

**Remarks of Maine Gov. John Baldacci**  
**before the**  
**Base Realignment and Closure Commission**  
**Boston, Massachusetts**  
**6 July 2005**

Chairman Principi, members of the Commission, I am Governor Baldacci of Maine, and I thank you for the opportunity to address the economic impacts on Maine people of the Department of Defense's BRAC recommendations. In the time available to me, I will speak first to the statewide impacts of the DOD plan; second, to their relative impacts in Maine, compared to other states; and lastly, to some flaws in the DOD analysis and the inaccuracies of its numbers.

The citizens of Maine have a long and distinguished history of service to our nation in times of need. In the 1863 Battle of Gettysburg, the 20<sup>th</sup> Maine Regiment led by General Joshua Chamberlain turned the tide at Little Round Top and, in the view of many historians, literally saved the Union. Today, Maine has one of the highest rates among all the states in deployment of National Guardsmen and women. Maine's population accounts for less than 1/2 of one percent of the nation, yet the state has consistently sent 2, 3, or even 5 times its share of servicemen and women in times of war. We did so during the Civil War, both World Wars, Korea, Vietnam, Desert Storm, Iraq, and Afghanistan. In each we suffered disproportionate casualties.

Today, speaking on behalf of all Maine people, let me say that we wish to continue to serve the nation as best we may; and we will.

In establishing "economic impact" as one of the criteria for the BRAC evaluation process, the Congress has created a dilemma for the Commission. No base closure or realignment will be without its economic impacts, at times positive, at other times quite negative. How then is the Commission to make "economic impact" a meaningful consideration?

Certainly, the most reasonable approach is to consider not the mere presence of economic impact, nor necessarily its absolute magnitude, but its relative size among affected areas. **No region should be asked to improve the nation's military efficiency by bearing a disproportionate share of the economic costs. Yet this is exactly what the DOD plan**

**proposes. Its recommendations and their consequences will amount to a federally-induced, major economic recession in Maine** – one deeper than the DOD figures would lead you to believe, and one from which the people of Maine will be years in recovery.

## **STATEWIDE IMPACT**

From the extreme northernmost point of Maine to its southernmost tip of Kittery, the statewide impact of the DOD plan will be massive. The closure of any single installation would be painful; the closure of three together will be felt throughout the Maine economy for years to come. Closing the DFAS center will hurt an already struggling northern region. Closing Portsmouth and realigning Brunswick will compromise all of southern Maine.

## **PORTSMOUTH**

Earlier today Governor Lynch described the impact of closing Portsmouth Naval Shipyard in Kittery. The southern Maine / New Hampshire economy will lose some 12,000 jobs.

In Maine's southern-most county of York, more than 4% of all workers will become unemployed as a result of the DOD plan. And since Shipyard pay levels are nearly twice the average in the region, the percent of total wages being removed from the regional economy will be even greater – fully 12% of all wages paid in the 20-mile region, and 11% of all wages in the 30-mile region. These are numbers one would expect to see only in times of severe recession.

The thousands of workers who will lose their jobs at the Shipyard have highly specialized skills that do not transfer readily to other industries. Many are advanced in their careers and have spent decades tailoring their skills to meet the Navy's needs. Their skills are today unmatched, yet there are not businesses or industries in the region capable of absorbing thousands of newly jobless Shipyard workers.

Long-term projections suggest that traditional manufacturing jobs in southern Maine will continue a pattern of decline. Helping five thousand Shipyard workers adapt their skills to new industries while supporting their families will be an unprecedented undertaking for our state. The lack of immediate job opportunities in the area inevitably will force some workers and their families to leave Maine.

### **BRUNSWICK**

We would like to give you a similar assessment for the impact of Brunswick in the mid-coast region of Maine, but we have been unable to obtain the necessary information from the Navy. We have very little information on which positions will leave, which will stay, which buildings will be mothballed, and which will be available for reuse. We know that DOD estimates a loss of 4,655 jobs and \$135 million in wages and salaries in the region. This alone suggests that the economic impact will be far reaching; however, the impact of the realignment will be magnified by local economic conditions that DOD did not consider.

The mid-coast Maine economy is today struggling with major workforce reductions at Bath Iron Works (BIW), the state's largest defense contractor and builder of Navy destroyers, next-door to Brunswick. In 2004 and 2005, BIW laid off 675 workers from jobs paying some of the highest wages in the region. Over 500 individuals are currently collecting unemployment insurance and face limited prospects for re-employment. The skills and occupational qualifications of the BIW workers are very similar to those employed at Portsmouth. Flooding the regional labor market with thousands of workers with similar skills will further handicap their re-employment prospects in Maine and New Hampshire.

### **LIMESTONE**

The DFAS Limestone center is located in Aroostook County, one of the most economically challenged regions in the nation. The unemployment rate in Aroostook is currently 7.5%, and out-migration is a chronic problem, due largely to its remote location and the decline of traditional agriculture and forestry. DFAS is among the area's largest employers, and its average wages are 50% higher than the rest of the county.

The DOD's decision to close DFAS Limestone, in fact represents a double closure. The 1994 closure of Loring Air Force base had a devastating effect on the local economy. At the time of the BRAC closure, the facility employed 4,500 military and 1,100 civilians.

While the region has not fully recovered from this painful blow, DFAS Limestone has been the cornerstone of that effort and has provided area residents with well paying jobs with benefits. The DFAS job losses will increase the number of unemployed in the region by more than 1/3. When indirect jobs are included, our economists calculate 550 to 600 total positions will be eliminated, increasing the number of unemployed Aroostook residents by more than one-half.

There will also be a severe de-population effect in a county with a long history of out-migration; the loss of 360 well-paying DFAS jobs will deepen this problem. Workers who relocate to find work will take family members with them.

**In sum, the total direct and indirect effect on wages in Maine from the loss of these three facilities will be the equivalent of losing the state's entire farming, fishing, forestry and logging industries. In terms of employment, it will be the equivalent of losing either the state's paper manufacturing industry, or the hotel and motel sector of Maine's tourism economy. It will be nothing short of a catastrophe!**

Under the DOD plan, the nation as a whole is asked to sacrifice some 26,000 direct jobs in order to improve overall military efficiency. Among the 50 states, there are

22 net gainers of direct jobs, and 28 net losers. The job losses will be difficult in each state; but some states will feel the loss more deeply than others.

Of the 28 net losers, only three states will lose more than 4,000 direct jobs: Connecticut, Maine, and Alaska. Maine will lose 6,938 jobs directly, second only to Connecticut. In terms of the number of civilian job losses, Maine is second only to Virginia. And if you add in the indirect job losses calculated by DOD, Maine will lose a total of 13,418 jobs, 2.1% of the state's total employment in 2002, second only to Alaska's 2.4%, and far greater than that of any other state in the nation.

These dire numbers do not, however, paint a complete picture of the DOD plan's impact all across Maine. Job losses will be difficult for every state; but the size of many other states' economies will help them soften the blow. Maine has a small population and a small workforce compared to other states. Of the three states losing more than 4,000 direct jobs, Connecticut will lose civilian jobs equivalent to 0.5% of total employment, Alaska will lose 1.1%, and Maine will lose 1.7%, by far the highest percentage of any state in the nation.

Further, the sub-state area impacted by the DOD plan in Maine is far larger than that of any other area in the country. Other high impact areas tend to be small both in absolute size of labor market and relative to total state employment. The economic area absorbing the bulk of Maine's impact represents over half of the state's total employment.

**By any measure, Maine is being asked to carry a grossly disproportionate burden of the reductions. For our state, the DOD plan will be nothing less than a federally induced, major recession.** Total estimates of civilian job losses are the equivalent of a 1.5 percentage point increase in Maine's unemployment rate. Our best estimate of the percentage of total wage and salary earning that will be lost is even higher: 3.5%. Indeed, 13,418 direct and indirect jobs, the total that DOD predicts Maine

will lose, will be **eight times greater than the job losses of the 2001 recession, and ever larger than the devastating recession of 1990-91.**

All this, as I say, is based on the DOD's own analysis. It is especially distressing to me to report, however, that this analysis appears seriously flawed, and not a reliable basis for the Commission's decisions in these most serious matters. Let me point briefly to just two of the significant problems we have encountered in trying to figure out for ourselves what the full economic impacts of the DOD plan will be.

**The first is incomplete information.** We lack, for example, critical information about the proposed realignment of the Brunswick Naval Air Station. The DOD analysis removes 2,420 military jobs from an authorized manpower level of 3,275, a reduction of 74%. However, our information is that current military personnel assigned to BNAS total 4,410. If the same proportion is to be reduced from the higher figure, the direct loss will be 3,260 jobs, equivalent to a complete shut down of the base using DOD figures.

Nor is it clear just what military personnel will be left at Brunswick – neither how many, nor what their roles will be. This is crucial to understanding the economic impact of the plan. The DOD analysis leaves 825 military employees at the base, but they may have little or no positive role in the local economy. If the only military left are reservists doing training, there is almost no economic benefit to the community, as reservists and guard personnel are counted in the employment of their home regions and not where they are stationed.

**Second, the economic impacts estimated by DOD are only a partial picture of what will actually happen.** Critically, the DOD analysis for bases like Brunswick ignores the related effects on population migrations. In their analysis, it is as if all the military personnel were to leave, but their families were to stay behind. This is a particularly acute issue in the case of Brunswick, where up to 5,700 dependents of military personnel will leave the area under the proposed realignment.

