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U.S. DEPARTMENT OF COMMERCE

# BRIEFING HANDBOOK



SUMMARY OF THE 1978 BUDGET

DEPARTMENT OF COMMERCE

SUMMARY OF 1978 BUDGET



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## 1978 Budget - Department of Commerce

Purpose. This paper summarizes and the attached material describes in greater detail, the proposed budget for the Department of Commerce for fiscal year 1978 now under review by the Office of Management and Budget, and the significant program issues associated with this request which will be of interest to the new Administration.

Summary of 1978 Budget. The Department's 1978 budget request totals \$2,181,031,000 in budget authority and \$2,975,500,000 in outlays (cash disbursements). In addition, the 1978 budget includes adjustments to the amount Congress has appropriated to date for FY 1977. These supplementals, which total \$183,933,000, are primarily to fund legislation enacted by Congress subsequent to the enactment of the 1977 budget.

The 1978 budget includes a total of \$366,631,000 in program increases. Of this amount, \$200,890,000 can be characterized as mandatory. These mandatory increases are to fund:

- o Nondiscretionary actions required by law (such as periodic censuses);
- o Prior commitments (such as ship operating subsidies); and
- o New responsibilities required by legislation (such as the Energy Policy and Conservation Act, and the Coastal Zone Management Act Amendments).

The remaining \$165,741,000 in program increases represented new initiatives and program expansions which were believed to be sufficiently important to be submitted to the Office of Management and Budget.

The budget also included, as it does each year, amounts to cover automatic nonprogram expenses which must be met just to keep programs operating at current levels. Such expenses are labeled as "adjustments to base," and are for such expenses as postage, rent payments, telephone charges, and contributions to the Federal unemployment compensation fund. In other words, increases in the cost of doing business. The adjustments to base amounts also include deductions for nonrecurring items, such as the \$2 billion appropriation for Local Public Works employment.

To partially offset these increases, the budget request to the Office of Management and Budget also includes \$247,523,000 in program reductions or in financing changes. Some of these reductions were automatic, such as, to reflect an expense incurred in the previous year which was of a nonrecurring



nature; for example, a purchase of a major capital investment, or the winding down of one of the periodic censuses.

Others, however, reflect difficult program choices to reduce or eliminate a lower priority activity in order to accommodate mandatory increases and higher priority for new initiatives or program expansions. Some of these reductions support major policy determinations of the current Administration, which have been unpopular with Congress, and may be reversed by them. These are discussed in the section of this paper on budget issues.

Our budget request to OMB can be summarized as follows:

	(Dollars in thousands)	
	Budget Authority	Outlays
1977 Appropriations to date.....	\$3,871,702	\$2,947,450
Changes proposed for 1977:		
Rescissions and deferrals...	-10,000	-1,000
Program supplementals.....	183,933	91,014
Proposed for 1977.....	4,045,635	3,037,464
Changes proposed for 1978:		
Program reductions.....	-247,523	-68,990
Program increases.....	366,631	154,680
Adjustments to base.....	-1,983,712	-147,654
Subtotal, 1978 changes...	-1,864,604	-61,964
Total, 1978 Budget request.....	2,181,031	2,975,500

Descriptive material describing the 1978 budget in detail accompanies this paper as follows:

Tab 1. Letter to OMB Director Lynn transmitting the 1978 budget.

Tab 2. Tables on 1977 and 1978 Budget Authority, Outlays and Employment for each of the Department's organizations. These tables include changes in our request made in our initial request to OMB.

Tab 3. Summary descriptions of the 1978 budget request for each of the Department's organizations.

Tab 4. List of proposed 1977 supplementals.



Tab 5. Mandatory program increases.

Tab 6. Other proposed program expansions or new initiatives.

Tab 7. FY 1978 Program reductions.'

Tab 8. Personnel analysis.

The three additional notebooks contain the detailed justifications which support the budget request to OMB. For each of the Department's programs, these justifications describe:

- o The objectives to be achieved.
- o The current status of achieving these objectives.
- o The changes in the programs being requested.

The remainder of this paper addresses the issues reflected in the 1978 budget request. Most of the program issues will be addressed in greater detail in the material being prepared by each of the Department's organizations. The principal purpose here is to provide a quick summary and a Departmental perspective of the overall budget.

Fiscal constraints. The Department's 1978 budget was developed against very stringent fiscal guidance provided by the President through the Office of Management and Budget. This guidance reflected (1) President Ford's oft-stated policy to reduce Federal spending, and to achieve a balanced budget by fiscal year 1979; and (2) current Administration policy regarding several programs in this Department. This guidance is expressed through the issue of ceilings within which the various Departments are to submit their requests. In reality, however, ours and virtually every large Department's request exceed this OMB ceiling by some amount. The objective of this Department was to provide for the necessary funds to carry out important programs and, at the same time, submit a fiscally responsible request. We believe this was achieved, but the nature of OMB's ceilings made this a difficult task.

We received two sets of 1978 budget ceilings from OMB. First, last February, we received ceilings of \$1,965,408,000 in budget authority and \$1,994,199,000 in outlays. These were supposed to represent the 1978 costs of the 1977 budget for Commerce just sent to Congress. Even at that time, these ceilings were understated by approximately \$74 million.



In August, after the development of the 1978 budget was virtually completed, a second set of ceilings was received from OMB. The new ceilings of \$1,837,000,000 in budget authority and \$2,018,000,000 in outlays were even more unrealistic in light of action taken by Congress on our 1977 budget and action which they were about to take. Congress had already increased our 1977 request by \$184,804,000 and eventually added a one-time appropriation of \$2 billion for local public works. The latter appropriation alone will increase our 1978 outlays by \$800 million over the 1978 ceiling.

We were in a good position, however, to deal with these tight ceilings because of the manner in which budget estimates are reviewed by the Department. An intensive review and analysis of the program managers' requests to the Secretary is conducted during the summer months. Not only are the proposed changes in resources and programs closely scrutinized, but each of the base activities as well. We have had to go through this process in order to at least partially offset increases for new initiatives and program expansions by terminating or reducing lower priority programs. While some activities are subjected to a more intensive review than others, every activity is looked at.

As a result of this approach, as well as normal annual variations in some types of programs, we were able to include in the 1978 budget to OMB the level of program reductions mentioned above. These reductions can be classified as follows:

(Dollars in thousands)

Curtailment of elimination of activity.....	\$221,945
Productivity savings.....	2,502
Financing changes.....	6,649
Completion of work.....	16,427
Total reductions.....	<u>247,523</u>

A detailed listing of the items included in these categories is shown under Tab 7.

SIGNIFICANT PROGRAM ISSUES.

Economic Development. This Administration has long been in conflict with the Congress with respect to the Department's economic development programs as administered by the Economic Development Administration (EDA), and the Regional Action Planning Commissions (RAPC). The principal objectives of these programs are to enhance long-term economic development on a local and regional basis. While the Administration seeks to limit both their program authority and spending, Congress believes that they should be considerably expanded, and in fact has adopted such a course of action. Moreover, Congress, while supporting long-term economic development, has increasingly looked to the EDA program as one of the principal vehicles through which to create immediate employment in times of high unemployment, again against the wishes of this Administration.

This Administration's position has been:

- o Decisions affecting economic development are principally the responsibility of States, local governments and the private sector, rather than the Federal Government's.
- o Federal programs should be geared to encourage and promote this approach, through such programs as revenue sharing, tax reductions and accelerated writeoffs of investment in new plant and equipment.
- o Commerce economic development programs, principally EDA public works, are not effective in creating immediate new employment opportunities. Such programs are expensive and add to inflation, rather than reduce unemployment significantly.

Congress, on the other hand, has disputed these positions and over the last two years has:

- o Added \$136,562,000 to the 1977 budget request for EDA and \$21,300,000 to the request for RAPC, increases of 61 percent and 50 percent, respectively. Increases of similar magnitude were made by the Congress to the 1976 budget requests for these programs.
- o In FY 1975 and 1976, established a job opportunities program in EDA and appropriated \$500,000,000 to carry it out, the full amount authorized in the law.

- o For FY 1977, established a local public works program, over the President's vetoes, and appropriated \$2 billion for it, the full amount authorized.

In addition, Congress, in recent amendments to EDA's and RAPC's basic legislation (the Public Works and Economic Development Act), has expanded authorizations for existing programs and added new authority -- again over the objections of this Administration. In recent amendments to the Public Works and Economic Development Act, Congress:

#### Economic Development Administration

- o Established a new loan program to assist urban areas and authorized \$125,000,000 for this program for FY 1977, 1978 and 1979.
- o Reauthorized and made permanent the job opportunities program as a standby anti-recession measure which would become operative when unemployment reaches seven percent nationally for the preceding calendar quarter. The amount authorized is \$81,250,000 per quarter, for a total annual authorization of \$325,000,000.
- o Provided a total authorization for all EDA programs of \$1,370,000,000.

#### Regional Action Planning Commissions

- o Enacted amendments which would encourage the formation of new regional commissions by relaxing the criteria for designation. This could add as much as \$60 million annually to the budget.
- o Provided for new program authorities for new commissions, particularly in the areas of energy and transportation.
- o Provided for a total program authorization of \$300,000,000.

