA) and PG&E reached an agreement that gives PG&E permanent rights to use FORA-owned easements. PG&E will pay FORA a standard franchise fee for use of the right-of-way.

Military departments have frequently interpreted FMV (fair market value) to mean the invested value of the assets, rather than their realistic economic value.

The operational shortcomings of the utility systems are compounded by federal property laws, which generally require the sale of utility assets at fair market value (FMV). Military departments have frequently interpreted FMV to mean the invested value of the assets, rather than their realistic economic value, taking into consideration the number of paying customers that are present to justify the significant capital improvements required. Utility companies use the latter evaluation method.

Uninterrupted utility service is essential for attracting base reuse tenants. An interim solution for providing this service, and agreement on a permanent transfer, are both required.

Recommendation: Establish a rapid means of transferring base utility systems to a responsible provider.

Electric, gas, and telephone utility systems usually have a “negative value,” but are not eligible for no-cost public benefit conveyance. Nevertheless, these systems are critical to the success of base reuse. The federal government should develop a mechanism for transferring systems to local reuse authorities or private utility providers based on negotiations for the best solution to enhance reuse of base property. Transfers should be made without cost to the recipient.

Recommendation: Permit utility providers to assume control of base utility systems which are out of compliance with state standards and to bring those systems into compliance on a reasonable schedule developed by the utility provider.

This might be accomplished through statute, using SB 81 as a model, or through California Public Utilities Commission regulation or administrative actions.

Adequacy of Financial Resources

Finding the funds necessary for ongoing planning and infrastructure upgrades is one of the major concerns facing California base closure

communities. To date, federal funds, primarily from the Office of Economic Adjustment and the Economic Development Administration, have provided the major source of base reuse capital. (See Appendix H for a list of contacts for closing and realigning California bases.) The federal government must identify additional sources of funds to fulfill its obligations under base closure. State and local governments will be hard pressed to identify sufficient funding for base reuse infrastructure, though it is becoming increasingly apparent that state and local funding sources must be found.

To make military bases attractive locations for private investment, and to help communities recover from the economic impacts of base closures, public investment will be an important prerequisite to successful military base conversion. Public investment may take several forms, including direct funding by the federal, state, or local government, loan or loan enhancement programs, state facilitation of local revenue generation, and incentives to businesses to locate on military base property. An example of this latter form of investment is the LAMBRA program.

In the past year, base closure communities have benefited from the TCA-administered Local Area Military Base Recovery Act (LAMBRA) program. The LAMBRA designation provides base closure communities with incentives which can be extended to companies interested in locating on former military bases. The LAMBRA designation, much like an Enterprise Zone designation, allows communities to offer state and local incentives, such as a 15-year net operating loss carryover and sales and use tax credits. LAMBRA legislation divides California into five geographical regions and mandates that only one designation be awarded to each region. LAMBRA awards were made in 1995 to Vallejo (Mare Island), the Castle Joint Powers Agency, and the Victor Valley Economic Development Authority (George Air Force Base). Competitions will be held for the two remaining LAMBRA regions in 1996.

Recommendation: Enhance public investment in redeveloping base property and infrastructure.

The Governor's Washington, D.C. office and the state's congressional delegation should advocate continued federal funding for affected communities, as well as maintenance of funding for toxic remediation and state participation in regulatory decisions with regard to toxic contamination.

The State should seek continuance and expansion of the Defense Adjustment Matching grants program, both to provide additional funds for base conversion and assurance of multi-year funding.

The State should implement the second phase of the TCA-administered LAMBRA program competition currently authorized by law, and expand the program to include additional competition phases.

To make military bases attractive locations for private investment, and to help communities recover from the economic impacts of base closures, public investment will be an important prerequisite to successful military base conversion.

Base reuse will require a level of regulatory flexibility and creativity not seen in the past.

The State should authorize bonds or other acceptable funding to finance base infrastructure. One possible way to do this is through the new State Infrastructure Bank, which is to be managed by TCA. The Bank, subject to funding, could provide loan funds for military base conversion projects. The State should also investigate, either through the Infrastructure Bank or elsewhere, the possibility of private investor loans for base remediation or other purposes, if acceptable collateral or other repayment assurance can be found.

Special provisions should be enacted for application of California Redevelopment Law to closing military bases. Virtually all base closure communities plan to use redevelopment as a primary tool for reuse implementation. Several have adopted redevelopment plans, or are beginning the lengthy process, using standard California Redevelopment Law or, very often, special base-specific legislation. However, current redevelopment law does not recognize the special needs brought on by base closures, making the process more difficult and increasing the risk of legal challenges. The ability of the LRA for Norton Air Force Base to access tax increment funds under California Redevelopment Law has been a primary contributor to its success in attracting private development to that base. The base may have full occupancy of its facilities by the end of 1997, an example that needs to be replicated elsewhere.

Resource and Regulatory Requirements

Local, state, and federal governments must be creative and responsible as they seek to adapt to resource and regulatory requirements on military base closure sites. Never before has so much federal government real estate been disposed of in the kind of regulatory environment present today. Base reuse will require a level of regulatory flexibility and creativity not seen in the past.

An example of the type of flexibility needed was witnessed in 1995 with the enactment of SB 1180, sponsored by the Wilson Administration. This bill amends CEQA by permitting use of the pre-closure environmental "baseline" for base reuse plan Environmental Impact Reports (EIRs) and by allowing implementing projects to utilize the reuse EIR to the extent that it covered their impacts. These provisions will reduce the time and expense of EIR special studies and mitigation measures and will expedite approval of projects other than the type that were contemplated in the reuse plan.

Public Trust Easements. Public Trust issues are of concern where bases include tidal and submerged land.³⁷ The California State Lands Commission

³⁷Rooted in Roman law, the public trust doctrine holds that certain resources belong to all and thus are held in trust by the state for future generations.

has oversight of trust land interests. Mare Island, Alameda Naval Air Station, Hunter's Point Naval Annex, Treasure Island Naval Station, Long Beach Naval Station and Shipyard, and Naval Training Center San Diego contain large areas of land potentially subject to the Public Trust Doctrine. About 70 percent of Naval Air Station Alameda is estimated to be subject to the Public Trust.

Former tide and submerged lands were transferred to the military in a number of ways. In many cases the transfers were specifically for military or defense purposes. Many transfers included implied or specific reversionary language should the land no longer be used for defense purposes. As a result, there may be questions regarding who is vested with ownership upon closure of the military bases. If land is found to be subject to the Public Trust, restrictions apply to its future use. Trust land may be used only for purposes of water-related commerce, navigation, fisheries, recreation, and open space. In areas where lands have been filled and improved, and are no longer susceptible to use for Public Trust purposes, the State Lands Commission can work with local government and/or private interests to lift the state's sovereign interest from the land.

There may be questions regarding who is vested with ownership upon closure of the military bases.

The process of delineating Public Trust lands often requires detailed title work. Without this detailed legal analysis, title companies are reluctant to issue clear title insurance policies for lands which may be subject to those interests. Without insurance, conventional financing will not be available for improvements or development.

Endangered Species. The Endangered Species Act may affect development potential at several bases where threatened or endangered species may reside in a natural habitat. Development of property adjacent to the airfield at Mather Air Force Base in Sacramento may be restrained by the discovery that the base provides habitat for the endangered fairy shrimp. The fairy shrimp is also found at Castle Air Force Base where its habitat, and that of the San Joaquin kit fox, is located on property planned for a federal prison. Fort Ord in Monterey County is home to 22 special status plant species (i.e., species listed on federal or state endangered or threatened lists, or meeting other definitions of rare or endangered) and 23 special status wildlife species.

While federal and state endangered species laws may pose a barrier at several bases, the California Department of Fish and Game (DFG) has found a means of mitigating the effects of state-listed species in some instances. At George Air Force Base in Victorville, DFG negotiated an inexpensive land swap as mitigation for the endangered Mojave ground squirrel, whose habitat would have been impacted by a proposed federal prison site. When the federal Bureau of Prisons was unable to execute the mitigation agreement,

DFG agreed to drop the mitigation requirement because proceedings had been initiated at the state level to de-list the species.

Air Emission Rights. Retention of air emission rights is a major issue at closing bases in California because large parts of the state have been designated non-attainment areas by the U.S. Environmental Protection Agency. Without the retention of these rights, virtually no economic activity can occur on closed military bases. Although air “conformity” findings have successfully been made to allow civilian reuse of the airfields at Mather and Norton Air Force Bases, other bases remain under the shadow of uncertainty. A recent conformity finding supporting the realignment of naval air units to Lemoore Naval Air Station required the transfer of over one-third of the emission rights for nitrogen oxides from Castle Air Force Base, and nearly all emission rights for particulate matter. Similarly, the Marine Corps has considered transfer of pollution rights from Marine Corps Air Stations El Toro and Tustin to support another base realigned by BRAC. Some of these possible actions may be mitigated by BRAC 1995 decisions which altered BRAC 1993 realignments.

Without the retention of these (air emission) rights, virtually no economic activity can occur on closed military bases.

Historic Preservation. Historic preservation requirements, both state and federal, are of concern at many California bases which have historic structures or archeological sites. Communities are generally favorable to preserving significant historic structures. The Mare Island reuse plan calls for creation of an historic district, and at least one of the historic blimp hangars at Tustin Marine Corps Air Station will be preserved. One of the final hurdles for the developer of the former Hamilton Air Force Base property was clearance with historic preservation officials. Although the project preserved most of the historic buildings on the base, some will have to be demolished to make the project economically feasible. A new problem has recently been raised. Barracks and other buildings constructed during World War II as temporary structures may now receive historic recognition because of their age.

Native American Claims. American Indian tribes have expressed an interest in a number of base closure sites such as Naval Training Center San Diego, Marine Corps Air Station El Toro, and Treasure Island Naval Station. DoD policy permits tribes to enter the federal screening process for both real and personal surplus property on the same priority basis as state and local government. In September, 1994 the Department of Interior (DOI) issued interim guidelines to tribes interested in acquiring base closure properties through DOI public benefit conveyance sponsorship. Indian tribes may request property through DOI if the following conditions are met: the tribe’s current land holdings are within a 25-mile radius of the base, the base is located within the state where a majority of the tribe’s current lands are held, and the proposed use of the property does not include gambling.