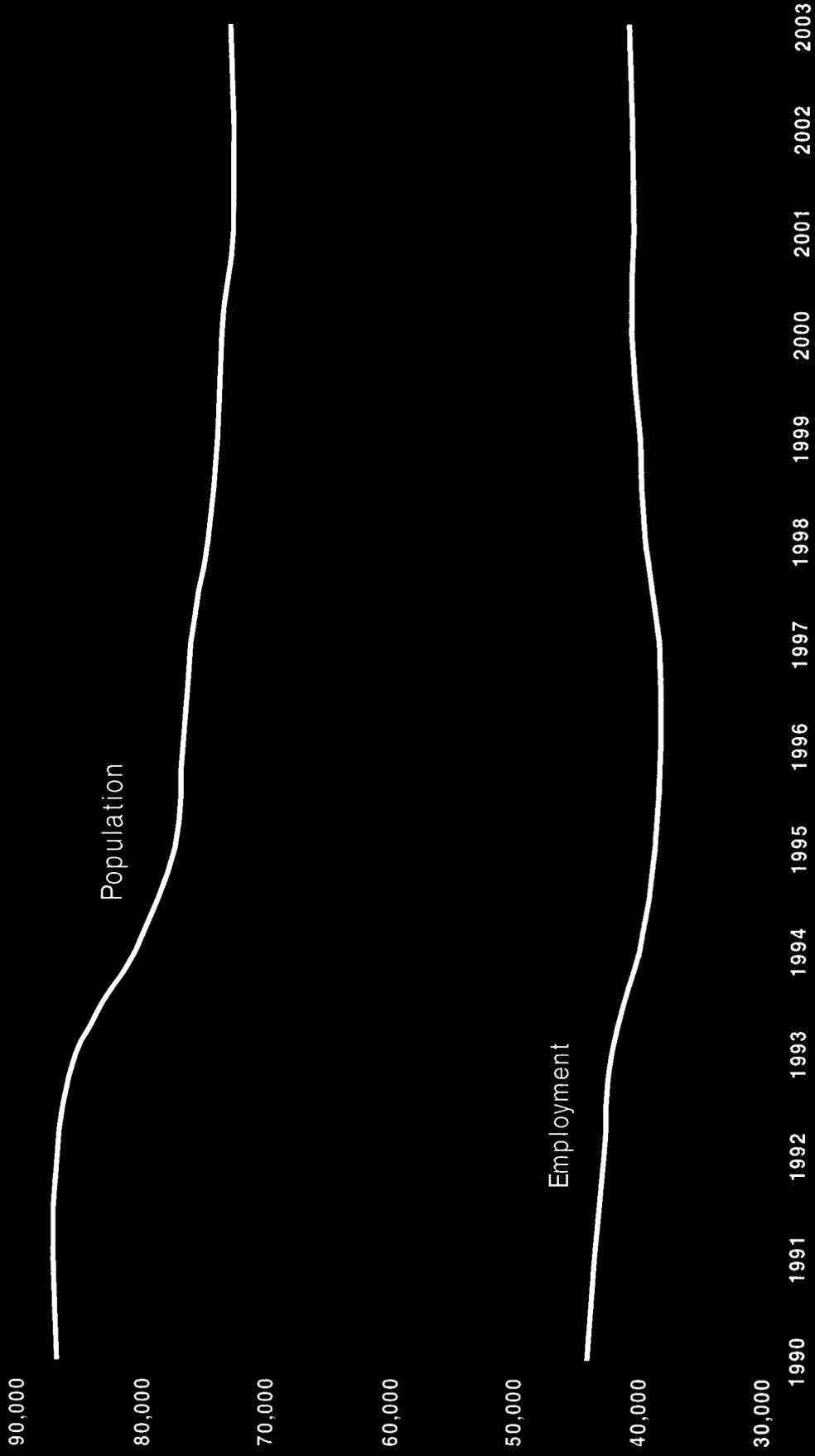
Taking these losses into account, the employment impacts at Brunswick could range from 5,800 to 7,500 job losses – in comparison with DOD’s estimate of 4,300 – as much as a 74% increase. These figures also ignore the potential loss of some portion of the nearly 6,000 military retirees who live near BNAS.

A similar problem exists for the analysis of Portsmouth. Taking into account analyses of both the Maine and New Hampshire economies, the effects could be 15% higher than DOD estimates when population migration is taken into account.

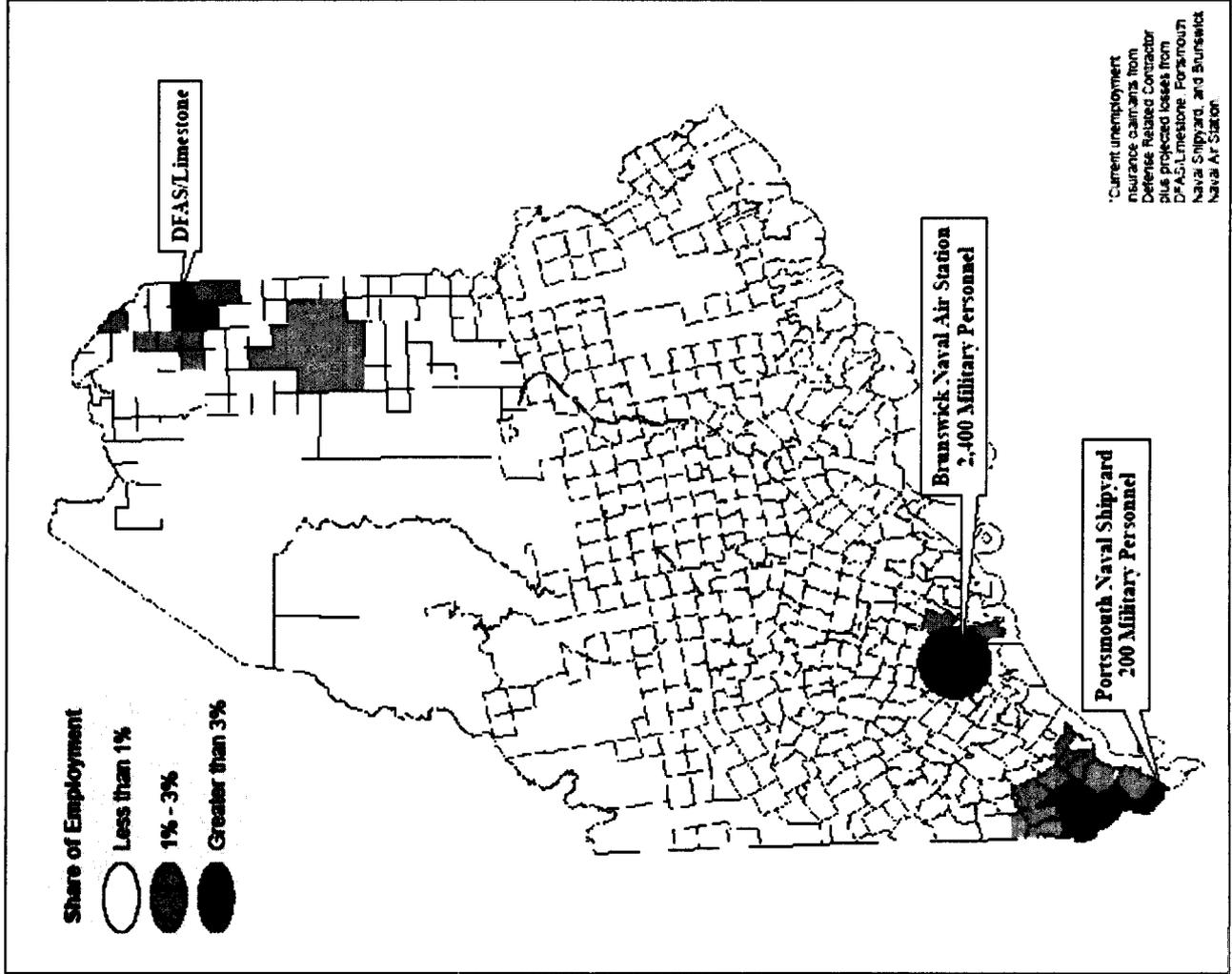
**In summary, then, we find that the DOD plan is founded upon flawed economic and financial data which, if implemented, will have the effect of a federally-induced, major economic recession throughout the state of Maine.** And I ask, is this the act of a grateful nation to a state that has, throughout its history, given so much to the nation’s highest purposes?

Again, on behalf of the people of Maine, I would like to thank you for your time, attention, and consideration.

