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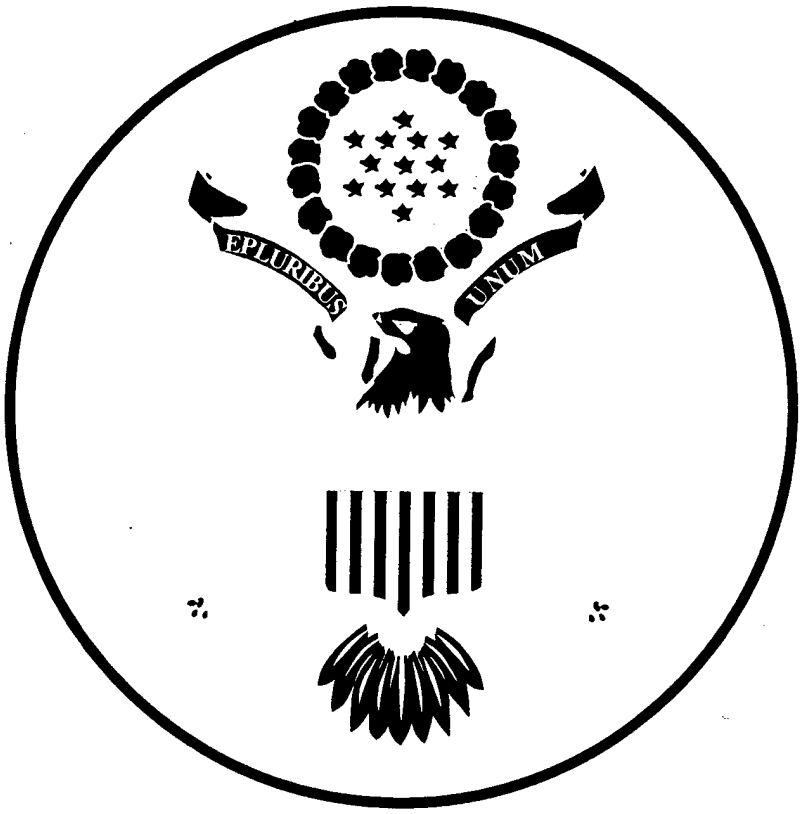
ADJUSTING TO THE DRAWDOWN: REPORT OF THE DEFENSE CONVERSION COMMISSION

DEFENSE CONVERSION COMMISSION
WASHINGTON, D.C.

DEC 92

Adjusting to the Drawdown



Report of the Defense Conversion Commission

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Abstract: The Defense Conversion Commission was formed in April 1992 to assess the consequences of the defense drawdown and to make recommendations constructively addressing them. The report lays out those recommendations, derived from a broad assessment based on new analyses, a thorough review of existing work, and information gathered from hundreds of separate briefings, meetings, interviews, and witnesses at public hearings. It addresses the questions of how current and projected reductions in spending on defense will affect the economy, how best to assist the transition of Department of Defense personnel and those in the defense industries to non-defense work, and how to improve interaction between the Federal Government and the commercial sector.

DEPARTMENT OF DEFENSE
DEFENSE CONVERSION COMMISSION
1825 K STREET NW, SUITE 310
WASHINGTON, DC 20006

December 31, 1992

The Secretary
Department of Defense
The Pentagon
Washington, DC 20301

Dear Mr. Secretary:

We have the honor of presenting this report of the Defense Conversion Commission.

Through hearings, meetings, and independent analyses, we have addressed the questions of how current and projected reductions in spending on defense will affect the economy, how best to assist the transition of Department of Defense personnel and those in the defense industries to non-defense work, and how to improve interaction between the Federal Government and the commercial sector.

While we have been heartened by the dynamism and adaptability inherent in our economy, we have also seen the pain and uncertainty that often accompany economic dislocation. Our recommendations are designed to build on this dynamism, to temper the pain and uncertainty, and to foster outcomes that benefit all of America.

It is in this spirit that we offer these recommendations, ask that they receive the full support of the executive branch and the Congress, and urge that they be implemented as soon as possible.

Sincerely,

David J. Berteau
Chairman

Carl J. Dahlman
Commissioner

L. Paul Dube
Commissioner

Robin L. Higgins
Commissioner

Michael M. Knetter
Commissioner

Douglas E. Lavin
Commissioner

Charles A. May, Jr
Commissioner

Adjusting to the Drawdown

Report of the
Defense Conversion Commission

December 31, 1992

CONTENTS

FIGURES

TABLES

REPORT OF THE DEFENSE CONVERSION COMMISSION

EXECUTIVE SUMMARY

The defense drawdown is viewed in a variety of conflicting ways: as an opportunity to convert defense industry to peacetime uses, as a drain on the economy, as a budgetary source of "peace dividends," or as a reward or a punishment for winning the Cold War.

In many ways, the drawdown is all of these and more. Its consequences, both real and anticipated, have led to numerous proposals for Federal Government action–in some cases to alleviate consequences perceived as negative, in others to hasten outcomes seen as desirable.

The Defense Conversion Commission was formed in April 1992 to assess the consequences of the defense drawdown and to make recommendations constructively addressing them. This report lays out those recommendations, derived from a broad assessment based on new analyses, a thorough review of existing work, and information gathered from hundreds of separate briefings, meetings, interviews, and witnesses at our public hearings.

The Commission defines conversion as the process by which the people, skills, technology, equipment, and facilities in defense are shifted into alternative economic applications. By viewing conversion as a process of transition, the Commission focuses on actions that make the process more efficient while minimizing hardship. This report uses the terms "conversion" and "transition" interchangeably.

While the Commission's report is designed to stand alone, it will be supplemented by a series of annexes (see Appendix 1) providing additional detail on the Commission's analyses and recommendations.

FINDINGS AND CONCLUSIONS

The Commission based its recommendations on several general findings and conclusions:

- The impact of the defense drawdown may be substantial in regions where the local economy depends heavily on defense spending. For the companies, their workers, and affected local communities, the

consequences of reduced defense spending can be dramatic. However, at the overall national level, the impact of the current drawdown is actually smaller than that of the drawdowns after the Korean War and Vietnam; it is also less severe than other recent economic dislocations.

- The long-term success of defense conversion is directly tied to overall economic growth, although specific actions may need to be taken to facilitate the transition by companies and local economies, to preserve needed defense capability, and to alleviate the effects of worker dislocation. With sufficient growth, the transition will be easier; without it, the process will be much more difficult and the adjustments more traumatic.

- Defense conversion cannot solve all of America's economic problems. However, actions that ease the transition are part of the answer to the question of promoting overall economic growth. In addition, effective defense conversion programs can serve as models for the roles of both Government and business in the transition of other sectors of the economy.

- Business development under the free enterprise system is the engine of economic growth in America and is what will create the demand for workers and resources that is essential for a successful transition. Government does, however, have a number of key, substantial roles to play.

- Many Government programs to assist the transition of workers, companies, and local economies already exist at the Federal, state, and local levels. However, in many cases these programs are not integrated and fail to identify the outcomes desired and the means by which to measure success.

GOALS

The preceding conclusions point to several significant goals for Government to pursue in fostering the defense transition process. While no one program can address all of these goals equally well, Government policies and programs collectively should aim at their achievement.

- *Facilitate the transition by encouraging economic growth over the long run.* The general condition of the economy is the most critical factor

affecting the adjustment of individuals, communities, and companies to lower levels of defense spending.

- *Preserve defense capability.* A healthy industrial base is vital to the nation's security. While continuing peacetime demands will support the existence of most necessary defense industrial capabilities, both present and future requirements may call for a limited number of special actions. The need for such actions will be lessened by greater integration of commercial and military economies.

- *Ease the immediate impact on workers, communities, and companies.* The drawdown will produce some hardships as resources are reallocated from defense to other sectors of the economy, and temporary Government assistance may be necessary to ease the process.

- *Improve Government programs.* Government programs and policies should be effective and efficient. More effective Government programs can increase benefits without necessarily increasing costs.

RECOMMENDATIONS

The Commission recommends a number of specific actions to accomplish those goals. The recommendations are summarized below.

Facilitating the Transition

The Commission recognizes that the Federal Government's role in supporting overall economic growth goes beyond the issue of defense conversion. As a result, the Commission's recommendations do not attempt to address in depth the host of Government policies that affect overall economic growth. However, the Commission's analyses do clearly indicate that greater long-term economic growth will come from redirecting defense resources into investment rather than into consumption.

The Commission strongly recommends that short-term actions taken to facilitate the transition from defense be consistent with and be evaluated in light of long-term economic growth objectives. For instance, retraining programs must focus on the question of "retraining for what?" and should be accompanied by corresponding actions to support related economic development.

Preserving and Enhancing Defense Capability

The Commission recommends dramatic and immediate actions to promote the integration of military and commercial technologies, products, and processes. These actions include removing barriers to integration as well as taking specific steps that enhance the ability of defense companies to develop and market commercial products.

The Commission also recommends actions both to strengthen the development and application of technologies that meet defense needs and to accelerate their commercial applications. Such actions will permit defense requirements to be satisfied at less cost from a larger, integrated national industrial base. These actions will also promote American industry that is technologically advanced and globally competitive.

In addition, the Commission recommends supporting military-commercial integration and increasing reliance on an integrated private sector for defense goods and services, from research and development (R&D) programs to overhauls and modifications of existing systems. Such increased reliance will also permit the retention of defense capability and skills.

Easing the Impact

The Commission recommends making broader use of integrated community planning to facilitate adjustments to drawdown impacts. The Federal Government needs to foster and support such planning, but ultimate responsibility rests in the hands of the local community.

In addition, while supporting continuation of Government assistance programs for people, companies, and local economies, the Commission also recommends a host of improvements in those same Government assistance programs and policies, as described below.

Improving Government Programs

The Commission recommends a set of principles and criteria for evaluating Government programs. While developed specifically for defense conversion, the principles are more broadly applicable. The Commission stresses the need to identify explicit program objectives and to measure how well they are achieved.

Setting baselines and measuring progress are not enough. The Commission also recommends ways to improve the integration of Government programs, both new and ongoing. Through actions like establishing common thresholds for eligibility and integrated application processes, the Federal Government can restore economic growth more quickly to impacted regions while ensuring taxpayers a better return.

Finally, the Federal Government needs to focus on *implementing* the Commission's recommendations, and organizational structures need to support that implementation. While the Department of Defense has a large role to play, overall direction for defense conversion and transition actions must come from the Executive Office of the President. The problems addressed in this report generally require solutions that cut across the boundaries of executive branch agencies and congressional committees. Only when oversight and direction are integrated in the Administration and in the Congress can the desired results of the Commission's recommendations be achieved.

BOTTOM LINE

Defense conversion does not pose any extraordinary problems for the nation. The impact of the defense drawdown does significantly affect some states and local communities, though there are existing Government policies and programs that attempt to address these effects. Adjusting to the drawdown provides unique opportunities for improvements in those programs.

Taken together, the Commission's recommendations have the potential of shortening the transition time and promoting economic growth. They will provide for more effective and efficient transition assistance programs, built upon community-based solutions that address actual problems. Adopting the Commission's recommendations will also lead to a stronger, better-integrated industrial base that can meet defense needs while becoming more competitive in global markets. Finally, implementing the actions in this report will illuminate the way to improve programs and policies throughout the Federal Government.

CHAPTER 1

INTRODUCTION

Planned reductions in the Department of Defense (DoD) budget will disrupt the lives of millions of Americans. In fact, reductions have been under way for several years, and their effects are evident today. Defense companies facing declines in DoD purchases are shrinking to adjust to a smaller market, struggling to find new markets, and merging with other companies to remain competitive. Communities affected by the drawdown are striving to attract new businesses. People leaving military service, DoD civilian employees, and defense workers in the private sector are seeking work in nondefense businesses.

The Defense Conversion Commission was created to report on the effects of the defense drawdown and make recommendations on Government programs designed for facilitating the transition to nondefense endeavors. The Commission was *not* created to recommend the size of future defense budgets, which will be determined by the President, DoD, and the Congress. The Commission reached its conclusions and recommendations through conducting public hearings, examining written submissions, reviewing previous studies, and conducting independent research. The Commission's recommendations are highlighted in **boldface** text throughout the report.

The Commission views defense conversion as more than a set of policies and programs. The Commission defines conversion broadly as the process by which the people, skills, technology, equipment, and facilities in defense are shifted into alternative economic applications. These uses encompass the full range of value-creating activities. By viewing conversion as a process of economic transition, the Commission focuses on actions that make the process more efficient while minimizing pain. In discussing this process, this report uses "conversion" and "transition" interchangeably.

OVERARCHING POLICY FRAMEWORK

The Commission found that there is an overarching policy framework that applies to defense conversion. The economic dislocations resulting from the defense drawdown are not fundamentally different from other economic dislocations, with the lone caveat that special attention must be

paid to ensuring sufficient industrial capability for national security. Dislocations occur periodically in different sectors of the economy as a result of many factors. Both historically and compared to other nations, the U.S. economy has proven to be particularly good at adjusting to and ultimately benefitting from such dislocations. However, the short-term negative consequences of dislocations cause sufficient human hardship that the Federal Government has recognized its responsibility to help alleviate them. As a result, Government policies recognize dislocations as a fact of our economic life and address them through two broad approaches: promoting long-term economic growth and providing dislocation assistance.

The Commission believes that analyzing and making recommendations on the full range of policies the Government can use to promote long-term economic growth are beyond its charter. However, the Commission cannot emphasize enough the importance of long-term growth because it alone provides the necessary opportunities for dislocated workers and resources.

The Commission strongly feels that current Government dislocation assistance programs are fragmented and do not place enough emphasis on meeting the needs of communities and individuals. Assistance programs are important because they help ease the impact of dislocations and facilitate the transition to new economic activities. The defense drawdown offers a unique opportunity to improve assistance programs because of the need not only to ease impacts and facilitate the transition, but also to ensure the adequacy of the industrial base.

The Commission adopted a basic framework of analysis to structure its examination of defense conversion issues. The framework's principles, goals, and evaluation criteria are summarized here and set forth in Appendix 2. The Commissioners agreed upon four basic guiding principles that define the scope and purpose of Government actions. They are:

- *Integrated Response.* Programs should ensure efficient integration of Federal, state, and local assistance, and promote integration of the commercial and defense industrial base.

- *Proper Government Role.* Government should intervene only when free-market allocations are inefficient or take too long to address transition needs and when intervention can be proven to work.

- *Long-Term Perspective.* While addressing the immediate, short-term effects of the drawdown, actions should provide tools that also

stimulate and support long-term economic growth–the foundation of our nation's future well being.

- *Universality.* Transition policies and programs should be broadly applicable to other sectors of the economy that experience dislocations.

The Commission believes that simply meeting these principles is not sufficient to ensure that Government programs work well. To assess program performance, the Commission developed specific criteria, which are built upon the guiding principles. The evaluation criteria include specifying clear objectives, identifying measurable outcomes, fostering demonstrated commitment, and providing effective and efficient delivery. The criteria are discussed further in Appendix 2.

The Commission found that much of the recent defense conversion legislation and many Government programs failed to meet the criteria, resulting in a parochial and fractured approach to dislocation assistance. While there are many causes for such failures, some endemic to our democratic system, the Commission feels that Government performance can be improved significantly with careful efforts. The criteria reflect the necessary ingredients of such efforts and form the basis of the recommendations summarized below.

Chapter 2 addresses the size, timing, and economic impacts of the drawdown. Outlays for DoD in 1997 are planned to decline to $237 billion, a 30 percent reduction from 1987. (Unless otherwise noted, all years in this report are fiscal years and all dollars are constant 1993 dollars.)

The economic impact of the drawdown is modest at the national level but more pronounced in a few states and some localities. The drawdown will exert a small downward pressure on gross domestic product (GDP, the value of the nation's output of domestic goods and services) for the next few years. Over the longer term, however, reducing the defense budget could foster economic growth *if* savings from defense are reallocated to private or public investment. The largest share of the planned reductions will come from DoD procurement accounts, which largely affect private industry.

Chapter 3 discusses how DoD can ensure the ability of the industrial base to support defense needs by maintaining critical capabilities and by integrating manufacturing for the military and Government business practices more fully with commercial manufacturing and business practices.

Chapter 3 also addresses companies' strategies to make the transition from defense to nondefense activities, business development, and a variety of technology programs.

Chapter 4 discusses the effects that the drawdown will have on states and communities. It describes programs to help communities adjust to reduced defense spending. The Commission concludes that all Federal community assistance programs could be strengthened through better integration and proposes a framework for a new approach to addressing local economic dislocation.

Chapter 5 details the effects of the drawdown on military personnel, DoD civilian employees, and defense workers in the private sector. It then discusses programs to ease their transition to nondefense endeavors. The Commission estimates that about 960,000 private-sector jobs will be lost from 1991 through 1997 as a result of the drawdown. By 1997, DoD plans to reduce the active duty military force to 1.6 million personnel (a 25 percent reduction) and civilian employment to about 900,000 (a 20 percent reduction). Annual turnover, however, will actually be less than during the 1980s build-up.

DoD has instituted a variety of programs to help its personnel make the transition, as have many private companies. A range of Government programs–such as retraining and job search assistance–are also available for DoD personnel and private-sector workers who are being separated. As discussed in Chapter 4, while some of these programs help, better integration would increase their effectiveness.

Chapter 6 uses specific criteria outlined in Appendix 2 to evaluate proposed conversion policies and programs. The criteria are based on the guiding principles described above. The chapter summarizes the Commission's analysis of legislation enacted into law for 1993 and concludes with a discussion of how to implement the Commission's recommendations.

CONCLUDING OBSERVATION

In its travels around the country, the Commission often heard remarks on how best to apply the "peace dividend" to our nation's needs. In the process of this review, the Commission has concluded that the true peace dividend is not simply the amount of money saved in the Federal defense budget. Rather, it is the opportunity to reallocate to other productive

activities the resources and talent made available as defense spending declines. The conversion process is the way in which this reallocation occurs. The national challenge of conversion is to seize this opportunity and accomplish the reallocation in the most timely and efficient way possible while still preserving the appropriate defense industrial base.