Recycling. Recycling mandates on California communities will impact the massive demolition task that must be carried out at some bases. Demolition activity will need to be integrated into a community's solid waste disposal plan. California cities and counties are mandated to reduce solid waste going to landfills by 50 percent by the year 2000. The California Integrated Waste Management Board has designed a comprehensive recycling program to address the need to recycle demolition debris at base closure sites.

Although all are well-intentioned efforts to preserve natural resources and the environment, the many restrictions placed on base conversion by federal and state environmental regulations have proven burdensome to the communities that must implement them at a time of considerable economic dislocation and public infrastructure expense.

Recommendation: Convene a military base regulatory reform effort aimed at simplifying and clarifying the planning mandates placed on base closure communities.

- An interagency effort should be convened between the California Resources Agency, Cal/EPA, and federal resource regulatory agencies to identify specific base reuse barriers and proposed remedies to facilitate base reuse and respond to problems on individual bases.
- Contacts should be established between local reuse authorities and Cal/EPA's Permit Assistance Centers, particularly where businesses may have an interest in relocating to closing bases.
- Through CMECC, the Resources Agency should coordinate resource issues with the military services prior to base closings to ease post-closure requirements.

Military base closures, along with other forms of defense downsizing, do not just affect employees or businesses or land or facilities; they happen to entire communities.

COMMUNITY RECOVERY FROM BASE CLOSURES

As is apparent from the preceding discussion, military base closures, along with other forms of defense downsizing, do not just affect employees or businesses or land or facilities; they happen to entire communities. To counteract the effects of these closures, we should focus on the community at large through collaborative partnerships and directed state actions.

This may be accomplished through strategies that reinforce local control of defense adjustment with support provided by federal, state, and local government through creation of initiatives and removal of regulatory barriers. California will help expedite the base reuse process by promoting greater flexibility in meeting regulatory requirements, including encouraging reform of the federal real estate transfer process, supporting community planning

**Military Base
Reuse**

activities, advocating for interim usage, and facilitating base redevelopment in general. Granting greater flexibility to LRAs will enable them to formulate plans that will more readily achieve community consensus and that can proceed to more certain implementation. OPR will be the lead agency for these actions, in cooperation with TCA, Cal/EPA, and the California Resources Agency.

CHAPTER IV

THE WORKFORCE: ADJUSTMENT THROUGH EDUCATION AND TRAINING

Mission Statement

The new California economy will be based on a flexible workforce capable of competing in emerging growth markets, resulting in higher paying jobs and a lower unemployment rate in the state.

CHAPTER IV SUMMARY OF RECOMMENDATIONS

- *Develop a comprehensive workforce preparation system that is fully integrated into California's economic development plan.*
- *Integrate and streamline workforce development efforts.*
- *Seek federal workforce funding to increase subsidies to employers, especially for small businesses, to train workers.*
- *Conduct proactive outreach efforts to reach workers in danger of layoff.*
- *Collect information on dislocated worker characteristics to focus assistance programs.*
- *Focus on small businesses to encourage the development of new and innovative global strategies.*
- *Support the development and use of technology in the delivery of training programs and related activities.*

There are three main factors that created an economic predicament for California's workforce in the early 1990s: a severe recession, economic restructuring (including defense downsizing), and a deterioration in the business climate and competitiveness of the state. While the recession had international and national elements beyond the control of California, restructuring the economy and improving the business climate are issues that California can address directly through its workforce policies.

Economic restructuring embodies not only the transition of traditional industries like aerospace and defense in California, but also a range of diverse globally emerging technologies and industries which are growing in the state. Many of these industries rank a highly educated workforce as a key factor in their location strategies.

In this dynamic, fast growing environment, government is a facilitator, creating an environment and infrastructure conducive to the new economy. It draws its charge from the private sector—the creator of jobs that form the basis of economic development. Government must be the responsive champion of a regionally-based model of economic policy and development in workforce modernization.

Government must be the responsive champion of a regionally-based model of economic policy and development in workforce modernization.

The California workforce can be divided into three segments: emerging, transitional, and in-place. The emerging workforce is the segment of the population involved in the traditional education system. Students in University of California, California State University, California Community College and K-12 systems will emerge into the market with skill sets designed to meet global competitiveness. Transitional workers are those who are displaced by recent restructuring of the California economy. Defense downsizing produced a spike in the unemployed workforce with special education and training requirements. The in-place workforce are the workers who are presently gainfully employed. This group is feeling extreme pressure to constantly modernize their skill sets to remain employed.

The defense conversion strategic plan will not deal with the emerging workforce in detail. While this is a very important segment, its needs and requirements are discussed in detail in California's Department of Education Strategic Plan. The major challenge lies in the fact that California cannot graduate enough modern workers in the short-term to enable business to remain globally competitive. Therefore, the transitional workforce and the in-place workforce skill sets will dominate the employment picture for the next twenty years. The quality and rate at which California retrain its transitional and in-place workforce may have a detrimental impact on the state's ability to remain globally competitive.

California has a unique opportunity. If the State can find a cost effective way to transition the knowledge of displaced and mature industry workers to emerging markets, it will have a strategic global advantage. A recent Wall Street Journal article stated that East Coast companies were interviewing thousands of potential employees to find a few hundred qualified workers. The defense industry workers, with their experience in the high technology workplace, may be California's key to avoiding such a costly and wasteful process.

IMPACTS OF DEFENSE DOWNSIZING ON CALIFORNIA'S WORKFORCE

California has lost approximately 520,000 direct and indirect jobs to defense downsizing since 1988. Aerospace employment peaked at 439,000 jobs in 1988, and fell to its current level of less than 240,000. Although a

smaller number of DoD civilian workers (around 19,000) from military bases in California have been displaced to date, this number is expected to increase rapidly as bases identified for closure are shut down. In addition to civilian DoD job losses, the number of military personnel in the state has fallen by about 52,000 in the past five years. While gross unemployment numbers appear to have stabilized, they alone do not give an accurate picture. Many studies have concluded that real income in California has been steadily shrinking since 1989. This is due to the wage compression caused by thousands of defense jobs being replaced by thousands of lower paying jobs.

These figures illustrate the severe adverse affect that reductions in defense spending have had on California's workforce. Unfortunately, the end is not in sight. As noted earlier in this report, continued defense budget declines will likely result in the loss of an additional 132,000 jobs in aerospace, electronics, and supporting industries (60,000 direct jobs in aerospace alone), and 61,000 jobs at military bases.

Defense downsizing affects workers in two different ways:

- Workers who have been laid-off from defense firms, subcontractors, suppliers, or from military bases frequently have an urgent need for re-employment services or longer-term retraining to acquire skills needed to qualify for new jobs
- Defense workers who remain employed, but are at risk of layoff, often need skill upgrading as their employers seek to make the transition from defense to commercial markets.

Re-employing workers displaced by defense downsizing has proven challenging for existing worker adjustment and retraining programs. Because of the nature of DoD missions, regulations, and specifications, dislocated defense workers—across occupational groups—are likely to have specific knowledge and skills not directly transferable to commercial enterprises. Additionally, in combination with a slowly recovering state economy, it has been difficult for laid-off defense workers to find new jobs, especially in fields which offer wages and benefits similar to their pre-layoff occupations.

CHARACTERISTICS OF DEFENSE WORKERS

These workers, especially those from the aerospace and electronics sectors, and many who have lost jobs as a result of base closures, include a large number of highly educated or skilled, well-paid, white collar and technical workers. Yet, despite their advanced skills and previous experience, these dislocated workers tend to possess characteristics that distinguish them from other job seekers and persons in need of retraining as a whole. Distinguishing characteristics often include:

Dislocated defense workers—across occupational groups—are likely to have specific knowledge and skills not directly transferable to commercial enterprises.

Despite their advanced skills and previous experience, these dislocated workers tend to possess characteristics that distinguish them from other job seekers and persons in need of retraining as a whole.

- Little information about current labor market conditions
- No recent experience looking for work
- Lengthy job experience and seniority
- Occupational skills that may be obsolete or not in demand in the “civilian” economy
- More highly paid than comparable workers in non-defense industry jobs
- A defense industry culture different from that of non-defense firms.

While some information exists on the general profile of dislocated defense workers, data is sparse on their specific characteristics. This is especially true for workers laid off from aerospace and electronics firms, the largest industry segments of defense contractors.

One study which addressed a portion of this population analyzed Unemployment Insurance (UI) wage and claims data from a sample of 39,000 aerospace workers who filed an UI claim in mid-1992, as well 9,000 such workers who filed UI claims during 1989.³⁸ The study indicated that characteristics of dislocated aerospace workers vary from those of laid-off workers as a whole. For example, the dislocated aerospace workers in the sample of UI claimants used for this study were:

- Highly concentrated in professional, technical, and managerial occupations; workers in machine trades and benchwork groupings were also heavily represented
- Older; specifically, workers 45 years of age and older accounted for over 40 percent of those sampled
- Unemployed longer, on average, than UI claimants as a whole; approximately one-third of these aerospace workers still remained unemployed over six months after being laid off, compared to one-fifth of total UI claimants.

This study also showed that, overall, engineers laid-off from defense industry firms had historically done better, on average, than dislocated defense workers at-large in regaining their pre-layoff income. To do so, however, many engineers had to relocate to other states or start their own firms.³⁹

³⁸Paul M. Ong and Jannette R. Lawrence, *The Unemployment Crisis in Aerospace*, Graduate School of Architecture and Urban Planning, UCLA, June 1993.

³⁹RAND also recently contracted with DoD to study the effects of defense downsizing on California’s labor force using UI wage and claims data from EDD. The RAND study will focus on workers formerly employed in aerospace industries matched with a non-aerospace industry control group, and civilian employees laid-off from recently closed military bases in California.