# Population & Employment in Aroostook County

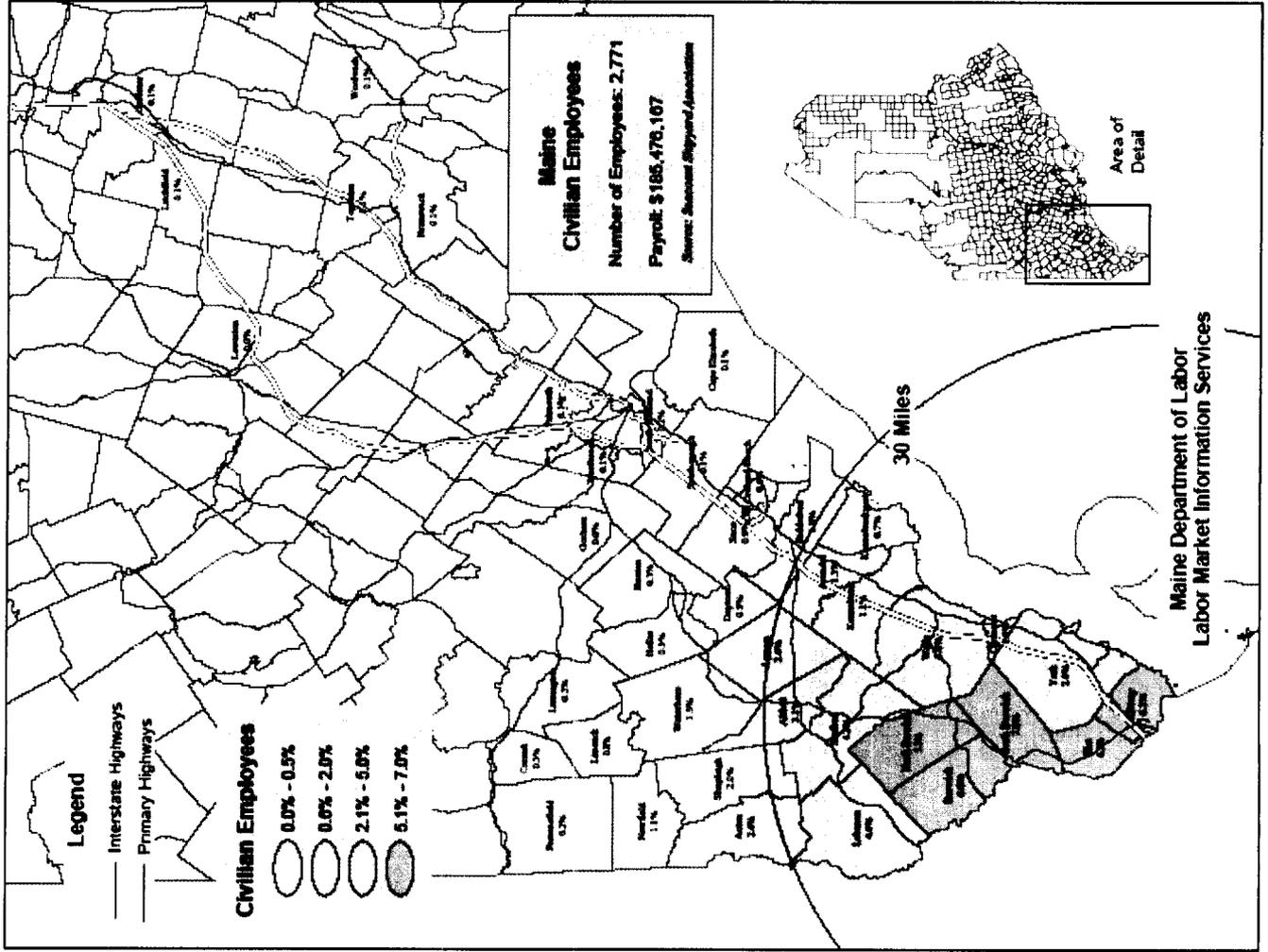


# DOD-Related Job Losses as a Share of Resident Employment\*

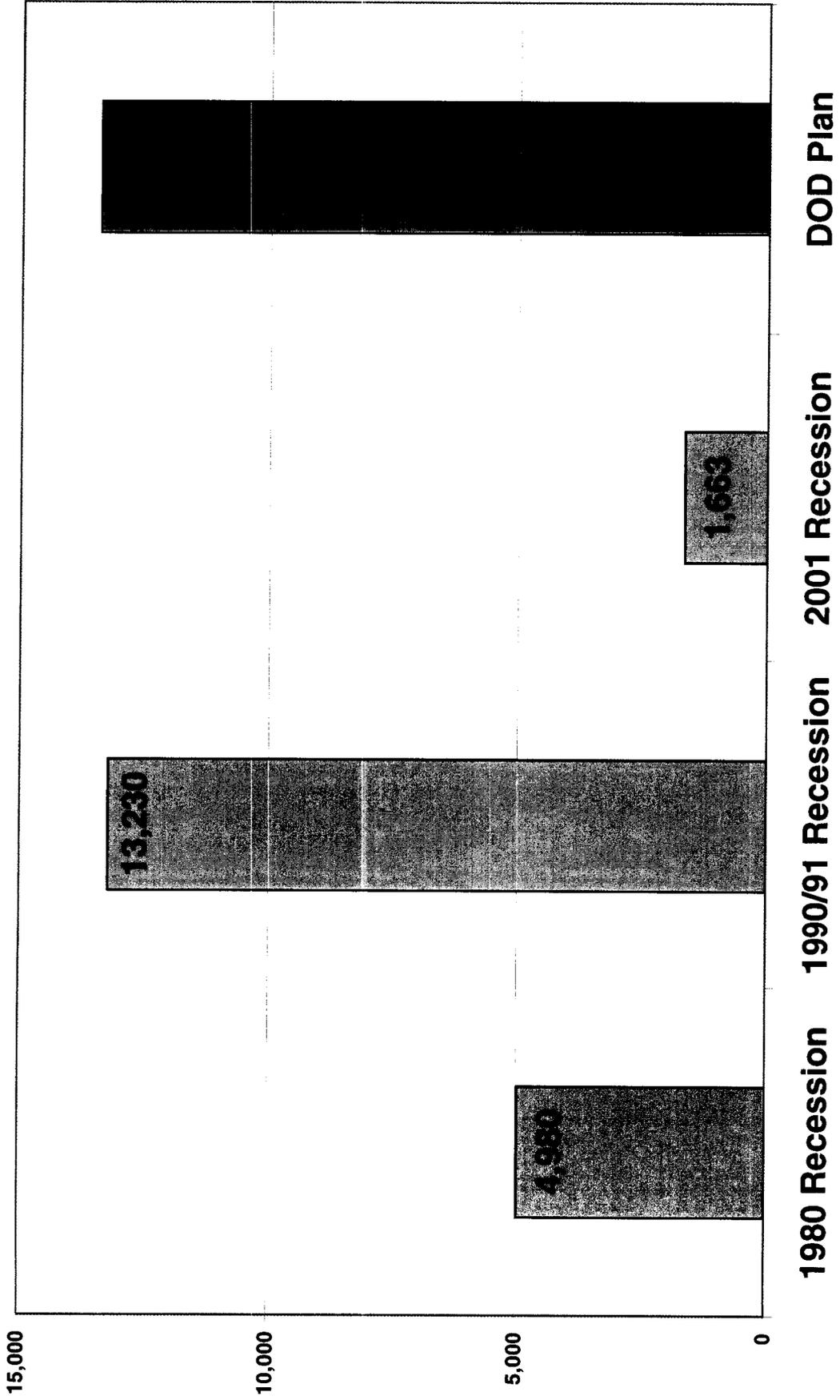


**Map C**

**Share of Employed Residents Working at Portsmouth Naval Shipyard**



# Maine Job Losses



# ATTACHMENTS

## Statewide Impact

1A.	Economic Impact of Closing DFAS Limestone.....	1
1B.	Economic Impact of Closing Portsmouth Naval Shipyard.....	5
1C.	Economic Impact of Realigning Brunswick Naval Air Station.....	10
1D.	Cumulative Impact.....	11

## Relative Impact

2A.	Relative Magnitude of Impact on Maine and Other States.....	15
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## The DOD Analysis

3A.	Critique of DOD's Methodology.....	18
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## Environmental Impact

4A.	Environmental Impact and Remediation Costs.....	20
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## Maps

Map A: Place of Residence of Employees Working in Limestone

Map B: Place of Residence of Civilian Employees at Portsmouth Naval Shipyard

Map C: Share of Employed Residents Working at Portsmouth Naval Shipyard

Map D: Distribution of DOD-Related Job Losses

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# STATEWIDE IMPACT

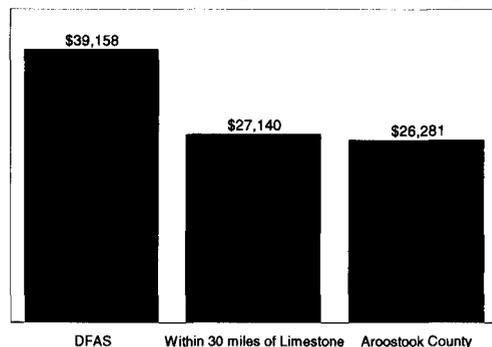
## 1A. Economic Impact of Closing DFAS Limestone

Closure of the Defense Finance and Accounting Service center in Limestone will have a major impact on the population of Aroostook County, which is among the most economically depressed regions in the nation. The county has long been heavily dependent on natural-resource-based industries, especially forestry and agriculture, which have been in decline for decades. The rise of mechanized potato and timber harvesting, increased competition from subsidized Canadian wood products mills, the closure of Loring Air Force Base in 1994, and other factors sent the economy into a decline that it has been struggling to reverse for more than two decades. The unemployment rate in Aroostook County currently is 7.5%. In 2000, 14.3% of residents lived in households with incomes below the poverty level. The economy is in a tenuous state and closure of the DFAS center will be a tremendous blow at an inopportune time.

### *Regional Employment and Wages of DFAS Workers*

DFAS is one of the ten largest employers in Aroostook County and is also among the highest paying employers. As such, a sizeable share of workers commute great distances to work there. Those workers accounted for 1.5% of jobs and 2.2% of total wages paid by employers within 30 miles of Limestone in 2004. Limestone attracts a large number of commuting workers from throughout the county (see Map A).

Average wages at the Defense Finance and Accounting Service are substantially higher than the average among employers in the region



### *Local Population and Labor Force*

Among Maine towns centered within 30 miles of Limestone, the population totaled just 38,290 in 2000 and the 2004 civilian labor force averaged 19,840, with 1,020 unemployed. The direct loss of roughly 360 DFAS jobs will increase the number of unemployed in the region by nearly one-third. That figure does not include secondary job losses that will occur as displaced workers reduce their spending on goods and services in the local economy.

### *Industry Structure of Employment and the Regional Job Outlook*

Many DFAS workers have accumulated knowledge and experience in business, information systems, accounting, and other finance-related occupations. In the slow- or no-growth labor market that currently exists in the Limestone region, it is likely that most displaced workers will experience a substantial drop in earnings upon re-employment and that some will choose to move to another region in order to find suitable employment.

***Critique of DOD Economic Impact Analysis***

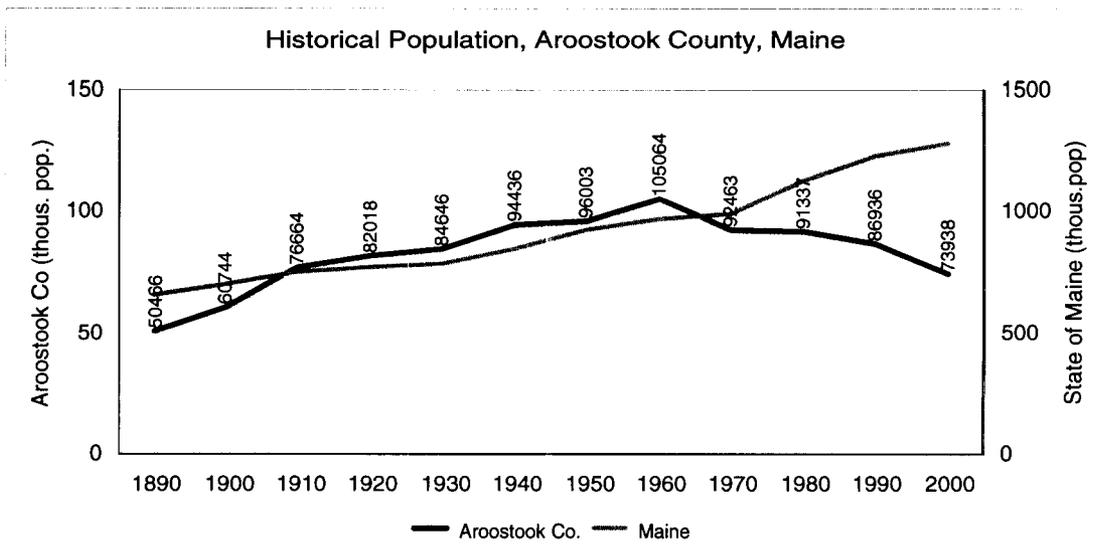
**Baseline employment figure inaccurate**

DOD estimates the impact of closing the Limestone DFAS center to be a loss of 391 jobs in Aroostook County, based on 241 employed at the center. However, the center currently employs just over 360 workers. The impact, using DOD’s method of measuring job loss, is much greater if the current employment figures are used.