CHAPTER 2

ECONOMIC EFFECTS OF REDUCING DEFENSE SPENDING

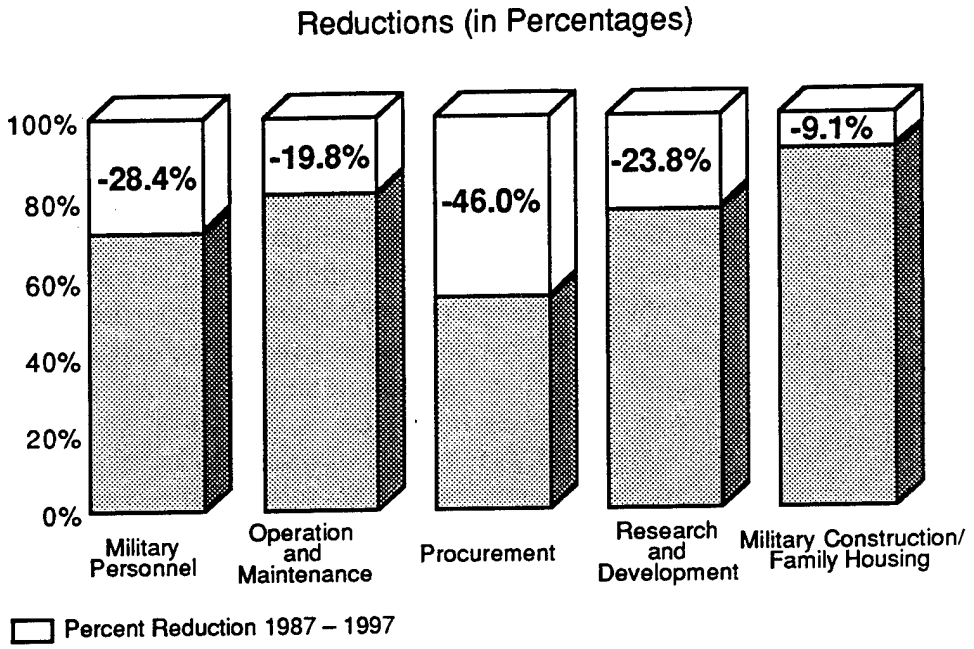
The Commission examined the effects of the defense drawdown on the economy. There are ample precedents to study, because drawdowns have occurred after each war in our nation's history. In fact, the present reduction, which has been in progress for about six years, is the mildest and most gradual of the past half-century. While the recent recession has temporarily slowed adjustment to the reduction, in the context of the nation as a whole, the effects appear quite manageable–the temporary loss of a few tenths of a percent per year in terms of employment, production, and growth. However, the impact of the drawdown is concentrated in a few particular geographic areas and industrial sectors. At those pressure points, the adjustment problems are more acute than elsewhere, and each trouble spot has unique circumstances. The implication is that, while the problem is a national one, the solutions must be tailored to specific areas and industries.

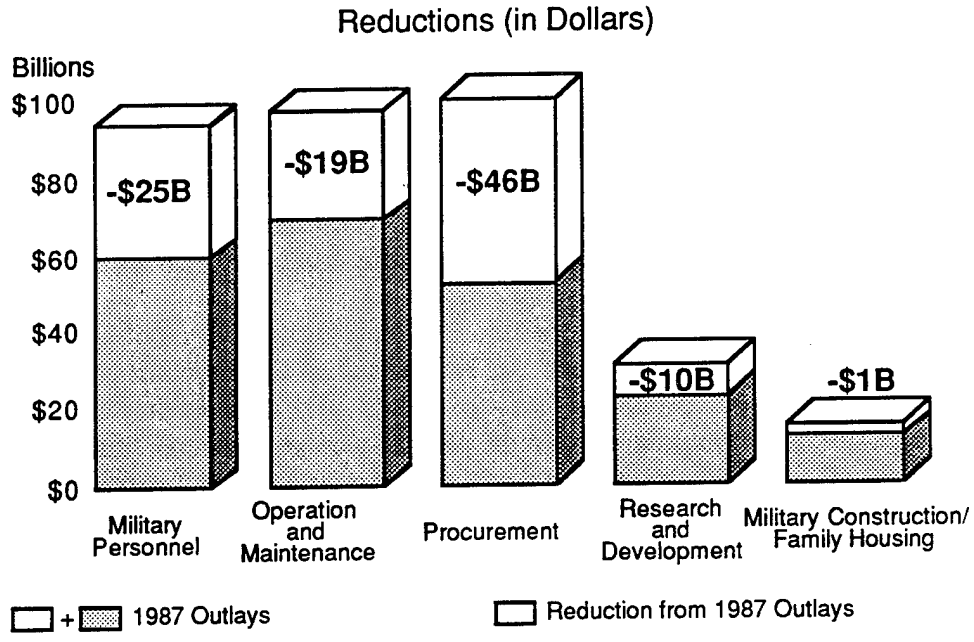
DEFENSE SPENDING PROJECTIONS FOR 1993 TO 1997

To address the economic impact of declines in defense spending, the Commission decided to use the most recent detailed projection available–that is, the President's January 1992 defense budget–as its baseline.[1] Larger or more rapid reductions in defense spending would increase the magnitude of transition adjustments but would not alter the general thrust of the Commission's assessments and recommendations.

Of course, actual spending for defense purchases will change from that currently planned. Several industrial associations and companies told the Commission that they would find it easier to plan for the future if DoD would publish a gradual drawdown plan and stick to it for several years. While recognizing that factors beyond DoD's control, such as the changing global security environment and congressional actions, make it difficult to adhere to a preconceived plan, the Commission supports efforts to strive for a stable and gradual drawdown plan. Further, the Commission strongly endorses efforts to implement biennial budgeting.

Figure 2-1.
Reductions in Outlays 1987 to 1997, by Spending Category





Source: Logistics Management Institute Report. *The DoD Drawdown: Planned Spending and Employment Cuts.* January 1993.

Defense spending is measured in budget authority (the amount of new defense funding granted each year) and outlays (actual spending). Since outlays measure spending DoD actually introduces into the nation's economy, they provide a better basis than budget authority for assessing economic effects.

Outlays are planned to decline from $340 billion in 1987 to $237 billion in 1997, a reduction of about 30 percent. Outlays totaled $306 billion in 1992, $34 billion less than the 1987 figure.[2] The planned reduction in outlays from 1987 to 1997 is therefore about 33 percent complete by 1992. Budget authority will fall by a nearly identical amount from 1987 through 1997, but reductions are 55 percent complete by 1992.[3]

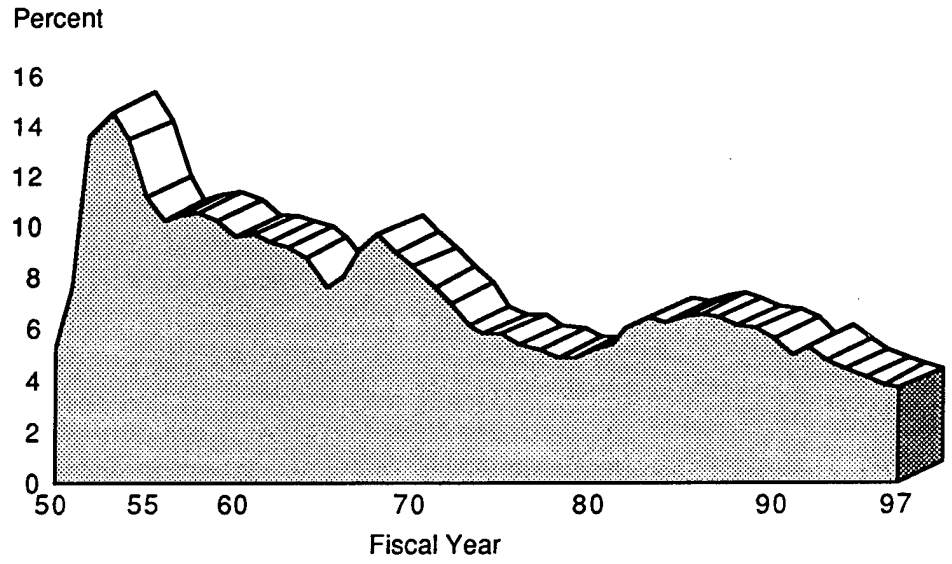
The largest one-year percentage reduction in outlays planned for the 1992-to-1997 period falls in 1993, when outlays would decline by 9.2 percent relative to their 1992 level. Outlays in any year, however, may not be a perfect indicator of economic activity in that year. Firms may take actions–such as reducing their work force–in anticipation of outlay reductions and might therefore respond to the drawdown earlier than outlay levels would indicate. For a complete description of planned cuts in spending for defense, see Annex A.

The largest reductions planned in outlays (46 percent) during the 1987-to-1997 period come in the procurement accounts of the defense budget, which pay for purchases of weapon systems and equipment. In contrast, other categories of spending each fall by less than 30 percent (see Figure 2-1). Since almost all procurement funds are spent through contracts with private industry, defense procurement cuts will largely affect companies and workers in the defense industry.

PRIOR DRAWDOWNS

Defense spending in both dollars and as a percentage of gross domestic product (GDP) has fluctuated–sometimes rather significantly–since the Second World War (see Figure 2-2). However, it is widely perceived that the current plan to reduce defense spending does not reflect merely a short-term downturn in the post-World War II pattern. On the contrary, the end of the Cold War has resulted in long-term restructuring of the nation's priorities for defense.

Figure 2-2.
National Defense as a Percentage of Gross Domestic Product



Source: Budget of the United States Government, Fiscal Year 1993, Supplement, February 1992. Washington, D.C.: GPO, pp. 82-88.

At the same time, the planned defense spending reductions are less severe than those that followed World War II, the Korean War, and Vietnam, both in size and in pace. Measured by outlays or as a share of gross domestic product, the current defense drawdown is smaller than the drawdowns that followed World War II, Korea, or Vietnam. Moreover, the current drawdown is planned to occur at a slower rate than its three predecessors. These findings are displayed in Table 2-1. Annex B describes the history of previous drawdowns in detail.

The Commission recognizes that while these findings help put the current drawdown in historical context, they in no way lessen the hardships being experienced by workers who are losing their jobs and by communities and companies that are in difficult financial circumstances. However, it is important to note that larger drawdowns have been accomplished successfully in the past.

Table 2-1.

Comparison of Previous and Current Defense Drawdowns

Defense Spending as a Percent of Gross Domestic Product

Era	Peak		Low Point		Difference		Average Change Per Year (Percentage)
	Year	GDP %	Year	GDP %	Years	GDP %	
WW II	1944	39.3	1948	3.7	4	35.6	8.90
Korea	1953	14.5	1956	10.2	3	4.3	1.43
Vietnam	1968	9.6	1978	4.8	10	4.8	0.48
Current	1986	6.5	1997	3.6	11	2.9	0.26

Outlays for National Defense (billions of 1993 dollars)

Era	Peak		Low Point		Difference		Average Change Per Year (Outlays)
	Year	Outlays	Year	Outlays	Years	Outlays	
WW II	1945	885.7	1948	80.4	3	805.3	268.4
Korea	1953	390.7	1956	284.5	3	106.2	35.4
Vietnam	1968	371.2	1977	219.1	9	152.1	16.9
Current	1989	353.6	1997	256.9	8	96.7	12.1

Source: Logistics Management Institute. *From War to Peace: A History of Past Conversions.* January 1993. Also, Budget of the United States Government, Fiscal Year 1993, Supplement, February 1992. Washington, D.C.: GPO, pp. 82-88.

Note: Includes all national defense spending, including Department of Energy defense activities.

ECONOMIC IMPACT

The Commission reviewed numerous economic studies and conducted independent computer simulations on the economic effects of the current drawdown. The simulations and most studies agree that while defense reductions will have adverse short-term consequences for unemployment and for growth in GDP, the long-term impacts are neutral or positive, but of smaller magnitude. It is important to note that even if the long-term effects on economic growth are neutral or small, the drawdown will make

more of the nation's output available for purposes other than defense, including investment and consumption.

Analysis conducted for the Commission suggests that although defense reductions were a significant factor in bringing about recessions in 1954 (following the Korean War) and 1970 (following reductions in Vietnam), they played a smaller part in the recent one. The financial troubles of savings and loans and commercial banks, high levels of household and corporate indebtedness, commercial overbuilding, and corporate restructuring were also contributing factors to the recent recession.

Results from Computer Simulations

The computer simulations estimate the impacts of the planned drawdown by comparing economic indicators against the base case, in which defense spending remains constant at its 1992 level.[4] The simulations are described in detail in Annex C.

The key findings from the simulations are:

- In the short run, the drawdown's main effect on the economy will be a slight downward pressure on output and a temporary increase in unemployment as resources shift from defense-related work to growing industries. The 1995 unemployment rate could be as much as 0.5 percentage points higher than it would have been had 1992 spending levels been continued, and the drawdown will reduce the annual GDP growth rate by between 0.25 and 0.50 percentage points over the next few years. In comparison, in terms of annual GDP loss, the impact of the 1970s oil price increases was 50 to 100 percent greater.

- The long-run growth rate of the economy varies slightly, depending on how savings from reduced defense spending are applied.[5] If defense spending is replaced mainly by investment in plant and equipment, human capital, and research and development, growth may speed up. If it is devoted to personal consumption or Government transfers, growth may slow down.[6]

- The simulation results are consistent with historical experience. Drawdowns put short-term downward pressure on the economy following World War II, the Korean War, and Vietnam. Experience shows, however, that after several years the economy typically returns to historical employment and GDP growth rates.

The short-term impact of the drawdown on the national economy does not in itself support the calls for an offsetting stimulus from new, large Federal programs, such as environmental cleanup efforts, new high-speed train systems, or other physical infrastructure. **The Commission recommends that the Administration and Congress judge the need for such new large Federal programs on their own merits, rather than as projects to ameliorate the effects of the drawdown.**

THE CRITICAL IMPORTANCE OF ECONOMIC GROWTH

History and the simulations suggest that having a dynamic, growing economy will speed and ease the transition. In particular, a rapidly growing nondefense sector can quickly absorb workers and resources no longer needed in defense. Paradoxically, though, the drawdown itself can temporarily depress regional employment and income growth, making it more difficult for nondefense businesses to expand.

The Commission discussed a wide variety of proposals designed to promote economic growth, including:

- granting tax credits for investment and research and experimentation,
- instituting banking reforms to stimulate lending,
- reducing the Federal budget deficit,
- improving primary and secondary education,
- reducing trade barriers,
- reforming the tax code, and
- increasing spending on infrastructure.

The Commission strongly emphasizes that a growing economy is the key to a successful defense transition. Implementing the Commission's recommendations will promote economic growth, but the Commission does not address the full range of economic policy instruments at the Government's disposal, since that would go beyond its charter. The Commission does suggest, however, that the proposals discussed above clearly merit serious consideration by the Administration and Congress.

The Commission also discussed two broad areas that are frequently cited as important for economic growth: technology policies and programs, and the general business environment.

Many in Congress and elsewhere have proposed new technology policies and programs (such as dual-use research, manufacturing extension, and technology transfer programs) to facilitate the transition to nondefense endeavors. Technology programs will probably do little to mitigate transition problems in the short run, although they may help promote economic growth in the long run. Through its visits to companies around the country, the Commission has observed that applying new technologies to production processes, products, and services is frequently difficult and time-consuming. Although some companies visited by the Commission have been able to make technological changes in months, others told the Commission that it is not unusual to spend a decade or longer working with technologies before products are ready for the marketplace. Thus, technology programs may offer benefits after a period of many years but probably will not speed or ease the transition in the near term. Because of their potential to contribute to economic growth, however, the Commission believes that many of these programs are worthwhile, and they are discussed in Chapter 3.

The Commission also recognizes that even if successful, technology programs are but one facet of a more comprehensive long-term strategy to create economic growth through developing a healthy business environment. Such an environment ensures access to markets and the right incentives for investments. The factors that influence the business environment include education of the work force, as well as policies shaping banking rules, access to capital, regulatory provisions, the legal system, and the tax code's treatment of depreciation, expenses, and profits, among others. Many of the policies and regulations that affect these factors have been put in place with understandable rationales, but, inadvertently, they add up to a set of restrictions limiting how effectively American firms can enter and compete in new markets. Addressing each of these factors and their implications is beyond the purview of this Commission. The Commission recognizes, however, the critical role that creating and maintaining a healthy business environment play in promoting economic growth.

CONCLUSION

The present defense reduction is the mildest and most gradual of the past half-century. History and computer simulations conducted by the Commission suggest that having a growing, dynamic economy is the key to a successful transition. The Commission also recognizes the critical role of creating and maintaining a healthy business environment to promote economic growth. In addition, the Commission concludes that although technology programs will probably do little to mitigate transition problems in the short run, they may help promote economic growth over the long run.

While the effects of the drawdown on the national economy are small, they are more pronounced on companies, communities, and people. The next three chapters address the impact of the drawdown and dislocation assistance programs and policies.

ENDNOTES FOR CHAPTER 2

1. This report frequently uses three benchmark years for comparison: 1987, 1992, and 1997. (Years in this report are fiscal years unless otherwise specified.) The January 1992 budget projects defense spending through 1997, making that a logical end point. The most recent fiscal year for which actual data–rather than estimates–are available is 1992. Finally, using 1987 as a starting point creates two comparable five-year periods (1987 to 1992, and 1992 to 1997), and 1987 is at or near the 1980s peak for key measures of the size of the drawdown: budget authority, outlays, and military and civilian personnel.

2. Outlays include those associated with Operation Desert Shield/Desert Storm.

3. During the build-up of the 1980s, budget authority peaked at $376 billion in 1985. Budget authority in 1997 is planned to be $237 billion, 37 percent below its 1985 level.

4. The simulations are not forecasts in the usual sense, because they focus solely on changes in defense cuts and therefore hold constant other factors that will affect the economy perhaps more powerfully than defense cuts, such as growth in the money supply, changes in exchange rates, or changes in the tax system. The various simulations reflect different assumptions about how the savings from reduced defense spending would be reallocated and differing views among economists as to how those reallocations would affect the economy. Six simulations were completed. Two assumed that the savings would be applied to reducing the Federal deficit, two assumed that the savings would be returned to taxpayers either through cuts in personal income taxes or by granting investment tax credits, and two assumed that they would go toward other Government spending, including new Government investments.

5. Long-term economic growth rates vary among the simulations because of the different effects that alternative uses of savings in the defense budget have on productivity growth. Investing the savings tends to increase productivity and therefore economic growth, while consuming them does not.

