

# MAINE STATE LEGISLATURE

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DRAFT

1994 UPDATE:  
DEFENSE SPENDING IN MAINE

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October, 1994

## PURPOSE OF REPORT

The last comprehensive review of defense spending in Maine was done by the Maine State Planning Office (SPO) in March of 1993 ("A Defense Action Plan for Maine: Report of the Task Force on Defense Realignment and the Maine Economy"). Since that time the Loring Base has closed, the Portsmouth Naval Shipyard has had several reductions in force, and the Maine economy has begun to recover. It is a good time to revisit the role of defense spending in Maine's economy, and to note the changes that have occurred.

## METHODOLOGY

The aim of this report is to replicate, as closely as possible, the format and analysis of the 1993 SPO report. Complete harmony has proved to be unachievable, due to revisions in data, improvements in methodology, and the like. But in general the information has been organized in a way which allows comparisons to be made.

The raw data used in this analysis includes newspaper articles, Census Bureau and Pentagon reports, and a Market Decisions telephone survey of the major defense facilities and operations in Maine. The survey also revealed a wealth of detail about subcontractors throughout Maine which is not referenced in this general report, but which is available at the Department of Economic and Community Development.

The result is a picture which is necessarily incomplete. The pace of events is moving much more rapidly than published data can reveal. But the broad lines of this analysis present very clear trends which, though subject to later correction and refinement, will not be contradicted.

## THE PACE OF EVENTS

1993 and 1994 were rollercoaster years for the defense industry in Maine. First the Portsmouth Naval Shipyard, then the Winter Harbor communications base, were threatened and then saved from closure.

But while these dramatic events dominated the news, on a quieter level day-to-day small changes continued to reshape the face of the defense industry in Maine. The data in the report which follows documents this restructuring.

But in order to appreciate the data and tables more fully, it is helpful to pause and review the headlines of 1993-94, as they are summarized from Market Decision's quarterly Maine Omnibus report, and provided on the following pages.

CHRONOLOGY OF EVENTS -- DEFENSE INDUSTRY IN MAINE, 1993-941993

- January Bath Iron Works awarded a \$724 million contract to build three of four new Aegis class destroyers
- February The Army National Guard announces phase-out of its 549-person engineer battalion in Bangor
- BIW announces shake-up of top management to become more efficient
- March National Semiconductor announces the impending layoff of 230 workers in South Portland due to drop in military orders
- Secretary of Defense announces base closure list -- Kittery and Brunswick not on it
- Secretary of Defense suspends competition for Defense Finance and Accounting Centers, leaving Bangor's proposal in limbo
- April Pratt & Whitney announces that its North Berwick plant will stay open, even though it is reducing its workforce by 9,000
- May Pratt & Whitney announces layoff of 22 workers at North Berwick
- The first Taiwanese frigate, built with BIW assistance, is put into service
- The Federal Military Base Closure and Realignment Commission adds Portsmouth Naval Shipyard to its list of bases being considered for closure, and refuses to reconsider its earlier decision to close Loring Air Force Base
- June Portsmouth Naval Shipyard receives permission from the Pentagon to eliminate 695 jobs in 1993
- The Base Closure Commission decides not to include Portsmouth Naval Shipyard in its list of facilities recommended to be closed

- 1993-94 chronology, continued -

July

Key Bank of Maine announces that it has dedicated \$2 million of its loan portfolio to help Maine defense industries convert to civilian ventures

BIW fails to win a contract for any of the 12 ships in the first phase of the Sealift program

September

Portsmouth Naval Shipyard loses a contract to overhaul the nuclear submarine USS Gato to Electric Boat of Connecticut, despite being low bidder

Saco Defense is awarded a \$20 million contract to build grenade launchers for the Army

November

Portsmouth Naval Shipyard receives permission to cut an additional 940 jobs

The U.S. Department of Labor awards the Bangor-based Training and Development Corporation a \$500,000 grant to assist workers affected by defense-related closures

1994

January

Pratt & Whitney lays off 99 hourly and 7 salaried employees in North Berwick, but remains optimistic about a possible \$1 billion deal involving Rockwell International and the Russian aircraft manufacturer Ilyushin

BIW launches its seventh Aegis guided missile destroyer into the Kennebec River

February

Pentagon announces its intention to buy three Aegis destroyers each year through the end of the decade -- BIW officials are encouraged, ready for competition with Ingalls Shipbuilding of Pascagoula, Mississippi