**No consideration of impact of population losses associated with closure**

Business closures that result in job losses impact entire families, not just the workers. When workers must relocate in order to find work, whole families leave. This effect will be more intense in areas that offer few alternative employment opportunities, such as Aroostook County. DOD did not consider this de-population effect in their analysis.

Aroostook County has had a long history of out migration, due largely to its remote location and to hard times in the agriculture and forestry industries that dominate the region. This was exacerbated in the 1990s with the closing of Loring Air Force Base, which removed 4,500 military personnel plus family members from the area and put more than a 1,100 civilians employed on the base out of work. Population decline in the county accelerated.



### **Lack of data on operational costs and expenditures**

Secondary impacts of closing the DFAS center include not only the indirect effect of jobs lost at the facility, but also the effects of spending by the facility that occurs in the region. To date little information has been released concerning expenditures.

### ***Maine Economic Impact Analysis***

A comparison of DOD's estimates of the impact of closing the Limestone DFAS center to other assessments show important differences. Had DOD used the current employment figures for the center, the results would have shown a greater impact.

The Maine State Planning Office and the Edmund S. Muskie School of Public Service at University of Southern Maine used two economic models (RIMS II from the US Department of Commerce Bureau of Economic Analysis, and Policy Insight from Regional Economic Models Inc. (REMI) to calculate the economic impact of the closure. The RIMS II and REMI forecasting models capture more of the impact of a closure, in spite of the obstacle of missing and unavailable data, than do IMPLAN multipliers employed by DOD.

### **Employment Effect of Closing DFAS-Limestone**

#### **Area Profile**

Population Estimate - Aroostook County (2003 U.S. Census Bureau)	73,390
Civilian Labor Force (April 2005)	37,030
Employment (April 2005)	34,240
Unemployment Rate (April 2005)	7.5%
Poverty Rate (2002 Census)	15.3%

#### **DOD Estimates**

DFAS Employment	241
Pct of Area Employment	NA
DFAS Employment Impact	391
Pct of Area Employment	1.0%

#### **Actual Labor Force**

DFAS Employment	364
Pct of Area Employment	1.1%

#### **RIMS II Impact Estimates**

DFAS Employment Impact	530
Pct of Area Employment	1.5%

#### **REMI Impact Estimates**

DFAS Employment Impact  
Pct of Area Employment

582  
1.7%

Sources: DFAS, DOD, Maine State Planning Office, University of Southern Maine

The output of the two economic models is based on the effect of losing 360+ jobs at the DFAS center. The results differ due to the different methods the models employ. RIMS II measures effects of payroll and direct spending by the center, while REMI measures the effects of job losses and computes the effects of further population impacts due to out-migration of a portion of the workforce over time. REMI multipliers were also available to measure both statewide and county impacts.

**Results**

RIMS II measures indirect impacts based on two criteria: the size of the payroll and the expenditures of the establishment. Current data for both criteria were unavailable; instead, the 2003 payroll was used. Note that the 2003 payroll is lower than the current payroll due to the increase in personnel that occurred at the center in 2004. As a result, the impacts of the payroll are conservative and understated. Since no data were available on purchases or direct expenditures to local businesses, the impact of \$1 million in spending was used to determine an approximate amount.

The results show a loss 546 jobs statewide, including 530 direct and indirect jobs due to loss of payroll, and another 16 jobs lost for each \$1 million in direct spending by the center.

**Economic Impact of Closing DFAS-Limestone:  
RIMS II Model Output**

	Direct	Indirect	Total
<b>Earnings (million)</b>			
Civilian	\$10.0	\$4.9	\$14.9
Military	---	--	--
Procurement*	--	\$0.465	\$0.465
<b>Total</b>	<b>\$11.0</b>	<b>\$5.365</b>	<b>\$15.365</b>
<b>Employment</b>			
Civilian	364	166	530
Military	--	--	--
Procurement	--	16	16
<b>Total</b>	<b>364</b>	<b>182</b>	<b>546</b>

\* Based on \$1 million in direct spending.

Source: Maine State Planning Office

The REMI forecasting model not only measures the results of lost jobs, but also estimates population loss that results over time from a business closing. The added impact of out-migration indicates that over time the effect will be somewhat greater.

The results show a loss of 582 jobs in the region and a statewide loss of 600 jobs. This loss will increase as out-migration occurs. The labor force is also forecast to decline as people leave the labor force or move away in search of jobs.

**Economic Impact of Closing DFAS-Limestone:  
REMI Model Output**

	2007	2008	2009	2010	2011
<b>Aroostook County</b>					
Total Employment	-581.90	-598.5	-607.90	-612.10	-613.90
Total GRP (Mil Chained 96\$)	-30.29	-30.96	-31.39	-31.64	-31.8
Total GRP (Mil Fixed 96\$)	-33.00	-34.17	-35.10	-35.85	-36.5
Personal Inc (Mil Nominal \$)	-28.18	-30.99	-33.45	-35.69	-37.81
Population	-120.4	-214.3	-293.0	-358.7	-413.8
Labor Force	-134.0	-220.9	-284.5	-331.3	-365.7
<b>Maine</b>					
Total Employment	-600.3	-619.4	-630.6	-635.7	-638.0
Total GRP (Mil Chained 96\$)	-31.06	-31.85	-32.37	-32.67	-32.86
Total GRP (Mil Fixed 96\$)	-33.84	-35.15	-36.19	-37.01	-37.72
Personal Inc (Mil Nominal \$)	-29.35	-32.4	-35.08	-37.48	-39.75
Population	-128.8	-229.9	-315.2	-386.6	-446.5
Labor Force	-143.1	-236.8	-305.5	-356.3	-393.9

Source: University of Southern Maine

Overall, the two models show similar results. A job loss of between 550 and 600 is indicated once the conservative results of the RIMS II model due to lack of current payroll data is considered. Out-migration of population in general, and especially of skilled workers, will make recovery very difficult in isolated Aroostook County.

**1B. Economic Impact of Closing Portsmouth Naval Shipyard**

Portsmouth Naval Shipyard in Kittery, Maine, is among the largest, highest paying employers in Maine and New Hampshire. Its location on the border of the two states creates a unique situation. Approximately 58% of PNS workers live in Maine, 40% in New Hampshire, and the small remainder in other states. Overall, closure will have a

major impact on both the immediate region in which it is located and the Maine economy overall.

The total impact of closure of the Kittery shipyard is a loss of nearly 12,000 jobs and over \$500 million in earnings, primarily in Maine and New Hampshire, with a small loss in other New England states from which the yard has significant purchases, primarily of replacement parts applied to submarines during the overhauling and refueling process.

***Regional Employment and Wages of PNS Workers***

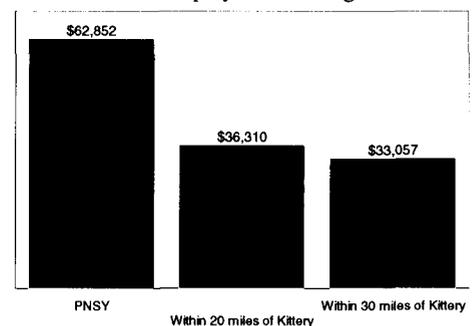
Figures for 2004 from the Seacoast Shipyard Association indicate that PNS’s civilian workforce of 4,803 was paid a total of \$318.3 million in wages, with an average wage of \$62,852. Maine residents accounted for 58% of the jobs and 59% of payroll. The military payroll was an additional \$29.3 million.

High levels of pay have attracted workers from throughout Maine to work at the yard. However, 55% of the workers who reside in Maine live in towns centered within 20 miles and 79% live in towns centered within 30 miles of Kittery (see Map B). Among these two commuting regions, the Maine resident PNS workers earned \$105.2 million and \$148.1 million in wages in 2004.

PNS workers accounted for 5% of all employed Maine residents living in towns centered within 20 miles of Kittery in 2004, and 4% of employed residents in towns within 30 miles of Kittery (see Map C).

With pay levels nearly twice the average of the region, the Maine Department of Labor estimates that PNS workers accounted for 12% of total wages paid in the 20 mile region and 11% of wages paid in the 30 mile region.

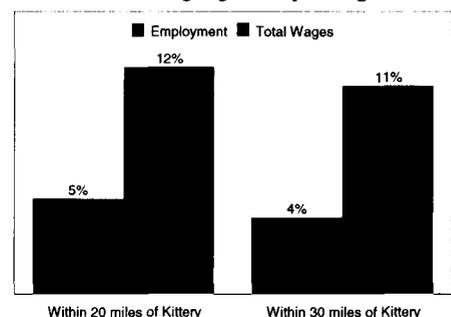
Average wages at the Portsmouth Naval Shipyard are nearly double those found among Maine employers in the region



***Local Population and Labor Force***

Maine towns centered within 20 miles of Kittery reported 56,300 residents in the 2000 Census. The 2004 average civilian labor force totaled 35,000 workers with an average number of unemployed workers of 1,200. The direct loss of 2,771 jobs by Maine residents will increase the number of unemployed in this region three-fold and cause the unemployment rate to spike from 3.5% to 8.1%.

The estimated share of employment and wages of Portsmouth Naval Shipyard workers in the residing in the primary Maine commuting region is quite high



In Maine towns centered within 30 miles of Kittery, the number of unemployed will increase twofold and the unemployment rate will spike from 3.9% to 7.7%. These numbers do not include indirect job losses that will occur as the displaced workers reduced their spending on goods and services in the local economy.

***Industry Structure of Employment and the Regional Job Outlook***

Many of the PNS workers have accumulated high-value, advanced skills in trades such as pipefitting, welding, and marine electronics. The knowledge, skills, and experience of those workers are not directly transferable to most industries in the region. As the table below indicates, the share of jobs in the manufacturing sector is relatively low. These figures include PNS workers, who account for more than half the manufacturing employment in the region.