6. For example, the simulations suggest that, by the year 2001, GDP could be increased by about one percent or $60 billion if savings from defense are invested rather than consumed.

CHAPTER 3

DEFENSE INDUSTRY POLICIES AND PROGRAMS

The negative consequences of reduced defense spending are the loss of jobs and the short-term negative impacts on economic growth, especially at the local level. Actions that companies–both new and existing–take will ultimately mitigate both of those consequences. Government assistance programs have a transitory role in easing hardship, but companies will provide new jobs to dislocated workers and be the long-term engines of economic growth, both locally and nationally.

Companies hold the key not only to new jobs through the expansion of the economy in the commercial marketplace, but also to the retention of the skills and resources upon which our national security will depend in the future. Government has an enduring interest in ensuring that the capacity and capability of the defense industrial base remain at an acceptable level.

The hundreds of business executives, union leaders, academics, strategic planners, state and local officials, and industrial and economic development experts consulted by the Commission discussed a wide range of approaches to adjusting to the drawdown. Many pointed out that sometimes Government policy, though well intended, has become an obstacle to the process of diversification. Others noted that there are opportunities for judicious Government assistance, especially when tailored to enlightened local implementation that capitalizes on the strengths of the free-market system.

This chapter describes the industrial base, the need to maintain critical capabilities, the benefits of integrating commercial and military manufacturing, business development, dual use and other technology programs, increasing reliance on the private sector for maintenance and research, and defense exports.

THE NATION'S INDUSTRIAL BASE

The defense industrial base is a relatively small part of the nation's overall industrial base. The Commission estimates that defense-related manufacturing accounted for about nine percent of manufacturing

employment in 1990. The defense manufacturing base therefore operates in the context of a national manufacturing base roughly 10 times its size.

Although some observers have expressed concern about U.S. competitiveness in manufacturing, the Commission believes that DoD will have a large, active national manufacturing base to draw upon for the foreseeable future. The United States has a large, diverse, productive, and internationally competitive industrial base and is the largest manufacturer in the world. Manufacturing's share of the nation's output has been roughly constant–between 20 and 23 percent of GDP–for more than 30 years. Over this same period, manufacturing employment has declined as a share of national employment, while the number of manufacturing workers has fluctuated between 17 and 21 million workers. Total manufacturing output as well as manufacturing output per worker have been growing over time with the rest of the economy. Many studies estimate that U.S. manufacturing output per worker is the highest in the world.

DoD will continue to be an active customer of the industrial base, even with planned reductions in spending. The Commission estimates that outlays for DoD purchases totalled about $180 billion in 1992, and DoD plans will reduce them to about $130 billion by 1997.

THE DEFENSE INDUSTRIAL BASE

No single term describes the defense portions of the industrial base better than "diverse." Tens of thousands of firms provide goods and services directly or indirectly to DoD. Companies vary by their size; their degree of diversification; whether they are prime contractors, subcontractors, or both; and the types of goods and services they provide. Defense suppliers include some of the nation's largest companies, as well as thousands of small businesses.

Analyses performed for the Commission conclude that the financial viability of the 25 largest DoD prime contractors is not at risk and that they will probably manage the drawdown successfully. This conclusion has important implications for the future of the defense industrial base. Notwithstanding mergers and acquisitions, the analyses suggest that the largest defense companies will survive the drawdown and will therefore be available to help meet emerging DoD needs. These analyses are detailed in Annex D.

In addition to private-sector capabilities, the military owns and operates a substantial part of the defense industrial base: 8 shipyards, 73 other major production repair, maintenance, and supply facilities, and 95 research laboratories. DoD will address the size of these facilities in conjunction with its process of closing and realigning military bases, which is not the purview of this Commission.

In light of planned reductions in defense spending, the defense industrial base today has excess capacity. Companies are adjusting to reduced defense spending and to overcapacity, as evidenced by the recent acquisitions and mergers of defense firms.[1] The basic strategies that companies are adopting include rationalizing (concentrating on their core defense capabilities through acquisitions and mergers and by shedding unprofitable defense business segments), increasing exports, and diversifying into new markets. (These strategies are discussed in more detail in Annexes D and E.)

It is important to note that diversifying into new markets presents all companies with difficult challenges. One well-diversified, highly successful nondefense corporation told the Commission that about 60 percent of its newly developed products fail, and studies of companies throughout the economy yield similar results.[2] Put simply, all companies find it difficult to enter new markets. Annex D discusses some diversification opportunities for defense firms in greater detail.

Diversification is particularly difficult for defense firms, however. Companies seeking to expand into nondefense markets identified to the Commission several barriers to diversification, many of them related to the differences between commercial and DoD purchasing practices, such as:

- Government-unique accounting practices,
- DoD-unique standards and specifications,
- the Government's claim of ownership of rights in technical data,
- Government-unique contract and information collection requirements, and
- Government audit and oversight rules.

These are barriers to both diversification and integration (discussed below), and if they are not adequately addressed by DoD and the

Congress, defense companies will face an especially difficult adjustment to the drawdown, and DoD will suffer as well.

It is important to recognize that there are also cultural barriers. These barriers arise because Government, not the market, dictates what is produced in the defense market. While that business relationship will continue, some of the recommendations below will mitigate the effects of these cultural barriers.

MAINTAINING CRITICAL CAPABILITIES AND SKILLS

As defense purchases are reduced, some of the skills and capabilities in the defense industrial base may no longer be required in order to meet DoD's needs. In a few cases, DoD may have to undertake special actions to preserve critical capabilities and skills that are not needed today but that might be needed in the future, either to replace existing weapons at the end of their service life or to reconstitute in the face of a new global threat. These actions might include R&D projects, product improvements, buying and storing long-lead-time components, or continuing to buy components or systems not needed to meet normal peacetime requirements.

Such special actions should be taken on a case-by-case basis, and only after rigorous analysis and thorough review. For each capability, DoD must consider:

- military threats and warning time,
- time and cost to reconstitute,
- cost to maintain current capabilities,
- likely technological advancements,
- dependency on foreign sources,
- the existence of similar commercial capabilities,
- maintenance of domestic production through exports,
- acceptable levels of risk, and
- the type of special action that would be appropriate.

DoD should determine which industrial base capabilities should be maintained by special actions in conjunction with its planning, programming, and budgeting system (PPBS), which permits the balancing of priorities among the competing demands for limited defense funds. DoD has established a process within the Office of the Secretary of Defense (OSD) to address effectively the need to maintain critical capabilities and skills. This process is under way, and the Commission believes that it will address the need for special actions effectively.

Creating Data Bases of Subcontractors and Industrial Sectors

To help DoD address the need for special actions, some in Congress and others have called for creating data bases that catalog the capabilities and skills resident in all industrial sectors and in the tens of thousands of companies involved in defense-related production (or potentially involved, in the case of products that have both defense and commercial uses). The Commission believes that creating and maintaining such a data base would be an undertaking of historic proportions that would be extraordinarily expensive, place heavy paperwork burdens on industry, and ultimately yield little focused information, beyond what is already available, of any value to decision-makers.

There are clearly instances, such as planned gaps in production, when DoD requires detailed information about subcontractors on a particular program or about a specific industrial sector. In these circumstances, DoD should first take full advantage of the range of the substantial efforts already under way and the information that already exists in the armed services–especially in the program offices that manage the acquisition of weapon systems, in other organizations within DoD, and in other Federal agencies such as the Department of Commerce. DoD can also take advantage of studies performed by companies, industry associations, and academics. When DoD requires additional data after exhausting existing sources, it should define its needs carefully and collect data to provide decision-makers with the specific information they need at reasonable cost.

The Commission recommends that DoD rely on existing sources and more focused data collection efforts, rather than repeatedly collecting data on all industrial sectors and potential subcontractors.

COMMERCIAL-MILITARY INTEGRATION

Studies performed for the Commission and numerous prior studies confirm the benefits to the nation of better integrating commercial and military manufacturing and development and of changing DoD procurement practices to more closely approximate commercial practices.[3] Integrating military and commercial manufacturing and purchasing practices would help ensure the adequacy of the industrial base at lower cost and help companies adjust to lower defense spending.

Since the end of World War II, the defense business sector has become increasingly segregated from the commercial business sector. This segregation results from increasingly specialized defense systems and from statutes and regulations that mandate unique buying practices for Government and especially for DoD.

Recent changes in the environment in which DoD operates diminish the practicality of segregation and point to the need for greater integration of the defense and commercial sectors. Four key changes are:

- *DoD no longer leads, but sometimes follows, commercial industry in some key technologies.* In electronics and information processing, for example, some commercial technologies lead those developed specifically for the military. In the past, leading-edge technologies would "spin off" from DoD to commercial applications. It is increasingly the case, however, that leading-edge technologies are developed for commercial uses first and that defense products would be improved if DoD could more easily "spin on" state-of-the-art commercial technologies.

- *As defense-unique procurement and production quantities go down, unit costs go up.*

- *There is less potential for competition to keep costs down.*

- *DoD plans to rely more on the commercial industrial base to satisfy future surges in demand.*

Integrating commercial and military manufacturing would foster the free flow of state-of-the-art technologies between commercial and defense products, thus increasing the capabilities upon which DoD can draw and ultimately resulting in more modern, capable, and cost-effective defense systems.

Integration would also facilitate the transition of defense-dependent companies. They would find it easier to respond to changes in defense spending if they could move more freely between defense and nondefense applications. In periods of falling defense spending, companies would be able to shift their resources toward nondefense markets. If DoD needs to reconstitute larger forces, industry would then be able more readily to reconvert resources to defense needs at lower cost to DoD.

Integrating commercial and military manufacturing is not feasible for all products and companies. Some defense-related capabilities and products are not closely related to any commercial products, and some companies will choose not to enter commercial markets. For many capabilities and products, however, integrating commercial and military manufacturing is feasible and the benefits make it desirable.

DoD has recognized the benefits of purchasing commercial products and using more commercial-type purchasing practices.[4] However, commercial-military integration requires not only that it be easier for DoD to purchase commercial items, but that it also be easier for defense companies to develop and sell commercial products. **The Commission recommends that efforts to foster commercial-military integration be strengthened, expanded, and accelerated considerably.** The next sections of this report address how this recommendation can be implemented.

Government Procurement Laws and Regulations

The first step in the integration process should be a thorough revision of those procurement laws and regulations that constitute significant barriers to integrating military and commercial manufacturing. Most companies that manufacture similar commercial and military items do so in separate facilities to comply with legal and regulatory requirements. This separation also helps ensure that the costs and burdens of complying with Government contract laws, regulations, and procedures do not inflate the costs of commercial products. Still, taxpayers bear the costs of separating military and commercial manufacturing by paying for duplicate facilities and for higher costs for defense products.

Independent of the Commission, the Acquisition Law Panel, also known as the Section 800 Panel, is reviewing Federal procurement statutes and will recommend changes to make Government procurement practices more like commercial practices. The Commission has no basis for judging

the Section 800 Panel's recommendations because the Panel's report had not been published at the time this report was written. However, the Commission strongly endorses the process of reviewing Government acquisition statutes, regulations, and practices to increase their similarity to their commercial counterparts and to that extent supports the goals and objectives of the Section 800 Panel.

DoD business practices will never become identical to commercial ones, because of the unique nature of some purchases in the defense market. However, the benefits of greater similarity are clear. **DoD should work closely with the Congress and with other Federal agencies to reduce or eliminate the statutes and regulations that prevent greater commercial-military integration.**

DoD-unique specifications, standards, and buying practices prevent integration of commercial and defense production. **The Secretary of Defense should require that DoD use commercial specifications, standards, and buying practices for all procurement actions except those for which he or she has approved military-unique practices on the basis of a demonstrated, compelling need.**

Other Actions Related to Acquisition Practices

While the process of eliminating the statutory and regulatory barriers to commercial-military integration is under way, DoD should take other actions related to acquisition practices that would facilitate the transition of defense firms. While many such actions are appropriate, the Commission selected two examples that illustrate the type of actions DoD should take to promote commercial-military integration.

Independent Research and Development

DoD should encourage broader application of allowable costs for companies' independent research and development and for preparing bids and proposals (IR&D/B&P). IR&D/B&P funds create new products and technologies. DoD reimburses contractors for IR&D/B&P costs, up to a specified limit, by permitting contractors to charge them to overhead on DoD contracts. DoD IR&D/B&P expenditures are substantial, totaling over $3.6 billion in 1990.

In discussions held around the country, the Commission found that many companies are not aware of the recently increased flexibility that

DoD authorizes for their choice of IR&D/B&P projects. A 1992 change to Defense Federal Acquisition Regulation Supplement (DFARS) subsection 231.205-18 allows companies wide discretion in choosing IR&D/B&P projects. The new DFARS policy allows companies to use IR&D/B&P funds for projects that have the potential to enhance the industrial competitiveness of the United States and to increase the development of technologies useful for both the private commercial sector and the public sector.

DoD should issue a statement to all DoD prime contractors and DoD auditors that emphasizes current policy on allowable IR&D activities and highlights the fact that DoD permits companies to use IR&D funds to develop commercial products.

Overhead on Commercial Products

Government could foster commercial-military integration by changing its policies on allocating overhead costs. Because of the methods used to adjust overhead payments, current policies and practices discourage defense-dependent companies from using available capacity in their facilities to pursue commercial applications of defense technology. Auditors sometimes reduce overhead payments on DoD contracts to reflect additional commercial development activity well in advance of any revenue that activity may produce. By making commercial development efforts bear too large a share of the facility's overhead costs, this situation can discourage contractors from pursuing new commercial products. (DoD could benefit from these efforts if they incorporate important defense capabilities.) Moreover, the overhead costs are likely to be higher than comparable commercial ones, because they reflect the higher costs of complying with DoD regulations. **DoD should change overhead allocation policies to remove disincentives to the development of commercial products.**

Such a change should permit the use of available capacity in existing facilities–including floor space, tooling and test equipment, and computer time–provided that these efforts do not detract from performance on existing DoD contracts. Contractors should bear identifiable *incremental* costs associated with commercial development activities but not a pro-rated share of overhead costs until the end of a two-year period (which would begin when companies notify their Government contracting officers in writing of their intention to begin commercial development projects) or until the projects result in the sale of a product or service, whichever

comes first. DoD should limit application of this policy to companies, or to the defense business units of diversified companies, 50 percent or more of whose revenues were attributable to defense-related work during 1992.

BUSINESS DEVELOPMENT

Helping companies grow is an important factor in the transition to nondefense activities. Business development programs are particularly important for new small businesses, which many feel will be the economy's main source of new jobs. The primary responsibility for business development rests with the private sector. However, Federal, state, and local governments provide a variety of services that support business development.

The Commission was impressed by the creativity, dedication, and enthusiasm in the many business and technology development efforts it visited or reviewed. These efforts, financed with public and private funds, include:

- a business incubator run by a defense company that encourages its employees to develop new products and processes. When these are successful, the defense company helps employees establish or "spin off" new companies. The defense company sometimes provides equity financing to the new companies.

- a number of business development centers that work with nearby military installations. Such centers can benefit from the synergistic effects of linking the strengths of the military installation with those of the local community.

- a technology and business development incubator that draws upon the capabilities of a major research university and of a significant number of high-technology companies.

- the small business development centers located around the country that provide small businesses with many useful services.

The Commission believes that, by helping businesses develop, these and similar efforts help facilitate the adjustment to reduced defense spending.

The Commission focused particular attention on two business development efforts because they are the subject of legislation and numerous proposals made directly to the Commission: technology transfer from Federal laboratories, and manufacturing extension centers.

Technology Transfer from Federal Laboratories

In addition to conducting research for the national good, Federal laboratories should be responsible for transferring the resulting technology to the public. The introduction and diffusion of new technologies in the commercial market can increase productivity and therefore promote economic growth. Companies may see a profitable use for technologies that has been overlooked by the laboratories.

There are conflicting views regarding the commercial potential of technologies originally developed in Federal laboratories for defense purposes. Some claim that these technologies are so esoteric and unique to defense that none, or very few, have commercial value. Others claim that the laboratories are a gold mine of promising new commercial technologies. The Commission believes that the right answer lies between these two extremes. While there are undoubtedly commercially useful technologies in the laboratories, there are also many that have no cost-effective applications today in the commercial market.

A number of Federal technology-transfer programs are already in place. These include Cooperative Research and Development Agreements (CRDAs) and technology-transfer offices at the larger Federal laboratories. Companies negotiate CRDAs with the laboratories on a project-by-project basis, and the laboratories have active programs to encourage CRDAs. CRDAs allow companies to take advantage of capabilities developed in the laboratories by permitting company personnel to work directly with the laboratories' personnel and equipment. In some cases, CRDAs lead to the creation of new knowledge; in others, CRDAs are vehicles through which companies can learn about the laboratories' existing technologies and capabilities. Companies reimburse the Government for some of the costs associated with CRDAs.

The Commission believes that current laws and policies provide companies with adequate access to Federal laboratory employees, equipment, and technologies, but that companies, especially small and medium-sized firms, may not have taken advantage of all that the Federal laboratories have to offer. Although this might reflect reluctance on the

part of companies to do business with the Federal Government, it probably also reflects shortcomings in communication. Commercial demand for new technologies is the key to successful technology transfer from the Federal laboratories to industry. Many companies that might benefit from technologies in the laboratories do not understand how the technologies could improve their processes, products, and profitability. Unless companies understand the benefits, technology transfer efforts will be ineffective.

The Commission endorses efforts, such as CRDAs, to help industry understand technologies that have been developed in Federal laboratories. In addition, the Commission endorses efforts to work with companies and the laboratories to facilitate communication. For example, the Commission is aware of efforts in which business students in universities work with Federal laboratories and small and medium-sized companies to identify and facilitate technology transfer opportunities. Such programs could serve as models for cooperation between other Federal laboratories and educational institutions.

In addition, the 1993 DoD Authorization Act requires the Secretary of Defense to establish an Office of Technology Transition within DoD to ensure that technologies developed for national defense are integrated into the private sector, as appropriate. **The Commission endorses the creation of a DoD technology transition office, with the primary function of serving as a needed focal point for coordinating technology transfer activity within DoD and between DoD and the other Federal departments.**

It should be noted, however, that many Federal technology transfer programs have developed measures of activity, such as the number of CRDAs signed, that only indicate the level of effort, not whether the programs have achieved their goals.