Training Characteristics

The higher-education systems in the United States, and particularly in California, are the best in the world. People from all over the world come to benefit from this system. Higher education has a very well-defined method of delivery. Top students are admitted to ensure quality inputs into the system. After matriculation, students are guided through a well-defined and highly reviewed curriculum of related courses to ensure uniformity of process. Faculty is screened and scrutinized to ensure the quality of the provider. Students are graduated and certified by nationally recognized organizations to insure the uniformity and quality of output. This provider-based model typically demands that the student dedicate a specific block of time to the process to insure timely completion and a dynamic system.

Increasingly, workers will be valued for their knowledge base and skill sets, rather than the tasks they perform. These knowledge-based workers require a different learner-focused delivery mechanism. The system needs to provide open access, so that every worker can participate. The information path needs to be self-assessing and self-paced. The worker needs to be able to synthesize knowledge on the job and just-in-time for required work performance. The process must be perpetual, cost-effective, and convenient. Certification needs to be available locally to a state or federal standard.

A recent study released by The Society for College and University Planning, authored by Michael G. Dolence and Donald M. Norris, does an excellent job of describing the difficulties of the traditional provider-based model. This study has a national perspective, but it is easy to apply the model to California.

“Looking to the year 2000, futurists estimate that just to keep even, each individual in the workforce will need to accumulate learning equivalent to that currently associated with 30 credit hours of instruction every seven years. This level of learning will be needed for every member of the Information Age workforce who wishes to remain competitive...This can translate into the full-time equivalent (FTE) enrollment of one-seventh of the workforce at any point in time. Since there will be an estimated 141 million workers in the year 2000, this could equal over 20 million FTE learners from the workforce. Most will be new learners. Using our existing educational model, these learners would require an additional 672 campuses with an enrollment of 30,000 students each. At an estimate of \$350 million each, the 672 campuses would cost \$217 billion to build and an additional \$217 billion per year to operate. To meet the full potential demand by the year 2010, a campus would have to be opened every eight days. Even if this demand were served by a mixture of higher

Increasingly, workers will be valued for their knowledge base and skill sets, rather than the tasks they perform.

education and other learning intermediaries, the cost under existing approaches to educational finance would be exorbitant.”

Special Workforce

Ninety-six percent of the businesses in California employ 10 people or less. Eighty-four percent of manufacturers in California employ less than 250 people. These businesses are typically privately owned and operated by a single dominant “hands-on” personality. If rapid conversion of California commerce is to occur, this group of influential business owners must be “converted” first. Training of the workforce is wasted if they are not allowed to apply new knowledge and methods in the workplace. Special attention should be given to retraining this critical group of workers.

Future workers can expect to enter and exit the workforce many times, and each time they will be expected to upgrade their skills.

WORKER NEEDS

A constantly changing workplace poses new challenges to the worker. New positions are often temporary with few benefits. Many of the positions require special technical credentials, proven interpersonal skills and diverse skill sets. Future workers can expect to enter and exit the workforce many times, and each time they will be expected to upgrade their skills. Companies will be small and may be geographically dispersed with only electronic collaboration. Knowledge-based skills with global utility will change rapidly and constantly.

Unlike efforts to identify the conversion needs of communities and businesses, neither the state nor federal government has surveyed defense impacted workers. However, the characteristics of dislocated and incumbent workers in the study cited earlier provide useful information about their needs. Worker needs can be summarized in five categories:

- Financial assistance (e.g., unemployment insurance) to compensate for lost income during their training
- Access to employment information and services
- Improved job-seeking skills
- Skill upgrades to qualify for new jobs or to remain with current firms as they transition to commercial products
- Access to programs that encourage self-employment and entrepreneurial activities.

A number of state agencies have been involved in the effort to address the re-employment and retraining needs of dislocated defense workers affected by base closure and defense industry downsizing. California is presently responding to these needs through the efforts of the Employment

Development Department, the Employment Training Panel, and the state's vast post-secondary education and vocational/technical training system, particularly the California Community Colleges. California's state college and university systems offer both professional education programs, as well as joint ventures with industry targeting training for the emerging workforce. EDD's Job Service program provides resources which enable field offices to help provide a range of information services, including holding workshops on job seeking techniques and determining potential for transferring skills to new occupations. ETP, as the state's only training program for incumbent workers, enables businesses faced with out-of-state competition to retrain current workers, to transition them into a high-performance workplace, or to diversify their product or service lines. This employer-driven training provides a means for California businesses in the defense industry to transition into commercial markets and remain competitive.

In discussing the challenges faced in preparing the California workforce, the Congress' recent efforts to consolidate employment, training, and vocational education programs cannot be ignored.

At the federal level, the Department of Labor (DOL) funds programs for displaced defense workers, although most of these are administered at the state level. Title III of the Job Training Partnership Act (JTPA) provides the largest single source of funds for retraining and related services for dislocated workers.⁴⁰ This includes services to workers affected by military base closures and defense industry reductions. At the local level, JTPA is operated by California's 52 Service Delivery Areas (SDAs) which, under federal and state law, have a key role in local planning and delivery of dislocated worker services. For JTPA Program Year 1994-95, which began July 1, 1994, California received an allocation from DOL of approximately \$212 million in JTPA Title III funds. In addition to actual training and placement programs, employment training services focus on access to information, including on-line resources for dislocated workers and self-employment services.

At the local level, numerous examples of collaborative training initiatives exist. One example is a local program administered through the Orange County Small Business Development Center for dislocated aerospace, defense, and military personnel, called Business Ownership Service System (BOSS). A number of dislocated workers have completed this two-month intensive training program for starting and managing their own business. BOSS has been widely cited as an example of a successful approach to coping with the growing number of workers dislocated from defense-related industries.

In discussing the challenges faced in preparing the California workforce, the Congress' recent efforts to consolidate employment, training, and vocational education programs cannot be ignored. It looks certain that the

⁴⁰JTPA programs under Title III include the Regular State Allocation, the DOL Secretary's National Reserve Account (NRA), and Defense Conversion Adjustment and Defense Diversification Program.

block grant funds will be greatly reduced compared with California's current allotment. Savings due to reduced administrative costs and the use of technology will not make up for the projected 40 percent decrease in funds to California. It is not clear how much of the limited funds will be targeted to the Welfare Reform Block Grant clients. Many of the categorical programs were eliminated and the funds are designated in more flexible general allotments. All of this could result in even less money to California for use in the broad workforce challenges.

Workforce competitiveness is the principal determination of long-term location/expansion decision strategies for vital California industries.

CHANGING ECONOMIC BASE

Job growth can be found in several segments of the California economy. Professional services, diversified manufacturing, transportation, technology-based entertainment, and high-technology manufacturing are all expected to provide a demand for high-skill, high-wage jobs.

Manufacturing exports in the areas of transportation equipment, electrical equipment, office machinery, professional, and scientific control instruments are driving this growth. Many manufacturing suppliers and employers are hidden in these industries. Most manufacturing segments are several layers deep; for example, metal fabrication, plastics, and advanced material are impacted by growth in this area.

Tourism, entertainment, and professional services have experienced sustained growth for the last twenty years, and the trend is expected to continue into the future. Software engineering, management services, legal services, and higher education are expected to generate a demand for high-skill, high-wage workers. National and international demand for high-technology goods will drive the need for workers in the areas of computer manufacturing, electronic component manufacturing, and instrumentation manufacturing.

Workforce competitiveness is the principal determination of long-term location/expansion decision strategies for vital California industries. A recent survey by the California Business Intelligence Service indicated that the basic cost-effectiveness or competitiveness of the labor force remains the fundamental concern in selecting communities for business relocation or expansion. There are two factors that always appear high on every business survey: the basic wage rate plus fringe benefits for the area and worker productivity. Since California has such a high cost of living, it must use productivity to keep and attract businesses.

Recommendation: Develop a comprehensive workforce preparation system that is fully integrated into California's economic development plan.

The Wilson Administration should continue to develop a workforce preparation system that coordinates and integrates EDD, ETP, the California Community Colleges, Department of Education, and other workforce development efforts with economic development efforts in TCA and other agencies. Once fully implemented, this system should be more effective, responsive, and proactive than the current system.

This state re-employment and retraining effort should link job training and re-employment services to expanding industries.⁴¹ One of the most common criticisms of job retraining programs is their failure to link the training and other assistance received by workers to actual job opportunities and industry needs. Better targeting and linking of retraining efforts for workers to growing industries such as trade, business services, engineering, and multimedia entertainment services should improve job placement opportunities and long-term retention prospects for these workers. The State Job Training Coordinating Council is committed to addressing this issue in conjunction with the Economic Strategy Panel, EDD, TCA, the education systems, and other interested entities. The community colleges' ED>Net is an example of a state program that targets technology deployment in its workforce training efforts (see insert on the next page for more information on the ED>Net program).

This state re-employment and retraining effort should link job training and re-employment services to expanding industries.

State agencies also should expand economic development activities in emerging commercial markets and occupations. This recommendation begins to address the question of where future jobs will be for dislocated workers with skills and experience, and which of these offer good long-term employment prospects. This is an especially important issue with respect to dislocated defense workers since many possess advanced professional and technical skills which can be a key asset to new and emerging industries and occupations. The EDD is providing relevant labor market information and analyses for the "industry cluster" studies sponsored by the Economic Strategy Panel. In addition, industry-specific training efforts, such as Project California's Advanced Transportation Job Training Alliance, and other initiatives that focus on assessing industry demand for training should be encouraged.⁴²

⁴¹ An example of this comprehensive approach is the PIC Aerospace Network in Los Angeles, which is one of the first and the largest attempts to demonstrate that a comprehensive, integrated system of workforce preparation services is possible.

⁴² Another example is EDD's commitment of JTPA Title III resources for federally funded technology projects. Federal funds received by California will help convert defense technologies and facilities to commercial uses and create new employment opportunities.