Pratt & Whitney reports it will close its general machining department in Maine and move it to East Hartford, Connecticut, impacting 100-150 people

BIW is part of a consortium awarded \$12.5 from the federal government to develop a robotic welding system to make shipbuilding more efficient

- 1993-94 chronology, continued -

Few take advantage of Portsmouth Naval Shipyard's early retirement incentives; the Yard announces it will have to reduce the workforce by 800 people by July

March

The Loring Readjustment Committee announces that a federal Job Corps Center will be located at Limestone, bringing \$8 to \$10 million into the local economy annually

April

Pratt & Whitney lays off 46 employees in North Berwick

Saco Defense is awarded a contract worth over \$700,000 by the U.S. Army to design a new ultra-light portable weapon system

May

Loring Air Force Base is chosen as a site for one of the Pentagon's new Defense Finance and Accounting Centers. It is expected to create up to 750 jobs with a payroll of \$22.5 million. Secondary employment may reach 600 with an additional \$40 million pumped into the local economy

Reversing an earlier plan, the U.S. Navy announces it will keep its Winter Harbor communications station open in eastern Maine. The installation has a \$4 million budget

A consortium led by BIW is awarded a \$600,000 federal grant to help pay for a proposal to develop a high-speed, single-hulled ship

June

After a two month delay, the Navy awards three Aegis destroyer contracts to BIW through fiscal year 1995. An identical two-year contract, worth \$750 million, goes to Ingalls

BIW wins a contract to design and manufacture the fuel and lubrication systems for gas turbines built by General Electric and used in commercial power plants. BIW officials express hopes that this work, which will go on over the next five years, will lead to other commercial ventures

- 1993-94 chronology, continued -

The Portsmouth Naval Shipyard is awarded a \$6.1 million contract for work on the USS Alexandria beginning in January. Although details are still not final, the Shipyard expects two larger projects in 1996 and 1997, involving a refueling overhaul and a deactivation

July

BIW commissions a new \$800 million destroyer, the John S. McCain

August

BIW union votes to accept a new 3-year contract which will result in sweeping changes in the workplace, including the teaming of union workers with management in efforts to improve efficiency

Under crime bill approved by Congress, Maine will receive over \$71 million in next six years. Under consideration is a regional federal prison at Loring Air Force Base which could generate up to 400 jobs in Aroostook County

September

Official closure of Loring Air Force Base marked by ceremony at the base

### DEFENSE EXPENDITURES DECLINE BY 1/7 IN 1993

Even though the headlines noted the saving of Portsmouth Naval Shipyard and Winter Harbor, defense expenditures in Maine continued on their steady downward track in 1993.

Total defense expenditures in Maine -- adjusted for inflation -- declined by a seventh in 1993. While 1994 figures are not yet available, the closing of Loring will provide a further downward impulse this year.

The major defense spending category in Maine is procurement, which gets \$2 out of every \$3 defense dollars. Within the procurement category, one company, Bath Iron Works, receives \$9 out of \$10 dollars spent. Procurement was down 19% in 1993.

The only category of defense spending to increase in 1993 was payment to military retirees, now totalling over \$140 million. This expenditure is usually not thought of when one is discussing "defense-related" industries. But in fact many military retirees were first introduced to Maine through service at a local base; the Pentagon, in essence, was providing the marketing for Maine's growing retirement industry! One of the negative side effects of cuts in the number and sizes of military bases will be the reduced number of people who will be introduced to the special quality of life of Maine, which will be a loss to the state's tourism and retirement businesses, and to property tax revenues in towns adjoining military bases.

TABLE 1  
DEFENSE EXPENDITURES IN MAINE, 1992 AND 1993

Source: Federal Expenditures by State, U.S. Census, 1992 and 1993

	1992 (mill\$)	1993 ('92\$)	Change	%
All Federal	\$6,533	\$6,398	- \$135	- 2.1%
All Defense	\$1,927	\$1,658	- \$269	- 14.0%
- Procurement	\$1,306	\$1,063	- \$243	- 18.6%
- Salaries (mil)	\$197	\$187	- \$10	- 5.2%
- Salaries (civ)	\$288	\$270	- \$18	- 6.4%
- Nat Gd centers	\$2	\$1	- \$1	- 30.6%
- Retirees pay	\$135	\$138	+ \$3	+ 2.3%



**DESPITE THE CUTS, MAINE STILL HAS A HEAVY DEFENSE DEPENDENCY**

Even in the reduced budget climate, Maine still attracts more than its share of military spending. In 1993 the Pentagon awarded \$900 in defense contracts for every man, woman, and child in the state. This is almost double the national average of \$500. Likewise civilian Pentagon expenditures (largely Portsmouth Naval Shipyard) are also very high.