The 1978 budget now under consideration by OMB is far below these authorizations. For EDA, the request totals \$276,321,000, including administrative funds. This is \$1,093,679,000 below the amount authorized. A table comparing the 1978 request with the authorization is shown under Tab 9. While Congress had traditionally authorized much

more for this program than it has been willing to appropriate, it's clear that the request will not be acceptable to Congress, particularly if unemployment is at or near current levels. In addition, the budget request includes no funds for the new urban development and job opportunities programs. It is likely that Congress will add funds for these programs, not only for 1978, but also for the remainder of 1977, as well. Finally, again if unemployment continues high, there is a chance that Congress would pass legislation similar to the local public works bill, which is now scheduled to expire on December 31, 1976.

Similarly, the 1978 budget request of \$44,200,000 for RAPC is also unlikely to be accepted by Congress. The request for RAPC includes \$2 million for two new commissions. The Southwest Regional Commission has already been designated, and the Antilles Regional Commission is likely to be designated soon. There are also applications for designation pending from other States and regions.

Among the uncertainties in this whole debate between Congress and the present Administration is to what extent do the EDA regular programs contribute to long-term economic development and whether the special programs enacted by Congress really generate immediate employment. With respect to the first question, the answer is probably "not much," if for no other reason than the levels of funding have been considerably below the amount supporters of the program believe are necessary to make a real impact. While no one can say for sure how much is needed, \$1 billion annually is the number most frequently used in the past.

On the matter of the effectiveness of the short-term anti-recession efforts, the answer is similarly unclear. However, an evaluation of the job opportunities program is under way and an evaluation will be made of the effectiveness of the local public works program. Unfortunately, conclusive results won't be available for two years. In the meantime, there will be continued pressure to increase appropriations for both the long- and short-term EDA programs.

#### United States Travel Service.

Domestic tourism. The 1978 budget anticipates a rescission of \$500,000 of the \$1,500,000 added to the budget in FY 1977 for the U.S. Travel Service domestic tourism program. This program was established by Congress during FY 1976. The initial authorization was vetoed, but a modified version was signed. Congress added \$1,250,000 to the 1976 budget for the program. No funds were included in the 1977 budget. The lack of budget support was explained as follows:

1. This was considered to be a lower priority item and could be foregone in the efforts to restrain Federal spending; but

2. Once experience had been gained with the program during FY 1976, it would be evaluated and a determination would be made regarding further funding.

Congress, however, did not accept this view and added \$1,500,000 to the budget for the program for the purpose of encouraging Americans to travel within the United States during the Bicentennial year.

There is strong support among the domestic travel industry and Congress, led by Senator Inouye, for a domestic tourism effort. There has been a good deal of uncertainty as to what types of activities should be carried out (the law specifically prohibits carrying out an activity which would duplicate that being carried out by the private sector). The Secretary, however, recently announced a joint effort with the domestic travel industry to develop a domestic tourism program. The Secretary committed \$1 million of the domestic travel budget for this purpose.

#### National Oceanic and Atmospheric Administration.

Ocean programs. The 1978 budget request of \$223.4 million for ocean programs provides for a program increase of \$27.0 million, offset by program decreases of \$5.8 million. In considering the request for these programs, six options were developed for the Secretary which involved budget increases ranging from \$7.4 million to \$67.2 million, and policy options ranging from proposing a major initiative in the oceans to providing for only uncontrollable increases. It was decided to include only the highest priority ocean activities in the 1978 request. This budget will permit progress toward achieving two overall objectives:

- o To permit and encourage private sector investment in the development of ocean resources; and
- o To protect and conserve the oceans' environment and resources, so that they will be available for use and development.

The significant increase for these programs notwithstanding, there continues to be a debate between the Executive Office of the President and the Congress as to the nature and extent of NOAA's ocean programs. When NOAA was created in 1970,

its supporters saw this as the initial step toward embarking on an effort in the oceans similar to that which was under way in space.

The Executive Office, however, had a different perception of the objective of the reorganization. They saw the creation of NOAA as the way to bring together in one organization similar activities to permit them to be conducted more effectively. They saw it as no endorsement of a new major effort, and though while the NOAA program has grown considerably since 1971, the Executive Office made it clear that it would not support a "wet NASA." They have been particularly reluctant to support fishery programs, other than efforts to better manage and conserve the resource. Anything, however, which smacked of direct assistance to the industry has not been supported by them.

Senator Hollings is one of the major advocates for a strong ocean program and for a major role for NOAA in that program. The Senator sits on our Appropriations Subcommittee, and it is likely that he will become Chairman, replacing Senator Pastore who has retired from Congress. Consequently, he will be in a good position to influence the NOAA budget.

Congress generally has found greater funding for ocean programs. The items listed below are considered to have high potential for increased funding due either to their high priority within NOAA or to frequent expressions of Congressional interest. Additional details are provided for each item in the following table.

Item	(Dollars in thousands)		
	1977 Approp.	1978 Request	Current Authorization
o Ship replacement.....	\$7,500	...	N/A
o Ocean engineering.....	...	\$1,200	N/A
o Implementation of National Marine Fisheries Plan.....	...	...	N/A
o Marine mammals.....	4,334	4,556	\$4,500
o Ocean dumping.....	1,970	2,970	5,600
o Marine sanctuaries.....	...	...	500
o Sea Grant.....	27,739	27,743	50,000
o Marine weather services.....	4,649	4,683	N/A

1. Ship replacement: Construction of two new fisheries research vessels (120 feet each) was authorized in 1977 in connection with funding for implementation of the Fishery Conservation and Management Act of 1976 (extended jurisdiction). Initiation of construction on these vessels has been delayed pending 1978 budget decisions and an internal review of the adequacy of

funding allocations for other extended jurisdiction efforts. At the same time, NOAA has been seeking to begin a replacement program for some of its other fisheries research and hydrographic survey vessels. The need for replacement stems from the age and condition of several of the vessels in NOAA's current 25-ship fleet and from the increasing demands for ship time resulting from offshore energy development, extended jurisdiction, and new marine environmental protection legislation. Replacement of least efficient vessels is estimated to cost \$50 million over five years (six ships). Construction of two replacement vessels in 1978 is estimated to cost \$16.5 million.

2. Ocean engineering: In 1975, the National Advisory Committee on Oceans and Atmosphere (NACOA) recommended establishment of a civilian Institute for Engineering Research in the Oceans. The purpose of the organization would be to provide leadership, funding, and an institutional focus for the development of new ocean engineering methods, standards, and instruments. The Department forwarded a \$5 million request for this item to OMB, but no funds were included for it in the 1977 budget. The 1978 budget includes \$1.2 million to begin a coordinated ocean engineering research program in NOAA, largely in the area of improved instrumentation. This effort could be expanded to include standards development, engineering methods research, and diver safety research for a total cost of approximately \$5.5 million in 1978.

3. Implementation of National Marine Fisheries Plan: After several years of effort and consultation with fisheries interests, the Department released, in July, a six-part plan for conserving, managing, and developing its marine fisheries resources. Although several major pieces of the plan are already being carried out in connection with NOAA's program to implement the extended jurisdiction legislation, major initiatives required to implement other parts of the plan have not yet been included in the budget. Among these are:

- o Conservation and restoration of fisheries habitats (possible budget of \$17 million in 1978);
- o Revitalization of U.S. fishing industry (possible budget of \$5 million in 1978);
- o Strengthening marine recreational fisheries programs (possible budget of \$3 million);
- o Development of aquaculture (possible budget of \$7 million); and
- o Improvement of seafood safety and quality control processes (possible budget of \$3 million).



In all, NOAA envisions an implementation program costing a total of \$167 million by 1985 in connection with the National Marine Fisheries Plan.

4. Marine mammals: Under the Marine Mammals Protection Act of 1972, NOAA is responsible for the protection of over 100 species of whales, porpoises, seals, and sea lions. The two major issues in this area concern porpoise kills incidental to U.S. tuna fishing fleet operations and conservation of threatened or endangered species of whales. To date, NOAA has received good funding support for the programs it has developed to carry out its responsibilities. However, a recent series of court decisions in regard to the porpoise problem and new legislation regarding studies of whale populations will probably require significant budget increases in the future (perhaps as much as \$5-\$7 million more annually, or a total of \$10-\$12 million a year). Legislation would also be required to authorize appropriations of this size, since the authorized amount for 1977 was only \$4.5 million.

5. Ocean dumping: Under the Marine Protection, Research and Sanctuaries Act of 1972, NOAA is responsible for conducting environmental assessments of ocean dumpsites identified by the Environmental Protection Agency (EPA). Prior to fiscal year 1976, NOAA concentrated exclusively on analysis of the New York Bight dumpsite. In 1976 and 1977, additional evaluations and monitoring activities are being conducted at four more sites. An increase of \$1 million is included in the 1978 budget request to provide for 11 more site evaluations. Even if this increase is approved, however, NOAA feels that additional research of a general nature will be needed and that evaluation of possible alternative ocean dumpsites could be accelerated. Additional funding of \$1-\$2 million could be used for these purposes.