**Employment by Industry Sector in the Kittery Commuting Region**

	Within 20 miles of Kittery		Within 30 miles of Kittery	
	Jobs	Percent	Jobs	Percent
Total	24,429	100%	41,794	100%
Goods-Producing	8,491	34.8%	11,946	28.6%
Natural Resources & Mining	35	0.1%	80	0.2%
Construction	1,024	4.2%	2,074	5.0%
Manufacturing				
PNS 2004	4,083	16.7%	4,083	9.8%
All Other Manufacturing	3,349	13.7%	5,710	13.7%
Service-Producing	15,937	65.2%	29,847	71.4%

Source: Maine Department of Labor

The Maine Department of Labor’s employment projections to the year 2012 for southern Maine indicate that jobs in most manufacturing industries will continue the long-term pattern of decline. Based on past experience with base closings, plant closings, and major workforce reductions, it is likely that most displaced workers will experience a substantial drop in earnings upon re-employment, and that some will move to another region to find suitable employment.

The age and educational profile of the PNS workers, suggests that they will face formidable re-employment challenges. Data from the Shipyard indicates that 77% of workers are age 40 or over 43% are age 50 or over. The highest educational attainment of nearly two-thirds (63%) of them is a high school diploma, and 78% have achieved less than a bachelor’s degree. Facing a weak job market demanding entirely different skill sets, the path to re-employment will be long and costly.

***Critique of DOD Economic Impact Analysis***

### **Baseline employment figure inaccurate**

According to the Seacoast Shipyard Association, PNS's Calendar Year 2004 employment stood at 4,803 civilians. DOD calculated the impact on the region using only 4,510 jobs, of which 4,032 were civilian jobs.

### **No consideration of other nearby closures/realignments**

DOD data show the impact on the region to be a job reduction of 2.8% of the Portland-South Portland-Biddeford MSA's employment. However, this MSA also contains the Naval Air Station at Brunswick, which is recommended for reduction and realignment. The combined effect, using DOD's figures, is a loss of 4.1% of the jobs in the MSA.

### **No distinction between full- and part-time employment**

The BEA employment measure used by DOD weighs full- and part-time employment equally. In Maine, especially, and south coastal New Hampshire as well, the economy is highly seasonal. The 2000 census shows that only 57% of Maine citizens have full time jobs. The BEA measure underestimates the impact that the loss of these full-time, year-round jobs will have on the economy.

### ***Maine Economic Impact Analysis***

The Maine State Planning Office assessed the economic impact of closing the Portsmouth Naval Shipyard using the RIMS II economic model from the US Department of Commerce Bureau of Economic Analysis. The baseline employment and payroll data to which the model was applied were from the shipyard and varied significantly from those provided by DOD in their initial impact report. The table below shows the residence of PNS workers by county and their associated payroll.

### **PNS Employment and Payroll by County, 2004**

	Workers	Payroll	Percent of Total Workers	Percent of Total Payroll
<b>Maine</b>				
York County	2,841	\$179,019,518	55.4%	56.3%
Cumberland County	60	\$3,441,941	1.2%	1.1%
Sagadahoc County	5	\$249,987	0.1%	0.1%
Other Maine	46	\$2,515,058	0.9%	0.8%
<b>Total</b>	<b>2,592</b>	<b>\$185,226,504</b>	<b>57.6%</b>	<b>58.2%</b>
<b>New Hampshire</b>				
Rockingham County	686	\$43,574,018	13.4%	13.7%
Strafford County	1,205	\$71,918,212	23.5%	22.6%
Other New Hampshire	117	\$7,143,678	2.3%	2.2%
<b>Total</b>	<b>2,008</b>	<b>\$122,635,908</b>	<b>39.2%</b>	<b>38.6%</b>

Maine & New Hampshire	4,960	\$307,862,412	96.8%	96.8%
All Other	164	\$10,217,654	3.2%	3.2%
Total	5,124	\$318,080,066	100.0%	100.0%

Note: Data reflects workers paid. Actual positions in 2004 = 4,803

Source: Seacoast Shipyard Association

York County, Maine, and Strafford County, New Hampshire, will bear the greatest impact of the PSNY closure. The Shipyard provides 4.2% of the jobs in York County and 2.5% of the jobs in Stafford County, based on 2003 BEA employment data. However, the BEA employment measure weighs full- and part-time employment equally and thus does not reflect the disproportionate impact that the loss of full-time, year-round jobs will have on these counties.

This difference in baseline and the available data on base spending (non-payroll) indicates a loss of almost 12,000 jobs in the region, rather than the 9,166 estimated by DOD.

#### Total Economic Impact of Closing PNS

	Maine	Other States	Total
Earnings (million)	\$314.4	\$225.0	\$539.4
Employment	6,788	5,175	11,963
Percent of Total			
Earnings	58.3%	41.7%	100.0%
Employment	56.7%	43.3%	100.0%

Source: Maine State Planning Office

Maine will bear the greatest impact of a closure of the Shipyard, resulting in a net loss of nearly 6,800 jobs and over \$300 million in lost wages. Other states, primarily New Hampshire, will suffer a loss of more than 5,000 jobs and \$225 million in lost wages. The following table displays a detailed breakdown of those earnings and employment losses for Maine.

#### Maine Economic Impact of Closing PNS

Earnings (million)	Direct	Indirect	Total
Civilian	\$185.5	\$89.1	\$274.6
Military	\$16.8	\$8.1	\$24.9
Procurement	--	\$14.9	\$14.9
Total	\$202.3	\$112.1	\$314.4

Employment			
Civilian	2,771	3084	5,855
Military	201	224	425
Procurement	--	508	508
Total	2,972	3,816	6,788

Source: Maine State Planning Office

## 1C. Economic Impact of Realigning Brunswick Naval Air Station

The State of Maine has been unable to obtain the information needed to conduct a reliable economic impact analysis of the realignment of the Naval Air Station in Brunswick.

The DOD analysis removes 2,420 military jobs from an authorized manpower level of 3,275, a reduction of 74%. However, our information is that current military personnel at Brunswick total 4,410. If the same proportion is to be reduced from the higher figure, the direct loss is 3,260 jobs, equivalent to a complete shut down of the base using DOD's figures.

It is not clear what military personnel will be left at Brunswick, neither how many nor what their roles will be. This is critical to understanding the economic impact of the DOD plan. The DOD analysis leaves 825 military employees at the base, but these may have little or no positive role in the local economy. If the only military to be left are reservists doing training, then there will be almost no economic benefit to the community since reservists and guard personnel are counted in the employment of their home regions, not where they are stationed.

In the absence of information about which positions are leaving and which are staying, or the level of activity that will continue at the base, it is impossible accurately to assess the impact of realigning BNAS. The table below represents our best estimate, based on the DOD's proposal to cut approximately 2,400 positions and using conservative procurement figures. Based on these assumptions, the realignment of BNAS will amount to a loss of approximately 4,655 jobs and \$135 million in wages and salaries.

### Economic Impact of Realigning BNAS

Earnings (million)	Direct	Indirect	Total
Civilian	\$2.0	\$1.0	\$3.0
Military	\$67.5	\$19.4	\$86.9
Procurement	--	\$45.0	\$45.0
Total	\$69.5	\$65.4	\$134.9

Employment			
Civilian	61	33	94
Military	2,400	661	3,061
Procurement	--	1,500	1,500
Total	2,461	2,194	4,655

Source: Maine State Planning Office

## ***Major Concerns***

### **Redevelopment Possibilities**

The loss of approximately 2,400 jobs in the town of Brunswick will cause ripple effects throughout the regional economy. In the long run, these effects may be lessened by concerted efforts to redevelop the installation. However, the DOD plan to “realign” Brunswick Naval Air Station will not allow the community to pursue opportunities for reuse. The base is located in the center of the Town of Brunswick and divides the community into two areas. The current plan will result in the de facto “mothballing” of portions of the base, which will permanently handicap the community’s ability to seek redevelopment.

### **Real Estate Impact**

Many BNAS employees and their families live in off-base housing. It is estimated that 500 military personnel own their homes and 1,500 live in rental units. The Town of Brunswick estimates that Navy personnel occupy 30-35% of multifamily units. Realigning BNAS will put these housing units at risk for becoming vacant and could depress the local real estate market. It will also have impacts on the local rental market.

## **1D. Cumulative Impact**

Under the DOD proposal, Maine will lose 6,938 direct jobs. Sixty percent are civilian jobs and have an accompanying payroll of about \$200 million. Forty percent are military positions and have an accompanying payroll of \$132 million (2003 payroll data). Adding direct losses and losses in surrounding regions, the total impact becomes even greater. Total estimates civilian job losses are the equivalent of a 1.5% increase in Maine’s unemployment rate. Because these are some of the best jobs in our economy, the percentage of total wage and salary earning that will be lost is much higher: 3.5%.

### ***17,000 Lost Jobs***

According to the State of Maine’s own analysis, the combined direct and indirect losses from the proposed closings and realignment will be nearly 17,000 lost jobs and \$690

million in lost wages and salaries in Maine and southern New Hampshire. These numbers fully account for the potential gain of 240 jobs at the Air National Guard Station in Bangor, Maine.

***Portsmouth***

The closure of Portsmouth Naval Shipyard alone will mean a loss of nearly 12,000 jobs in Maine and New Hampshire, and more than \$500 million in earnings. Approximately 58% of the impact will be in Maine (6,800 jobs and \$314 million in wages and salaries).

***Limestone***

Preliminary figures for closing the DFAS Limestone center show a loss of at least 546 jobs and at least \$15 million in wages and salaries. Operation and maintenance expenditures and current payroll information, when known, will undoubtedly increase these figures.

***Brunswick***

The realignment of Brunswick Naval Air Station will amount to a loss of approximately 4,655 jobs and \$135 million in wages and salaries. These are conservative figures, based on the DOD's proposal to cut approximately 2,400 positions at BNAS.