TABLE 2  
PER CAPITA DEFENSE EXPENDITURES IN MAINE, 1993

Source: Federal Expenditures by State, U.S. Census, 1993

	Maine	United States	Location Quotient*
Military salaries	\$156.88	\$166.67	0.94
Civilian salaries	\$226.66	\$115.81	1.96
Military retirement	\$115.96	\$98.37	1.18
Veteran's benefits	\$114.59	\$66.78	1.72
Defense contracts	\$893.45	\$496.58	1.80

\* A "location quotient" is a measure of concentration. In this case, it is the ratio of federal expenditures in Maine to that of the nation; a factor higher than 1.00 indicates a higher-than-average concentration.

Given the continuing high reliance on military spending, Maine will be affected by the long-term defense downsizing for years to come.

### CONTRACTS ARE DOWN BY 18%

The previous table showed data on actual expenditures on military contracts in Maine. Contracts involve money awarded to Maine companies, but not yet spent; they are what will support Maine defense businesses in the short-term future.

Contracts, like procurement spending, are down by about a sixth in 1993. Contracts to companies besides Bath Iron Works are down even more, by about a third. Of the contracts in the "other" category, about \$16 million are Loring-related, and are unlikely to continue into the future.

The outlook, then, even if all bases stay open, is for a continuing shrinkage in the private defense sector in the immediate future.

TABLE 3  
DEFENSE PROCUREMENT CONTRACTS, 1992-1993

Source: Prime Contractors in Maine, Defense Department

	1992 (mill\$)	1993 ('92\$)	Change	%
Bath Iron Works	\$1,137	\$957	- \$181	- 15.9%
Other	\$165	\$110	- \$55	- 33.3%
Total	\$1,302	\$1,067	- \$236	- 18.1%

**EMPLOYMENT AT 5 MAJOR MAINE DEFENSE OPERATIONS  
ARE DOWN ABOUT A THIRD FROM 1992**

The five major defense facilities or operations in Maine are Bath Iron Works (BIW); the Brunswick Naval Air Station (BNAS); the Loring Air Force Base; the Portsmouth Naval Shipyard (PNS); and the Army and Air Maine National Guard units.

In the last two years alone 9,000 jobs have been cut from these facilities. Much of the impact was from Loring (3,500 jobs lost). But Portsmouth Naval Shipyard lost almost as many (2,600), and the National Guard units also had major cuts. Overall, the reduction is about a third.

TABLE 4  
EMPLOYMENT AT MAJOR DEFENSE FACILITIES, MAINE, 1992 AND 1994

Source: State Planning Office, Market Decisions survey

	1992			1994		
	Civ.	Mil.	All	Civ.	Mil.	All
BIW	9,817	0	9,817	9,000	0	9,000
BNAS	826	2,797	3,623	791	2,526	3,317
Loring	956	2,538	3,494	35	2	37
Portsmouth	6,873	0	6,873	4,190	114	4,190
TOTAL	18,472	5,335	23,807	14,016	2,642	16,658
Nat'l Guard	481	4,566	5,047	292	2,710	3,002
	CHANGE			%		
BIW	- 817	0	- 817	- 8.3%	--	- 8.3%
BNAS	- 35	- 271	- 306	- 4.2%	- 9.7%	- 8.4%
Loring	- 921	-2,536	-3,457	-96.3%	-99.9%	-98.9%
Portsmouth	-2,683	+ 114	-2,569	-39.0%	--	-37.4%
TOTAL	-4,456	-2,693	-7,149	-24.1%	-50.5%	-30.0%
Nat'l Guard	- 189	-1,856	-2,045	-39.3%	-40.6%	-40.5%

**EMPLOYMENT AT THE FIVE MAJOR DEFENSE FACILITIES  
IS DOWN 40% SINCE 1989**

Taking a slightly longer view, over 12,000 defense jobs were lost in these five major facilities over the five years between 1989 and 1994.