Meaningful measures of success should be developed for technology transfer programs of Federal agencies, and the programs should be evaluated on the basis of those measures. Measures could include the number of patents issued, the number of jobs created, the number of new companies formed, and increases in productivity, revenues, and profits.

Manufacturing Extension Centers

Manufacturing extension centers are resource centers where manufacturers can obtain information and advice on improving their production processes. These centers generally disseminate information about proven manufacturing capabilities and best manufacturing practices that are available today.

Manufacturing extension centers can help improve productivity by encouraging companies to adopt current, and hence more productive, capital equipment and production processes.

Numerous Federal, state, and local agencies sponsor manufacturing extension efforts. The armed services and the Defense Logistics Agency promote manufacturing extension as part of their Manufacturing Technology (ManTech) programs. DoD's Manufacturing Technology Information Center also provides a wealth of information to those seeking information on Federal manufacturing technology efforts. In addition, industrial assistance services, which help companies improve their efforts in manufacturing, technology transfer, marketing, business planning, finance, and related areas, are offered by the Trade Adjustment Assistance Centers of the Department of Commerce, by the Regional Technology Transfer Centers of the National Aeronautics and Space Administration (NASA), by the Small Business Development Centers funded in part by the Small Business Administration, by various laboratories of the Department of Energy, and by the Cooperative Extension System of the Department of Agriculture. In addition, the National Institute of Standards and Technology (NIST) funds manufacturing extension centers in seven states. These state centers sponsor satellite centers dispersed throughout each state.

The Commission reviewed several proposals for expanding manufacturing extension efforts. The Commission endorses such proposals, with the following three caveats.

First, Federal agencies should work with the states to establish and monitor quantifiable measures of success for manufacturing extension programs and should expand them in coordination with evaluations based on output-oriented measures of success. Because Federal manufacturing extension efforts often lack quantifiable measures of success, it is difficult to know exactly how effective they are. Federal programs should attempt to measure the improvements that result from

manufacturing extension, such as increases in output per worker, the number of jobs created, or increases in profits.

Second, Federal manufacturing extension efforts should be better coordinated and should not be administered by DoD. As noted above, many Federal agencies provide industrial extension services, and the Commission believes that these efforts would be more effective if they were better coordinated and integrated.

While some have proposed that DoD be responsible for expanded manufacturing extension services, these programs are much more closely connected to missions of other agencies, such as NIST. While DoD should continue to research dual-use manufacturing processes and technologies and disseminate information through its ManTech programs, DoD lacks the expertise to carry out general-purpose manufacturing extension services.

Third, Federal manufacturing extension efforts should be implemented by the states, taking advantage of the networks of such centers that already exist. Many states have created manufacturing extension networks. States should carry out manufacturing extension services because they are aligned more closely with state than with Federal Government roles, such as encouraging local economic development.

DUAL USE AND DEFENSE CONVERSION

The Commission examined issues of dual-use technologies because of their prominence in defense conversion proposals. For example, Congress provided $200 million for various dual-use technology programs for 1993. "Dual use" means having defense and commercial application, whether as a technology, process, or product.

Dual-use technology refers to fields of research and development that have potential application to both defense and commercial production. Some technologies are important for both DoD and commercial customers. Imaging-sensor technology, for example, has broad applications in surveillance systems, video cameras, and robot vision systems that find both military and commercial uses. In fact, at the generic level, most of today's important technologies can be considered dual use.

Dual-use processes are those that can be used in the manufacture of both defense and commercial products, such as soldering, process control, and computer-aided design. For defense acquisition, these processes are

frequently tied to military standards that may make them defense-unique, resulting in the segregation of defense and commercial production.

Dual-use products are items used by both military and commercial customers. Notable examples are global positioning systems used for navigation, aircraft engines, and most medical and safety equipment used by DoD. Some modified commercial products are similar enough to those used by the military to be considered dual use. Some examples are the Air Force's KC-10A Extender aircraft (which is a modified version of the McDonnell-Douglas DC-10 commercial aircraft) and the Army's light cargo vehicle, the CUCV (which is a modified version of the Chevy Blazer). DoD's ability to buy dual-use products is limited by the requirements of military specifications and standards and by the degree to which commercial firms are willing to comply with defense purchasing requirements.

Benefits of Dual Use

The benefits of dual use are similar to those of integrating commercial and military manufacturing. Increasing the use of dual-use technologies, processes, and products would increase the size of the industrial base upon which DoD can draw, allow DoD to take advantage of the state of the art in commercial products, and help generate a greater return on Federal research investments. Dual use could also save DoD money since increasing a company's business base would lower overhead costs on DoD purchases.

Almost all technologies, processes, and products could conceivably have both military and commercial applications. DoD's role is fairly straightforward at the extremes of the dual-use spectrum. On one hand, DoD has a clear interest in supporting the development of technologies, processes, and products that are mostly oriented toward military needs, but have some commercial potential. On the other, DoD does not have the mission, expertise, or experience to develop technologies, processes, and products that are mostly oriented toward commercial applications but might have some military use. Between these two extremes, however, it is difficult to determine at just what point DoD's interests become secondary to commercial interests.

The Commission believes that DoD should maintain an active role in developing dual-use technologies, products, and processes in the gray area between mostly military and mostly commercial technologies. By carrying

out dual-use research and development, DoD can benefit by ensuring the military utility of dual-use developments, a benefit that would be more difficult to attain if the research were to be carried out under another agency. DoD can ensure the commercial potential of its dual-use research projects by including companies in project planning. DoD can judge the commercial value of its dual-use efforts by the extent to which companies are willing to share research and development costs.

DoD administers a number of programs to develop dual-use technologies, processes, and products. Through its ManTech programs, DoD develops dual-use manufacturing technologies and processes. The Defense Advanced Research Projects Agency (DARPA) is active in dual-use efforts. In the past, DARPA provided the initial support for important dual-use technologies such as advanced materials, computers, and electronics. DARPA currently funds SEMATECH, the semiconductor manufacturing technology research consortium. Since 1991, Congress has provided DARPA funds for dual-use critical technology partnerships. DARPA has used this money to fund consortia in dual-use fields such as opto-electronics, ceramic fibers, and superconductivity.

As part of its overall effort to encourage companies to pursue commercial application of defense technology, DoD should require companies to address potential commercial applications in their proposals responding to solicitations from DARPA, the Small Business Innovation Research (SBIR) program, and other research programs.

DoD participates (with 10 other Federal agencies and departments) in the SBIR program, established in 1982 to stimulate technological innovation, to use small businesses to meet Federal R&D needs, to encourage minority and disadvantaged persons in technological innovation, and to increase private-sector commercialization of Federal R&D. SBIR funds projects in their early development phases. Non-SBIR sources, such as companies or other Federal funds, pay for the projects' final development phase, which leads to production. DoD funding for SBIR projects totaled about $250 million in 1992, about 54 percent of the overall Federal SBIR program.[5]

Twice a year, DoD publishes research topics for SBIR projects in a solicitation. Under the current DoD program, the potential for commercial application is not a consideration in selecting proposed SBIR projects, as it is in other Federal agencies. By not doing so, DoD loses an opportunity to encourage dual-use R&D. These changes to the SBIR program are illustrative of changes DoD should make more broadly.

The Advanced Technology Program and Defense Conversion

Several other Federal programs could also help companies exploit the commercial potential of defense technologies. One such program is the Advanced Technology Program (ATP) administered by NIST. The ATP, created by Congress in 1988, is funded at $68 million in 1993.

The ATP supports pre-competitive applied research and development. Private industry pays for at least 50 percent of all ATP projects. Companies of any size may submit proposals, which are judged on the basis of scientific and technical merit, the scope of their potential benefit, the proposer's experience and qualifications, and the potential for technology transfer and successful commercialization. The Government reviews the technical merits of proposals, while a panel of industry representatives reviews the proposals for their commercial potential. Projects may run from three to five years.

The structure of the ATP is well suited to finance proposals from companies to apply defense capabilities to nondefense markets. The ATP has identified several key measures of success, which it uses to monitor programs. These measures include the number of high-technology jobs created and retained, sales and value added, and changes in market share, manufacturing costs, product quality, and time to market.

Annual funding for the ATP should be increased to levels that accommodate proposals from defense-dependent companies that wish to apply to nondefense markets technologies developed originally for DoD. These proposals should be evaluated through the same rigorous, competitive selection process to which other ATP proposals are subject.

INCREASING RELIANCE ON THE PRIVATE SECTOR FOR MAINTENANCE AND RESEARCH AND DEVELOPMENT

As the size of the public and private sectors of the defense industrial base decreases during the drawdown, DoD must ensure that critical maintenance and research capabilities do not disappear.

DoD should determine the future size of its public-sector maintenance and research infrastructure in conjunction with its process to close military bases. In its deliberations about closing military

bases, DoD will determine which public-sector maintenance and research capabilities must be maintained. These decisions, however, must consider the maintenance and research capabilities that will be available from the private sector. Unless DoD considers the public and private capabilities together, it may ultimately maintain duplicate capabilities or inadvertently lose critical capabilities.

DoD should increase opportunities for the private sector to compete for maintenance and research work. About 31 percent of DoD maintenance and repair funding is spent in the private sector, and about 69 percent is spent in-house. About 83 percent of R&D funding is spent in the private sector, and about 17 percent in-house. In both cases, some of the funds that go first to public facilities are ultimately spent through contracts with private firms.

Increasing the maintenance workload in the private sector would benefit the industrial base more than maintaining the current balance between public and private facilities would. Allocating more maintenance to private-sector facilities could provide additional work to companies that can provide DoD with design and production capabilities and services beyond those of public maintenance facilities. The Commission does not support proposals to expand DoD's existing design and production capability. **DoD's evaluation of bids for maintenance work should recognize the positive spillover effects of maintaining critical and essential design and production capabilities.**

If DoD pays for cost overruns at public but not at private facilities, then public facilities will be encouraged to submit lower bids on contracts for repair work, without penalties for cost overruns. The Commission believes that DoD should eliminate this advantage of public facilities and take further actions to level the playing field for public-private competitions. **DoD should increase fairness in public-private competitions by taking steps to ensure that public facilities do not overrun their bids on competitively awarded maintenance contracts. Public facilities that do overrun should be subject to penalties, which could include being prohibited from bidding on future contracts.**

Increasing reliance on the private sector for research could help transfer defense technologies to commercial markets. The desire to seek profits encourages companies to use defense capabilities for profitable nondefense uses. In contrast, Government facilities lack this incentive and are more likely to limit the application of capabilities developed for DoD to defense purposes. By making greater use of the private sector, DoD would

increase the likelihood that nondefense sectors of the economy would benefit from commercial capabilities derived from DoD activities.

DEFENSE EXPORTS

Exports are a significant factor in maintaining the defense industrial base. In recent years, the dollar value of defense exports has equalled about 10 to 15 percent of DoD procurement. Increasing exports will be an important strategy for some companies as they adjust to smaller U.S. purchases.

In all likelihood, companies will find it increasingly difficult to export defense products in the 1990s, as global markets for defense products decline. The end of the Cold War, of the war between Iran and Iraq, and of Operation Desert Storm, as well as global pressures to reduce defense spending, should reduce demand for exported defense goods. While the market is shrinking, it is becoming more competitive. Many NATO countries plan to increase reliance on defense exports to bolster their domestic defense industries, and Russia and the other former Soviet republics seek to sell arms in order to obtain hard currency for economic development projects.

Foreign policy and national security are overriding considerations regarding defense exports, and the defense industry, our defense industrial base, and our economy generally can benefit from defense exports. Such exports can ensure the adequacy of the industrial base by keeping open some production lines that might otherwise close as a result of the discontinuance of DoD purchases. For example, in the next few years, purchases by foreign militaries will keep open plants that produce tanks and maritime patrol aircraft for which no DoD purchases are planned.

The Commission believes that any Administration decision regarding defense exports should be based on a foreign policy and national security analysis, which, by definition, includes an analysis of their impact on the defense industrial base. Once the decision is made that a specific proposed export is in our national security and foreign policy interest, the Government should be a strong advocate for U.S. industry and ensure that American companies have a fair opportunity to compete in approved defense export markets.

There are steps that the Government can undertake to help U.S. companies compete in approved defense export markets. The Commission identified two areas that deserve particular attention: offsets and export controls.

Offsets

Countries purchasing military equipment from U.S. manufacturers frequently require offset agreements, which obligate the U.S. manufacturer to buy a specified amount of goods and services produced in the purchasing country. By forcing U.S. companies to purchase unneeded products or to pay higher prices than necessary, offset agreements distort decisions on international trade, and the resulting inefficiencies ultimately work to the detriment of all trading countries.

Since American companies would be placed at a severe competitive disadvantage if the United States limited offsets while other exporting countries did not, changes in offset policies need to be considered in cooperation with other exporting countries. Because of the deleterious effects of offsets on trade, the Commission endorses efforts to reach agreement with other countries to limit offsets.

Export Controls on Dual-Use Items

Second is the area of export controls on munitions and dual-use items. One dilemma facing U.S. defense firms as they pursue more commercial production is the difficulty of penetrating an already highly competitive domestic commercial market. As a result, foreign markets will often provide the best opportunity for sales of new commercial products and, when consistent with foreign policy and national security considerations, offer opportunities for the sale of defense articles.

Recent events have demonstrated the importance of multilateral export controls. On the one hand, some argue that multilateral cooperation on export controls was a contributing factor in bringing about the collapse of the Soviet Union and the Warsaw Pact. On the other, some point to the alleged failures to apply these controls effectively as the reason why Iraq was able to undertake its nuclear and chemical weapons programs.

Export controls have often put U.S. industry at a competitive disadvantage compared to some of its major trading partners. The United States unilaterally imposes licensing requirements on American companies

that some foreign countries, especially in Europe and the Pacific Basin, do not impose on their companies. U.S. controls on commodities and technologies that are widely available from other sources will not have their intended strategic effect of denying military capabilities to other countries, and they could have adverse domestic economic effects.

Export control policies are changing in response to changes in the international security environment. Controls on exports to the former Soviet Union and Eastern Europe are being reduced, while controls have increased on items that could be used to develop and produce nuclear, biological, and chemical weapons. While the Commission does not question these changes of export controls, it urges the Administration to take the steps necessary to ensure that the international export control system does not unnecessarily interfere with U.S. industry's ability to compete in the global market.

The Administration should place a high priority on persuading U.S. allies and trading partners to adopt controls comparable to U.S. proliferation controls in order to achieve overall security goals while minimizing the negative economic impact of these controls on U.S. companies.

In addition, companies would benefit from more rapid implementation of Presidentially directed changes in export control procedures. Multilateral agreements classify defense exports as either "munitions" or "dual-use items." The United States classifies some items as munitions that our trading partners consider to be dual-use items, causing a competitive disadvantage for U.S. companies because the U.S. munitions export system is less flexible than is the multilateral dual-use system. As a result, our trading partners may be able to grant export approvals more quickly for similar items, and U.S. firms may lose business as a result.

In recognition of the harm that this situation might cause U.S. businesses, in June 1991 the President directed that dual-use items now on the U.S. munitions list, administered by the Department of State, be transferred to the dual-use list, administered by the Department of Commerce. To date, this transfer has not been completed. **The executive branch should transfer appropriate dual-use items from the munitions list to the dual-use items list.**

CONCLUSION

The Commission recommends dramatic and immediate actions to promote the integration of military and commercial technologies, products, and processes as well as actions both to strengthen the development and application of technologies that meet defense needs and to accelerate their commercial applications. The recommendations in this chapter will permit defense requirements to be satisfied at lower cost from a larger, integrated, national industrial base and will help promote American industry that is technologically advanced and globally competitive.

ENDNOTES FOR CHAPTER 3

1. Within the past year for example, Martin Marietta purchased General Electric's defense electronics business, Hughes purchased General Dynamics' missile business, and Lockheed announced an agreement with General Dynamics to purchase its tactical aircraft business.

2. Studies of diversification are included in T. Dunne et al., "Patterns of Firm Entry and Exit in U.S. Manufacturing Industries," *Rand Journal of Economics*, Winter 1988, and M. Porter, "From Competitive Advantage to Corporate Strategy," *Harvard Business Review*, May-June 1987.

3. Prior studies include Office of the Under Secretary of Defense for Acquisition, *Defense Science Board 1986 Summer Study: Use of Commercial Components in Military Equipment*, January 1987; President's Blue Ribbon Commission on Defense Management, *A Quest for Excellence* and *A Formula for Action*, 1986; Office of the Under Secretary of Defense for Acquisition, *Defense Science Board 1989 Summer Study: Use of Commercial Components in Military Equipment*, June 1989; and The Center for Strategic and International Studies, *Integrating Commercial and Military Technologies for National Strength–An Agenda for Change*, Washington, D.C.: CSIS, March 1991.

4. In acquisition, DoD policy supports the integration of defense and commercial production by giving preference to the use of commercial products. In support of this policy, DoD is working on eliminating unnecessary military standards and specifications in favor of industry or nongovernment standards and in favor of purchase descriptions based on commercially available products. DoD is seeking to change acquisition regulations to eliminate some of the impediments to buying commercial products from commercial firms and has developed training for acquisition personnel on market research, on drafting performance-based specifications, and on other subjects important to the acquisition of commercial products.

5. The 1993 DoD Authorization Act gradually increases DoD's SBIR program to 2.5 percent of the Department's extramural R&D budget by 1998, up from the current requirement of 1.25 percent.

CHAPTER 4

EFFECTS ON STATES AND COMMUNITIES

Many states and communities today are addressing the challenges created by base closings, personnel reductions, and cuts in DoD purchasing. More communities will be affected as the drawdown continues.

In its travels across the country, the Commission has been impressed by the vitality of state and local efforts and the capacity shown by local institutions, often newly created, to deal effectively and forcefully with the problems created by the drawdown.

It is essential that communities be leaders in every stage of the planning and implementation of actions to respond to the drawdown. Communities are the best judges of their own strengths and weaknesses. Communities can constructively direct resources toward the solutions they have identified. Finally, most communities already have in place institutions that can help.

The Commission is heartened by the fact that the localities the Commission visited are working to overcome their problems and that they are not waiting for the Federal Government to solve them. All affected localities do, however, hope to get some Federal help in solving them and would prefer that help to be in the form of flexible funding.

This chapter estimates the effects that the drawdown will have on states and communities and makes recommendations concerning programs designed to help communities.