6. Marine sanctuaries: Also under the Marine Protection, Research and Sanctuaries Act of 1972, NOAA is responsible for administering a nationwide marine sanctuaries program. This program does not involve the acquisition of land; rather, it consists of designating certain ocean areas as sanctuaries. To date, no funding has been appropriated specifically for this program. However, two areas have been analyzed and designated as sanctuaries using small amounts of existing resources: the site of the ironclad ship MONITOR and a coral reef in the Florida Keys. NOAA has recently contracted for a study of the program's potential: needs, objectives, and funding levels. Once this study has been completed and possible additional sanctuary areas have been identified, additional funding of \$1-\$2 million a year might be required to carry out the program. Legislation would be needed to authorize these additional appropriations.

7. Sea Grant: Under the Sea Grant Act of 1966, NOAA makes matching grants to universities and other institutions on a two-thirds Federal, one-third matching fund basis. Grants are used to support a wide variety of marine research, engineering, education, and advisory service projects. In recent years, Congress has added funds to NOAA's budget (above the President's budget) for Sea Grant. In October 1976, new legislation was enacted which increased Sea Grant's authorization for appropriations to \$50 million (nearly twice the current budget) and which established two special new categories of grants -- one for projects of national scope and one for international projects. No funds for these new programs are included in the 1978 budget, and there will probably be strong pressure from Congress to provide funding for them as well as to increase the regular Sea Grant budget (for which an additional \$2 million has been requested). Up to \$5 million may be appropriated for the national projects recently authorized by Congress. However, extension of authorizations to fiscal year 1978 would be required.

8. Marine weather services: With increased emphasis being placed on offshore activity (including petroleum exploration and drilling, increased shipping of oil, and recreational boating), NOAA has felt a corresponding pressure to improve its marine conditions forecasts. Problems in this area include the sparseness of basic data for forecast development, the lack of proven techniques for predicting ocean conditions (wave height and direction, sea ice, severe storms at sea, etc.), and difficulties in disseminating timely forecasts and warnings.

A small prototype program to improve such services is under way at the Seattle, Washington, Weather Service Office. This location was chosen because of the development and transportation problems associated with Alaskan oil. NOAA feels that the program could be accelerated, both at Seattle and in other areas, and has drafted a plan for a coordinated five-year effort. The first-year cost of an accelerated improvement program would be approximately \$5 million.

Coastal Zone Management Act. The 1978 budget at OMB includes a 1977 supplemental request of \$199 million and a 1978 budget request of \$260 million to implement the Coastal Zone Management Act Amendments of 1976. This legislation significantly affected the Coastal Zone Management program in two ways.

1. It greatly expanded the ongoing program of grants to States for developing and administering coastal zone management plans by:



- o Increasing the Federal share of program development grants to 80 percent, and supporting new planning requirements added by the legislation.
- o Providing interim grants for those coastal States which have completed the planning phase of their coastal zone management programs, but have not received approval for these plans from the Secretary.
- o Encouraging development of consistent interstate coastal planning through 90 percent Federal matching grants to regional entities.
- o Funding energy impact formula grants based on each coastal State's proportional share of the preceding year's Outer Continental Shelf oil and gas activity.
- o Supporting development and implementation of coastal zone management plans through national and State research, study, and training programs.
- o Acquiring lands to provide access to public beaches or other coastal areas of environmental, recreational, historical, esthetic, ecological or cultural value.
- o Providing sufficient program management capability to carry out the new responsibilities of the Act.

The 1977 supplemental includes \$31.2 million for these activities. This would provide a total 1977 program of \$53.0 million in 1977.

2. The Act also created a Coastal Energy Impact Fund. This authorizes credit assistance totaling \$800 million over the next 10 years to allow coastal States to deal with the impacts of energy development. The fund, for which \$146.0 million has been requested in 1977 and \$185.0 million in 1978, will provide the following types of assistance.

- o Planning grants to coastal States to undertake detailed studies and planning for economic, social and environmental consequences of new or expanded energy development activities.
- o Environmental grants to reduce or ameliorate an unavoidable loss of a valuable environmental or recreational resource, if no other funds are available under the Act for this purpose.



- o Loans, loan guarantees, and repayment assistance for coastal States to provide public facilities and services necessitated by energy development.

The structure of the fund, and the types of assistance it would provide, were the result of very careful and protracted negotiations with Congress. The request to OMB reflects these compromises, particularly in the fact that we are requesting that the assistance provided through the funds be appropriated on a dollar for dollar basis, even though many States may opt for loan guarantees which have less of an immediate budgetary impact than direct loans. The assumptions used in developing the request to OMB are set forth in detail under Tab 10.

Indications we are getting from OMB are that they are likely to recommend a far smaller program to the President than we have requested. The staff apparently feels that the States should use the private money market to obtain loans instead of relying on the Federal Government.

It is the considered judgment, however, on the part of the Department officials who participated in the negotiations with Congress, that anything substantially less than what we have included in the budget to OMB would break faith with the Hill.

Climate program (excludes NOAA's ongoing weather prediction and forecasting activity). During the past two years, the state of the world's climate and the nature and effect of climatic change have become issues of major concern. Problems include determining the effect of fluorocarbons on the ozone layer, assessing the causes of major climate fluctuations such as the recent European drought, predicting the effects of climate fluctuations on world supplies of food and energy, and measuring any long-term changes taking place in the stratosphere as a result of land-based activity. Since 1974, several major reports have been issued on this subject, including one issued in September by the National Academy of Sciences. Additionally, the Domestic Council developed and issued a four-point program plan for climate monitoring and prediction and is continuing to investigate problems resulting from inadvertent modification of the stratosphere. NOAA's ongoing efforts include basic physical and chemical research regarding atmospheric components and their interactions, operation of a network of climate monitoring observatories, and participation in an interagency program to determine the effect of climate changes on world food supplies.



As in the development of the 1978 budget for ocean programs, six alternatives were developed for the Secretary's consideration, including the option of a full national climate program initiative. The Secretary decided that we should seek increases only for selected items having the greatest merit. However, there are potential areas for additional program initiatives related to climate problems. They include:

- o Development of methods and instruments for monitoring ozone and radiation changes using satellites (possible \$3 million budget).
- o Expansion and improvement of existing observatory network and acceleration of data analysis and interpretation (possible \$2 million budget).
- o Expansion of basic research into the nature and causes of climate changes (possible \$3 million budget).

The 1978 budget for NOAA includes \$8.4 million, an increase of \$2.7 million over 1977. These funds are principally for the following activities:

- o Continue development of models to predict the impact on major sources of food;
- o Establish a Climate Diagnostic Center to determine why climate varies and to predict future variations; and
- o Conduct a long-term program of stratospheric research and climate monitoring to better understand the chemistry, physics, and dynamics of climate change.

The selective approach differs considerably from the proposal made in 1977 where we suggested the climate program as an item for the President's State of the Union Message, and a major climate initiative in the 1977 budget. Both were rejected, principally because budget limitations could not accommodate the initiative.

#### National Bureau of Standards.

Nuclear Safeguard Program. Public concern with the safety of nuclear power, combined with current projections of increases in the number of nuclear reactors, has resulted in requests from a number of sources for improved physical measurements and standards related to nuclear materials and their accountability. The National Bureau of Standards (NBS) has

developed a program for providing the improved standards and services needed over the next six to eight years. This plan was developed jointly with the Energy Research and Development Administration (ERDA) and the Nuclear Regulatory Commission (NRC). Initial funding of \$1.5 million is included in the 1978 budget. Yet to be settled are policy questions in regard to which agency will have lead responsibility for safeguards and accountability measurements and whether NBS will receive direct funding for its portion of the program or conduct the work on a reimbursable basis.

The amounts requested for 1978 do not represent the maximum feasible program. The full program, as planned, would cost a total of \$2,900,000 and would involve:

- o Development of thermodynamic data, reference measurement techniques, and standards for measuring the amount of nuclear fuel consumed in reprocessing.
- o Standardization of test methods for determining power plant fuel burnup.
- o Measurement of the nuclear properties of waste products.
- o Improvement of the accuracy of reference non-destructive assay techniques and standards for nuclear fuel materials.
- o Development of calibration procedures to account for plutonium more accurately.
- o Development of new standard reference materials for nuclear fuels.
- o Improvement of measurement techniques for uranium and plutonium isotopes used in power plant operation.

At the full program level, the basic program would be completed in 1981 or 1982. At the current level, an additional three to five years would be required to complete the program.

#### Maritime Administration.

Ship construction. The Merchant Marine Act of 1936, as amended, established the construction differential subsidy (CDS) program, which provides for the payment of construction subsidies to U.S. shipbuilders by the Government. The Merchant Marine Act of 1970 additionally established the major national policy

objective of maintaining a base of efficient shipbuilding and ship repair facilities. The basis for subsidy determination is the difference in costs between having a ship constructed in a foreign shipyard and having the same ship constructed in a U.S. shipyard. The subsidy is intended to substantially negate the cost advantage of contracting in lower cost foreign yards. A subsidy differential, commonly called the CDS rate, of up to 50 percent can be paid under either negotiated pricing or competitive bid procedures.