ED>Net—The California Community Colleges' Regional Economic Development Model

The California Community Colleges' Economic Development Network (ED>Net) has developed as the restructuring of California's economy switches from defense and aerospace domination to one built on smaller companies with varying interests.

Nine statewide initiatives focus on action areas as well as support local and regional economic development enterprises. ED>Net consists of more than 90 local projects. The network includes 41 regional centers, 61 contract education programs and over 500 local, regional, and statewide partners from industry, government, and service agencies. Community colleges in 10 regions of the state are helping to identify and coordinate programs and training in their regions. The 106 campuses of the California Community Colleges use ED>Net to address the following economic development goals:

- Coordinate a response that meets statewide workforce needs and helps attract, retain, and expand business
- Identify economic development priorities and implement innovative solutions
- Identify, acquire, and leverage economic development resources
- Build capacity to respond to local, regional, and statewide economic opportunities
- Create a logistical, technical, and marketing infrastructure
- Optimize business and industry's access to economic development services.

Recommendation: Integrate and streamline workforce development efforts.

California's current workforce preparation programs provide education, employment, and training services to millions of Californians each year. For a variety of reasons, usually regulatory, these programs operate more or less independently of each other and, as such, do not constitute a coordinated workforce preparation system. In order to maximize California's resources and to build a more efficient and accountable workforce system, the Wilson Administration should continue to explore efforts to integrate and streamline current workforce preparation efforts.

California has already begun plans to increase access to workforce information and services with plans for a One-Stop Career Center System.⁴³ The One-Stop Career Center System will, in part, help to mitigate the adverse effects that military base closures and defense industry layoffs are having on affected workers and communities. Initial partners include state agencies that administer all of California's major employment and training programs, various governing and advisory bodies for these programs, TCA, Private

⁴³Local Job Service managers already have been designated as single points of contact for individuals and organizations engaged in community planning efforts to facilitate access to employment and training services.

Industry Councils, education providers, employer groups, and labor organizations.

Recommendation: Seek federal workforce funding to increase subsidies to employers, especially for small businesses, to train workers.

A program should be created that allows small businesses relief while they retrain their workforce. Many large companies have received special trade tariff protection while they repositioned their workforce. It may be just as critical for a small business to be given periodic tax relief or even cash infusions to offset costs of training its workforce. Special emphasis should be given to the owner/manager of small businesses. It is vital that they become acquainted with the issues of global competitiveness. Federal block grants could have a positive impact in this area if restrictions are not prohibitive.

Recommendation: Conduct proactive outreach efforts to reach workers in danger of layoff.

California will likely lose an additional 60,000 jobs in the aerospace and electronics industries as defense budget reductions continue. Research has demonstrated that early intervention—specifically, retraining prior to layoff—is effective in successful worker retraining. A collaboration of EDD, TCA, ETP, and the community colleges and universities would develop an effective means to identify firms and workers likely to be affected by these reductions. In addition, ETP and the California Community Colleges should increase outreach efforts to these affected small businesses through workshops or other delivery mechanisms.

Both ETP and the California Community Colleges have extensive experience in helping employers plan customized training programs which build on workers' transferable skills, and provide new skills where necessary. As a result, ETP, in conjunction with the community colleges, should play a lead role in these types of initiatives, particularly by retraining incumbent workers to help existing defense-related businesses compete in commercial markets. The unique cooperation between ETP and the Community College System is becoming a national model.

Recommendation: Collect information on dislocated worker characteristics to focus assistance programs.

The EDD has been collecting data on civilian workers displaced as a result of military base closures. This data, gathered by the Office of Personnel Management (OPM) at each base, includes federal job title, wage, geographic area of residence, sex and length of service. The data does not include workers' skills information that is easily referenced by training institutions.

Research has demonstrated that early intervention—specifically, retraining prior to layoff—is effective in successful worker retraining.

Information about skills is needed to provide insight into what kinds of training programs are most effective in helping displaced workers find new employment. For example, defense workers typically possess advanced skills and have lengthy work experience. Training for these workers should focus on building upon transferable skills and, in general, upgrading existing skills, rather than focus on basic skills or preparation for totally different careers.

The California Community Colleges and EDD should expand their efforts to collect workers' skills data, either by testing workers or expanding current data collection efforts. These agencies should use the OPM data and workers' skills assessments to develop, refine, and target state services. Current efforts by regional economic development groups should be included in the statewide database.

Recommendation: Focus on small businesses to encourage the development of new and innovative global strategies.

The college systems have leveraged existing programs and increased their capacity to effectively deliver training programs in emerging areas of technology. However, additional resources are needed to expand the dissemination of these programs to adequately serve workers throughout the state.

Small business workers are expected to bear the cost of keeping their skill sets current. Most small businesses are too lean to engage in training programs or even to release the worker for training during normal business hours. Clearly, a method needs to be devised to offset the cost of release time for small business.

ETP needs greater flexibility in job training programs for the small business executive program and for programs supporting emerging industry clusters.

Recommendation: Support the development and use of technology in the delivery of training programs and related activities.

It is necessary to focus resources on improving educational programs which are relevant to the demands of a technologically advanced society. New and refocused methodologies will allow a greater utilization of existing educational resources. As an example, strategies using distance learning as a delivery methodology will increase access and provide just-in-time learning, thus expanding the traditional classroom and allowing learning to take place in a much more global context.

It is necessary to focus resources on improving educational programs which are relevant to the demands of a technologically advanced society.

CHAPTER V

THE NEXT STEP: IMPLEMENTATION FOR THE FUTURE

The intent of this plan is to establish broad policies and strategies that, over the next five years, will guide California state government's response to the challenges described in this document. That response will be the State's effort to facilitate the process of economic transition in defense-impacted areas of the state on behalf of workers, industries, and communities. These broad policies and strategies are intended to create a framework within which state agencies, in public/private partnership with key stakeholders, can initiate and implement focused action plans, programs, and services to mitigate need and optimize emerging opportunities.

The Defense Conversion Council is the entity legislatively mandated to coordinate, advise, and monitor state government's defense conversion and base reuse efforts. In so doing, the DCC faces the following challenges:

- To adopt this strategic plan as the Council's guide for the State's defense industry conversion and base reuse effort
- With the support of the Wilson Administration and the State Legislature, to direct state agencies to implement this strategic plan and to oversee and evaluate implementation
- To clearly identify its future role in the response effort, in particular, the Council's working relationship with state agencies
- To evaluate the future make-up of the Council, including representation from local government and the private sector
- To continue to serve as a clearinghouse on defense industry conversion and base reuse issues.

State government leadership is also faced with a challenge: to translate the strategic plan's guiding principles, goals, objectives, and recommendations into public policy, legislation, and hard-hitting, well-crafted services to industry, communities, and workers. This process will require each state agency to assess their existing programs and resources, and to refocus and realign them as necessary. Further work will be required to identify ways in which agencies can collaborate on programs and services on behalf of particular client groups.

Finally, agencies and the DCC must evaluate the overall effectiveness of state government's coordinated response. Further implementation plans must set specific performance standards and timeframes, and must assess all costs to the State.

It is important for partners and interested parties to understand that the transition to a healthy, sustainable, growing economy—in this instance, the careful integration of the changing defense economy with the emerging, restructured, commercial economy—does not happen overnight. It is a complex, dynamic process requiring the effort and commitment of all stakeholders over a long period of time. This is the process of economic development. For economic development to be successful, many investment features need to be present over the long term:

- Strong leadership at the state and local levels
- Clear focus on vision, goals, and desired results
- Clear understanding and acceptance of roles and responsibilities
- Strong commitment of time and resources
- Access to accurate and timely information
- Good planning and effective programs
- Strong partnerships, collaboration, and communication
- Access to effective expertise
- Adaptability and flexibility.

Investment in the prerequisites for successful economic development is being made to varying degrees in defense-impacted regions, but such effort needs to be focused, continued, and expanded—not only to mitigate needs currently unmet or needs emerging from the latest round of base closures, but also to ensure that the state takes full advantage of its assets to compete and lead in the global economy. Market force changes are being viewed increasingly at the local level as opportunities to replace lost economic activity, to create a diversified economic base, and to foster sustainable job and business growth. The state and federal governments, through various agencies, are meeting the transition challenge as well. The greater challenge to the State for many years to come is the ongoing commitment to lead the response effort in a timely, flexible, coordinated, and creative fashion, one supporting and empowering industry, workers, and communities. This strategic plan represents the State's commitment to meet that challenge.

The greater challenge to the State for many years to come is the ongoing commitment to lead the response effort in a timely, flexible, coordinated, and creative fashion, one supporting and empowering industry, workers, and communities.

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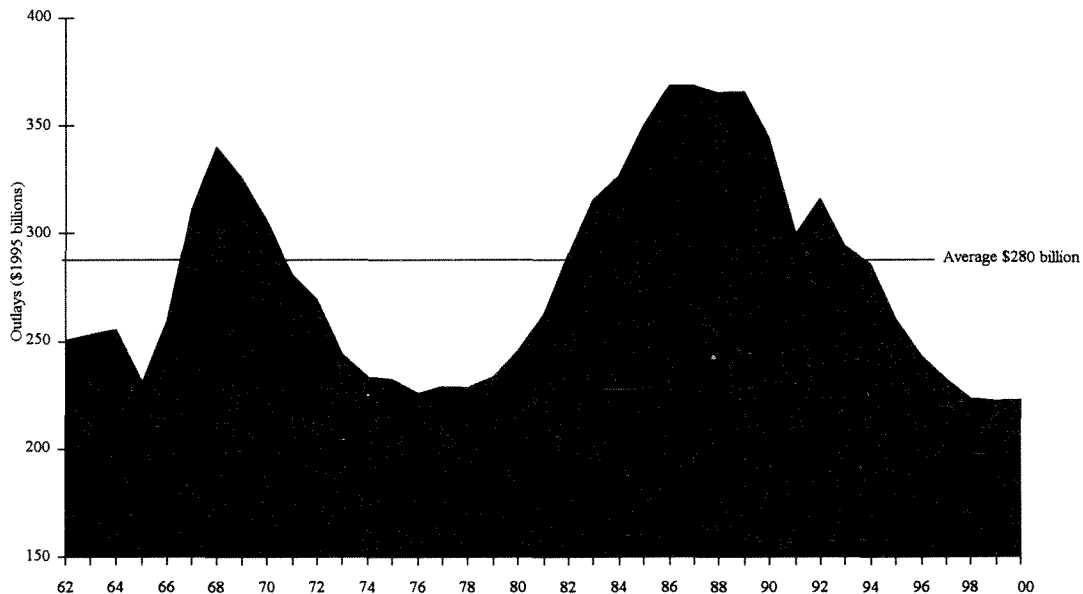
APPENDIX A

The Importance of Defense Outlays in California

National defense outlays are expected to continue to decrease, although at a slower pace. Current national outlays of \$261 billion are expected to fall to \$223 billion, expressed in 1995 dollars, at the turn of the century. Defense outlays from 1962 to 2000 are illustrated below (Figure A-1). In 1988, California's share of U.S. defense outlays was 21 percent; by 1992, it had fallen to 16.6 percent (Table A-1).