ESTIMATES OF JOB LOSSES

The Commission estimated the number of private-sector job losses that will result from reduced DoD purchasing. It is important to distinguish between "job losses" and unemployment. As used throughout this report, job losses are an estimate of the number of jobs or positions in the economy that are no longer required to fulfill the demand for defense-related purchases during the seven-year period from 1991 through 1997.

Job losses do not equate to unemployment. As the number of jobs in the defense sector declines, new jobs are being created in sectors of the economy that are growing. For workers who do not find new work immediately, job losses result in a temporary period of unemployment, which typically lasts a number of months. Thus, the concept of job losses tends to overstate the employment effects of the drawdown, because it does not account for the ability of the economy to absorb dislocated workers.

The Commission estimated that about 960,000 jobs would be lost from 1991 through 1997 due to reduced DoD purchasing. It is important to acknowledge that estimates of job losses are also subject to some uncertainty because they are derived from economic models that make hundreds of assumptions, each of which has a measure of uncertainty. It is also important to put this estimate of jobs lost over *seven years* (from 1991 through 1997) in the context of national unemployment statistics. Census data suggest that on average, over 1.5 million people flow into and out of unemployment per *month*. On the basis of these statistics, the drawdown will account for less than two percent of all unemployment over the next seven years.

EFFECTS ON STATES

The effects of reducing defense purchases will be concentrated in certain states. The Commission estimates that ten states will account for about 60 percent of the estimated 960,000 defense-related jobs lost from 1991 through 1997 as a result of reduced DoD purchasing (see Table 4-1 and Annex F).[1] This estimate accounts for the effects of all direct DoD purchases as well as those of indirect purchases made by prime contractors and many tiers of subcontractors.[2]

Even in these states, however, defense-related purchases represent a relatively small portion of total state economic activity. The Commission estimates that during the 1991-to-1997 period, reducing such purchases will eliminate no more than three percent of private-sector jobs in any one state, and no more than two percent in 48 states (see Table 4-2).

Although defense-related purchases account for a relatively small proportion of private-sector employment in each state, reducing defense spending does tend to increase unemployment rates in those states especially dependent on defense purchases. While the recession that began in 1990 did increase unemployment throughout the whole country, in the four states most heavily dependent on defense-related purchases–

Table 4-1.

States with the Largest Estimated Number of Private-Sector Job Losses Due to the Defense Drawdown, 1991 to 1997

State	Thousands of Jobs Lost	Jobs Lost as a Percentage of Total Jobs Lost Nationwide	Cumulative Percentage of Total
California	178	19	19
New York	62	6	25
Texas	56	6	31
Virginia	47	5	36
Massachusetts	46	5	41
Pennsylvania	38	4	45
Ohio	38	4	49
Florida	38	4	53
Connecticut	37	4	57
New Jersey	30	3	60
Total for Top 10	**570**	**60**	**60**
Total for Job Losses	**958**	**100**	**100**

Source: Logistics Management Institute. *Impacts of Defense Spending Cuts on Industry Sectors, Occupational Groups, and Localities.* January 1993.

Note: Job losses represent one-time dislocations and do not reflect the economy's ability to absorb dislocated workers.

Connecticut, Virginia, Massachusetts, and California–the rise in the unemployment rate from 1988 through August 1992 was more than two-and-a-half times that of the remaining 46 states.

Many states have developed mechanisms to respond to the drawdown's economic impacts. State-wide commissions have been formed to raise awareness, provide a forum for concerned parties, and promote innovative solutions. Governors have issued executive orders directing state legislatures to develop responses to the drawdown. New programs have been developed and existing programs have had their missions modified to address defense conversion issues. States' responses are also influenced by their overall economic policies and business environment. A number of state initiatives are described in greater detail in Annex G.

Table 4-2.

States with the Largest Estimated Percentage of Private-Sector Job Losses Due to the Defense Drawdown, 1991 to 1997

	1991 Total Number of Nonfarm Private-Sector Jobs in State (thousands)	Number of Those Jobs Attributable to DoD Purchases (thousands)	Share of Those Jobs Attributable to DoD Purchases (percent)	Rank Among States	Estimated Job Losses Resulting from Reductions in Defense Purchases, 1991 to 1997 (thousands)	These Losses as a Share of 1991 Total Nonfarm Private-Sector Jobs in State (percent)	Rank Among States
Connecticut	1,349	113	8.3	1	37	2.8	1
Virginia	2,250	166	7.4	2	47	2.1	2
Massachusetts	2,433	159	6.5	3	46	1.9	3
Mississippi	733	38	5.2	6	13	1.8	4
California	10,418	585	5.6	4	178	1.7	5
Maine	417	16	3.9	16	6	1.5	6
New Hampshire	409	18	4.4	13	6	1.5	7
Arizona	1,226	58	4.8	9	17	1.4	8
Washington	1,759	79	4.5	11	24	1.4	9
Maryland	1,682	93	5.5	5	23	1.3	10
Missouri	1,924	94	4.9	8	26	1.3	11
Vermont	205	7	3.6	17	3	1.3	12

Source: Logistics Management Institute. *Impacts of Defense Spending Cuts on Industry Sectors, Occupational Groups, and Localities.* January 1993.

Note: Job losses represent one-time dislocations and do not reflect the economy's ability to absorb dislocated workers. Estimates of jobs and percentages have been rounded.

ASSESSING COMMUNITY VULNERABILITY

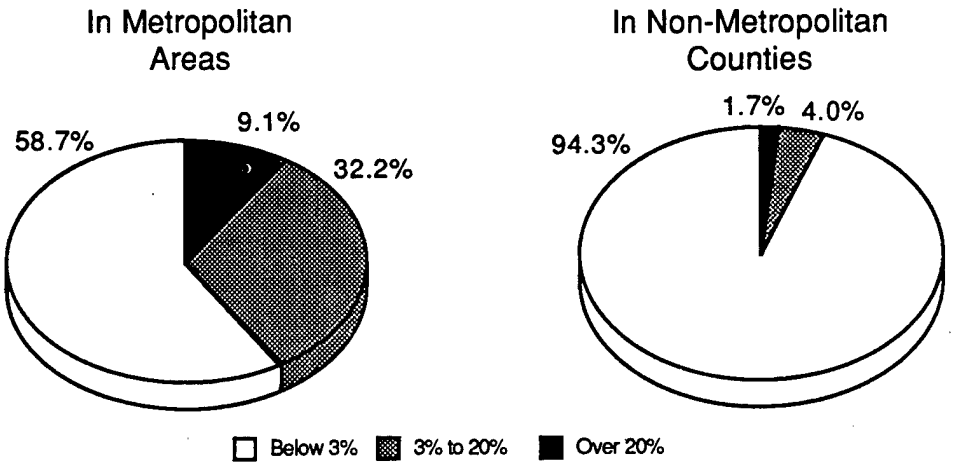
Although it is not possible to predict the effects that the planned drawdown will have on specific communities, it is possible to identify which communities, in general, might be particularly vulnerable to economic dislocation if defense spending were to be reduced abruptly.

The Commission used the percentage of local jobs attributable to defense spending in each of the country's metropolitan areas and non-metropolitan counties as an indicator of vulnerability.[3] This analysis, which is detailed in Annex H, examines the range of local economic effects stemming from pay for military personnel, DoD civilian employees, and private-sector defense workers.[4]

The Commission found that most communities are not highly vulnerable to reductions in defense spending. In 199 of the 339 metropolitan areas (58.7 percent) and 2,285 of the 2,422 nonmetropolitan counties (94.3 percent), defense-related jobs accounted for less than three percent of local employment.

However, the Commission did identify the communities that are most dependent on defense spending and are, therefore, potentially more vulnerable to defense reductions. Defense-related jobs account for more than 20 percent of local employment in 31 of the 339 metropolitan areas (9.1 percent) and 41 of the 2,422 (1.7 percent) nonmetropolitan counties (see Figure 4-1).

Figure 4-1.
Percent of Local Jobs Attributable to DoD Spending



Source: Logistics Management Institute. *A Method for Estimating Local Impacts of Cuts in Defense Spending.* January 1993.

Note: These data reflect all jobs attributable to direct and indirect DoD spending and multiplier effects.

The fact that a community is vulnerable to reductions in defense spending does not mean that it will experience economic dislocation during the drawdown. For example, many communities are vulnerable because they derive a large portion of employment from a local military installation, and many military installations will not be significantly affected by the drawdown. Even if vulnerable communities are affected by the drawdown, the specific economic consequences that they will face are impossible to predict because they depend on a range of factors unique to each community, including industry mix, level of unemployment, and effective community planning for transition.

A Model for Community Economic Adjustment

Public hearings and other meetings with community leaders around the country have convinced the Commission that improving the integration and flexibility of Federal assistance programs would benefit communities and the Federal Government. While redesigning all Federal assistance programs is a task beyond the scope of the Commission's charter, the Commission identified important characteristics of a new, integrated approach to helping communities that would further attainment of the Commission's goal of improving Government programs. The elements of this approach are based on DoD's success in fostering integrated community planning as part of its process of closing and realigning military bases.[5]

Federal programs should be flexible enough to address communities' individual circumstances. For example, the effects of the drawdown will vary among different defense-dependent communities. In some, nondefense economic sectors could be growing, and that growth would therefore offset losses in the defense sector. These communities may benefit from short-term assistance such as retraining programs and job search services. In others, defense reductions might occur at the same time that nondefense sectors are in decline. These communities may benefit from long-term assistance such as economic development programs aimed at creating jobs. In all cases, the best solutions will be formulated by the communities and will recognize that short-term transition assistance and long-term economic development must be considered together, rather than separately.

Federal programs should reflect an integrated approach. Currently, communities seeking Federal assistance for economic dislocations must approach several different Federal agencies, each offering different services

with different application procedures, selection criteria, and timetables for the disbursement of funds. This segmented structure is mirrored in the Congress, where oversight of and funding for assistance programs are divided among several committees. The disparate administrative mechanisms force communities to spend excessive amounts of time and effort applying for assistance from various sources, when "one-stop shopping" would clearly be in their best interest. Also, since many programs are allocated by formula, communities find it even harder to integrate their approaches. As a result, the segmented nature of Federal assistance programs inhibits communities' development of integrated plans.

Communities could benefit from developing plans flexible enough to respond to change and to shocks to the local economy. Such planning could address long-term goals and shorter-term approaches to achieve those goals. Careful planning improves communities' responses to changing economic circumstances, galvanizes leadership and consensus on overall goals, and identifies the range of available assistance. Planning also reinforces the idea that communities, not a distant agency in Washington or the state capital, are responsible for their own future. However, good planning takes time, and time is of the essence when dislocations strike. Communities would speed their transitions, and thereby minimize the problems created by economic disruptions, by being prepared for change before disruptions occur.

Planning is more successful when the entire community is involved. Representatives from state and local government, business, labor, education, and nonprofit groups can all make important contributions to the planning process. It is essential that community planning efforts focus on meeting the needs of communities and avoid the temptation to direct the internal efforts of private companies, as some have proposed. The Private Industry Councils established in many local areas under the Job Training Partnership Act could be a model for community-wide participation.

Both communities and individuals should be able to approach single points of contact for Federal, state, and local assistance services. The fragmented nature of assistance programs today is inefficient and inhibits communities and individuals from obtaining assistance services in a timely manner.

Federal assistance should be distributed on the basis of current economic conditions to focus services on areas where they are needed in a timely manner. Today's programs are often distributed on the basis of economic indicators that are more than one year old. In addition, a

variety of different means of measurement could be examined to indicate the need for assistance, including private business spending on long-term capital investment, local real estate values, the rate of business start-ups and failures, and local tax revenues. In contrast, today's programs frequently rely heavily on unemployment rates, which lag behind actual economic dislocations and recoveries.

Assistance programs should pool resources available at the local, state, and Federal levels. To encourage the pooling of resources, Federal funds should be matched by state and local funds. Cost sharing is essential to promote community commitment.

Implementing this approach will require the cooperation of Federal agencies, Congress, and state and local governments. Federal agencies would have to consolidate and coordinate their programs. The Congress would have to consider new implementing legislation and merging responsibilities among committees. One approach, for example, would be to integrate Federal programs such as Community Development Block Grants, which target low-income areas; the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA, Title III of the Job Training Partnership Act), which targets dislocated workers; the Title IX Sudden and Severe Economic Dislocation program of the Economic Development Administration (EDA); and Unemployment Insurance.

Developing a new approach for assisting communities experiencing economic dislocation will no doubt be difficult to accomplish. It would entail substantial changes in current programs and policies and well-established ways of doing business. The Commission is convinced, however, that the fragmented, disjointed structure of current assistance programs needs to be replaced. Integrating these programs, increasing their flexibility, and enhancing local authority and accountability will lead to more timely and effective help for communities and better Federal programs. Communities themselves must play the lead role through an integrated planning process. This model has worked effectively in areas affected by military base closures and should be applied more broadly.

In addition to providing for better government support to affected communities, this new approach will also have benefits for dislocated workers. As described further in Chapter 5, changes are also needed in Government programs that assist dislocated workers.

Communities that are vulnerable to economic dislocations from *any* source should develop integrated plans. Encouraging communities that

derive an especially high proportion of employment from any one source to develop long-range plans would help them cope with dislocations when they arise.

The Federal Government should provide support and assistance to communities for planning and implementation. The Federal Government should share costs with communities for developing integrated plans that prepare for economic dislocation. Sources of funding and technical assistance to implement plans should be identified as part of the planning process. The key roles for the Federal Government in the planning process are to encourage communities to plan and to leverage local resources.

CURRENT FEDERAL PROGRAMS

As described further in Chapter 6, implementing the Commission's recommendations will require more than better community planning; it will also demand better integration of assistance programs by the Federal Government. The Commission does not recommend a particular Federal agency to oversee the community planning process; the Administration must decide which agency is best suited to carry out this mission. The Commission strongly believes, however, that the agency must fully support this mission and be provided the resources to carry it out effectively.

One existing Federal agency already does this well for military base closures: the Department of Defense's Office of Economic Adjustment (OEA). A second existing agency, the Department of Commerce's Economic Development Administration (EDA), appears to represent the characteristics needed for a broader Federal effort.

Office of Economic Adjustment

The Commission believes that OEA should continue to help communities affected by military base closures develop integrated plans. OEA was created in 1961 to help communities plan for base closings. OEA offers grants to help communities plan for their future. The grants encourage communities to develop a long-run strategy with inputs from industry, labor, the public at large, and local government. OEA provides funds for planning only; it does not, and should not, offer grants to implement plans once they are developed. OEA also helps communities identify sources of assistance in other Federal agencies, informs them of successes and failures in other communities, and helps them work with the armed service whose base is closing. (Congress

passed legislation regarding OEA for 1993. This legislation is discussed in Chapter 6.)

OEA also acts as the executive secretariat of the President's Economic Adjustment Committee (EAC). The EAC's mission is to coordinate Federal assistance to help communities adjust to dislocations caused by military base closures and changes in defense purchases. The EAC was created in 1970 and currently operates under Executive Order 12788, signed in January 1992. The EAC is composed of representatives of 23 Federal departments and agencies involved in addressing community issues.

Economic Development Administration

The Commission believes that under its existing statutory authority, EDA could have the characteristics needed to promote and support integrated planning for communities that are vulnerable to economic dislocations other than base closures. EDA was created by the Public Works and Economic Development Act of 1965. EDA was charged with financing public works projects for economic development, such as building basic infrastructure, improving access to industrial areas, and developing industrial spaces. The 1965 Act was amended in 1975 to add Title IX, which gave EDA additional responsibilities for addressing sudden and severe economic dislocations.

EDA's legislative charter provides it with the authority to help communities plan for and react to dislocations. Title IX provides grants to eligible state or local governments to help replace economic activity and jobs lost as a result of sudden and severe economic dislocation. The law allows the government recipient to use grants to develop economic plans, establish revolving loan funds, build or rehabilitate public facilities, provide technical assistance, encourage business development, improve public services, train management and workers, and finance employee buy-outs of companies. Typically, the award of an EDA Title IX grant requires the recipient to match at least 25 percent of Federal contributions. Recent Administration budgets proposed to eliminate EDA, but the Congress has continued to fund the agency. The uncertainty over its future has hampered EDA's effectiveness.

In order to implement integrated community planning, EDA should reduce its historical emphasis on funding public works projects and speed its review of proposals. Several communities suggested to the

Commission that EDA's review process for applications should be shortened. Currently, applicants to EDA must contact the agency, obtain an invitation to submit a proposal, and have their proposal approved by an EDA regional office and by headquarters in Washington. When a community experiences economic dislocation, acting quickly is important. On average, EDA currently takes about six months to approve proposals once they have been invited, and additional time is spent preparing proposals prior to the invitation.

CONCLUSION

The Commission recommends a new model for community assistance programs that is based on integrated local planning. The Commission is convinced that the fragmented, disjointed structure of current assistance programs needs to be eliminated. Integrating community assistance programs, increasing their flexibility, and enhancing local authority and accountability will lead to more timely and effective help for communities and more effective Federal programs.

ENDNOTES FOR CHAPTER 4

1. This analysis does not capture all state effects because it does not include the effects of military and civilian pay. Moreover, a comprehensive state-level analysis projecting defense spending through 1997 is currently impossible because it would have to project the effect of base closures that will not be decided on until 1993 and 1995 and whose impacts are not known or predictable at this time. Despite this shortcoming, this analysis does offer insight into industrial effects at the state level.

2. This analysis does not, however, estimate "induced" spending (i.e., spending not directly related to defense purchases, such as defense workers' spending).