**Total Economic Impact of DOD Plan**

Earnings (millions)	Direct	Indirect		Total
		from payroll	from spending	
DFAS Limestone	-\$10.0	-\$4.9	-\$0.5	-\$15.4
NS Portsmouth*	-\$335.1	-\$161.9	-\$42.4	-\$539.4
NAS Brunswick	-\$69.5	-\$20.4	-\$45.0	-\$134.9
Naval Reserve Center - Bangor	?	?	?	?
Air National Guard - Bangor	?	?	?	?
<b>Total</b>	<b>-\$414.6</b>	<b>-\$187.2</b>	<b>-\$87.9</b>	<b>-\$689.7</b>
<b>Employment</b>				
DFAS Limestone	-364	-166	-16	-546
NS Portsmouth*	-5,004	-5,512	-1,447	-11,963
NAS Brunswick	-2,461	-694	-1,500	-4,655
Naval Reserve Center - Bangor	-7	-2	?	-9
Air National Guard - Bangor	+240	+173	?	+413
<b>Total</b>	<b>-7,596</b>	<b>-6,201</b>	<b>-2,963</b>	<b>-16,760</b>

\*Reflects impact on both Maine and New Hampshire.

**In Maine, the total direct effects alone of lost payroll (civilian and military) and jobs at the Portsmouth, Limestone, and Brunswick facilities will be greater than losing the state's entire farming and fishing industry, its food processing industry, its wood**

**products manufacturing industry, the computer and electronics industry, or the entire hotel and motel sector of Maine's tourism industry.**

### **Earnings in Selected Sectors of the Maine Economy**

Sector	Earnings (million)
Farming and Fisheries	\$210
Food Processing	\$258
Wood Products Manufacturing	\$255
Computer & Electronics Manufacturing	\$276
Hotel and Motel Sector	\$248
<b>DOD Plan</b>	<b>\$280+ (Direct Effect Only)</b>

Source: Bureau of Economic Analysis, 2003

### ***Loss of Maine's Best Jobs***

These proposed cuts will hit Maine from its most southern to its most northern locations. In a state known for its lack of large, stable employers that offer earnings and benefits aligned with the national economy, the magnitude of such a loss will be devastating and come at a time when Maine's economy is just starting to move forward.

**Of critical importance is that these jobs are nearly all full-time jobs.** Maine's economy is highly seasonal, dominated by natural resource industries and tourism. The 2000 census shows that only 57% of Maine citizens hold full time jobs. Maine can ill afford to lose full-time year-round jobs.

The jobs at the DFAS center, PNS, and BNAS, pay some of the highest wages in their respective regions, and their loss will be a profound economic blow. Many of the jobs are highly specialized. History has shown that when such jobs leave, replacing them with jobs of comparable skill level is exceedingly difficult and most laid off workers will find themselves choosing between accepting a job at much lower pay or out-migrating.

### ***Compounding Effects: The Bath Iron Works***

The picture is even bleaker in light of potential major reductions at Bath Iron Works (BIW), the state's largest single-site employer and a builder of Navy destroyers. BIW is located less than ten miles from Brunswick, Maine. In 2004 and 2005, BIW laid off 675 workers from jobs paying some of the highest wages in the state. Based on current DOD plans for future construction of destroyers, there is potential for additional major reductions at BIW.

Layoffs at BIW, in combination with cuts at PNS and BNAS, will severely weaken the entire Maine economy. These three employers are located in the same MSA, and

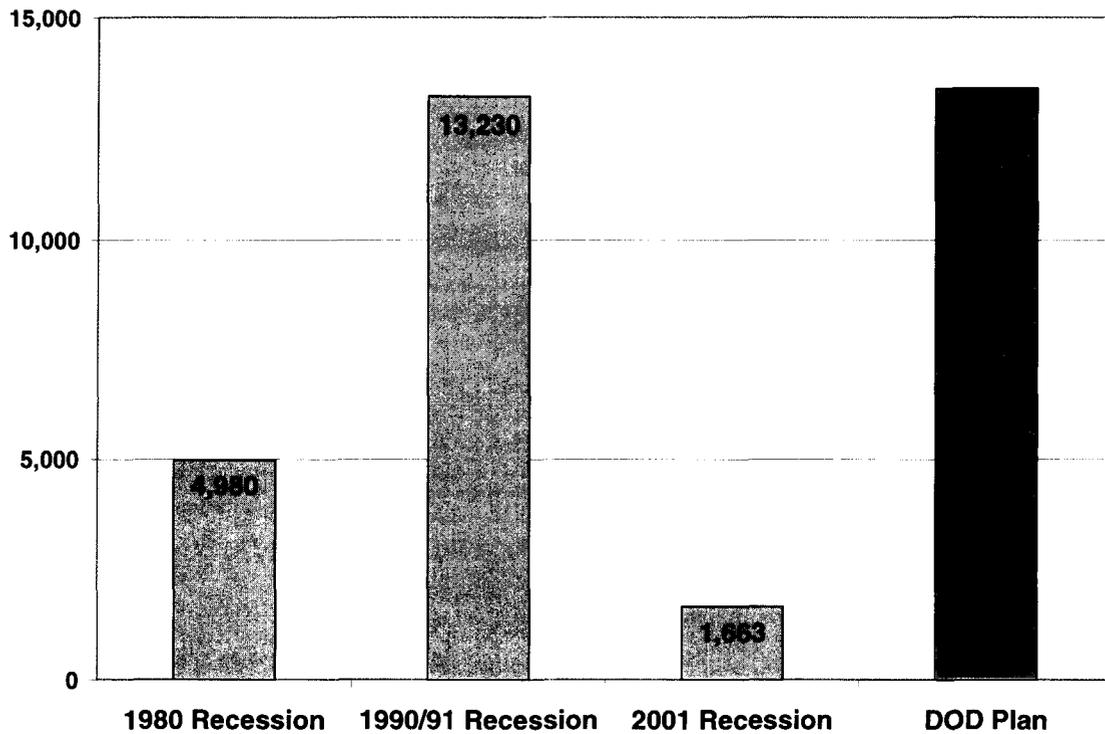
between them account for 16,500 jobs, or 5% of the total (BEA full and part time) jobs in the Portland-South Portland-Biddeford MSA. Along with DOD's proposed reductions at BNAS and closure of the shipyard, one must note the uncertainties surrounding the future workforce level at BIW. DOD's future plans and contracting policies for new Navy destroyers has been unclear and created a high level of uncertainty.

The Portland Region MSA is the core of Maine's economy. It holds 39% of the state's population, 42% of the jobs, and 44% of the personal income. In few, if any, states does a single MSA account for so large a portion of the state's economic activity. A significant loss of jobs in the Portland MSA impacts the entire state of Maine.

### *Statewide Recession*

**In short, the DOD plan will constitute a major, federally-induced recession for the state of Maine. The job loss will be seven times greater than that of the 2001 recession, and even larger than the devastating recession of 1990/91.**

**Maine Job Loss by Event**



Sources: Ibid. and Maine DOL

# RELATIVE IMPACT

## 2A. Relative Magnitude of Impact on Maine and Other States

By virtually any measure, Maine will suffer the greatest economic impact of any state in the nation, should the currently proposed DOD recommendations stand. This section compares the impact on Maine and other states using DOD's own estimates.

**In terms of direct job losses, Maine is second only to Connecticut among the 50 states.** Excluding military job losses, however, Maine is by far the most heavily impacted state. This conclusion is evident using the job figures provided by DOD. Once these figures are adjusted for numerous omissions and miscalculations, the impact will be even greater.

### Top 5 States by DOD-Estimated Job Loss

State	Direct Job Loss	% Civilian	Total Job Loss	Multiplier
1. Connecticut	8,586	12%	16,049	1.87
<b>2. Maine</b>	<b>6,938</b>	<b>60%</b>	<b>13,418</b>	<b>1.93</b>
3. Alaska	4,619	13%	7,653	1.66
4. New Jersey	3,760	99%	8,176	2.17
5. Missouri	3,679	64%	5,124	1.39

Source: DOD

DOD reports that Maine will lose 6,938 direct jobs as a result of its plan. Sixty percent of these jobs are civilian, far more than Connecticut and Alaska, the other major job-losing states.

In part because of this difference, Maine's total job loss is relatively greater still, at 13,418. The job loss in Maine, by the DOD's own impact analysis, has a multiplier effect of 1.93, greater than the 1.87 multiplier for Connecticut and the 1.66 multiplier for Alaska.

Another way of illustrating Maine's disproportionate share of the burden of the DOD plan is to consider job loss as a percentage of total state employment.

### Top 5 States by DOD-Estimated Job Loss: BRAC Job Loss as Percent of Employment

State	Total Job Loss	Civilian Job Loss
Connecticut	0.9%	0.5%

<b>Maine</b>	<b>2.1%</b>	<b>1.7%</b>
Alaska	2.4%	1.1%
New Jersey	0.4%	0.5%
Missouri	0.2%	0.2%

Sources: DOD and BEA

The 13,418 jobs the DOD estimates Maine will lose as a result of this process amount to 2.1% of the state's entire non-farm wage and salary employment in 2002, the year the DOD used for impact calculations. This rate was second only to Alaska's 2.4%, well above the rates for New Jersey and Missouri, and far greater than those for any other state in the nation.

**Considering only the 10,619 civilian jobs to be lost in Maine, Maine jumps to first in the nation.** The civilian job loss in Maine amounts to 1.7% of total employment.

### *Economic Area Impact*

The DOD plan impacts 234 economic summary areas nationwide. The total DOD-estimated related job loss (direct plus indirect) amounts to more than 10% of the area's employment in just 10 of these areas. Portland ranks number 10 on this list at 4.0% of area employment.

However, the sub-state area impacted by DOD's plan in Maine is far larger than that of any other area in the country. Maine's impacted economic summary area accounts for over half of the state's total employment. This is over twice as large as the next largest area. As a consequence, the job loss in Maine (direct plus indirect) as a proportion of total state employment is the largest of any MSA in the nation.

### **Job Loss by Economic Area**

Area	State	Area Employment	Loss as % of Area Employment	Area Employment as % of State Employment	Loss as % of State Employment
<b>Portland</b>	<b>ME</b>	<b>331,655</b>	<b>-4.0%</b>	<b>52.7%</b>	<b>-2.11%</b>
Rapid City	SD	79,970	-8.5%	20.3%	-1.73%
Grand Forks	ND	66,242	-7.4%	19.2%	-1.42%
Fairbanks	AK	54,469	-8.6%	16.9%	-1.45%
Norwich/New London	CT	168,620	-9.4%	9.7%	-0.91%
Elizabethtown	KY	65,926	-4.5%	3.5%	-0.16%
Clovis	NM	23,348	-20.5%	2.9%	-0.60%
Mountain Home	ID	14,441	-6.2%	0.5%	-0.03%
King George County	VA	14,171	-5.5%	0.4%	-0.02%
Martin County	IN	8,525	-11.6%	0.3%	-0.03%

Sources: Ibid.