The loss of full-time jobs was about 40% of the 27,500 existing in 1989. National Guard reductions were about a third of the 4,400 jobs in 1989.

TABLE 5  
EMPLOYMENT AT MAJOR DEFENSE FACILITIES, MAINE, 1989 AND 1994

Source: State Planning Office, Market Decisions survey

	1989			1994		
	Civ.	Mil.	All	Civ.	Mil.	All
BIW	11,400	0	11,400	9,000	0	9,000
BNAS	900	3,000	3,900	791	2,526	3,317
Loring	900	3,300	4,200	35	2	37
Portsmouth	8,000	0	8,000	4,190	114	4,190
TOTAL	21,200	6,300	27,500	14,016	2,642	16,658
Nat'l Guard	525	3,900	4,425	292	2,710	3,002
	CHANGE			%		
BIW	-2,400	0	-2,400	-21.1%	--	-21.1%
BNAS	- 109	- 474	- 583	-12.1%	-15.8%	-14.9%
Loring	- 865	-3,298	-4,163	-96.1%	-99.9%	-99.1%
Portsmouth	-3,810	+ 114	-3,696	-47.6%	--	-46.2%
TOTAL	-7,184	-3,658	-10,842	-33.9%	-58.1%	-39.4%
Nat'l Guard	- 233	-1,190	-1,423	-44.4%	-30.5%	-32.2%

**EXPENDITURES AT MAJOR BASES IS ALSO DOWN A THIRD  
BETWEEN 1992 AND 1994**

Base operations pump money into the economy in two ways -- through the salaries they pay to workers, and through purchases in the local economy. In 1993 salaries at the five major Maine defense operations exceeded \$500 million dollars, and local purchases \$100 million.

When compared to the figures reported by SPO in 1992, and adjusted for inflation, total spending on purchases and salaries was down 32% in real terms between 1992 and 1994.

Besides Loring, the Brunswick Naval Air Station and the Maine National Guard reported major reductions.

TABLE 6  
EXPENDITURES AT MAJOR MAINE BASES, 1994

Source: Market Decisions survey

million\$	1994			1992	Change real\$	%
	Purch	Salary	Total			
BIW	\$62	\$295	\$357	\$360	- \$33	- 9%
BNAS	\$21	\$86	\$107	\$186	- \$88	- 48%
Loring	\$5	\$1	\$6	\$111	- \$106	- 95%
Portsmouth*	\$2	\$137	\$139	\$157	- \$30	- 19%
Nat'l Guard	\$17	\$29	\$46	\$70	- \$29	- 41%
<b>TOTAL</b>	<b>\$106</b>	<b>\$548</b>	<b>\$654</b>	<b>\$885</b>	<b>- \$285</b>	<b>- 32%</b>

\* Only refers to purchases from Maine companies and salaries to Maine workers.

**DEFENSE EMPLOYMENT FROM ALL SOURCES  
IS DOWN 19% FROM 1992 TO 1994**

Using the Maine State Planning Office "Regional Output Simulation Model," the indirect effect of salaries and purchases by defense facilities can be estimated for the Maine economy.

The analysis shows that in 1994, 45,000 jobs in Maine were dependent upon the defense sector, and over \$1 billion in income. The biggest impact is from Bath Iron Works, which accounts for nearly half of the jobs and earnings from all defense activities. Portsmouth Naval Shipyard and Brunswick Naval Air Station provide the bulk of the remaining jobs and income.

TABLE 7  
EMPLOYMENT IMPACT OF DEFENSE FACILITIES IN MAINE, 1994

Source: Market Decisions survey, State Planning Office impact model

	Civilian	Military	Indirect	Total	Earnings mill\$
BIW	9,000	0	10,494	19,494	\$513
BNAS	795	2,526	3,247	6,568	\$153
Loring	35	2	143	180	\$4
PNS*	4,190	114	4,213	8,517	\$223
Nat'l Guard	292	2,710	1,309	4,311	\$57
Winter Hbr	72	373	367	812	\$17
Cutler	83	97	122	302	\$6
Tenant commands	292	780	692	1,764	\$37
Other private	1,525	0	1,392	2,917	\$66
<b>TOTAL</b>	<b>16,284</b>	<b>6,602</b>	<b>21,979</b>	<b>44,865</b>	<b>\$1,077</b>
Change - '92	- 5,569	- 7,942	+ 2,874	- 10,637	- \$349
%	- 25.5%	- 54.6%	+ 15.0%	-19.2%	- 24.5%
Change - '89	- 9,545	- 8,398	- 81	- 18,024	-\$371
%	- 37.0%	- 56.0%	- 0.4%	- 28.7%	- 25.6%

\* For Portsmouth Naval Shipyard, total jobs are those located at the base, but indirect impacts are only calculated based upon Maine expenditures.