3. This section updates the data in the *Advance Copy* of this report.

4. This analysis of community impacts examines direct, indirect, and induced or "multiplier" effects.

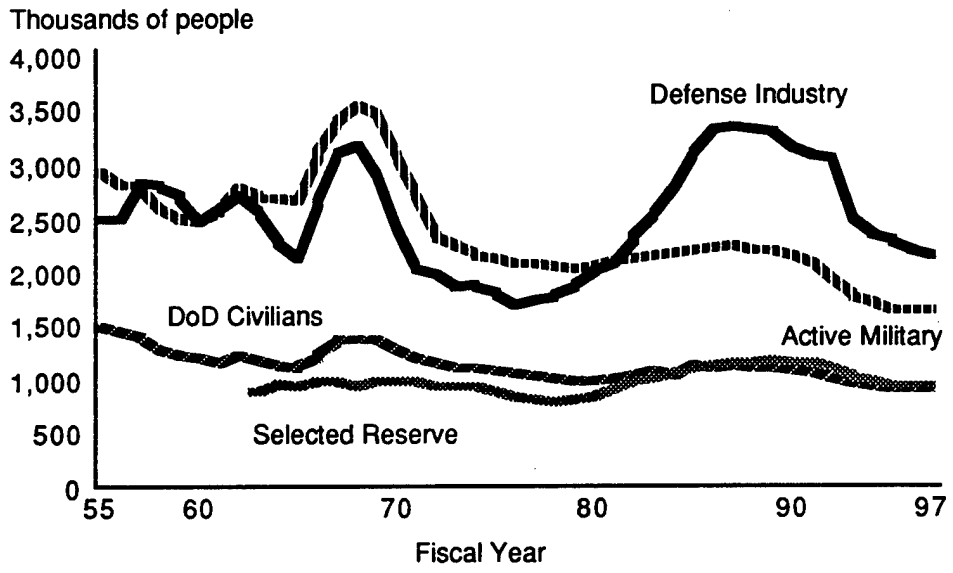
5. The Commission did not define "community" for the purpose of implementing this model of community planning. In DoD's base closure process, it is up to local areas to define the boundaries of the affected community, a process that would work equally well here.

CHAPTER 5

ASSISTING PEOPLE

The Commission examined the impact of defense reductions on military personnel, defense civilians, and defense industry workers. The drop in defense-related jobs has meant painful disruptions in the lives of hundreds of thousands of families of American military personnel and civilians, and there are more to come. The impact of changes in defense spending from 1955 to 1997 can be seen in the employment and military strength levels shown in Figure 5-1. Ultimately, the best long-term solution will be the increase in new jobs that will come with economic recovery; in the meantime, however, some constructive short-term measures are available. The Commission found that programs to assist military personnel and DoD civilian employees were generally adequate, although they could be improved by developing and applying measures of success. In contrast, the Commission believes that programs for private-sector defense workers should be strengthened considerably by adopting the model of integrated community planning described in the previous chapter and by improving existing programs.

Figure 5-1.
DoD and Defense-Related Employment, 1955 to 1997



Source: OSD (Comptroller) and OSD (Reserve Affairs).

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MILITARY PERSONNEL

DoD plans to reduce active duty end strength–the number of people in the services at the end of each fiscal year–from 2.2 million in 1987 (when the reductions began) to 1.6 million in 1997.[1] Two-thirds of those reductions had already been completed by the end of 1992.

The Commission estimates that about half of the planned reductions in active duty end strength from 1987 to 1997 will come from military units stationed overseas: 53 percent of the active duty force stationed overseas will be cut, compared with 16 percent of the force stationed in the United States.[2]

DoD plans to reduce the Selected Reserve–those reservists who serve full-time or are paid to drill on a part-time basis–from 1.2 million in 1987 to 0.9 million in 1997. The reduction in Selected Reserve end strength began later and is progressing more slowly than active-force reductions, partly because the Congress has opposed DoD's plans to reduce the size of the reserves. For example, DoD planned to reduce the size of the Selected Reserve by about 113,000 during 1993. The Congress, however, authorized a reduction of only about 40,000. Thus, instead of reserve reductions moving in parallel with active-force reductions, only 14 percent of scheduled Selected Reserve reductions have been completed.

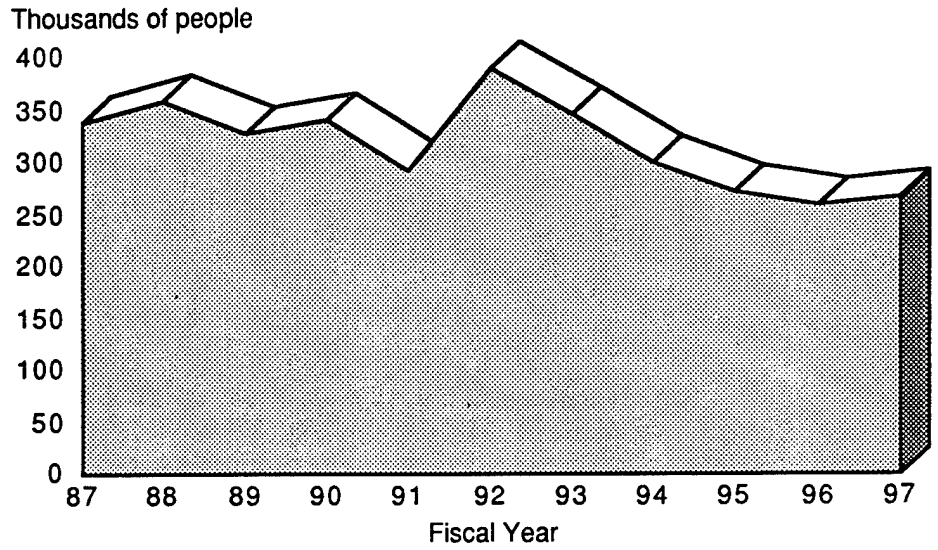
Separations and Accessions

As the overall size of the armed forces shrinks, fewer people will actually leave the military each year through 1997 than did during the 1980s. Even in years when the end strength is not reduced, many in the military leave to return to civilian life ("separations"), while other people begin military service ("accessions"). Planned separations will actually *decrease* in the remainder of the 1990s relative to prior years.

Separations for the active duty military forces peaked in 1992 at 390,000, but are planned to decrease to 345,000 in 1993 and 265,000 in 1997 (see Figure 5-2). After 1992, separations are planned to be lower than the number experienced during the 1980s. The fact that the armed services took in fewer new accessions beginning in 1987 helps explain why fewer people will leave the military, especially at the end of first enlistments, for the remainder of the 1990s.

Figure 5-2.

Active Duty Military Separations (Including Retirements), 1987 to 1997

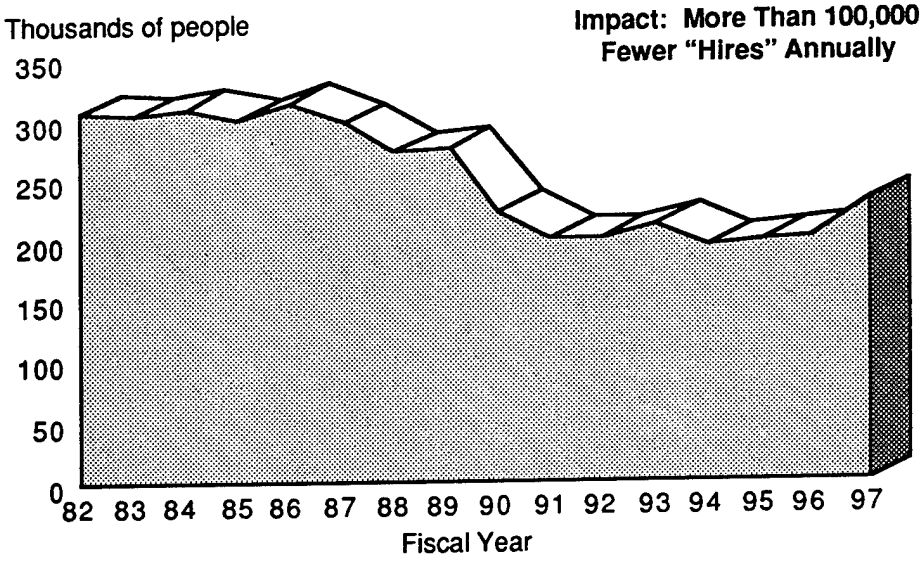


Source: OSD (FM&P) MM & PP. Actual numbers through FY92; FY93 to FY97 based on service personnel plans–June 1992.

New accessions are also planned to be lower during the 1990s. From 1980 through 1986, the armed services took in between 300,000 and 360,000 new enlisted entrants annually. DoD plans to enlist between 195,000 and 230,000 new entrants annually from 1993 to 1997. In comparison with the 1980s, therefore, about 100,000 fewer high school graduates (about 3.8 percent of all high school graduates) each year will receive the benefits of military service, training, and veterans' programs (see Figure 5-3).

Because fewer young people will receive training in the military, alternative sources for training that could help prepare America's youth for successful entry into the work force will be needed. The Department of Labor's (DoL) SCANS (Secretary's Commission on Achieving Necessary Skills) program is an important initiative in this area. SCANS brings together schools and employers in a realistic examination of the skills and competencies needed in the workplace and determines how the schools can ensure that students graduate with them. SCANS also endorses employer-

Figure 5-3.
New Enlisted Active Duty Accessions, 1982 to 1997



Source: OSD (Force Management and Personnel) Accession Policy.

sponsored training, both public and private, to develop the skills and competencies of those already in the work force and to create high-performance workplaces. SCANS is now being implemented and institutionalized at the local level across the country through a series of community coalitions.

SCANS and other initiatives that facilitate successful transition from school to the workplace should be incorporated further in the nation's school systems and workplaces.

Transition Programs for Active Duty Military Personnel

The armed services and DoL have been providing transition assistance services to separating military personnel for many years. The National Defense Authorization Act for Fiscal Year 1991 tasked the Department of Defense and the armed services to establish additional transition assistance programs and permanent employment assistance centers for military personnel leaving active duty. The Act required transition services such as pre-separation counseling, employment assistance (in conjunction with the Department of Labor), and benefits such as transition health care,

permission for temporary use of commissaries and base exchanges, and, in some cases, military family housing and DoD schools. It also granted permissive travel to find jobs and relocate households, and priority for joining reserve units. The transition assistance programs are fully described in Annex G.

The armed services have opened more than 350 transition centers where military personnel and their spouses can receive assistance. About 900 new civilian positions have been authorized to operate those transition centers. In fiscal year 1992, DoL conducted almost 2,500 transition workshops attended by nearly 120,000 personnel and their spouses. In excess of 37,000 people have listed mini-resumes on the Defense Outplacement Referral System, a centralized data system available to private-sector employers and to other Federal agencies. The military has already established its own computerized job bank, the Transition Bulletin Board, and soon the Interstate Job Bank, a DoL-administered listing of open jobs, will be available at most military bases.

Measuring Success and Coordinating Programs

The statistics cited above are measures of activity, not of goal achievement or success. Through the provision of transition assistance services, many of the objectives envisioned by Congress may have been met. However, the effectiveness of these services could be improved by establishing clear-cut statements of program goals as well as mechanisms to monitor the achievement of those goals.

The Office of the Secretary of Defense, the armed services, and the Department of Labor should develop clear objectives and, where possible, quantified measures of effectiveness for their assistance programs and should monitor program performance against those objectives. The OSD, the Department of Labor, the Army, and the Air Force have recently begun reviews of program effectiveness, but results of those reviews are some months away. When available, the results should be used to establish program objectives and measures of effectiveness. Measures should include: assessments of satisfaction at the time transition services are delivered and several months later, employer response, a comparison of how long enrollees in the programs receive unemployment insurance in comparison to those who did not participate in transition programs, and some measure of job placement success rates.

The Office of the Secretary of Defense should develop a directive delineating the scope and responsibilities of the armed services' transition services. Staffs within OSD and the armed services are confronting similar challenges in designing and implementing transition assistance programs. Although the staffs work in close coordination, some duplication of effort is inevitable. While there will always be, and should be, some diversity of transition services among bases and localities and among the armed services, the Commission believes that there should be greater direction from OSD in order to avoid duplication, consolidate and save resources, and ensure provision of adequate, timely, and proper services at all levels.

Successful transition assistance programs should be made permanent. Even though the number of people leaving active duty each year is planned to decline through the 1990s, current projections indicate that about 230,000 military personnel will continue to be separated annually even after the force reductions are completed. These individuals, too, will need transition assistance. DoD has an obligation to help its departing members return to the civilian work force upon separation (including retirement) regardless of whether the armed forces are growing or shrinking.

Overseas Personnel

Under the most recent plans, about 81,000 overseas active duty military and several thousand DoD civilian jobs will be eliminated between now and 1997. While some individuals will be transferred to new positions in the United States, others will leave the military. Those stationed abroad who leave often face a more difficult transition than those stationed in the United States.

People stationed overseas are far away from their future job markets. Moreover, transition assistance programs are not as universally available as in the United States. In particular, DoL's Transition Assistance Program (TAP) seminars and Veteran Affairs counselors are not available overseas because of legislation restricting their activities to the United States and because funds have not been allocated to hire contractors to offer services overseas.

The armed services, recognizing the difficulties for those stationed overseas, have implemented several important policies to help address them, such as allowing 30 days of permissive leave for separating military

personnel to search for housing and work in their desired location and encouraging U.S. employers to participate in job fairs abroad. However, the programs for those serving overseas can and should be strengthened.

DoD, DoL, and the armed services should ensure that overseas military personnel returning to the United States during their 30-day permissive travel are given every opportunity, indeed priority where possible, to avail themselves of transition services, including TAP seminars at bases in the United States.

DoD, DoL, and the Department of Veterans Affairs should provide transition assistance services to all overseas personnel, including civilian personnel as appropriate and those in isolated locations.

DoD and DoL should support overseas job fairs and continue to encourage and assist private employers willing to participate in them.

Force Management Programs

Some programs that are frequently considered to be transition assistance programs are more accurately described as tools to manage the size, age distribution, and skill mix of the active duty force. These programs include the Voluntary Separation Incentive (VSI), the Special Separation Bonus (SSB), and the authority–recently granted by Congress–to offer retirement after 15 years of service.

The VSI is a stream of annual payments offered as an incentive to encourage certain active duty personnel to leave the military voluntarily. The armed services have offered the VSI to personnel who have served a minimum of six years, especially those who work in occupations for which the services have more than enough qualified personnel. The SSB is a separation incentive, similar to the VSI, except that it provides a one-time lump sum payment, rather than the VSI's stream of annual payments.

The VSI, the SSB, and the 15-year retirement authority are means to achieve two objectives: reduce the need for involuntary reductions in force (RIFs) and help shape the structure of the active duty force. **The Commission is not aware of any force management needs which warrant the use of the 15-year retirement authority and therefore does not recommend its implementation.** However, the VSI and SSB programs have been successful in avoiding RIFs, at least in their first year. They have also shaped the force by encouraging the departure of more

senior military personnel who, absent RIFs, would have been very likely to remain to normal retirement without these inducements. This turnover permits more young people to enter the armed forces, ensuring a future balance of experience and youth. In addition, data show that the services did, to the maximum extent possible, target the VSI and SSB to reach people in skills that were fully manned or overmanned.

These programs are sometimes thought of as transition assistance programs because they offer their participants cash, or offer cash payments earlier than was allowable before (both of which can help ease the transition to civilian life). They should not be made permanent transition assistance programs because they are most importantly tools to manage the size and composition of the active duty force and are offered to relatively few individuals. **Once the drawdown is complete, the VSI, SSB, and 15-year retirement authority should be terminated.**

Transition Assistance for Reservists

The 1993 National Defense Authorization Act authorizes a broad range of pay and benefits for separating members of the Selected Reserve. Some of the reserve provisions are mandatory, while the implementation of others is left up to the Secretary of Defense. These programs are discussed in more detail in Annex I.

The Secretary of Defense should evaluate the authorities granted in the 1993 legislation in light of two essential goals: the need to maintain readiness and the need to achieve the desired size and composition of the Selected Reserve force. Provisions that foster the attainment of these two goals should be implemented.

The Commission also believes that the transition assistance needs of part-time reservists are not comparable to those for active duty personnel and full-time reservists. Since drilling reservists are responsible for their own full-time employment, they do not lose the main source of their livelihood upon separation.

Drilling reservists who are involuntarily separated could have their income reduced temporarily. The Commission believes, however, that DoD should not offer separation pay to offset the reduction in income. Separated reservists' income loss would be substantially smaller (in percentage terms) than what active duty military, DoD civilians, or private-sector employees now experience when they lose their jobs and collect

unemployment insurance. This argues against separation pay for separating reservists.

Some of the reserve provisions give DoD the authority to use new tools to help achieve the desired size and composition of the reserve force. Other sections provide benefits that the Commission does not believe are necessary. As is the case with managing the active duty force, the Commission believes that the necessary and successful transition programs for reservists should be made permanent and that programs to help shape the force should be reevaluated after the drawdown is complete.

CIVILIAN PERSONNEL

DoD plans to reduce civilian employment from about 1.1 million in 1987 to about 900,000 in 1997. At the end of 1992, DoD civilian strength totaled about 1 million, making the 1987-1997 reduction about 50 percent complete as of that time.

Separations

Civilian separations are expected to average about 85,000 a year through 1997.[3] They averaged between 90,000 and 100,000 a year during the 1980s. As is the case with military personnel, a substantial number of new employees enter DoD each year.

To achieve planned reductions while complying with Government-wide civilian personnel regulations, DoD has relied primarily on hiring restrictions and on voluntary attrition.[4] DoD prefers to avoid RIFs because of their adverse effect on morale and work effectiveness. Nonetheless, because of an expected decrease in civilian voluntary separations, estimates are that DoD will have to RIF about 25,000 civilians from 1993 through 1997, representing about six percent of all civilian separations.

The 1993 National Defense Authorization Act authorized the Secretary of Defense to reduce projected RIFs by offering financial incentives to civilians who voluntarily resign or retire. Similar financial incentives have been used by other Federal agencies in recent years, including the U.S. Postal Service, the Department of the Treasury, the Department of Agriculture, and the Tennessee Valley Authority. Many DoD organizations offered early retirement, with a commensurate reduction in retirement payments, to eligible employees. The number of individuals

taking advantage of these offers was significantly below expectations. **The Commission concludes that by using financial incentives, a cost-effective program can be established for reducing civilian personnel levels while minimizing RIFs.**

Transition Assistance for Civilian Personnel

DoD attempts to find new jobs within the Department for RIF'd employees through the Priority Placement Program (PPP), an automated worldwide referral program. The skills of employees scheduled to be separated or downgraded because of RIFs are matched with vacant positions at DoD activities in locations where the employee has indicated a willingness to work and is eligible to register. Generally, PPP registrants whose qualifications match job requirements *must* be given a job offer.

In addition, DoD maintains local Reemployment Priority Lists, which provide priority consideration for hiring eligible RIF'd employees over other outside applicants for open positions.