Subsidy contracts awarded under the 1970 Act through 1976 provided for the subsidized construction of 60 ships and reconstruction or conversion of 29 ships at a total CDS program cost of approximately \$1.3 billion.

Oversupply of certain type ships, especially oil tankers, led to slowdown in merchant ship construction beginning in 1975. As a result of the demand slowdown, MARAD began a trend of substantial overestimations of ship construction demand in budget requests. The following table compares MARAD's recent Congressional estimates for ship construction funding with actual contract levels:

<u>Program level</u>	<u>1975</u>	<u>1976</u>	<u>TQ</u>	<u>1977</u>	<u>1978</u>
Estimate.....	\$280.5	\$250.8	\$2.0	\$247.0	\$242.0
Actual.....	101.6	85.0	16.7	...	...

Carryover from 1975 to 1976 of \$236.0 million together with funds from 1976 and transition quarter appropriations canceled the necessity to request new appropriations for 1977. Accumulated carryover from additional 1976 underruns to TQ and 1977 totaled \$346.0 million allowing a program level of \$242.0 million for 1978 financed by new appropriations of only \$135.0 million.

This \$135.0 million when combined with an anticipated \$107 million available from prior year funds, will result in having \$242 million available in 1978.

The combined 1977-1978 program of 19 ships and \$456 million reflects MARAD's expectation of a resurgence of demand. Six of the ships in the combined programs are Liquefied Natural Gas (LNG) carriers projected at a total CDS cost of \$207 million.

Generally, OMB has been reluctantly accepting the reasons for the demand slowdown and the serious underestimations. However, an accumulated skepticism concerning MARAD's estimating accuracy may result in a cut in the 1978 budget.

Operating-differential subsidies. The Merchant Marine Act of 1936, created a program which provides for the payment of

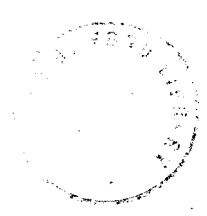
operating-differential subsidy (ODS) to qualified U.S. flag shipping companies for the operation of ships in essential services in the foreign commerce of the United States. In general, the program seeks to equalize the disparity in operating costs between those of American ships and their foreign competitors with respect to the wages of officers and crews, insurance, and maintenance and repairs not compensated by insurance.

The Maritime Subsidy Board (MSB), as the representative of the Secretary of Commerce, is authorized to enter into ODS contracts for either liner or bulk carrier operations for a term of up to 20 years. Contracts may be renewed following application by the operator and approval by the MSB.

The ODS contracts entered into by MARAD do not specify the exact annual amounts to be paid to the ship operator. The contracts primarily establish the type items to be subsidized. Operators are paid on a tentative basis until MARAD can establish the actual U.S. versus foreign cost differential in existence at voyage completion.

Due to the time lag between tentative and actual cost determinations, MARAD is authorized open ended contract authority. Annual appropriations provide cash to liquidate the contract obligations incurred regardless of the period in which they occurred. Since the amount of annual subsidy is not defined in the contract and the contract is not easily terminated without operator concurrence, the ODS program has been viewed as largely uncontrollable in terms of operating cost increases over the agreed 20-year contract periods. The recent cost growth trend for ODS is reflected by a rise in subsidy cost per ship year of \$1.3 million in 1976 to an estimated \$1.5 million in 1978.

In the past two years, renewals of ODS agreements for new 20-year agreements have been signed with four companies. The budget impact of the renewals is estimated to be approximately \$70 million for 1978. Seven other long-term renewal applications involving six companies have been filed for current contracts expiring in the 1976 through 1978 time period. The potential annual accrued cost impact of those renewals commencing 1979 is estimated at \$160 million. United States Lines, Inc., a currently unsubsidized U.S. flag carrier, has filed application for a long-term agreement. If approved, the potential annual accrued cost that would begin in 1979 is estimated to be \$19 million. As in the past, the above estimated annual costs are expected to rise as operating costs increase over the term of the contracts.



The OMB has generally expressed dissatisfaction with the uncontrollable nature of the long-term contracting agreements. This dissatisfaction was more apparent in May 1976, when the Director of OMB suggested that the MSB decision to grant operating subsidy to American Export Lines for North Atlantic routes be reviewed by the Secretary. This request was not granted since this would violate the regulations governing the proceeding. Nonetheless, OMB's continuing concern with the uncontrollable aspects of 20-year contracting procedure and the cost implications of the upcoming renewals was specially stressed during the recent OMB review of the 1978 MARAD budget request of \$329.5 million.

### OTHER PROGRAM ISSUES

These issues generally are of a lower dollar magnitude, but could be ones which the new Administration may well wish to consider in determining its budget and program priorities, ones where there is a potential conflict with Congress, or both.

1. 1980 Winter Olympic Games. The 1980 Winter Olympic Games will be held in Lake Placid. Just prior to adjournment, Congress enacted legislation which would authorize \$49.0 million in Federal financial assistance, in the form of grants to the Lake Placid Organizing for three types of facilities:

- o Permanent, unique facilities needed for the games, such as the ski jumps, luge run, ice arena, etc.
- o Temporary housing for the participants in the games; and
- o Other temporary facilities, such as stands and television facilities.

This legislation was enacted over the objection of this Administration which had proposed to provide \$28 million for the permanent, unique facilities and anticipated funding this from funds already appropriated to the Economic Development Administration.

The Administration proposal was not satisfactory to the Organizing Committee and they were successful in obtaining a larger authorization. However, Congress, while authorizing (and expecting) additional appropriations, also provided the use of EDA Title I (public works) funds to carry out the Act. And in doing so, provided for certain exemptions from Title I to facilitate such use. President Ford, in signing the authorization, reaffirmed his position that Federal financing should be limited to the permanent, unique facilities. He asked the Secretary to meet with the Olympic Committee to find ways to meet its other needs without additional Federal expenditures. The principal item involved is the athletes' housing.

After several meetings with the Organizing Committee, and their contractor, Gilbane and Company, it was clear from their cash flow figures, that if the facilities were to be completed in time for the Olympics, \$30.1 million would be required for FY 1977, plus funds for the athletes' housing. Due to the short construction season at Lake Placid, construction contracts must be let by April.

We will, therefore, be proposing a request to our Appropriations Committees to permit us to use \$30.1 of funds appropriated to

EDA in 1977 for its Title I (public works) program for the permanent, unique facilities and some of the temporary facilities. Our Appropriations Committees are likely to balk at this large shift in funds, which would otherwise be available for public works projects throughout the country. The \$30.1 million represents 21 percent of the total amount appropriated for this program and would mean that EDA would make 50 fewer grants than if the full amount of the appropriation were to go to regular activities. However, given the construction schedule, plus the fact the Congress authorized the use of the Title I program funds, the Committees may go along, but restore the \$30.1 million in a 1977 supplemental.

With respect to the temporary housing for the athletes, the Justice Department has been directed by OMB to submit a supplemental request to build a minimum facility prison at Lake Placid. Such a facility is needed in the Northeast and this would be used to house the athletes. Justice is showing some reluctance to comply with this request, but the approach is a sound one, since no one wants to spend \$14 million on temporary housing for which Lake Placid has no use once the Olympics are completed. If Justice manages to avoid complying with the OMB directive, then Commerce will also have to provide funds for the housing.

There is one final issue associated with the Olympics, and that concerns environmentalists' concerns. A Draft Environmental Impact Statement was released on October 17, 1977. Under the law, a total of 120 days are required from date of issuance to permit an opportunity to comment on the statement. Before any Federal funds can be committed to the project, this time must lapse. Environmentalist groups, in fact, have raised some concerns about the construction plans for the area, although the Organizing Committee has been very careful to minimize the impact of the Olympic needs on the environment. These concerns are currently the subject of hearings on the EIS being held in Albany. Regardless of the outcome of these hearings, it appears that the earliest funds can be committed to the project is February 1. In the meantime, Gilbane and Company has been using its own funds on a good faith basis to cover some of the costs of preliminary costs, such as architectural and engineering work.

2. Domestic and International Business Administration. Adverse action may be taken by OMB on two elements of the 1978 budget request for the Domestic and International Business Administration (DIBA).

(1) Export promotion. DIBA conducts a program to promote the role of American products to foreign countries

through a wide variety of activities. These include operation of seven trade centers, participation in trade and international exhibitions, and market research to advise businessmen of business opportunities. The focus of the DIBA program is on new-to-export or new-to-market firms, although these programs are also available to established exporters. The funding for the program is about \$20 million annually, including support provided by DIBA field offices. (DIBA also has a separate program for promotion of trade between the U.S. and socialist countries.)

OMB has never supported the DIBA export promotion program. Their principal objection is that there has never been any real evidence that the exports claimed by the program wouldn't have taken place anyway. Moreover, even if the export sales (about \$1.5 billion) are the result of this program, they are such a very small increment to the total export sales of over \$100 billion to make the program of marginal utility. Moreover, OMB feels that the most effective manner to increase U.S. exports is through negotiations to reduce trade barriers and through negotiating flexible exchange rates.