Figure A-1

U.S. DEFENSE OUTLAYS, 1962-2000



Sources: OMB, *Historical Budget Tables of the United States*; GPO, Washington, D.C., 1992. Defense Budget Project.
 Note: FY 1997-2000 figures are projections.
 1990, 91, and 92 figures are adjusted for Desert Storm and Desert Shield costs.

Table A-1

DEFENSE BUDGET OUTLAYS IN CALIFORNIA AND THE U.S., 1988 TO 1992 (billions of current dollars)

Year	U.S. Defense Outlays	Defense Outlays in California	California Defense Share of U.S.
1988	290.4	60	20.7%
1989	303.6	59	19.4%
1990	299.3	56	18.7%
1991	273.3	53	19.4%
1992*	303.3	51	16.6%

*Latest year available

Sources: Department of Defense, California Commission on State Finance

Table A-2
DoD PRIME CONTRACT AWARDS
BY COUNTY, 1994
(millions of dollars)

City	State	Amount
Los Angeles	CA	10,233
St. Louis City	MO	5,696
Santa Clara	CA	3,803
Middlesex	MA	3,085
Cobb	GA	2,774
Fairfax	VA	2,774
Tarrant	TX	2,386
San Diego	CA	2,334
Palm Beach	FL	1,430
Denver	CO	1,388
Orange	CA	1,386
Fairfield	CT	1,282
Dallas	TX	1,275
Brevard	FL	1,254
Montgomery	MA	1,253
Jackson	MI	1,222
Essex	MA	1,209
Orleans	LA	1,131
Pima	AZ	965

Source: *Prime Contract Awards by State, Fiscal Year 1994*, DIR, Operations and Reports, U.S. Government Printing Office, Washington, D.C.

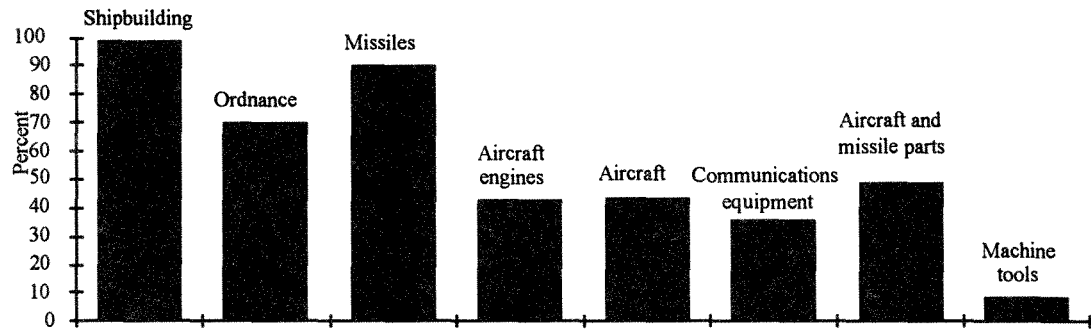
Reductions in defense expenditures have had a major impact on large numbers of California businesses, particularly aerospace and electronics companies. These reductions have primarily affected prime contractors (firms selling directly to federal military procurement offices) and secondary contractors (firms selling to prime contractors), but they also have affected tertiary subcontractors and suppliers to both the defense industry and military bases.

On a regional basis the importance of aerospace employment is more apparent. Defense-related manufacturing employment is substantial in three areas: greater Los Angeles, San Diego, and San Jose, with direct and indirect defense employment accounting up to nearly one-sixth of the civilian labor force employment. As Table A-2 indicates, Los Angeles, Santa Clara, San Diego, and Orange counties occupied were among the top ten places in terms of total DoD prime contractors in 1994. In total, these four California counties received almost \$18 billion in prime contract awards in 1994.

Many industries are heavily dependent on defense output. Figure A-2 demonstrates the defense dependence of eight industries. The downturn in the aircraft industry has been greatly exacerbated by a weak civilian market and increased competition from commercial aircraft manufacturers out of state and overseas. However, unlike the effects of defense downsizing on aerospace industries nationally where aircraft manufacturing has suffered the most, the steepest drop in California has occurred in search, detection, navigation, and guidance equipment. California's employment in aircraft and missile parts fell the same as national employment in that industry. The electronics industry, reeling from defense cuts, has also been subject to intense increased competition from overseas and from other states.

Figure A-2

DEFENSE OUTPUT SHARE OF TOTAL OUTPUT BY INDUSTRY



Source: Richard A. Bitzinger, "Adjusting to the Drawdown: The Transition in the Defense Industry," Defense Budget Project, Washington, D.C., April, 1993, p. 5.

APPENDIX B

Industry Assistance Survey Results

The industry survey had a 9% return rate (325 respondents) by the October 1, 1994 deadline with 65% (221 respondents) having some share of their business related to the defense industry. The following data reflect only those firms with a greater than zero percentage of their products sold for defense-related purposes.

A. Location of firm:

Alameda: 15%	Los Angeles: 2%	Riverside: 1%	San Diego: 33%
Contra Costa: 2%	Marin: 2%	Santa Clara: 14%	San Francisco: 2%
Imperial: .5%	Orange: 10%	San Bernardino: 2%	Solano: 1%

B. What impact has the reduction in defense spending had on your community? Please rank top 5 impacts with 1 being greatest impact. (Results represent a percentage of the times that the response was chosen as a number one priority.)

Under 10 employees:	32%
10 to 50:	36%
51 to 100:	6%
101 to 500:	4%
501 to 1000:	1%
Over 1000:	2%

C. If you have experienced layoffs in the last five years, please give the approximate number of employees that were lost:

Under 10 employees:	44%
10 to 50:	14%
51 to 100:	6%
101 to 500:	3%
501 to 1000:	1%
Over 1000:	2%

D. What is your estimate of the percentage of employees lost over the last five years?

10 to 20 percent:	28%
30 to 40 percent:	16%
50 to 60 percent:	12
70 to 80 percent:	4%
90 to 100 percent:	1%

E. What approximate percentage of your products are presently sold for defense-related uses?

Under 20 percent:	49%
20 to 40 percent:	15%
40 to 60 percent:	10%
60 to 80 percent:	1%
80 to 100 percent:	5%

F. What reduction in your total sales (defense and non-defense related) have you experienced over the last five years?

None:	13%
Under 20 percent:	26%
20 to 40 percent:	17%
40 to 60 percent:	16%
60 to 80 percent:	5%
80 to 100 percent:	2%

G. What direct or indirect effects have defense downsizing cuts had on your company?

Reduced sales volume:	48%
Layoffs/Loss of skilled labor:	12%
No negative effects:	11%
Reduced return of investment:	10%
Reduced ability to service debt:	7%
Loss of economies of scale:	7%
Difficulty balancing production:	5%

H. Which of the following barriers have you experienced in trying to overcome the problems listed in question G?

Limited product line:	14%
State government permits and regulations:	14%
Local government permits and regulations:	13%
Unable to identify private sector markets (customers) for existing products:	12%
Availability of debt financing:	9%
Lack of knowledge and experience promoting and selling products to new markets:	8%
Lack of knowledge of distribution channels in new markets:	7%
Limited access to state and federal funds:	6%
Lack of Knowledge of market research methods:	4%
Availability of equity financing:	4%
Availability of facilities for product development and R&D:	3%
Unable to identify other companies for joint ventures or partnerships:	3%
Availability of employer training programs:	3%
Lack of knowledge of exporting and foreign market entry:	0%
Other barriers:	

I. What business and industry information needs does your firm have?

Availability of market research to identify existing and new markets	24%
Information on external funding for new venture activities	15%
Lack of information on state business assistance programs	6%
Lack of knowledge on how business operates	3%

APPENDIX C

Sample of On-Line Business Information Projects

The following Internet addresses provide a sampling of the resources available to the on-line user. The list below is by no means comprehensive and will, undoubtedly, grow in the months to come.

Project/ Internet Address	Description
Cal-ACCESS http://www.calaccess.org/calaccess/	On-line system of databases and associated matchmaking support tools that bring technology-based and defense-converting companies together with key economic development and assistance providers, universities, and government agencies in the greater Los Angeles area.
California Economic Diversification and Revitalization (CEDAR) http://www.cedar.ca.gov/	Centralized Internet resource devoted to defense conversion; provides links to existing information resources, on-line access to defense conversion information, and lists additional resources relevant to impacted businesses, communities and workers.
California Information Infrastructure (CII)	Builds upon the existing Internet infrastructure to assist in coordinating linkages among high technology firms and organizations, focusing on technology transfer.
CommerceNet http://www.commerce.net	Focuses on bandwidth requirements for on-line product data, mechanisms for data providers.
Economic Conversion Information Exchange (ECIX) http://ecix.doc.gov/ecix/ecixhomepage.html	OECI is a collaborative initiative of the U.S. Department of Commerce and the Department of Defense. OECI is a free service that provides information about defense adjustment and defense conversion, economic development and technology transfer.
Trade and Commerce Agency http://www.ca.gov/commerce/home.html	Lead agency in California for defense conversion issues. Administers state defense conversion assistance programs.
Project California http://mercury.saic.com/calif/	Project California was launched in the summer of 1992 by the California Council on Science and Technology as a collaborative effort between the State of California, industry, labor and academia to develop globally competitive, high-technology clusters of transportation businesses in California.
TradePort http://mercury.saic.com/tradenet/	Assists firms in exporting from California to global markets.
UC-ACCESS http://www.ucaccess.org/	On-line match making and information system for use by companies and researchers worldwide. Fosters research partnering and technology transfer to benefit industry through the rapid commercialization of University of California technologies. Includes data on licensing, UC research in progress, faculty expertise, available UC equipment and facilities, and research centers.