Like the military, DoD civilians may use the DoD Transition Bulletin Board (TBB) and the Defense Outplacement Referral System (DORS). Army civilians located at bases where Army Career and Alumni Program offices exist are eligible to use those programs, which include career counseling and training in resume writing. These and other transition assistance programs for separating civilian personnel, including the range of services offered by the Department of Labor to civilian employees, are described fully in Annex G.

The PPP has placed between 35 and 43 percent of registrants scheduled to be separated. The other programs maintain placement statistics indicating that they place less than five percent of their registrants. DORS and TBB do not keep comprehensive placement statistics.

The Commission found that while civilian transition programs are generally adequate, some lack quantifiable measures of success. **DoD should evaluate civilian transition assistance programs by defining clear objectives and quantifiable measures of success, which might include the number of participants, the number of job offers and job placements generated, and the range of salaries offered.**

In July 1992, the President directed that the TAP seminars sponsored by the Department of Labor for separating military personnel be made

available to separating DoD civilian employees also. However, several barriers have prevented full implementation of the President's order. For example, the state employees who conduct most of the TAP seminars are permitted by law to serve veterans only, excluding most separating civilian employees. As a result, the Department of Labor requires new legislation or new sources of funds to hire contractors not subject to the same restrictions, in order to conduct seminars for separating DoD civilian employees. **DoL should work to remove the barriers and provide TAP seminars to DoD civilian employees who are being separated.**

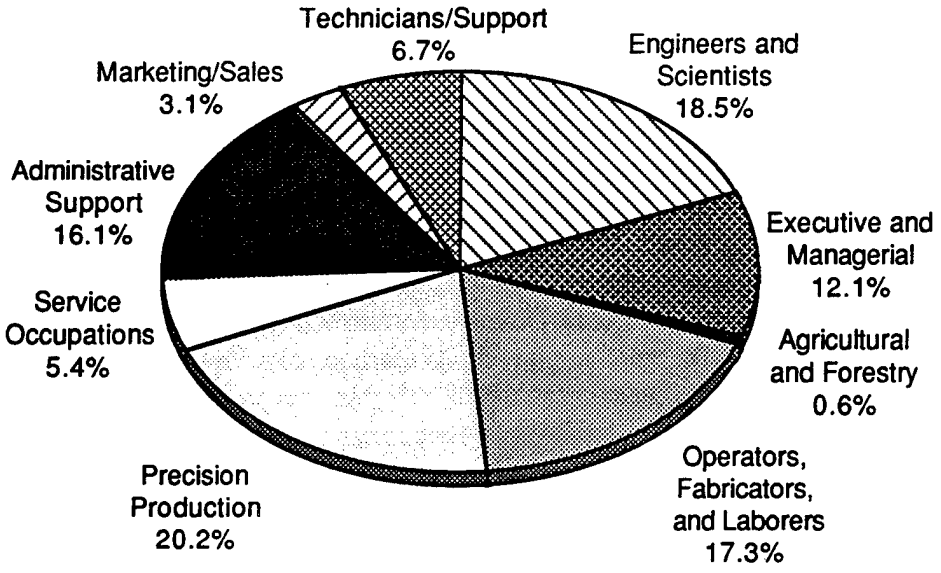
Recently enacted legislation provides extended health insurance coverage for separated DoD civilian employees. Section 4438 of the 1993 National Defense Authorization Act extends health benefits for up to 18 months for DoD civilian employees who are involuntarily separated because of a RIF. Under this provision, separated civilians will continue to pay the employee contributions for their health benefits program while their former agency pays the remaining portion. Thus, for up to 18 months, their health insurance costs will remain the same as if they were still Federal employees.[5]

PRIVATE-SECTOR DEFENSE WORKERS

The Commission estimates that as many as 960,000 private-sector jobs could be lost between 1991 and 1997 as a result of the drawdown. (As described in Chapter 4, the concept of job losses tends to overstate the unemployment effects of the drawdown.) The Commission also estimated how job losses will be distributed among occupational groups. As illustrated in Figure 5-4, reduced defense purchases are estimated to affect workers in many occupational groups, not just scientists and engineers or production workers. Finding jobs in an economy that is not growing, or is growing slowly, can be difficult for dislocated defense workers. The labor market is especially competitive because of the recent recession.

The nature of some job losses in the defense industry points to the need to reevaluate Government programs for dislocated workers. As companies restructure to become more competitive, they have eliminated permanent jobs, not laid people off temporarily. In fact, the proportion of all unemployed workers who have permanently lost their jobs, rather than being laid off, was over 45 percent in October 1992, an all-time high. Intra-industry movement for dislocated defense workers is limited as a result of restructuring. Inter-industry movement, even when possible, may require sacrifices on the part of the worker, such as a substantial cut in

Figure 5-4.
Estimated Private-Sector Job Loss by Occupational Groups, 1991 to 1997



Source: Logistics Management Institute. *Impacts of Defense Spending Cuts on Industry Sectors, Occupational Groups, and Localities.* January 1993. Also, 1990 Bureau of Labor Statistics data.

salary or a relocation. Many current Government programs for dislocated workers, such as unemployment insurance, are oriented more toward assistance for those temporarily laid off than they are toward helping those faced with permanent employment changes.

Dislocated-Worker Programs

Many defense-related private employers have transition assistance programs for their employees who face layoffs. These programs provide services such as retraining, counseling, skills assessment, job search assistance, help with resume writing, and instruction in job interviewing skills. Employers are not required to provide these services, but they may do so because they appreciate the contribution the workers have made to the firm, or because they wish to keep up the morale of the firm.

Government has a well-established role in helping dislocated workers that complements the efforts of private employers. It is based on the acknowledgment that timely and effective assistance can help shorten the time during which dislocated workers are unemployed and can optimize

matches between workers and employers. Everyone benefits when displaced workers are reemployed quickly. If a quick and seamless transition is made from one job to another, the individual is less likely to become dependent on Government assistance programs and more likely to contribute to the public good. The desirable outcomes for dislocated workers participating in transition programs include self-determination, quick reemployment, comparable salaries, and optimization of skills.

Government programs to assist dislocated workers should be strengthened and improved. Implementing the new model for Government dislocation assistance for communities that is described in Chapter 4 clearly would go a long way toward meeting the needs of dislocated workers. The model stresses that Government programs should offer dislocated workers an integrated set of programs and policies that responds to their individual needs in a timely manner. The Commission also believes that assistance programs should empower workers to invest in their own future in ways that *they* think they would benefit from the most.

To illustrate the types of improvements that could be made to existing programs that would reflect the underlying principles of the new model for community dislocation programs, the Commission analyzed the Economic Dislocation and Worker Adjustment Assistance (EDWAA) Act. In addition, the Commission identified several other programs that offer potential for improvements.

Economic Dislocation and Worker Adjustment Assistance Act

One of the most important assistance programs for dislocated workers is the Economic Dislocation and Worker Adjustment Assistance Act, which is also referred to as Title III of the Job Training Partnership Act (JTPA). EDWAA was passed to help dislocated workers find new employment in a timely manner. EDWAA funding in 1993 is $567 million.

The Department of Labor distributes 80 percent of the EDWAA funds to states on the basis of a formula and retains 20 percent, in a fund known as the Secretary's Reserve, for plant closures or mass layoffs that exceed the funds allocated to a state. In turn, the state governors distribute 60 percent of states' allocations to substate areas for basic readjustment services, retraining, support services, and needs-related payments. The remaining 40 percent of the states' funding is used for administration, rapid response, and funding dislocated-workers programs.

EDWAA is designed to help dislocated workers through five basic services:

- *Rapid-response assistance.* Under the direction of the governor's Dislocated Worker Unit (DWU), specialists establish on-site contact with employees and employers within a short time after a plant closure or substantial layoff is announced. The DWU provides information on the programs available to workers and works with a variety of local service providers.

- *Basic readjustment services.* Local service providers may offer job search assistance, career counseling, help in developing individual readjustment plans, testing, labor market information, relocation assistance, and early intervention.

- *Retraining services.* Retraining can include classroom training, skill training, on-the-job training, basic and remedial education, courses in literacy, courses in English for non-English-speakers, and entrepreneurial training.

- *Supportive services.* EDWAA can fund child care, commuting assistance, and financial and personal counseling necessary to enable individuals to participate in a qualified training program.

- *Needs-related payments.* EDWAA can provide needs-related income payments to eligible workers after they have exhausted their unemployment compensation benefits.

EDWAA could be strengthened by greater flexibility and more timely response. EDWAA administrators face the difficulty of budgeting for a demand that is difficult to predict accurately. Analysis summarized in Chapter 4 suggests that current community economic indicators are a better gauge of the need for EDWAA funds than are the year-old state unemployment rates on which EDWAA allocations are now based.

The method for allocating EDWAA funds should be changed to increase emphasis on more current data. Additional community-level information–such as that relating to industrial decline, plant closures, and mass layoffs–should be collected and used to influence the allocation of EDWAA funds.

The Secretary's Reserve was established to support dislocated-worker programs. Frequently, however, the funds are not available in a timely

manner. The application for reserve funds is complex and time-consuming. Therefore, the time between layoffs and the provision of services to dislocated employees can be great. The EDWAA program does not reimburse states for expenses incurred before the application is approved. In practice, therefore, states often delay providing services until they receive approval.

The Department of Labor should change the application process for EDWAA funds from the Secretary's Reserve to increase responsiveness and speed awards. The process could be improved by simplifying the application. It could also be improved by making it a two-step process in which preliminary information is submitted for a decision on funding basic readjustment services, while a second submission soon after provides greater detail regarding the needs, planned services, and anticipated costs.

DoL should eliminate the requirement that 50 percent of EDWAA funds be spent on retraining. EDWAA procedures currently require that 50 percent of all funds allocated to the states be spent on retraining; however, the state's governor may reduce this requirement to 30 percent. This requirement may lead to inefficient expenditure of EDWAA funds. Displaced workers might find new employment more quickly through services that are less expensive than retraining, such as job search assistance or instruction on resume writing.

DoL should set clear goals and evaluate EDWAA to determine whether it meets its goals. At a minimum, evaluations should address whether EDWAA serves enough displaced workers and whether workers in all occupations who seek EDWAA services are benefiting from them. At present, EDWAA serves about four percent of all dislocated workers. Figure 5-4 on page 62 highlights the fact that individuals from a variety of occupational groups could require employment assistance, whether as a result of reduced defense spending or of other economic dislocations. DoL is in the process of establishing appropriate measures of success for EDWAA, and is developing a regular evaluation of the program.

Other Transition Programs for Private-Sector Defense Workers

The Commission believes that other transition assistance programs for private-sector workers would benefit from the same type of improvements recommended for EDWAA. Such improvements will also strengthen the Government's ability to assist in community planning and economic development. These programs, which are designed to help dislocated

workers in the private sector but may also be available and appropriate for military personnel and DoD civilian employees who are being separated, are described in detail in Annex G and include:

- *Worker Adjustment and Retraining Notification (WARN) Act.* WARN requires that any company with 100 or more full-time employees provide 60 days advance notice to workers for mass layoffs or for plants that are closing. WARN notices are beneficial because they provide workers time to plan for reemployment and service providers time to identify and prepare for an increased demand.

- *Employment Services (ES).* ES is a joint state and Federal program designed to act as a labor exchange system, matching people seeking jobs with employers' advertised positions. The service coordinates labor-exchange efforts, job-search assistance, career counseling, and training referral for all types of workers and operates the Interstate Job Bank, a computerized listing of job vacancies nationwide.

- *Unemployment Insurance (UI).* The UI system is a joint state and Federal program that provides income support to unemployed workers based on their previous year's earnings. Regular UI benefits last for 26 weeks, but may be extended by the state or Federal Government, and average about 37 percent of the previous year's wage.

- *Health Benefits.* Under Title X of the Consolidated Omnibus Budget Reconciliation Act (COBRA) of 1985, an employer with 20 or more employees is required to provide employees who have lost their group health insurance as a result of job loss or reduction in hours the option of continuing coverage for 18 months under the employer's group health insurance plan. Employers are not required to pay for this coverage, but it must be offered to eligible individuals at a rate not to exceed 102 percent of the actual premium (100 percent of the premium plus a two percent administrative charge).

CONCLUSION

The Commission found that government assistance programs for military personnel and DoD civilian employees are generally adequate, although they would benefit from establishing clear objectives and measures of success. In contrast, the Commission believes that assistance programs for dislocated private-sector workers should be strengthened considerably. Implementing the new model for integrated Federal

assistance programs and community planning described in Chapter 4 is a critical first step in improving government programs for dislocated workers. In the interim, existing programs should be strengthened and improved.

ENDNOTES FOR CHAPTER 5

1. While others have recommended active duty forces of 1.4 million or lower, the Commission's recommendations remain valid even in cases that extend beyond current plans.

2. These data indicate that the economic impact of the drawdown on communities in the United States will be less than would be predicted simply by the size of the drawdown without regard to where reductions take place.

3. This report defines civilian separations as the number of individuals who worked for DoD on the first day of the fiscal year but not on the last. The estimate of separations under this definition does not include workers who entered and left DoD employment after the first day of the fiscal year.

4. Some DoD officials have expressed concern that the hiring restrictions and RIFs could result in skill imbalances (shortages of employees in some skill areas and overages in others) and a disproportionate impact on women and minorities. The Commission did not review analyses of these topics.

5. Section 4306 of the 1993 National Defense Authorization Act instructs the Under Secretary of Defense for Acquisition to submit a report to Congress on matters relating to the provision by DoD contractors of continuing health benefits coverage to their employees who are involuntarily separated by reason of the termination or curtailment of defense contracts.

CHAPTER 6

ADJUSTING TO THE DRAWDOWN: IMPLEMENTATION

This report has described the Commission's findings and recommendations concerning the impact of the drawdown on people, communities, industry, and the economy as a whole. There are a number of practical measures the Administration should take to implement the recommendations outlined in preceding chapters.

Implementation requires evaluating policies, programs, and organizational structures–some effective, some less so–already in place to address various aspects of conversion. In addition, the Administration will have to consider the more than $1.5 billion of assistance funds authorized and appropriated by Congress for 1993.

This chapter uses the Commission's criteria for evaluating Government programs to analyze recent conversion legislation. It suggests the characteristics of organizational mechanisms needed for implementation and offers recommendations as to how program administration can be made more efficient and effective.

1993 DEFENSE CONVERSION LEGISLATION

The Commission analyzed defense conversion aspects of the National Defense Authorization Act (PL 102-484) and the Department of Defense Appropriation Act (PL 102-396) for 1993 (see Annex I for more detail). In support of defense conversion, the Authorization Act authorized $1.512 billion and the Appropriation Act and its accompanying Conference Report identified $1.767 billion (see Appendix 3).

The Appropriation Act funded most of the defense conversion programs outlined in the Authorization Act. Both included at least $575 million for defense industry and technology base programs. The Appropriation Act also categorized as conversion assistance over $300 million in previously existing high technology programs now funded in the Title IV Research, Development, Test and Evaluation account.

Analysis of Legislation

To analyze the legislation, the Commission used the five criteria described in Appendix 2: support for transition goals, clear objectives, measurable outcomes, demonstrated commitment, and effective and efficient delivery. The analysis grouped sections of the legislation into three categories: Personnel Assistance, Community Adjustment and Assistance, and Defense Industry and Technology.

The Commission found that the legislation as a whole did not provide an integrated approach to transition problems as recommended in this report. In addition, while some of the specific legislative initiatives adequately met the Commission's criteria, many did not. Many lacked clear objectives and measurable outcomes. Others targeted specific objectives, but did not support defense conversion goals as defined in this report.

The results of the Commission's analysis are included in Annex I. Some general observations follow.

PERSONNEL ASSISTANCE

Evaluations of programs for personnel assistance were mixed. The Commission found that the legislative initiatives concerning health insurance for military personnel and DoD civilian workers who are being separated, separation pay for DoD civilian employees, and training programs appeared to satisfy the criteria.

Other personnel assistance programs, however, do not. For example, the "Teacher and Teacher's Aide Placement" initiative failed to answer several basic questions raised by the criteria. The program objectives focus on teacher certification and job placement for displaced professionals, without considering other vehicles that accomplish the same goals. In addition, it is difficult to believe that other teachers will not be displaced. Moreover, the program oversight and funding responsibility is *not* placed in the agency whose mission would be most directly furthered by success of the program, and the program seems costly in terms of the number of individuals likely to be served ($65 million for 1,000 to 2,000 participants).

COMMUNITY ADJUSTMENT AND ASSISTANCE

Evaluations of legislative initiatives for community adjustment and assistance were also mixed. A proposed increase in responsibilities for DoD's Office of Economic Adjustment (OEA) is illustrative of the Commission's evaluations in this area. The need for improved government support for integrated community planning is important, a fact that the Commission emphasizes in Chapter 4. However, the proposal requires DoD to undertake implementation activities that are clearly within the charter of other organizations, such as the Economic Development Administration (EDA), and that are inconsistent with DoD's mission.

DEFENSE INDUSTRY AND TECHNOLOGY

As defense spending declines, defense industry and technology base programs have received extensive attention as a possible way to assist companies during the drawdown and to strengthen the nation's industrial and technological base.

As noted in Chapter 2, technology programs are of only limited value to companies during the transition, because of the time it takes–sometimes a decade or longer–before such programs result in products that are ready for commercial markets. In the long run, however, technology programs can provide substantial benefits.

Some legislative proposals for technology programs appear to satisfy the criteria. For example, the initiative for Dual-Use Critical Technology Partnerships exhibits clear objectives and is crafted to demonstrate commitment on the part of industry and government. This program promotes cost-sharing research and brings together government, industry, and academia to work on technologies that are potentially important for defense and commercial applications. As discussed in Chapter 3, however, DoD's role in promoting dual-use programs should be limited to those where the military benefit is clear.

Some legislative initiatives in the defense industry and technology field, however, fall short in several areas highlighted by the criteria. For example, the Defense Manufacturing Extension Program duplicates programs operated by other Federal agencies. As Chapter 3 points out, existing manufacturing extension programs can be made to meet the needs of U.S. industry, including defense firms, and such efforts need not be funded by DoD.

The Commission recognizes the role that the Budget Enforcement Act (BEA) of 1990 played in the development of defense conversion legislation for 1993. Among other provisions, the BEA sets annual spending limits on three categories of spending through 1993: national defense, international affairs, and domestic discretionary programs. Defense spending for 1993 was well below its BEA limit, but domestic discretionary spending was at or near its legal limit. To provide funds for conversion legislation without exceeding the BEA domestic discretionary limit, Congress funded the conversion program in the DoD budget.