Consequently, from time to time, OMB has recommended that the program be substantially cut back. Their special target has been the trade centers which they have recommended unsuccessfully, be closed. Also, from time to time, we have proposed that some of the marginally performing trade centers be closed, specifically, Sydney and Milan. The closing of Sydney is again proposed for 1978. However, Congress has usually not approved these closings.

Recently, however, OMB has been successful in pushing an increase in fees for participation by individual businesses in overseas trade promotion events. These fees were increased significantly, particularly for participation by established exporters. DIBA feels, but cannot yet demonstrate conclusively, that these fees have reduced participation in these events for both nonestablished and established exporters. The latter, because it is too expensive, the former because of their reluctance to participate in an event when there is no drawing card for foreign buyers, which the well known established exporter tends to be.

It would not be unlikely for OMB to make another effort to significantly reduce this program in 1978 in light of their past efforts to do so, and as a result of previous efforts to hold down the overall budget totals.

(2) Field Offices. DIBA operates 43 district offices and 19 satellite offices. These operations provide the field structure to support the DIBA program, and some other Commerce programs. Again, OMB has from time to time tried to close

the smaller two- (or three-) person offices, and indications are that they will try to do so again. Every attempt to close any Commerce field office has been rebuffed by Congress. They are particularly popular because they conduct activities in which the Congressmen can participate, such as business seminars. The offices are also used by local businessmen to obtain information about Federal programs, for assistance on export control matters, and for exporting overseas. Consequently, they generally are supported by the local business communities.

The likelihood of Congress accepting a reduced field office structure is slight. In fact, Mr. Slack, the Chairman of our House Appropriations Subcommittee, favors this program and has repeatedly made clear that he will not abide a reduction.

3. Personnel. The OMB maintains a system of control over the total number of people directly hired by the Federal Government. The disparity between the OMB hiring ceilings and the needs of the Department is one of the most pressing problems we have. In recent years, the Department has not been given enough hiring authority to allow us to carry out new directly and reimbursably funded programs. While our programs, in constant dollars, have grown by 38.6 percent, employment has increased by only 8.6 percent. Improved productivity, selected contracting out, and employment control management have helped cover some of the difference, but the problem remains acute, particularly in NOAA and the Patent Office. Some agencies have found it necessary to violate basic personnel policies, often to the further detriment of individual employees as well as programs.

The Department's 1978 budget request included a plea for a 4.3 percent increase in permanent employment for 1977 just to cover needs of our existing programs. Another 1.9 percent increase was requested for new programs in 1977 and 1978.

Program managers have been reluctant to give up existing assignments and funding or to forego new activity solely because of the hiring ceilings. This may be necessary in the future, however, if relief isn't granted.

A separate analysis of our personnel situation, which has been provided to OMB, is under Tab 8.

DEPARTMENT OF COMMERCE

1978 BUDGET  
TRANSITION TEAM

TAB

- 1 Letter to OMB Director Lynn transmitting the 1978 budget.
- 2 Tables on 1977 and 1978 Budget Authority, Outlays, and Employment for each of the Department's organizations. These tables include changes in our request made in our initial request to OMB.
- 3 Summary descriptions of the 1978 budget request for each of the Department's organizations.
- 4 List of proposed 1977 supplementals.
- 5 Mandatory program increases.
- 6 Other proposed program expansions or new initiatives.
- 7 FY 1978 Program reductions.
- 8 Personnel analysis.
- 9 EDA/RAPC Authorization.
- 10 Assumptions for NOAA's 1977 Supplemental and 1978 Amendment for Coastal Zone Management.





Honorable James T. Lynn  
Director, Office of  
Management and Budget  
Washington, D.C. 20503

Dear Jim:

This letter transmits the 1978 budget request for the Department of Commerce. This request is consistent with the President's policy of achieving a balanced budget. Most of the program increases have been offset by decreases, achieved in many instances by terminating or reducing current programs. These programs, although typically worthwhile, are generally of lower priority than the increases and new initiatives. We have made a very genuine effort to make trade-offs and to accommodate new requirements by cuts in other areas. We have also reflected savings expected to be achieved through the President's Management Initiatives program and other efforts to improve productivity.

My basic recommendation of \$1,837,000,000 in budget authority complies with the ceiling we received from you just three weeks ago. It provides for program increases of \$199,750,000. Of this amount, \$139,940,000 can be classified as mandatory; that is, increases for specific tasks we must carry out by law, either pursuant to recently enacted or longstanding legislation, or where previous commitments leave us little choice but to carry out the program. Notable items falling into these categories include:

- o Preparing for and conducting periodic censuses;
- o Implementing legislation extending U.S. fishery jurisdiction to 200 miles;
- o Continuing the environmental satellite program;
- o Carrying out the U.S. responsibilities under the Patent Cooperation Treaty;
- o Meeting new assignments given to us by the Energy Policy and Conservation Act; and
- o Financing to accommodate increased activity in the ship construction program.



The remaining \$59,810,000 will be used for a limited number of new initiatives or program expansions which deserve serious consideration, including:

- o Expanding programs to encourage private sector investment in the oceans while, at the same time, safeguarding the marine environment;
- o Improving our ability to measure changes in manufacturers' inventories and their value. The lack of such ability, most agree, limited our capability to forecast the extent and depth of the recent recession;
- o Resuming the NOAA hurricane modification experiment (Project STORMFURY);
- o Beginning or expanding research programs to better understand the climate and stratosphere. Such research is designed to learn more about the nature and extent of climate changes and the effect of climate on food production;
- o Moving ahead with the fire prevention program, including developing a sound fire academy program; and
- o Initiating a program to improve present methods for accounting for nuclear materials, both domestically and internationally. This program has been developed jointly with the Energy Research and Development Administration and the Nuclear Regulatory Agency. Your staff has been briefed on this new initiative.

These activities are more fully described in the enclosed summary and the detailed justifications provided to your staff. They survived a long and rigorous review of requests from my program managers which totaled far more than I am recommending in this budget.

In addition, I am recommending for your consideration three over ceiling items, totaling \$102,500,000. This will bring our total budget request to \$1,939,500,000. These items are:

- o \$20,000,000 to continue the EDA section 304 grant program to States;



- o \$67,000,000 to meet potential demand for the construction of two liquefied natural gas carriers (LNG's) to transport gas from Algerian fields; and
- o \$15,500,000 to consolidate NOAA facilities in Seattle at Sand Point.

To offset these increases, I have identified \$247,523,000 in program reductions and financing changes, and \$10,000,000 in rescission and deferral of 1977 appropriations. I will have some observations on the reductions later in this letter.

Also included in the budget request are two 1977 program supplementals. The first is \$751,000 to investigate approaches to determine and measure the quality of life, including the publication of available statistical data in STATUS. The second is \$5,000,000 to acquire and renovate Marjorie Webster College for a National Fire Academy as required by law. I selected this site for the Academy after reviewing the recommendations of the Site Selection Committee. Based upon these recommendations and in analyzing them, I concluded that this was the best site available.

Thus, the budget request can be summarized as follows:

	(Dollars in thousands)	
	Budget Authority	Outlay
1977 Appropriations to date....	\$1,874,487	\$2,149,783
Rescissions and deferrals proposed.....	-10,000	-2,500
Program supplementals.....	5,751	3,714
Total, 1977 estimate..	1,870,238	2,150,997
1978 Changes in ceiling:		
Adjustments to base.....	14,535	-167,143
Program reductions.....	-247,523	-68,990
Program increases.....	199,750	96,576
Total, 1978 budget ceiling.....	1,837,000	2,011,440
Over ceiling items....	102,500	6,560
Total, recommended 1978 budget.	1,939,500	2,018,000

Program reductions. We had virtually completed the development of the 1978 budget when we received your revised allowance. This allowance was \$128,408,000 below the one received last February. We had considered this too low by approximately \$75,000,000, principally due to Congressional

action on our 1977 appropriation request, even excluding the add-ons for the Economic Development Administration and the Regional Action Planning Commissions. Therefore, in our view, the new allowance represented a reduction of more than \$200,000,000 from the previous level. Up to the point in the process that the revised ceiling was received, we had already identified \$203,572,000 in program reductions and in financing adjustments. I called for further reductions and as a result \$43,951,000 additional was identified. Moreover, \$19,798,000 in program increases which had been approved for the budget were eliminated. I cite this to demonstrate that this Department takes seriously the underlying policy of Federal fiscal constraint.

The nature of this Department severely limits our ability to make the level of reductions required by your ceiling and at the same time provide for some program increase. Over 75% of our resources are concentrated in three bureaus -- the Economic Development Administration, the National Oceanic and Atmospheric Administration and the Maritime Administration. Opportunities for large reductions are essentially limited to these areas, and even with these areas we are constrained by the uncontrollability of some of these programs.

The remaining 25% of the Department's resources are generally service oriented. These services are provided to the public and to other Government agencies. This is particularly true of the statistical, National Bureau of Standards and Patent Office programs. While faced with these limitations, I believe that we have done a credible job in meeting the revised allowance.