In short, while other high impact areas tend to be small both in absolute size of labor market and relative to total state employment, the economic area absorbing the bulk of Maine's impact represents over half of the state's total employment.

Finally, it must be noted that Maine's first-in-the-nation impact is not entirely a matter of jobs. Maine has a long history of personal commitment to the nation's defense. Maine has sent a larger percentage of its population to war over the past century and a half than virtually any other state. Economically, this is evident in the high proportion of veteran's benefits.

### Relative Veterans Benefits by Economic Area

Area	State	Veterans Benefits per \$10,000 State Personal Income
<b>Portland</b>	<b>ME</b>	<b>\$74.59</b>
Clovis	NM	\$74.35
Rapid City	SD	\$56.97
Fairbanks	AK	\$51.96
Mountain Home	ID	\$47.49
Elizabethtown	KY	\$47.06
Grand Forks	ND	\$43.11
King George County	VA	\$39.72
Martin County	IN	\$25.94
Norwich/New London	CT	\$16.55

Sources: Ibid. and BEA.

Maine has the highest proportion of personal income deriving from veteran's benefits of any of the ten most impacted states, and, save New Mexico, has a vastly greater dependence on veteran's benefits.

**In sum, Maine can legitimately claim to have been the single most negatively impacted state in the nation by the DOD plan. In light of Maine's traditional commitment to the national defense, such an impact must not be allowed to stand.**

# THE DOD ANALYSIS

## 3A. Critique of DOD's Methodology

The DOD's analysis of economic impact is seriously flawed, and is not a reliable source of information for the BRAC Commission.

### *Inaccurate Measurement of Regional Employment*

In its economic impact analysis, DOD reported only the number of jobs that would be lost as a result of closures and realignments. It did not report wage levels. The omission of wage information implies that the DOD jobs are no better or worse than other jobs in an MSA. This is rarely the case. In Maine, DOD jobs generally pay much higher wages than other jobs in the economy and provide more stable, year-round employment.

Further, the BEA employment measure used by DOD in its computations of economic impact is total full- and part-time employment. This measure weighs full- and part-time employment equally. Maine's economy is highly seasonal. The 2000 census shows that only 57% of Maine citizens have full time jobs. Using the BEA measure underestimates the impact that the loss of these full-time, year-round jobs will have on the economy. This limits the Commission's ability to make reliable cross-state and cross-MSA comparisons when considering economic impact.

### *Lack of Information*

As we strive to anticipate the impact that the DOD plan will have on Maine's economy, we have been continually challenged by the lack of information available to us. We have struggled to collect accurate data on current employment levels at each installation, payrolls figures, and estimates of operational expenditures within the state.

We lack critical information about the proposed realignment of the Brunswick Naval Air Station. The DOD analysis removes 2,420 military jobs from an authorized manpower level of 3,275, a reduction of 74%. However, our information is that current military personnel at BNAS total 4,410. If the same proportion is to be reduced from the higher figure, the direct loss is 3,260 jobs, equivalent to a complete shut down of the base using DOD's figures.

It is not clear what military personnel will be left at Brunswick, neither how many nor what their roles will be. This is absolutely critical to understanding the economic impact of this proposal. The DOD analysis leaves 825 military employees at the base, but these

may have little or no positive role in the local economy. If the only military to be left are reservists doing training, there will be almost no economic benefit to the community since reservists and guard personnel are counted in the employment of their home regions, not where they are stationed.

### ***Lack of Consideration of Population Effects***

The economic impacts estimated by DOD are only a partial picture of what will occur when installations are closed or realigned. The DOD analysis ignores the effects on population. By only reporting estimated job losses, it is as if the military personnel leave while their families stay.

Consider the case of Brunswick, where up to 5,700 dependents of military personnel will leave the area with the proposed realignment. Taking these losses into account, the employment impacts could range from 5,800 to 7,500 (in comparison with DOD's estimate of 4,300) depending on which figure for the military personnel at the base is correct. These figures also ignore the potential loss of some portion of the nearly 6,000 military retirees who live near BNAS.

A similar problem exists for the analysis of Portsmouth. Taking into account analyses of both the Maine and New Hampshire economies, the effects could be 15% higher than DOD estimates if population migration is taken into account. While a smaller number of military personnel are associated with the Shipyard and many Portsmouth employees will retire, the lack of similar work anywhere in Maine or the region will inevitably draw many people away from Maine and New Hampshire.

# ENVIRONMENTAL IMPACT

## 4A. Environmental Impact

Maine Department of Environmental Protection (DEP) staff has undertaken a careful review of the estimated cleanup costs included in the DOD report to the BRAC Commission. They report that **these costs are substantially underestimated, are missing entire categories of likely costs, and are based on inaccurate and misleading assumptions.** Actual costs of meeting DOD's legal obligations for environmental clean-up in a base closure scenario are substantially higher than estimated by at least \$100 million. In addition, there are areas of major uncertainty which DEP is unable to estimate due to inadequate and incomplete information provided by DOD.

The Portsmouth Naval Shipyard is one of oldest military installations in the U.S. inventory and also one of the oldest industrial facilities in the State of Maine. One would therefore expect to find a history of environmental contamination issues. In addition to the \$46.9 million spent through FY03 and \$47 million in costs to complete estimated by DOD, **there are likely an additional \$100 to \$200 million in further non-radiological, environmental compliance and cleanup costs that will be incurred to comply with legal requirements before transfer of the facility for re-use.** In fact, closure of the facility will accelerate and increase these costs which ordinarily would be spread out over many years as the facility continues to operate.

The detailed analysis of these costs from the Maine DEP follows:

### *Hazardous Waste Regulation Requirements*

The Maine DEP's analysis of the costs associated with compliance with the hazardous waste regulations law not included in the current Department of Defense estimates for the Portsmouth Naval Shipyard (PNS) indicates substantial obligations and associated costs not accepted in the COBRA analysis.

A. Hazardous Waste Storage Facility Closure: PNS currently has a licensed hazardous waste storage facility known as Building 357. This is know as a "TSD License" and has substantial closure obligations associated with closing the license to ensure that no hazardous waste or contamination is left on-site. At the time the facility will no longer be active, it must undergo State of Maine Closure as described in the Hazardous Waste Rules Chapter 854, Section 12G. Under these rules, all waste must be removed from the site, including tanks, materials, equipment, structures and soils containing or contaminated with hazardous waste or waste residues. The estimated cost for closing out PNS's current license is \$1.3 to \$1.5 million.

A further obligation and cost under the current PNS RCRA license is the requirement to excavate and remove contaminated soils and the roll-off pad at building 357 upon termination of the license. The estimated cost for this activity is \$161,000. Third, there is a requirement to cap SWMU-11, located adjacent to building 357 with a plume of contamination emanating from it. The estimated cost by the Navy for this action is \$1.6 million.

Fourth, when costs for TCLP samples and disposal of decontaminated waste are included, the total **overall estimate for closing out PNS's RCRA TSD license alone is \$2.9 to \$3.1 million.**

B. RCRA Generator Closure: PNS has approximately 160 Hazardous Waste generator areas on site utilized over the lifetime of the facility. When the shipyard closes, it will need to undergo generator closure as per the Maine Hazardous Waste Rules Chapter 851, Section 11, which apply to the entire site. Each hazardous waste generator area will need to be certified as having undergone clean closure. The estimated cost for closing the 160 areas is \$4.8 million. The estimate is based on \$30,000 per area, and is based on two recent case studies of military generator area closures in Maine: Brunswick Naval Air Station closed out a photo lab area at a cost of approximately \$30,000, and PNS closed out an abbreviated license unit on site, also at a cost of approximately \$30,000.

C. Removal of Hazardous Materials: There are multiple industrial areas on site that will need to have hazardous materials and wastes removed. These include the cleaning of equipment and removal of structural components that cannot be cleaned, such as creosote coated wood flooring. Some examples of these requirements are:

- demolition and disposal of the blast and paint facility (Building 285) at an estimated cost of \$512,000;
- disposal of hazardous materials stored in lockers (throughout facility – flammables lockers, etc.) at an estimated cost of \$1.29 million;
- cleanup and closure of hazardous materials storage building (commodities) and associated post-cleanup sampling at an estimated cost of \$1 million.

In the event that all the contaminated soil and/or water cannot be removed from the site, the facility will need to undergo post-closure care in accordance with the closure and post-closure requirements pertaining to landfills under Chapter 855, Section 9(A)(15) and (16) of the Rules. This possibility would require substantially more money (approximately \$150,000 per year of post closure care per area) for ongoing oversight and monitoring.

Additional costs for cleanup of industrial areas, sampling and disposal of decontaminated waste bring the **overall estimated total for generator closure to \$23 million.**

D. Former Oil Terminal Tank Farm: Further site investigation will be needed for the former oil terminal tank farm, including soil testing and groundwater sampling. Soil removal would be expected plus toxicology assessments of soil proposed to be left in place. An evaluation will be necessary of the feasibility of extracting petroleum from bedrock fractures, as well as an investigation and removal of underground pipelines that remain. The need for asbestos removal from the heated lines would be assessed. Previous oil terminal closures of this size in Maine without the piping that is present at PNS, cost \$1,000,000 (Sprague, Bucksport North) and \$2,000,000 (Long Island). Based on the State's experience with those closures, **the total estimated cost for these actions is \$1 to \$2 million.**

E. Tank and equipment survey: An inventory of the entire facility for tanks, containers and equipment that contain petroleum and hydraulic fluids would be required, as well as removal and disposal of fluids plus contaminated soil removal. Maintenance on certain pieces of equipment in working order would be required for re-use or sale (for example: cranes and manufacturing equipment that require fluids to remain or be circulated to ensure seals, hoses, and gaskets do not deteriorate). **Total estimated cost for these actions is \$1 to \$2 million.**

F. Heating and Power Plant: Since the facility is centrally heated, the power plant will need to be maintained and remain operational to ensure buildings are heated during winter months. This will be necessary to ensure that pipes do not freeze and burst and that other equipment or storage tanks do not undergo adverse consequences such as releases of miscellaneous fluids due to freezing. Also, the plant will need constant maintenance to ensure it does not deteriorate while being left idle. **Total estimated cost for keeping the power plant operational is \$4.65 million per year or \$23.25 million over a projected 5 year closure period.**