The Commission's guiding principles and criteria emphasize that programs should be carried out by the agency whose mission is most directly furthered by successful implementation. **Many of the initiatives in the 1993 conversion legislation should be removed from DoD and placed in other Federal agencies whose missions are more closely aligned with the programs.**

ORGANIZING FOR IMPLEMENTATION

The multiplicity of Government programs and funding items reflects the complexity of defense conversion as well as the overarching policy framework for coping with economic dislocation. This multiplicity creates the potential for duplication and inefficiency. The Commission believes that improving the Federal policy-making and coordination process is critical in facilitating adjustment to the drawdown. DoD has a strong interest in achieving successful defense conversion and has an important role to play. But DoD should *not* be in charge of Government-wide integration. Who should be?

The Commission believes there may be several answers to this question, depending upon how the Administration is structured to meet the general policy questions bearing on national security and economic growth. Rather than propose an organization independent of this process, **the Commission recommends that the following key characteristics be incorporated into an organizational entity charged with overseeing and integrating policies to address economic dislocations, including those related to reductions in defense spending.**

- *Synthesis.* There must be a capability to ensure that efforts are focused on the critical issues that lie at the heart of successful defense transition, to orchestrate the activities of various agencies as they cope with different manifestations of these issues, and to ensure consistency.

- *Access.* There must be a Federal point of contact and clearinghouse for defense conversion information. The Commission has begun this process by compiling a substantial repository of information, including the annexes to this report, public testimony, and other pertinent research information and bibliographies (listed in Appendix 1). The Commission has developed a catalog of transition assistance programs (Annex G) that should be maintained, updated, and published periodically.

- *Direction and Control.* Someone must have the authority to direct and control the allocation of defense conversion funding, including the authority to make decisions as to which agencies are best suited to tackle given aspects of the problem. To ensure successful implementation, the Administration must develop and maintain a close working relationship with the Congress on the reforms needed for successful defense conversion.

The 1993 Authorization Act states that the President's Economic Adjustment Committee (EAC), supported by a newly established National Defense Technology and Industrial Base Council and a Military-Civilian Integration and Technology Transfer Advisory Board, should perform the above functions. The Commission supports the effort to better incorporate broad-ranging advice from public and private defense conversion experts from the Federal, state, and local levels. The Cabinet-level principals of the EAC have never met, and while the EAC could provide a coordinating mechanism, it is not clear that any committee could properly provide the synthesis, direction, and control of information and resources required to make the changes described in this report. **The Commission believes that the authority needed to address defense conversion successfully can only come from the Executive Office of the President.**

LOOKING TOWARD THE FUTURE

In summary, defense conversion in its broadest sense is sometimes a painful and uncertain process. However, the current drawdown can be mitigated by an enlightened Government structure streamlined and tailored to assist where appropriate, and judicious enough to refrain from unnecessary interference. The Commission has been profoundly impressed by the creativity, vitality, resourcefulness, and determination of American private enterprise. With the deft touch of sensible Government, these qualities can be harnessed to maintain a strong defense while supporting a new level of integration and productivity that simultaneously protects our

ability to rearm if necessary. The human and material resources no longer needed for defense can then work for the same kind of victory over the problems of the 21st century that they achieved in the Cold War.

APPENDIX 1

SUPPORTING ANNEXES

(Available February 1993)

Annex		Author
A.	The DoD Drawdown: Planned Spending and Employment Cuts	Logistics Management Institute Report DC201R1
B.	From War to Peace: A History of Past Conversions	Logistics Management Institute Report DC201R4
C.	Defense and the Economy	Institute for Defense Analyses Paper P-2810
D.	The Impact of Reduced Defense Spending on U.S. Defense Contractors	Data Resources, Inc./ McGraw-Hill
E.	Defense Drawdown: Financial Overview and Strategies for the Top 25 Prime Contractors	DCC Staff Analysis
F.	Impacts of Defense Spending Cuts on Industry Sectors, Occupational Groups, and Localities	Logistics Management Institute Report DC201R2
G.	Compendium of Programs to Assist the Transition	Logistics Management Institute Report DC201R3
H.	A Method for Estimating Local Impacts of Cuts in Defense Spending	Logistics Management Institute Report DC201R6
I.	Analysis of Defense Conversion Legislation	DCC Staff Analysis
J.	Military Personnel: End Strength, Separations, Transition Programs and Downsizing Strategy	DCC Staff Analysis

K.	Civilian Personnel: Employment Levels, Separations, Transition Programs and Downsizing Strategy	DCC Staff Analysis
L.	Transcripts of Regional Hearings - Atlanta, Georgia - Long Beach, California - St. Louis, Missouri - Fort Worth, Texas - Groton, Connecticut - Seattle, Washington - Washington, D.C.	DCC Staff
M.	Summary of Regional Hearings	DCC Staff
N.	Defense Conversion Bibliography	DCC Staff

Additional supporting material is listed in Annex N, the Defense Conversion Bibliography.

APPENDIX 2

DEFENSE CONVERSION PRINCIPLES, GOALS, AND EVALUATION CRITERIA

The Commission adopted the following principles, goals, and evaluation criteria.

PRINCIPLES

- *Integrated response.* Our nation's well-being and security rest upon its political, military, economic, and moral strengths. A successful defense conversion strategy must recognize the breadth of our security needs, and the interdependence between military and economic security. Our nation can better meet these needs with an integrated response, including a well-integrated industrial base. Transition policies and programs that satisfy both military and civilian goals are preferable to those that support only one or the other. Likewise, transition programs that efficiently integrate Federal, state, and local assistance provide the best response to dislocations resulting from the defense drawdown.

- *Proper Government role.* In most situations, free-market allocations lead to the most efficient outcome for society. Government intervention in the private economy may be justified, however, when structural deficiencies in markets lead to inefficient outcomes, or when the transition to market-determined outcomes would take too long.[1] Both rationales for intervention are present in the defense conversion process. In either case, Government should intervene only when both cost and benefits have been considered and found to support Government action.

- *Long-term perspective.* In addressing defense conversion needs, the Commission recognizes the need both to address the, immediate, short term effects and to provide the tools to stimulate long-term economic growth–the foundation for our nation's future well-being. While recognizing the continuum of transition needs, including the need for short-term assistance, the Commission's recommendations advocate actions designed to promote the highest net benefit over the long term.

- *Universality.* Few programs and policies relating to the conversion process–be it transition assistance, training, or technology–are defense-unique. Their design and evaluation should therefore reflect the potential for universal application to civilian purposes. There will continue to be a need for certain essential defense programs and skills. And while a limited number of conversion programs and policies may need to focus exclusively on defense, most should be applicable to other sectors of the economy that experience dislocations. Whenever possible, transition strategies should be broadly applicable but flexible enough to meet individual circumstances.

GOALS

- *Facilitate the transition* by encouraging economic growth over the long run. The general condition of the economy is the most critical factor affecting the transition of individuals, communities, and companies to lower levels of defense spending.

- *Preserve defense capability.* A healthy industrial base is vital to the nation's security. While continued peacetime demands will support most necessary defense industrial capabilities, both present and future requirements may call for a limited number of special actions. The need for such actions will be lessened by greater integration of commercial and military economies.

- *Ease the immediate impact* on workers, communities, and companies. The drawdown will produce some hardships as resources are reallocated from defense to other sectors of the economy, and temporary Government assistance may be necessary to ease the process.

- *Improve Government programs.* Government programs and policies should be effective and efficient. More effective Government programs can increase recipients' benefits without necessarily increasing the program costs.

EVALUATION CRITERIA

Building upon the above goals and principles, the following criteria are intended to assist in the evaluation of existing programs and to help frame new policies and programs. Not all programs can meet all criteria. Natural tensions exist between certain of these criteria, and it is unrealistic to

expect that a static formula can be developed and used to determine relative program "value."

The value of attempting to define and apply evaluation criteria lies in establishing a framework through which to view programs and policies with two fundamental questions in mind: (1) is the program, policy, or proposal well conceived, and (2) how will its success be measured. Such a framework for analysis should contain elements of the following criteria:

- *Overall support for defense transition goals.* In forming the "bottom line" evaluation of the existing or proposed program, it must be clear (1) what the program is and (2) who has the primary responsibilities in funding and executing the program. It should be clear how this program will ease the impact of economic dislocation in the short term and/or facilitate the transition to enhanced economic growth in the long term.

- *Clear objectives.* Defense transition policies and programs should have a clear statement of objectives relating to a *specific, demonstrated transition impact* and ensure that *services are directed to the needs of the impacted population.* They must be considered in connection with ongoing programs and must address needs in a manner that does not duplicate other efforts.

- *Measurable outcomes:* Measures of merit, tied to program objectives, must be established and maintained *to determine program impact on the target population* following a necessary time period to accomplish those objectives. Input-oriented measures, such as the number of people contacted or grants awarded, are incomplete measures of effectiveness. Outcome-oriented measures–for example, the number of job placements or jobs created, new or increased sales or market share due to technology development or insertion–are essential for determining program merit.

    - *Exit criteria* should also be established. Measures of program success–including requirements and criteria for "graduation" from transition assistance–should be clearly delineated. For programs not intended to provide a continuing service, there should be a plan for phasing out or terminating assistance when needs are met or when the program fails to meet the specified objective in a reasonable time.

- *Demonstrated commitment.* Experience has shown that a cooperative approach to program delivery among different levels and Government agencies, service providers and target populations leads to better services, less duplication and quicker response to needs. Program design should *foster participant cooperation and commitment* through any of a variety of methods, including *cost sharing, resource matching, and performance incentives to local delivery areas.*

- *Effective and efficient delivery.* Effective and efficient delivery mechanisms require a variety of considerations:

  - The *roles of public agencies* in program delivery bear scrutiny; the Federal Government can facilitate effective service to local entities by establishing information clearinghouses on best program practices, disseminating data, and offering technical assistance to impacted communities.

  - Program oversight responsibility and funding should reside in the organizations whose *mission* is most directly furthered by successful program results.

  - Transition programs should provide enough *flexibility* to tailor services to local needs. *Implementation should be delegated to the lowest possible level,* and project funds dispensed to entities closest to target populations to facilitate timely service delivery. Local people and organizations know more about local resources and needs, can better devise appropriate transition services, can respond more quickly, and have the most at stake.

  - Programs should be *affordable*; reasonableness of costs as compared to program objectives and recipient needs must be considered and re-evaluated on a regular basis.

ENDNOTE FOR APPENDIX 2

1. "Structural deficiency" is used here to describe what economists call market failure. A market failure exists in a particular market if the parties involved in a transaction or a productive activity do not capture all benefits or bear all costs associated with the transaction or activity. For example, there is a failure in the market for basic research, since the researcher may be unable to appropriate all benefits of a scientific discovery that becomes common knowledge. In that case, from society's point of view, the profit motive alone will yield an inadequate amount of basic research. Government action is justified because the social benefits exceed the private benefits of this activity.

APPENDIX 3

CONVERSION AUTHORIZATIONS AND APPROPRIATIONS FOR 1993

Program	Authorized (millions of dollars)	Appropriated (millions of dollars)
Personnel Assistance Programs:		
Temporary early retirement authority	254.	254.*
Temporary health transition assistance	76.	76.
Guard and reserve transition initiatives	40.	40.*
Separation pay and civilian health benefits	72.	72.
Teacher and Teacher's Aide Placement	65.	65.
DoD environmental scholarship program	10.	10.
Grants to colleges for training in environmental restoration	10.	10.
Job training and employment services	75.	75.
Participation of discharged military personnel in Upward Bound	5.	5.
Job bank program	4.	4.
Military personnel occupational conversion & training	75.	75.
Job placement	NA	.21*
Subtotal	*686.*	*686.21*
Community Adjustment and Assistance Programs:		
Office of Economic Adjustment	52.	50.
Economic Development Administration	80.	80.
National Guard Civilian Youth Opportunity Pilot Program	($50)**	30.
Civilian Community Corps	($30)**	20.
Commission on National and Community Service programs	($30)**	20.
Subtotal	*132.*	*200.*

Continued

Program	Authorized (millions of dollars)	Appropriated (millions of dollars)
Defense Industry and Technology Base Programs:		
Program for analysis of the technology & industrial base	5.	0.
Center for the Study of Defense Economic Adjustment	2.	0.
Defense dual-use critical technology partnerships	100.	100.
Commercial military integration partnerships	50.	50.
Regional technology alliances assistance program	100.	100.
Defense advanced manufacturing technology partnerships	25.	25.
Defense manufacturing extension programs	100.	100.
Defense dual-use assistance extension program	200.	100.
Defense procurement technical assistance program	12.	($16)**
Defense manufacturing engineering education program	30.	30.
Other defense industry and technology base programs	70.	70.
Subtotal	*694.*	*575.*
Ten Additional Title IV Technology Programs included in Appropriation Report	NA	305.8
Defense Conversion Commission	NA	($5)**
TOTAL	1,512.	1,767.01

*Title I funds not specifically outlined in Title I Appropriation language.
**Amounts in parentheses are Appropriated or Authorized, but not in the conversion sections of the legislation, and are not included in Total.

Note: NA = Not Applicable

ORGANIZATIONAL INITIATIVES IN THE 1993 DEFENSE AUTHORIZATION ACT

Congressional Defense Policy Concerning National Technology and Industrial Base, Reinvestment, and Conversion. Section 4211 outlines policy objectives for the national technology and industrial base.

National Defense Technology and Industrial Base Council. Section 4212 establishes the NDTIBC, which is to be composed of the Secretaries of Defense, Energy, Commerce, Labor, and others to be determined by the President. The NDTIBC is to serve as the Executive Council to the President's Economic Adjustment Committee.

National Defense Program for Analysis of the Technology and Industrial Base. Section 4213 establishes a program for analyzing national technology and industrial base.

Center for the Study of Defense Economic Adjustment. Section 4214 requires the formation of the Center, affiliated with the Industrial College of the Armed Forces and the National Defense University, to study the conversion and reutilization of defense personnel, resources, and facilities.

National Technology and Industrial Base Defense Capability Assessments. Section 4215 requires the NDTIBC to prepare a comprehensive assessment of the capability of the national technology and industrial base.

National Technology and Industrial Base Plan and Major Defense Program Planning. Section 4216 requires preparation of a multiyear plan to ensure that the policies and programs of the Department of Defense, the Department of Energy, and other Federal departments and agencies are planned, coordinated, funded, and implemented to attain national security objectives.

Implementation of Requirements for Assessment, Planning, and Analysis. Section 4218 requires regulations and sets timetables for the preparation of the assessment and planning.

Implementing Regulations Concerning the National Technology and Industrial Base Periodic Assessment. Section 4219 outlines what should be contained in implementing regulations.

Implementing Regulations Concerning the National Technology and Industrial Base Periodic Plan. Section 4220 outlines what should be contained in implementing regulations.

Encouragement of Technology Transfer. Section 4224 requires the Secretary of Defense to encourage technology transfer and to establish a Federal Defense Laboratory Diversification Program to foster greater cooperation between Federal laboratories and private industry.

Office of Technology Transition. Section 4225 requires the establishment of the Office of Technology Transition in OSD to ensure that technology developed for national security is integrated into the private sector to enhance the national technology and industrial base.

Military-Civilian Integration and Technology Transfer Advisory Board. Section 4226 establishes a 17-member board appointed by the NDTIBC to ensure furtherance of national security goals.

APPENDIX 4

DEFENSE CONVERSION COMMISSION CHARTER AND COMMISSIONERS AND STAFF

THE DEPUTY SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301-1000

April 14, 1992

MEMORANDUM FOR: UNDER SECRETARIES OF DEFENSE
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
ASSISTANT SECRETARY OF DEFENSE FOR FORCE MANAGEMENT AND PERSONNEL
COMPTROLLER OF THE DEPARTMENT OF DEFENSE
DIRECTOR OF ADMINISTRATION AND MANAGEMENT

SUBJECT: Defense Conversion Commission

Pursuant to the laws of the United States, including the Department of Defense Appropriations Act, 1992 (Public Law 102-172), this is to direct as follows:

1. Establishment. There is hereby established within the Department of Defense the Defense Conversion Commission ("the Commission").

2. Membership. The Commission shall consist of seven members designated by the Secretary of Defense from among officers and employees of the United States, of whom one shall be designated on the recommendation of the Secretary of Commerce, one shall be designated on the recommendation of the Secretary of Labor, and one shall be designated on the recommendation of the Chairman of the President's Council on Economic Advisers. The Secretary of Defense shall designate a member of the Commission to serve as Chairman.

3. Duties. The Commission shall review (a) the impact on the U.S. economy of the reduction in the size of the armed forces and the reduction of resources devoted to defense procurement and (b) the potential for strengthening or establishing Federal programs for retraining military personnel and civilian employees of the Department of Defense for non-defense-related pursuits and for appropriate cooperative ventures between the Federal Government and companies predominantly engaged in defense-related activities to assist the companies in converting to predominantly commercial activities. The Commission shall hold hearings and obtain information and views as appropriate, including from representatives or associations of industry, labor and academia. The Commission shall submit to the Secretary of Defense by December 31, 1992 a report of its findings and recommendations on the matters it is required to review.

4. Quorum and Meetings. A quorum of the Commission shall consist of the Chairman and three other members of the Commission. The Commission shall meet at the call of the chair.

5. Administration. The Chairman of the Commission may pay the Commission's expenses authorized by law from the funds made available under the Operation and Maintenance, Defense Agencies heading of the Department of Defense Appropriations Act, 1992 (Public Law 102-172). The Director of Administration and Management shall ensure that heads of appropriate Department of Defense components provide staff services and other appropriate support for the Commission.

6. Expiration. The Commission shall terminate 15 days after the submission of its report to the Secretary of Defense.

D. J. Atwood

58051

DEFENSE CONVERSION COMMISSION

COMMISSIONERS

David J. Berteau, *Commission Chairman, Department of Defense*
Carl J. Dahlman, *Department of Defense*
L. Paul Dube, *Department of Defense*
Robin L. Higgins, *Department of Labor*
Michael M. Knetter, *Council of Economic Advisers*
Douglas E. Lavin, *Department of Commerce*
Charles A. May, Jr., *Department of Defense*

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END

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