APPENDIX D

Community Assistance Survey Results

In August, 1994, TCA surveyed 20 cities and 20 counties affected by reductions in defense spending. The community survey had a seven percent return rate by the October 1, 1994 with 81 percent of those who responded having felt an impact from reduced federal defense spending. The following data reflect only those communities that indicated they have been affected by defense downsizing.

A. Do you represent a county, city or chamber of commerce?

County	28%
Chamber of Commerce	6%
City	5%

B. What impact has the reduction in defense spending had on your community? (Results represent the percentage of times the response was chosen as a number one priority.)

Increase in unemployment rate due to dislocated workers	16%
No noticeable impact	14%
Closure of military base	14%
Reduction in real estate prices	14%
No available study/data to assess impact	14%
Increase in commercial/industrial vacancy rate	9%
Reduction in funding for schools due to drop in enrollment	7%
Increase use of unemployment insurance	5%
Loss in retail sales	2%
Reduction in tax revenue	2%
Increase in demand for social services (welfare caseloads)	0%
Disproportionate impact on minority and woman owned business	0%

C. What impact has the reduction in defense spending had on businesses in your area? (Results represent the percentage of times that the response was chosen as a number one priority.)

Downsizing of businesses operations	33%
Business closure	18%
Severe impact on firms ability to stay in business	15%
Increased diversification of business	10%
No available study/data to assess impact	8%
No noticeable impact	5%
Not applicable	3%
Others	3%
Increase in number of joint ventures/partnerships	0%
Relocation	0%

- D. In your response to defense cutbacks, what barriers have you encountered while planning and developing policy to assist your community? (Results represent the percentage of times the response was chosen as a number one priority.)**

Lack of knowledge of federal policy	14%
Lack of knowledge of other communities impacted and their development strategy	14%
Lack of knowledge of state policy	11%
Lack of information with respect to statewide defense conversion programs	11%
Ability of local organizations to reach consensus on planning and program issues on defense conversion	11%
Lack of information on funding sources	9%
Absence of land use and facility surveys	9%
Availability of market feasibility studies	9%
Understanding the process for applying for grants	6%
Knowledge of covenants, conditions and restrictions of land use	6%

- F. In your response to defense cutbacks, what barriers have you encountered while implementing assistance in your community? (Results represent the percentage of times the response was chosen as a number one priority.)**

Access to business financing	32%
Ability of local organizations to reach consensus on planning and program issues on defense conversion	26%
Lack of funding for attending and participating in conferences, seminars on defense related issues	16%
Availability of sufficient technical assistance by federal and state agencies	11%
Availability of resources to hire defense adjustment staff	5%
Knowledge and availability of training programs for dislocated workers	5%
Others	5%
Lack of knowledge of state permits and regulations	0%
Too restrictive or costly permit processes	0%

- G. In your response to defense cutbacks, what barriers have you encountered in assisting your community with respect to base reuse? (Results represent the percentage of times the response was chosen as a number one priority.)**

Ability of local organizations to reach consensus on base reuse planning and program issues	24%
Time frame for property-transfer	16%
CEQA/NEPA compliance	12%
Availability of financing	8%
Ability to market military bases	8%
Cost of upgrading the physical infrastructure of the military bases for reuse purposes	8%
Knowledge of utilities available at bases	4%
McKinney Housing for the Homeless Act compliance	4%
Lack of information on base reuse efforts in other/neighborhood communities	4%
Knowledge of type of property, infrastructure and equipment on bases	0%
Knowledge of skilled labor force existing on bases	0%
Ability to expedite clean-up of bases	0%

H. In your response to defense cutbacks, what barriers have you encountered in assisting businesses in your community? (Results represent the percentage of times the response was chosen as a number one priority.)

Availability of market research to identify existing and new markets	24%
Lack of budget and staff to assist business	18%
Information on external funding for new venture activities	15%
Ability to market base properties	12%
Lack of support by city council or board of supervisors	12%
Provision of training and worker assistance	6%
Lack of information on state business assistance programs	6%
Ability to provide export assistance	3%
Lack of availability of state enterprise zones	3%
Lack of knowledge on how business operate	3%

I. What would you consider the role of the federal government in assisting communities impacted by defense cuts and/or military base closures? (Results represent the percentage of times the response was chosen as a number one priority.)

Help finance reuse planning and infrastructure	22%
Remove regulatory obstacles to base reuse	21%
Provide tax incentives to impacted companies to encourage diversification	15%
Provide information on federal programs	14%
Provide capital for research and development	10%
Provide technical assistance in developing defense adjustment strategies	9%
Assist in securing federal non-defense contracts	9%

J. What would you consider the role of the state in assisting communities impacted by defense cuts and/or military base closures? (Results represent the percentage of times the response was chosen as a number one priority.)

Assist in acquiring federal funds	18%
Streamlining state permits	15%
Assist communities start business incubators	13%
Provide financing for both community development and industrial expansion	12%
Assist and participate when closure is announced and expedite the transfer of military base property	12%
Assist in marketing bases	9%
Provide site assistance when firms are interested in locating at a base	9%
Develop business retention programs	8%
Provide information on impact of base closures and defense cutbacks in other states and communities	5%

K. What would you consider the role of local government in response to the impact of defense cuts and/or military base closures? (Results represent the percentage of times the response was chosen as a number one priority.)

Help regional public/private and private/private partnerships	27%
Identify the appropriate use of military base property	26%
Assist in developing business incubators	20%
Assist in the training and re-employment of laid-off defense workers	11%
Others	9%
Establish revolving loan funds for business	8%

L. Do you or employees in your organization use a modem to access on-line information for decision making and/or information exchange purposes?

No	50%
Yes, though rarely used	28%
Yes, often used	23%

M. If yes to Question L, the modem is used for:

Information exchange	45%
Access to government programs	12%
Information for decision making	10%

APPENDIX E

Sample of Financial Assistance Awards to California Communities Affected by Base Closure and Industry Downsizing—Not a comprehensive list

(thousands of dollars)

Grant Recipients	State Funds^a	Local Funds	Federal Funds	Federal Source
Alameda NAS, NAD (ARRA, EBCRC)	66		1,100	OEA
Castle AFB (Castle JPA, City of Atwater, Merced Co.)	568 ^b	59	8,420	EDA, OEA
City of Chula Vista	100	567	2,000	EDA
City of Port Hueneme	26	26	159	OEA
City of Vacaville	100	1,276	3,203	EDA
County of Los Angeles (CDC)	100	117	650	EDA
El Toro MCAS (ETRPA, Orange County)	100		741	OEA, FAA
Fort Ord Army Base (Monterey County and FORA)	800 ^b	503	9,841	OEA, EDA
George AFB (VVEDA, San Bernardino County)	62 ^c		7,080	EDA, OEA, FAA
Hamilton Army Airfield			464	OEA
Humboldt County	10	5	46	OEA
Hunters Point Naval Annex/Treasures Island (County and City of San Francisco)			1,602	OEA, EDA
Long Beach Naval Shipyard (City of Long Beach)	100	392	1,475	OEA
Long Beach Naval Station (City of Long Beach)			349	OEA
March AFB (March JPA)	22	71	327	OEA
Mare Island (City of Vallejo)	271	79	9,817	OEA, DOL, EDA
Mather AFB (Sacramento County)	12.5		23,343	OEA, FAA, HUD, EDA
McClellan AFB (Sacramento Co.)			1,000	OEA
Norton AFB (IVDA, SBIAA)	1,616 ^d		10,481	OEA, EDA, FAA
Oakland Naval Hospital (OBRA, EBCRC)	49		60	OEA
Orange County (County of Orange, ETRPA)	25	25	150	OEA, EDA
Point Molate (City of Richmond)		275	150	OEA
Sacramento Army Depot			436	OEA
San Diego NTC (City of San Diego)	100	314	3,496	OEA, EDA
Santa Clara County	30	30	130	OEA
Sierra Army Depot (Lassen County)	68	102	511	OEA
Tustin MCAS (City of Tustin)	9	9	839	OEA

^aGrants are from the California Defense Adjustment Matching Grant Program of TCA, unless otherwise specified.

^bIncludes funding from the California Housing and Community Development.

^cIncludes funding from the California Department of Transportation.

^dIncludes funding from Petroleum Violation Escrow Account funds through TCA.

Sources: *California Military Base Closures: Current Status of Reuse Efforts*, OPR; Defense Adjustment Matching Grant Program applications, TCA.

APPENDIX F

Sample of On-Line Community Information Projects

The following Internet addresses provide a sampling of the resources available to the on-line user. The list below is by no means comprehensive and will, undoubtedly, grow in the months to come.