At the bottom of Table 7, these 1994 findings are compared to the findings of the prior SPO report for 1989 and 1992. Two cautions are in order in viewing these comparisons:

- 1) The military employment estimates of SPO in 1992 appear to be too high. The Census reports that in 1990, there were 12,200 military jobs in Maine. The SPO report estimated 15,000 in 1989 and 14,500 in 1992 (at the time of the SPO report, the Census figures on 1990 were not yet available). This overestimate has the effect of *exaggerating the reduction in military employment* which is shown in Table 7 above.
- 2) The indirect employment impacts produced by the SPO model in 1994 appear to be larger than those used in the 1993 SPO report. The reason may be that SPO used its "REMI" model in 1993 rather than its "Regional Output Simulation Model." For this report, only the latter is available. This difference has the effect of *underestimating the loss of indirect employment due to defense cuts* during the period.

Even considering these limitations, the data shows a reduction of 30% in total jobs in the five year period, and a loss of a quarter of income.

### DEFENSE IS SHRINKING AS A PROPORTION OF MAINE'S ECONOMY

Recognizing the limitations of the data noted above, the comparison of 1989 to 1992 to 1994 still reveals a consistent overall pattern.

In the early 1970's defense spending accounted for only 2% of Maine's gross state product. According to the 1993 SPO report, by 1989 it had risen to about 8% of the economy.

Since then it has steadily declined. Total earnings due to defense activities (direct and indirect) fell from 11.8% of all Maine earnings in 1989 to 7.6% in 1994. Employment from defense went from 9% of total employment in 1989 to 6.5% in 1994. While figures for gross state product in 1994 are not yet available, it can be estimated that the proportion due to defense has fallen to 6.5%.

It should be repeated that this is still a higher proportion than other states, and for this reason Maine is still vulnerable to defense cutbacks. But the proportion is slowly shrinking, and as it does, Maine's vulnerability to wide swings in economic fortune is reduced as well.

TABLE 8  
THE ROLE OF DEFENSE IN MAINE'S ECONOMY

Source: SPO estimates, Market Decisions survey

<i>\$ in millions</i>	1989	1992	1994
Defense expenditures	*	\$1,927	\$1,727
% ME state product	*	7.8%	6.5%
Defense employment	62,885	55,502	44,865
% ME employment	9.0%	8.3%	6.5%
Defense earnings	\$1,448	\$1,426	\$1,077
% ME earnings	11.8%	10.8%	7.6%

\* Federal data prior to 1992 not comparable.



### NEAR TERM OUTLOOK IS MIXED

On the positive side, Bath Iron Works workload is stabilized for the remaining years of the decade, giving the company more time to diversify into commercial markets.

And at the former Loring Air Force Base a new Defense Finance and Accounting Service (DFAS) begins operation in 1995. It will open in April with 50 to 80 employees, and will build up at the rate of 50 a month until it reaches 600 to 750 employees. The Service will spend \$22.5 million in salaries and \$25 million in operating costs each year. This, combined with the \$8-\$10 million a year Job Corps center, will replace about half of the impact of the loss of the air base.

On the negative side, there will be continuing cuts at the Brunswick Naval Air Station and in the Maine National Guard. And the Base Closure Commission will recommend a new set of bases for closure, and both Brunswick and Portsmouth are considered vulnerable.

TABLE 10  
SHORT-TERM ECONOMIC OUTLOOK AS SEEN BY BASE RESPONDENTS

Source: Market Decisions survey

FACILITY	OUTLOOK	CRITICAL FACTORS
BIW	same as today	
Brunswick NAS	3% lower	• Base Commission
Portsmouth NS	same level	• Base Commission
		• size of fleet
		• private/public division of work
National Guard	5% lower	• defense budget
		• force levels
		• state budget
Winter Harbor	same	
Cutler	same	
Loring	DFAS -- 600-750 jobs, \$45-\$50 m spending	