While the reductions we proposed are credible, and are certainly consistent with Administration policies, we must recognize that they will be difficult to achieve, in some cases, because of their political sensitivity. I wish to emphasize that reductions were not selected because of that characteristic. Indeed, the alternatives would be even less acceptable to the Congress.


I would be remiss, however, if I failed to point out some of the difficulties we will encounter in achieving the reductions. Among these are the lower program requirements recommended for the Economic Development Administration and the Regional Action Planning Commissions. As you know, for the last two years we have tried to make reductions in these two programs. While we were successful in holding add-ons to a minimum, Congress did not accept the levels proposed in the budget. Moreover, the popularity of these programs

is evidenced by recent legislative changes already made or likely to be made. Congress expanded the program responsibility of the Regional Commissions, and made designation of new commissions easier. The Congressional support for EDA has been evidenced, not only by the add-ons to the budget, but also by the Local Public Works program and the current efforts to expand considerably EDA's urban programs.

Other reductions which may face opposition include rescission of \$1,000,000 in the United States Travel Service's domestic and international tourism programs, deferral of \$7,500,000 added by Congress for the construction of two new ships to implement the extended fisheries jurisdiction legislation, deferral of \$1,500,000 added to the 1977 budget for design of a new underwater laboratory, and amending the Voting Rights Act of 1965 to reduce the requirement to take a registration and voting survey from every two years to every four years.

One major concern I have with respect to the program decreases is the temptation inherent in the budget process, particularly when trying to achieve lower budget totals, to accept all reductions without giving adequate consideration to the recommended program increases. I view the proposed program decreases as offsets to accommodate increases. Some program managers in this Department argued strongly to forego all increases instead of exposing themselves to significant reductions in ongoing programs during the OMB review process. I fully recognize that the pressures to hold down Federal spending weigh heavily upon you and your staff. Nonetheless, I know you will agree that sound recommendations for new initiatives and program expansions should receive careful consideration, particularly when they have been accompanied by program reductions. Otherwise, the budget process will continue to be less than rational. Attempts to cut out lower priority and marginal programs and to improve productivity will be thwarted.

It is my observation that this Department has a good record in improving program management, and in assuring that its objectives are carried out with a minimum of resources. Recent examples include my personal involvement in Management by Objectives and our response to the President's Management Initiatives, which I would hope is one of the best that has been developed. These efforts, along with our concrete proposals to reduce ongoing activities, should be taken into consideration in your review of the 1978 budget request.



I would like now to address just a few of the increases included in this budget in which I have a personal interest.

Quality of life. As you know better than most, our Nation is confronted simultaneously with many conflicting priorities and with limited resources to meet them. We do tend to give the greatest attention to economic criteria, because these are more easily measured and verified. While other criteria are recognized as reflecting important national goals, such as environment, health, energy sufficiency and the status of minorities, they are all too often omitted from systematic analyses because of lack of quantification. In order that resources may be applied in a manner that is more representative of national priorities, it is necessary for us to develop a system which permits us to comprehend where the Nation stands through a variety of relevant measures, and to examine the incremental change in all of these measures that may be brought about by any Government action. This problem has concerned me for many years. I see my appointment as Secretary of Commerce as an excellent opportunity to move forward with a quality of life effort; that is, shaping statistical data to reflect more appropriately all important national concerns.

Consequently, I am requesting \$751,000 in 1977, through a supplemental, and \$1,172,000 in 1978 for this work. I am also reprogramming \$421,000 in 1977 in order to get it under way.

There are three individual but related segments to this request. In the first, the Bureau of Economic Analysis will introduce qualitative variables into the system of national economic accounts. This is a unique undertaking which will require the development of a conceptual framework and new statistical methodologies. The first areas to be studied include the value of housewives', volunteers', and other labor services not now included in the GNP; services rendered by consumer and Government capital, such as autos, computers, and building; expenditures for occupational safety and health and other aspects of employee welfare; measures of the value and depletion of our national resources; the value of human capital and its relationship to productivity increases; and the allocation of leisure time.

In the second segment, the Bureau of the Census will begin developing a series of social indicators. This will be an ongoing research project similar to the operation mentioned above, and it will consist of the preparation of

analytic and interpretive reports. Initially, the reports will concentrate on time series and correlations of available data. Subject areas planned for examination at the outset include the dimensions and characteristics of gross movements into and out of poverty, measures of racial and economic clustering, the impact of transfer payments and Governmental distribution of noncash benefits on economic well-being and income redistribution, and the impact of crime, unemployment and housing on community life.

The third segment will allow continued publication of the chartbook on domestic developments, STATUS, and of the related Vice Presidential briefing notes. The budget estimates in this submission for STATUS are based upon issuance of the publication on a quarterly basis. Subsequent to the time these estimates were prepared, the President has decided that he would prefer to publish STATUS each month. Consequently, these estimates will be revised to include the additional cost associated with more frequent publication. I should also point out that the Congress did not approve our 1977 request for STATUS. Thus, we will have to obtain the concurrence of our Appropriations Committees to continue the publication in 1977 using reprogrammed funds until we obtain a 1977 supplemental. I am including the cost associated with STATUS in this quality of life request since I envision that it will eventually become the vehicle for the presentation of the new information to the public. I consider this to be an extremely important and innovative program.

Marine programs. There continues to be an ever increasing interest in the conservation and development of our marine resources. This heightened interest is evident from the activity in Congress over the last several years, beginning with the creation of NOAA itself. Since then, the following significant legislation has been enacted addressing ocean or ocean-related policies:

- Federal Water Pollution Control Act;
- Deepwater Ports Act;
- Marine Protection, Research and Sanctuaries Act;
- The Coastal Zone Management Act, with important amendments just signed by the President;
- The Marine Mammal Protection Act;
- The Endangered Species Act; and
- The Fisheries Management and Conservation Act.

In addition, the Senate is now conducting a thorough review of our ocean policy through the Senate National Ocean Policy Study, and the GAO has issued a comprehensive report on this matter.

Much of this new activity has placed additional responsibility on NOAA and the 1978 budget request reflects the need to meet these responsibilities effectively. While the 1978 budget includes far less than many individuals would prefer, it is the minimum amount I believe is required to demonstrate credibility to the Congress that we are indeed serious about our ocean responsibilities. The depth of Congressional interest was brought home to me once again when I testified before the Subcommittee on Oceanography of the House Committee on Merchant Marine and Fisheries on September 9. As I indicated in my testimony, there are a wide variety of new areas which warrant special consideration, if for no other reason than economics. For example, in 1973, the primary economic value of ocean resources to the United States approached \$8 billion. Current projections estimate a three-fold increase by 1985 and a fivefold increase by 2000. This represents a real annual growth in excess of six percent. Over the next quarter century, the oceans will create major growth industries in a number of areas, including energy, minerals, and food products.

As I see it, our role in this process as a Federal agency ought to be one of encouraging private sector investment in the development of ocean resources while, at the same time, taking appropriate steps to insure that these resources will be properly conserved and managed. This is fully consistent with our position at the Law of the Sea Conference and with recent legislative enactments. It will allow us to move ahead in rapidly growing areas, such as marine mining and ocean engineering, without making future commitments to Federal spending which might better come from the private sector. It will also permit us to conserve and protect our valuable ocean resources where that is necessary. My 1978 budget proposals in the marine programs area reflect this policy.

The President and the Congress have also recognized, through the Coastal Zone Management Act, as amended, that balanced management of our coastal environment is critical to our national need to accommodate many conflicting uses of our coastal zones. These zones must be used for energy facilities, housing and industrial areas, and ocean transportation. At the same time, we must also make sure that the wetlands and habitats that sustain our fisheries are not destroyed, that ample recreational opportunities are available, and that the quality of the oceans is maintained.

I will be sending you shortly a budget request for 1977 and 1978 to implement the coastal zone management amendments recently enacted by the Congress.

Ship construction. This budget also provides for a \$242 million program level in 1978 for ship construction. The ship construction industry shows signs of recovering from the collapse of the demand that has plagued it for the last year. There are at least two discernible trends which support prediction of recovery. First, U.S. flag operators who have operating subsidies and Capital Construction Fund agreements must order replacement ships. Second, we can also anticipate a demand for liquefied national gas carriers, particularly now that a more liberalized policy on LNG imports has been announced by the President. This budget contains ship construction subsidy amounts to meet the two demands.

Research and development. This budget includes significant increases in research and development, about 14% over last year. I directed that special emphasis was to be given to research and development proposals during the formulation of the 1978 budget. Much of the R&D is associated with and required for operational activities, such as implementing extended jurisdiction, improving our ability to predict natural disasters and determine the reasons for climatic change. Nevertheless, it has been my observation that all too often, particularly in "tight" budget years, increases for R&D programs are the easiest to forego. However, research and development help make operational programs more effective, and it also opens us up to new ideas and approaches in Government and in the private sector. For this reason, I believe we should invest more heavily in R&D programs and have reflected that policy in this budget.