Project/ Internet Address	Description
Office of Business Development http://www.ca.gov/commerce/bd.html	Houses TCA's Defense Conversion Unit; administers state assistance programs. Includes information on the LAMBRA and the Defense Adjustment Matching Grant Programs.
Empowerment Zone and Enterprise Community Program http://www.ezec.gov/	The Empowerment Zone and Enterprise Community program is designed to afford communities real opportunities for growth and revitalization.
California Association for Local Economic Developers http://hallucinet.com/caled	CALED is dedicated to educating and assisting communities in promoting economic development.
Environmental Restoration Electronic Bulletin Board http://www.dtic.dla.mil/envirodod/envirodod.html	The purpose of this bulletin board is to provide one stop shopping for all small and minority businesses who are interested in supporting the DoD environmental cleanup mission.
California Economic Diversification and Revitalization (CEDAR) http://www.cedar.ca.gov/	Centralized Internet information resource devoted to defense conversion information; provides links to existing information resources, on-line access to defense conversion information, and lists additional resources relevant to impacted businesses, communities and workers.
Department of Defense's Base Reuse Manual http://www.acq.osd.mil/es/reinvest/manual/initman.html	This Manual has been prepared by the Office of the Assistant Secretary of Defense for Economic Security [OASD(ES)], in cooperation with the Military Departments, and the Office of the Secretary of Housing and Urban Development, to assistance communities experiencing base closure.
Economic Conversion Information Exchange (ECIX) http://ecix.doc.gov/ecix/ecixhomepage.html	OECI is a collaborative initiative of the U.S. Department of Commerce and the Department of Defense. OECI is a free service that provides information about defense adjustment and defense conversion, economic development and technology transfer.
PARCELS http://atlas.lmi.org/parcels/	PARCELS is a multi-media information system that provides detailed information about closing and realigning military bases to people interested in buying, leasing, or developing property. PARCELS is funded by the Department of Commerce's Economic Development Administration in cooperation with DoD's Office of Economic Adjustment (OEA).
Community Guide to Base Reuse http://www.acq.osd.mil/es/reinvest/guide.html	This guide provides options and suggestion to communities looking to reuse closing military bases in their jurisdiction.

APPENDIX G

Environmental Clean-Up Cost Estimates For Closing California Bases

(in millions of 1994 dollars)

	Actual Costs through FY 1994	DoD Budget Plan, FY 1995-2001	Unbudgeted Costs as of FY 2001	Total Estimated Cost	Percent Complete by FY 2001
BRAC 1988					
George AFB	52,858	24,765	32,720	110,343	70.35%
Hamilton AAF	3,939	232	15,161	19,332	21.58%
Mather AFB	81,423	70,084	53,130	204,637	74.04%
Norton AFB	64,677	32,766	7,600	105,043	92.76%
Presidio, SF	49,986	26,993	20,679	97,658	78.83%
Salton Sea	N/A	N/A	N/A	N/A	N/A
BRAC 1991					
Castle AFB	57,586	105,603	15,000	178,189	91.58%
Fort Ord	63,240	100,000	68,568	231,808	70.42%
Hunters Point	78,536	46,818	231,203	356,557	35.16%
Long Beach NS	13,049	67,732	113,166	193,947	41.65%
Moffett Field NAS	44,645	12,863	83	57,591	99.86%
Sacramento AD	49,303	8,613	0	57,916	100.00%
Tustin MCAS	19,481	15,410	13,017	47,908	72.83%
BRAC 1993					
Alameda NAS ^a	29,483	24,778	52,275	106,536	50.93%
Mare Island NSY	26,634	59,178	121,193	207,005	41.45%
Treasure Island NS	4,605	7,950	31,309	43,864	28.62%
San Diego NTC	3,585	11,022	0	14,607	100.00%
El Toro MCAS	22,101	26,273	13,159	61,533	78.61%
March AFB ^b	83,335	107,713	53,548	244,596	78.11%
BRAC 1995					
Long Beach NSY	4,749	7,360	9,913	22,022	54.99%
McClellan AFB	151,789	193,430	512,016	857,235	40.27%
Oakland AB	-	198	1,728	1,926	10.28%
Oakland FISC	4,707	24,338	12,165	41,210	70.48%
Fort Hunter Liggett ^b	9,713	733	6,432	16,878	61.89%
Onizuka AFS ^b	139	2,678	7,944	10,761	26.18%
Sierra AD ^b	18,053	3,524	83,372	104,949	20.56%
Totals	937,616	981,054	1,475,381	3,394,051	56.53%

^a Includes Aviation Depot, Public Works Center, and Oakland Naval Hospital.

^b Realignment.

Source: Defense Environmental Cleanup Program Report for FY 1994

APPENDIX H

Contacts for Closing and Realigning California Military Bases

Base	Director	Address	OEA Contact	Base Transition Coord.	BRAC Round/Estd. Closure
Alameda Naval Complex (Naval Air Station Alameda, San Francisco Bay Public Works Center, Naval Aviation Depot Alameda)	Kay Miller Executive Director (510) 263-2870 Fax: (510) 521-3764	Alameda Reuse & Redevelopment Authority NAS Base Conversion Office Postal Directory, Building 90 Alameda, CA 94501-5012	Mark Braly (916) 557-7365	Not Specified	BRAC 93/ March 1997
Castle Air Force Base	Richard (Dick) Martin Executive Director (209) 384-7325 Fax: (209) 357-3404	Castle Joint Powers Authority P.O. Box 547 2721 Winton Way Atwater, CA 95301	Col. Jim Richards (703) 604-5703	LTC Michael Miller (209) 726-2170	BRAC 91/ Sept. 1995
Marine Corps Air Station, El Toro	Kari Rigoni (714) 834-2109 Fax: (714) 834-2771 Candy Haggard (714) 252-5284 Fax: (714) 252-5290	Orange County EMA P.O. Box 4048 Santa Ana, CA 92702-4048 John Wayne Airport Admin. 3151 Airway Avenue, K-101 Costa Mesa, CA 92626	Paul Reyff (916) 557-7365	COL Jim Ritchie (714) 726-2242	BRAC 93/ July 1999
Fort Ord Army Base	Leslie (Les) White Executive Director (408) 883-3672 Fax: (408) 883-3675	Fort Ord Reuse Authority 100 12 th Street Marina, CA 93933	Patrick O'Brien (703) 604-5690	Kathleen Clack (408) 242-0444	BRAC 91/ Sept. 1994
George Air Force Base	Kenneth Hobbs Director (619) 955-5032 Fax: (619) 955-5041	Victor Valley Economic Development Authority 13246 Eagle Street Victorville, CA 92394	Tony Perez (916) 557-7365	Gary Gray (619) 246-5360	BRAC 88/ Dec. 1992
Hamilton Army Air Base		Hamilton Reuse Planning Authority 900 Sherman Ave Novato, CA 94945	Paul Reyff (916) 557-7365	Not Specified	BRAC 88/ Oct. 1994
Long Beach Naval Station and Long Beach Naval Shipyard	Braden Phillips Economic Devel. Specialist (310) 570-3851 Fax: (310) 570-3897	Economic Devel. Bureau City of Long Beach 230 Pine Avenue Long Beach, CA 90802	Bryant Monroe (703) 604-5690	Kevin Barre (310) 547-6875	BRAC 91 & BRAC 95/ NA
March Air Force Base	Steve Albright Executive Director (909) 656-7000 Fax: (909) 653-5558	March Joint Powers Authority P.O. Box 7480 Moreno Valley, CA 92558	Col. Jim Richards (703) 604-5703	Gerry Manori (909) 655-4141	BRAC 93/ NA

Base	Director	Address	OEA Contact	Base Transition Coord.	BRAC Round/Estd. Closure
Mare Island Naval Shipyard	Gil Hollingsworth Mare Island Conversion Program Manager (707) 649-5452 Fax: (707) 648-4499	City of Vallejo 555 Santa Clara Street Vallejo, CA 94590	Toby Halliday (703) 604-4726	Dennis Kelly (707) 646-9910	BRAC 93/ Apr. 1996
Mather Air Force Base	Robert (Rob) Leonard Director of Base Reuse (916) 643-6877 Fax: (916) 643-6278	County of Sacramento 3237 Peacekeeper Way, # 240 McClellan AFB, CA 95652	Mark Braly (916) 557-7365	Scott E. Gerhart (916) 364-4009	BRAC 88/ Sept. 1993
McClellan Air Force Base	Robert (Rob) Leonard Director of Base Reuse (916) 643-6877 Fax: (916) 643-6278	County of Sacramento 3237 Peacekeeper Way, # 240 McClellan AFB, CA 95652	Tony Gallegos (916) 557-7565	Richard Bennecke (916) 643-4374	BRAC 95/ Sep. 2001
Oakland (Oak Knoll Naval Hospital, Fleet Industrial Supply Center, Oakland Army Base)	Paul Nahn Executive Director (510) 238-6427 Fax: (510) 238-4731	Oakland Base Reuse Authority 1333 Broadway, 9th Floor Oakland, CA 94612	Mark Braly (916) 557-7365	Thomas Galvin Oakland Army Base (510) 466-4248	BRAC 93/ Sept. 1996
Onizuka Air Force Base	Karen A. Davis Asst. to the City Mgr. (408) 730-7599 Fax: (408) 730-7696 Alex Terrazas Asst. to the City Mgr. (415) 903-6304 Fax: (415) 962-0384	City of Sunnyvale 456 W. Olive Avenue Sunnyvale, CA 94088-3707 City of Mountain View 500 Castro Street Mountain View, CA 94039	Amy Hughes (408) 356-2212	Scott E. Gerhart (916) 364-4009	BRAC 95
Norton Air Force Base	William Bopf Executive Director (909) 885-4832 Fax: (909) 386-7591	Inland Valley Development Agency 201 North E Street, Suite 203 San Bernardino, CA 92401	Tony Perez (916) 557-7365	Not Specified	BRAC 88/ March 1994
Sacramento Army Depot	Greg Wessel Project Manager (916) 440-1346	Sacramento Housing and Redevelopment Agency 300 I Street Sacramento, CA 95814	Mark Braly (916) 557-7365	Not Specified	BRAC 91/ July 1995
San Diego Naval Training Center	Tim Johnson Base Reuse Project Director (619) 236-6732 Fax: (619) 236-6706	City of San Diego 1200 3rd Avenue, Suite 1700 San Diego, CA 92101-4178	Paul Reyff (916) 557-7365	LCDR Robert Citrano (619) 524-6526	BRAC 93/ Sept. 1997
San Francisco Naval Facilities (Hunters Point Naval Shipyard, Naval Station Treasure Island)	Larry Florin Coordinator of Base Conversion (415) 749-2532 Fax: (415) 749-2585	Office of Military Base Conversion 770 Golden Gate Avenue San Francisco, CA 94102	Toby Halliday (703) 604-4726	Cmdr. Al Elkins Treasure Island (415) 395-3931	BRAC 93/ Sept. 1997