G. PCB Investigations: A site assessment will be required in areas of known historic PCB storage and use. The facility is old enough that PCB's may be found in conjunction with uses other than electrical transformers. Likely areas of PCB investigation based on examples with which Maine's RCRA program is familiar are PCBs used in the rubber coating of electrical cables (Maine Yankee), hydraulic fluid (Loring and other military sites), and paint (Naval Base at Cutler and Maine Yankee). Investigation and remediation of PCB contaminated areas can be costly, for example: the Bath Iron Works drydock remediation at \$2 million and the Kimberly Clark Winslow Mill remediation at \$2 million. Confirmation samples for dioxin-like congeners for PCB clean-ups run approximately \$1,200 each. A concern for PCBs is the likelihood of encountering contaminated sediments that would need to be remediated. **Total estimated cost for PCB investigation and remediation is \$2 million.**

**RCRA Closure Costs Not In COBRA Analysis**

Description of Expense	Costs
Hazardous Waste Storage Facility	\$2,900,000 - 3,100,000

Closure	
Generator Closure	\$23,000,000
Tank and Equipment Survey	\$1,000,000 - 2,000,000
Heating and Power Plant	\$4,650,000 per year
PCB Investigations	\$2,000,000
<b><i>RCRA Costs Subtotal</i></b>	<b><i>\$28,900,000 - 30,100,000</i></b>

**Boiler Operation and Maintenance for Closure Period - costs not accepted by COBRA: \$4.65 million per year in heating costs to maintain buildings and systems prior to transfer of property – assume five years**

### ***Superfund Cleanup Costs***

The COBRA analysis packet points out several factors that can only increase the cleanup costs at Portsmouth Naval Shipyard, assuming the BRAC closure is accepted by the panel. The primary factor is the increased cost of more conservative cleanup levels to account for future use. A large portion of the current shipyard is residential or non-industrial in nature. Most of the sites being considered for remediation under Superfund are not in the central industrial area and are ideal for residential development (condominiums, apartments, residences etc.). In particular, the Defense Reutilization and Marketing Office (DRMO) storage yard, Topeka Pier, and Building 62 areas are on scenic, non-industrial, shorefront property. In and of itself, the cost of removing lead soil contamination at the DRMO to residential instead of industrial standards increases the cost of the clean-up by more than \$7.3 million.

The following additional factors not accounted for in the COBRA documents will add significantly to the environmental cleanup costs:

- Increased cost of greatly accelerating the cleanup schedule in a closure scenario increases the clean-up budget because of the need for additional contractors and supervision. In addition, these costs are front-loaded, requiring higher appropriations for cleanup in earlier years than the Navy had planned.
- The cost of developing Environmental Baseline Studies and Findings of Suitability to Transfer. These are required due diligence documents which may uncover additional contaminated areas.
- The security costs of protecting the sites and the base after the departure of an active military presence and before full re-use could add additional costs not accounted for by COBRA.

Taking these concerns in order:

A. The increased cost of more conservative cleanup levels: The most recent Feasibility Study (FS), for Operable Unit 2 the Defense Reutilization and Marketing Office (DRMO) storage yard and Old Incinerator, includes 5 Alternatives. The FS is a draft and more investigation is required before it may be finalized. Nonetheless, the Net Present Worth Cost for Alternative 4, closure to meet the current military-industrial use, is \$11,346,000. The Net Present Worth Cost for Alternative 5, closure to meet future use residential standards, is \$18,675,000. This represents a 65% increase to meet the likely future use standards for residential purposes. Applying this increase across the board to the Navy's estimated cost to complete cleanup of the entire base (\$46,552,000) presented in the 2003 Annual Report to Congress, an additional \$30,258,800 would be added to the cleanup cost due solely to the need for a higher standard resulting from non-industrial reuse.

B. The increased cost of greatly accelerating the schedule: In order to meet BRAC transfer and reuse deadlines, the Navy's efforts would need to be ramped up. More contractors, more supervision, more contingencies, better QA/QC, more presence on the facility, and more delegation of decisions to personnel on the scene would be necessary to expedite cleanup. Maine DEP's experience at Loring Air Force Base demonstrates that such an additional level of effort is required to meet the Navy's need for rapid transfer and the communities need for expedited reuse of the facility. While the state cannot speak for the Navy's procurement process, based on our own State experience the need to expedite cleanup in this manner is likely to increase costs to the Navy by 25% to 50%. This factor alone will increase the Navy's cost estimate by an additional \$11,638,000 to \$23,276,000.

C. The cost of developing Environmental Baseline Studies and Findings of Suitability to Transfer and required due diligence documents that may uncover additional areas of concern: The State notes with concern that the costs of activities necessary to adequately address environmental issues prior to reuse were disallowed by COBRA. CERFA requires that transferred federal property undergo the equivalent to due diligence environmental review to produce disclosure documents. During the process of closing the former Loring Air Force Base, all of the buildings received thorough inspections and documentation of asbestos and lead hazards, and these buildings are much newer than the buildings at the Kittery Yard, most of which pre-date World War II. The state would likewise require a review based on unrestricted use, including lead and asbestos abatement prior to approval for transfer. Existence of substantial lead paint and asbestos remedial activities is likely based on the age and history of use of many buildings at the Kittery Yard. Further, it is likely that further releases of petroleum or hazardous substances will be discovered during the due diligence process. In the absence of hard figures, the State used its experience at the former Loring AFB to estimate that the \$5.2 million listed under "Miscellaneous" on the "Costs Disallowed in COBRA" worksheet is an accurate estimate of additional environmental investigation costs.

D. The security costs of protecting the sites and the base after the departure of an active military presence and before full reuse. Given the shoreline and surrounding

population, the historical structures and the nature of the sites, this could be a significant cost: Maine DEP's main concern is keeping the public away from sites that may pose a hazard, protecting our monitoring devices such as monitoring wells, and protecting remedial measures from damage. This will add to the facilities operation and maintenance costs, already estimated as \$8,000,000, but hopefully not by a significant amount.

Thus the total increase in costs based on the Navy's own estimates are:

#### **Portsmouth Naval Station Remedial Costs**

Description of Expense	Costs
DOD Cost to Complete as of 2003	\$46,552,000
Increased cost of stringent standards	\$30,258,800
Cost to accelerate cleanup	\$11,638,000 - 23,276,000
ESB/FOST	\$5,200,000
<b><i>Revised Total Cost to Complete</i></b>	<b><i>\$93,648,000 - 105,286,000</i></b>
<i>Increase</i>	<i>\$47,096,000 -58,734,000</i>

#### ***Cleanup Precedents at Other Bases Suggest Environmental Cleanup Costs will be much Higher than Projected to Congress***

While the figures above are greater than the environmental costs reported to Congress by the Navy by approximately 100%, consideration of similar BRAC sites known to the DEP suggests that environmental cleanup costs will be even higher. The current estimate to complete the clean-up of Pease AFB is over \$200 million ( Dick Pease, NH DES), and the cost to complete Mare Island in California (Portsmouth's sister base) is over \$225 million ( Isabella Alasti, CA ). Portsmouth's age and documented contamination problems suggest a minimum \$200 million cleanup cost is likely to prepare the property for reuse.

#### ***Dredge Costs of Contaminated Sediment in the Back Channel, Drydock, and Former Industrial Waste Outfalls***

Due to a lack of information from the Navy, the Maine DEP is not able to estimate the cost to dredge contamination from the shipyard in the Portsmouth Estuary. Two areas of particular concern have not been addressed by the Navy. The area adjacent to the Former Gasification Plant in the Back Channel and the submerged areas adjacent to the Drydocks and Former Waste Outfalls may require extensive dredging to remove heavy metals, PCB, and Poly-aromatic Hydrocarbon-contaminated sediment. If contaminated, this material would be banned from ocean disposal, requiring disposal in a hazardous waste landfill. The costs of dredging contaminated sediments run in the many millions of dollars.

**Summary of Environmental Compliance and Closure Costs not Accounted for in COBRA Analysis**

Based on information known to the State, primarily the Maine DEP, the COBRA's analysis dramatically under-accounts the costs of closing and cleaning up the results of over 200 years of operation of the PNS as a naval shipyard.

The figures in this table are likely a low-estimate of environmental costs, based on the history of closure of similar military bases as described in Section III. The age and history of this base suggest that likely additional and substantial environmental issues will be discovered. And the costs of cleaning up contaminated dredge spoils in the Back Channel, drydock, and former waste outfall areas are not included because the State has no basis to estimate these costs at this time.

**Summary of Environmental Compliance Closure Costs not Accounted for in COBRA Analysis**

<b>Description of Expense Remedial Costs</b>	<b>DOD accepted costs for future work</b>	<b>Costs not accepted by COBRA</b>
DOD's Cost to Complete as of 2003	\$46,552,000	\$0
Increased cost of stringent standards	\$0	\$30,258,800
Cost to accelerate cleanup	\$0	\$11,638,000 - 23,276,000
ESB/FOST	\$0	\$5,200,000
<b><i>Remedial Subtotal</i></b>	<b><i>\$46,552,000</i></b>	<b><i>\$47,096,800 - 58,734,800</i></b>

<b>Description of Expense RCRA Costs</b>	<b>DOD accepted costs for future work</b>	<b>Costs not accepted by COBRA</b>
Hazardous Waste Storage Facility Closure	\$0	\$2,900,000 - 3,100,000
Generator Closure	\$0	\$23,000,000
Tank and Equipment Survey	\$0	\$1,000,000 - 2,000,000
PCB Investigations	\$0	\$2,000,000
<b><i>RCRA Costs Subtotal</i></b>	<b><i>\$0</i></b>	<b><i>\$28,900,000 - 30,100,000</i></b>

<b>Description of Expense Heat &amp; Power</b>	<b>DOD accepted costs for future work</b>	<b>Costs not accepted by COBRA</b>
Heating and Power Plant – facility operations & maintenance during closure \$4,650,000 – 5 years	\$0	\$4,650,000 per year

<i>Heating and Power Plant Subtotal</i>		<b><u>\$23,250,000</u></b>
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<b>TOTAL Environment Closure Cost not accounted for in COBRA Analysis</b>	<b>\$46,552,000 accepted by COBRA</b>	<b>\$99,246,800 - 112,084,800 in foreseeable environmental costs in immediate future due to closure</b>
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