Personnel. My 1978 budget includes a September 30, 1978 permanent employment estimate of 30,779, which is 1,749 over the current September 30, 1977 ceiling as adjusted for Congressional action. I recognize that this is a very large increase and I am cognizant of the President's desire to limit the growth of the Federal bureaucracy. Accordingly, I am recommending only a net increase of 534 employees as a result of 1978 budget program reductions, 1977 supplementals, 1978 program increases and 1978 changes in reimbursable work. I must, however, request the remaining increase of 1,215 for September 30, 1977, which represents a present Department-wide shortage in hiring authority. This has accumulated over the years as new programs have been approved, but adequate hiring authority to carry them out has not. The adverse effects of this artificial restriction can be seen in a number of instances, most notably where

components of the Department have been using temporary hiring authority where that authority is not appropriate. It is not only unrealistic, but impossible, to continue this Department's programs with the manpower allowances now in force. I earnestly ask relief from employment ceilings so that NOAA, EDA and the Patent Office can continue carrying out their responsibilities without the major management problems which are inherent in the current permanent employment ceilings. Moreover, in order that the Department may develop a sensible staffing plan for the remainder of 1977, I ask that a decision be reached on the 1,215 for September 30, 1977 as soon as possible, prior to your completion of the 1978 budget review. This requirement is not affected by the 1978 request.

Items not included in the request.

Coastal Zone Management. As I mentioned above, Congress has recently passed legislation which significantly enlarges the coastal zone management program. We are in the process of reviewing the funding requirements for the entire coastal zone management program and will provide 1977 and 1978 estimates to you shortly. It is our intent that these estimates be the minimum necessary to carry out the expanded program.

Public Works Employment. A 1977 supplemental of \$2 billion is now pending in Congress for the public works employment program. Enactment of this supplemental will require an increase in our outlay ceilings of \$800 million for each of the years 1977 and 1978, and \$200 million for 1979. We will also need funds to administer and evaluate the program in 1978. A formal amendment to this budget will be submitted once the supplemental is enacted and a decision made as to the course of action the President plans to take with respect to the supplemental.

Measure of real national defense purchases. The Bureau of Economic Analysis proposed a program to prepare price indices of national defense purchases in constant dollars for the purpose of including them in the GNP estimates. From the standpoint of improving the national economic accounts, we believe this program has merit. However, it was not included in our request because the principal beneficiary appears to be the Department of Defense. That Department has been paying for developmental costs since 1975 and we believe they should continue to pay for the operational costs, preferably through a transfer of funds to BEA. In this way, BEA would be able to get the funds in its base without having to justify an increase to Congress for a program which is of principal benefit to another agency.

In addition, the National Academy of Sciences has just issued a Report on Halocarbon Effects on Stratospheric Ozone. The report deals with the possible breakdown of the Ozone layer. The Academy's finding could impact NOAA's program of measuring and monitoring ozone changes in the stratosphere. We are now reviewing the report to determine its impact on our program.

\* \* \* \* \*

I wish to close by reiterating that we made difficult choices in the development of this budget in order to accommodate program increases within the allowance provided us. This is a budget request responsive both to the President's fiscal policy and the need to respond to the demands placed upon the Department. As such, I know it will receive very careful consideration by you and your staff.

Sincerely,

Elliot L. Richardson

Enclosures

OBPA:DSNathan:JEKasputys:bv  
Exec. Sec. (20)  
A/S Kasputys (2)  
Program Managers (w/o enclosures)  
Mr. Nathan (2)  
Mr. Sweeney (2)  
Mr. Treat and Staff Analysts  
Ms. Richards and Staff Analysts

DEPARTMENT OF COMMERCE  
Summary of Recommended Budget for Fiscal Year 1978  
Budget Authority  
(In thousands of dollars)

	1977 Approp	1977 Supplementals Requested	Adjustments to Base	Rescissions & Deferrals	Program Reductions	Program Increases Within Ceiling	Over Ceiling	Total Program Increases	Total 1978 Budget
General Administration....	21,158	...	122	...	-279	1,220	...	1,220	22,221
Bureau of the Census.....	90,687	592	157	...	-8,584	35,798	...	35,798	118,653
Bureau of Economic Analysis.....	12,300	159	190	...	-100	746	...	746	13,295
Economic Development Administration.....	386,725	...	20	...	-133,545	...	20,000	20,000	273,200
Regional Action Planning Commissions.....	63,500	...	...	...	-19,300	...	...	...	44,200
Domestic and International Business Administration	57,524	...	601	...	-1,160	622	...	622	57,587
Minority Business Enterprise.....	50,000	...	61	...	-250	...	...	...	49,811
U.S. Travel Service.....	14,470	...	422	-1,000	-307	279	...	279	13,884
National Oceanic and Atmospheric Admin.....	585,296	...	7,868	-9,000	-23,272	65,070	15,500	80,570	641,462
National Fire Prevention & Control Administration..	12,239	5,000	-4,779	...	-421	3,466	...	3,466	15,505
Patent & Trademark Office	86,400	...	-435	...	-8,507	2,592	...	2,592	80,250
Science and Technology: National Bureau of Standards.....	66,205	...	4,270	...	-3,101	4,517	...	4,517	71,891
National Technical Information Service...	1,166	...	-148	...	...	345	...	345	1,363
Office of Telecommunications.....	1,414	...	12	...	...	250	...	250	1,676
Subtotal, Science & Technology.....	68,785	...	4,134	...	-3,401	5,112	...	5,112	74,930
Maritime Administration...	432,872	...	674	...	-48,900	84,845	67,000	151,845	586,491
Contingency Items.....	...	...	5,500	...	...	...	...	...	5,500
Total, Budget Authority...	1,881,956	5,751	14,535	-10,000	-247,523	199,750	102,500	302,250	1,990,509
Trust funds, other funds, & offsetting receipts.....	-7,469	...	...	...	...	...	...	...	-7,469
Total, Department of Commerce.....	1,874,487	5,751	14,535	-10,000	-247,523	199,750	102,500	302,250	1,983,000

ENCLOSURE 1

DEPARTMENT OF COMMERCE

SUMMARY OF BUDGET OUTLAYS  
FISCAL YEARS 1977 AND 1978

(IN THOUSANDS OF DOLLARS)

	<u>1977</u> <u>REQUEST</u>	<u>1978</u> <u>REQUEST</u>
General Administration.....	\$23,063	\$23,500
Bureau of the Census.....	91,344	112,100
Bureau of Economic Analysis.....	12,176	12,900
Economic Development Administration.....	416,294	283,000
Regional Action Planning Commissions.....	67,980	62,000
Domestic and International Business Administration.....	58,521	58,000
Minority Business Enterprise.....	54,936	55,000
United States Travel Service.....	13,471	14,100
National Oceanic and Atmospheric Administration.....	574,607	573,900
National Fire Prevention and Control Administration.....	14,261	21,100
Patent and Trademark Office.....	86,209	80,900
Science and Technology:		
National Bureau of Standards.....	70,820	71,645
National Technical Information Service.....	2,064	1,425
Office of Telecommunications.....	2,121	1,830
Subtotal, Science and Technology.	<u>75,005</u>	<u>74,900</u>
Maritime Administration.....	<u>663,130</u>	<u>646,600</u>
Total, Department of Commerce.....	2,150,997	2,018,000
Revised OMB Ceiling.....		<u>2,018,000</u>
Difference.....		...

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## DEPARTMENT OF COMMERCE

1978 Budget  
Mandatory Program Increases  
(Dollars in thousands)

	1978 Increases	
	Perm. Pos.	Amount
<u>General Administration:</u>		
Privacy Act Recordkeeping responsibilities.....	7	\$134
<u>Bureau of the Census:</u>		
Develop statistical requirements for the Trade Act of 1974....	13	293
1977 Economic censuses.....	...	9,483
1978 Census of Agriculture.....	31	5,116
1980 Decennial census.....	...	12,000
Data processing equipment.....	...	6,119
General administration associated with the above.....	2	1,105
Other capital outlays.....	...	360
Subtotal, Bureau of the Census.....	46	34,476
<u>Bureau of Economic Analysis:</u>		
Computer replacement.....	...	261
<u>Domestic and International Business Administration:</u>		
Establish energy material allocation system pursuant to Sections 102 and 104 of the Energy Policy and Conservation Act.....	12	310
<u>National Oceanic and Atmospheric Administration:</u>		
Relocate Southeast Utilization Research Center.....	...	894
<u>Environmental Satellite Program:</u>		
TIROS-N procurement and launch.....	...	8,914
GOES procurement and launch.....	...	3,205
GOES data collection units.....	...	202
Payment to NASA for increased launch costs.....	...	1,689
Subtotal, Environmental Satellite Program.....	...	14,010
First GARP global experiment.....	...	699
Great Lakes Laboratory.....	...	1,846
Implement extended jurisdiction legislation.....	29	7,183
Subtotal, National Oceanic and Atmospheric Adminis.....	29	24,637
<u>National Fire Prevention and Control Administration:</u>		
Data analysis and computer support for new States added to the Fire Information System in 1977.....	1	275
<u>Patent and Trademark Office:</u>		
Implement Patent Cooperation Treaty.....	21	478
Additional patent examining staff.....	...	1,272
Subtotal, Patent and Trademark Office.....	21	1,756
<u>National Bureau of Standards:</u>		
Equipment depreciation payment.....	...	163
<u>Maritime Administration:</u>		
Ship construction subsidies.....	...	68,000
Operating differential subsidies.....	...	+9,923
Subtotal, Maritime Administration.....	...	77,923
Total, mandatory increases.....	116	139,940