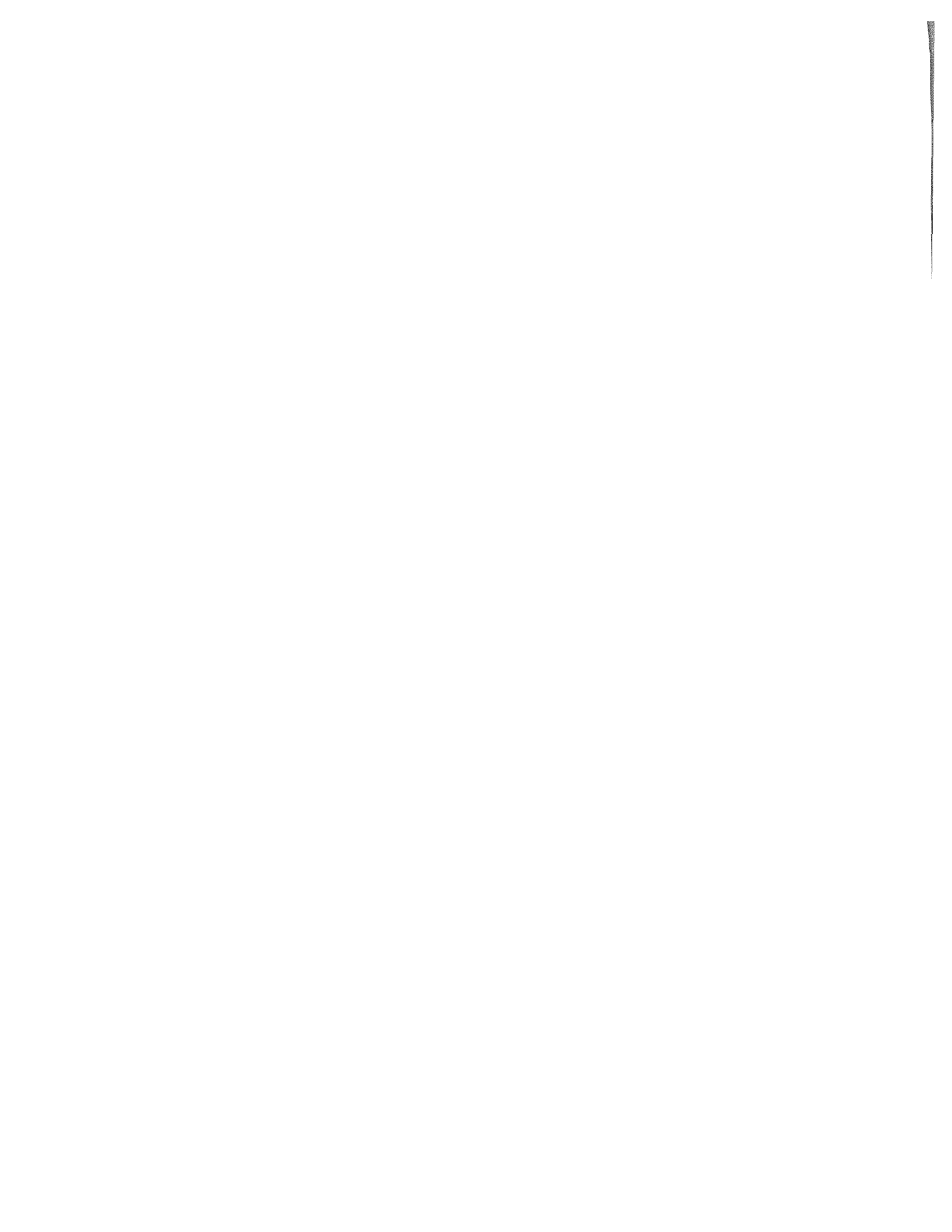
Base	Director	Address	OEA Contact	Base Transition Coord.	BRAC Round/Estd. Closure
Sierra Army Depot	Patrick Landon Economic Development Mgr. (916) 257-8311 Fax: (916) 257-4898	Lassen County 707 Nevada Street Susanville, CA 96130	Tony Perez (916) 557-7365	Jimmy Spain (916) 827-4488	BRAC 95
Tustin Marine Corps Air Station	Christine Shingleton Assistant City Mgr. (714) 573-3107 Fax: (714) 573-3113	City of Tustin Community Devel. Depart. 300 Centennial Way Tustin, CA 92680	Paul Reyff (916) 557-7365	Peter Ciesia (714) 726-2679	BRAC 91/ July 1997
Point Molate Naval Refueling Station (FISC)	Patricia Jones Office of the City Mgr (510) 620-6952 Fax: (510) 620-6542	City of Richmond Post Office Box 4046 2600 Barrett Avenue Richmond, CA 94804	Toby Halliday (703) 604-4726	Not Specified	BRAC 95
Port Hueneme Naval Laboratory	Thomas E. Figg Dir. of Com. Dev. (805) 986-6514 Fax: (805) 488-2633	Port of Hueneme 250 North Ventura Road Port Hueneme, CA 93041	Paul Reyff (916) 557-7365	James Razinha (805) 982-1706	BRAC 93/ Nov. 1995
Rio Vista Army Reserve Center	Norman Repanich (707) 374-6451 Fax: None	City of Rio Vista #1 Main Street Rio Vista, CA 94571	Not Specified		BRAC 95

APPENDIX I

Sample of On-Line Employment Information Projects

The following Internet addresses provide a sampling of the resources available to the on-line user. The list below is by no means comprehensive and will, undoubtedly, grow in the months to come.

Project/ Internet Address	Description
Employment Development Department Job Service Division http://www.edd.cahwnet.gov/jsind.html	The Job Service provides California's employers with a variety of services to meet workforce needs. Through its Job Match system, Job Service offers a statewide network that provides an instant link for employers with qualified job seekers anywhere in California. The Job Service also provides employers with: re-employment services for dislocated workers; assistance in meeting affirmative action goals; current labor market information for planning business expansion, relocation, and future hiring; focused recruitment for new business ventures or facilities needing a large number of specialized workers in a hurry.
Employment Development Department California State Job Training Coordinating Council http://www.sjtcc.cahwnet.gov/	The State Job Training Coordinating Council (SJTCC) is the Governor's advisory body for California's workforce preparation system. Established by the federal Job Training Partnership Act (JTPA), the SJTCC provides a public forum for issues and policy related to workforce preparation. All plans and decisions of the Council are subject to approval by the Governor. The Council also promotes the coordination of various state and federal employment and training programs and resources throughout the state.
Department of Labor http://www.dol.gov/	The U.S. Department of Labor is charged with preparing the American workforce for new and better jobs, and ensuring the adequacy of America's workplaces.
America's Job Bank http://www.ajb.dni.us/	The America's Job Bank computerized network links the 1,800 state Employment Service offices. It provides job seekers with the largest pool of active job opportunities available anywhere. For employers it provides rapid, national exposure for job openings. The 'nationwide' listings in America's Job Bank contain information on approximately 250,000 jobs.
The Franklin Search Group, Inc. http://www.gate.net/biotech-jobs/	Serving some of the strongest biotechnical and medical corporations, The Franklin Search Group, Inc. identifies, evaluates and recruits the professionals with scientific and technical expertise who stand out in their fields. Through a process of research and peer-review, they select and refer only those candidates who have proven their abilities by virtue of their achievements and the esteem of their colleagues.
California Career and Employment Center http://www.webcom.com/~career/	Clients can post their job openings or resumes in on-line databases.



GLOSSARY OF ACRONYMS

AB	Assembly Bill
AFB	Air Force Base
BOSS	Business Ownership Service System
BRAC	Base Realignment and Closure
CACT	Centers for Applied Competitive Technology
Cal/EPA	California Environmental Protection Agency
CALED	California Association for Local Economic Development
CEDAR	California Economic Diversification and Revitalization
CEQA	California Environmental Quality Act
CERES	California Environmental Resources Evaluation System
CERFA	Community Environmental Remediation Facilitation Act
CITD	Centers for International Trade Development
CMEC	California Manufacturing Extension Center
CMECC	California Military Environmental Coordinating Committee
CPUC	California Public Utility Commission
DCC	California Defense Conversion Council
DCMG	California Defense Conversion Matching Grant
DELTA	Defense Loan and Technical Assistance
DFG	California Department of Fish and Games
DoD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
DOL	U.S. Department of Labor
ED>Net	Economic Development Network
EDA	U.S. Economic Development Administration
EDC	Economic development corporation
EDD	California Employment Development Department
EIR	Environmental Impact Report
ESP	California Economic Strategy Panel
ETP	California Employment Training Panel

FMV	Fair market value
FORA	Fort Ord Reuse Authority
FTE	Full-time equivalent
GATT	General Agreement on Tariffs and Trade
GSA	General Services Administration
JTPA	Job Training Partnership Act
LAMBRA	Local Agency Military Base Recovery Area
LRA	Local Reuse Authority
NAFTA	North American Free Trade Agreement
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Protection Act
NIST	National Institute for Standards and Technology
OEA	U.S. Office of Economic Adjustment
OECI	U.S. Office of Economic Conversion Information
OPM	Office of Personnel Management
OPR	California Governor's Office of Planning and Research
OST	California Office of Strategic Technology
PG&E	Pacific Gas & Electric
R&D	Research and development
RTA	Regional Technology Alliance
SB	Senate Bill
SBA	U.S. Small Business Administration
SBDC	Small Business Development Center
SBIC	Small Business Investment Corporation
SDA	Service Delivery Area
TCA	California Trade and Commerce Agency
UCLA	University of California, Los Angeles
UI	Unemployment Insurance
YTD	Year to date