DEPARTMENT OF COMMERCE

SUMMARY OF RECOMMENDED BUDGET FOR FY 1978  
OTHER THAN PERMANENT END-OF-YEAR EMPLOYMENT

	1977		RECOMMENDED FOR FY 1978			
	OMB CEILING	REQUEST	WITHIN CEILING		OVER CEILING	TOTAL
			CHANGE	TOTAL		
General Administration.....	114	113	...	113	...	113
Bureau of the Census.....	4,864	4,860	1,283	6,143	...	6,143
Bureau of Economic Analysis.....	51	51	6	57	...	57
Economic Development Administration.....	73	58	...	58	...	58
Regional Action Planning Commissions.....	5	6	...	6	...	6
Domestic and International Business Administration.....	85	85	...	85	...	85
Minority Business Enterprise.....	50	50	...	50	...	50
United States Travel Service.....	14	14	...	14	...	14
National Oceanic and Atmo- spheric Administration.....	1,360	1,683	...	1,683	...	1,683
National Fire Prevention and Control Administration.....	...	10	...	10	...	10
Patent and Trademark Office.....	152	152	...	152	...	152
Science and Technology: National Bureau of Standards...	412	477	...	477	...	477
National Technical Information Service.....	50	50	...	50	...	50
Office of Telecommunications...	70	41	...	41	...	41
Subtotal, Science and Technology.....	532	568	...	568	...	568
Maritime Administration.....	95	95	...	95	...	95
Total, Department of Commerce....	7,395	7,745	1,289	9,034	...	9,034

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DEPARTMENT OF COMMERCE

SUMMARY OF RECOMMENDED BUDGET FOR FY 1978

PERMANENT END-OF-YEAR EMPLOYMENT

	1977		RECOMMENDED FOR FY 1978			
	OMB CEILING	REQUEST	WITHIN CEILING		OVER CEILING	TOTAL
			CHANGE	TOTAL		
General Administration.....	1,295	1,295	22	1,317	...	1,317
Bureau of the Census.....	3,974	3,982	8	3,990	...	3,990
Bureau of Economic Analysis.....	514	514	19	533	...	533
Economic Development Administration.....	691	815	-70	745	...	745
Regional Action Planning Commissions.....	60	89	2	91	...	91
Domestic and International Business Administration.....	1,580	1,604	13	1,617	...	1,617
Minority Business Enterprise.....	206	206	...	206	...	206
United States Travel Service.....	116	127	...	127	...	127
National Oceanic and Atmo- spheric Administration.....	12,467	13,718	290	14,008	...	14,008
National Fire Prevention and Control Administration.....	75	92	34	126	...	126
Patent and Trademark Office.....	2,646	2,694	76	2,770	...	2,770
Science and Technology: National Bureau of Standards...	3,070	3,088	53	3,141	...	3,141
National Technical Information Service.....	367	409	16	425	...	425
Office of Telecommunications...	215	264	4	268	...	268
Subtotal, Science and Technology.....	3,652	3,761	73	3,834	...	3,834
Maritime Administration.....	1,378	1,378	37	1,415	...	1,415
Total, Department of Commerce....	28,654	30,275	504	30,779	...	30,779

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DEPARTMENT OF COMMERCE  
Summary of Recommended Budget for Fiscal Year 1978  
Budget Authority  
(In thousands of dollars)

	1977 Approp	1977 Supplementals Requested	Adjustments to Base	Rescissions & Deferrals	Program Reductions	Program Increases within Ceiling	Over Ceiling	Total Program Increases	Total 1978 Budget
General Administration....	21,158	...	122	...	-279	1,220	310	1,530	22,531
Bureau of the Census.....	90,687	659	272	...	-8,581	35,798	...	35,798	118,835
Bureau of Economic Analysis.....	12,300	274	75	...	-100	746	...	746	13,295
Economic Development Administration.....	2,386,725	...	-1,999,980	...	-133,545	...	23,121	23,121	276,321
Regional Action Planning Commissions.....	63,500	...	...	...	-19,300	...	...	...	44,200
Domestic and International Business Administration	57,524	...	601	...	-1,160	622	...	622	57,587
Minority Business Enterprise.....	50,000	...	61	...	-250	...	...	...	49,811
U.S. Travel Service.....	14,470	...	422	-1,000	-307	279	...	279	13,864
National Oceanic and Atmospheric Admin.....	585,296	178,000	7,018	-9,000	-23,272	65,070	76,450	141,520	879,562
National Fire Prevention & Control Administration..	12,239	5,000	-4,779	...	-421	3,466	...	3,466	15,505
Patent & Trademark Office	86,400	...	-435	...	-8,307	2,592	...	2,592	80,250
Science and Technology: National Bureau of Standards.....	66,205	...	4,270	...	-3,101	4,517	...	4,517	71,891
National Technical Information Service...	1,166	...	-148	...	...	345	...	345	1,363
Office of Telecommunications.....	1,414	...	12	...	...	250	...	250	1,676
Subtotal, Science & Technology.....	68,785	...	4,134	...	-3,101	5,112	...	5,112	74,930
Maritime Administration...	432,872	...	674	...	-48,900	84,845	67,000	151,845	536,491
Contingency Items.....	...	...	5,318	...	...	...	...	...	5,318
Total, Budget Authority...	3,881,956	183,933	-1,986,497	-10,000	-247,523	199,750	166,881	366,631	2,188,500
Trust funds, other funds, & offsetting receipts.....	-10,254	...	2,785	...	...	...	...	...	-7,469
Total, Department of Commerce.....	3,871,702	183,933	-1,983,712	-10,000	-247,523	199,750	166,881	366,631	2,181,031

DEPARTMENT OF COMMERCE

SUMMARY OF BUDGET OUTLAYS  
FISCAL YEARS 1977 AND 1978

(IN THOUSANDS OF DOLLARS)

	<u>1977</u> <u>REQUEST</u>	<u>1978</u> <u>REQUEST</u>
General Administration.....	\$23,063	\$23,800
Bureau of the Census.....	91,411	112,100
Bureau of Economic Analysis.....	12,291	12,900
Economic Development Administration.....	1,216,294	1,086,000
Regional Action Planning Commissions.....	67,980	62,000
Domestic and International Business Administration.....	58,521	58,000
Minority Business Enterprise.....	54,936	55,000
United States Travel Service.....	13,471	14,100
National Oceanic and Atmospheric Administration.....	660,892	728,100
National Fire Prevention and Control Administration.....	14,261	21,100
Patent and Trademark Office.....	86,209	80,900
Science and Technology:		
National Bureau of Standards.....	70,820	71,645
National Technical Information Service.....	2,064	1,425
Office of Telecommunications.....	2,121	1,830
Subtotal, Science and Technology.	<u>75,005</u>	<u>74,900</u>
Maritime Administration.....	<u>663,130</u>	<u>646,600</u>
Total, Department of Commerce.....	3,037,464	2,975,500
Revised OMB Ceiling.....		<u>2,018,000</u>
Difference.....		957,500

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DEPARTMENT OF COMMERCE

SUMMARY OF RECOMMENDED BUDGET FOR FY 1978

PERMANENT END-OF-YEAR EMPLOYMENT

	1977		RECOMMENDED FOR FY 1978			
	OMB CEILING	REQUEST	WITHIN CEILING CHANGE	TOTAL	OVER CEILING	TOTAL
General Administration.....	1,295	1,295	22	1,317	...	1,317
Bureau of the Census.....	3,974	3,985	8	3,993	...	3,993
Bureau of Economic Analysis.....	514	514	19	533	...	533
Economic Development Administration.....	691	815	-70	745	...	745
Regional Action Planning Commissions.....	60	89	2	91	...	91
Domestic and International Business Administration.....	1,580	1,604	13	1,617	...	1,617
Minority Business Enterprise.....	206	206	...	206	...	206
United States Travel Service.....	116	127	...	127	...	127
National Oceanic and Atmo- spheric Administration.....	12,467	13,785	290	14,075	...	14,075
National Fire Prevention and Control Administration.....	75	92	34	126	...	126
Patent and Trademark Office.....	2,646	2,694	76	2,770	...	2,770
Science and Technology: National Bureau of Standards...	3,070	3,088	53	3,141	...	3,141
National Technical Information Service.....	367	409	16	425	...	425
Office of Telecommunications...	215	264	4	268	...	268
Subtotal, Science and Technology.....	3,652	3,761	73	3,834	...	3,834
Maritime Administration.....	1,378	1,392	37	1,429	...	1,429
Total, Department of Commerce....	28,654	30,359	504	30,863	...	30,863

DEPARTMENT OF COMMERCE

SUMMARY OF RECOMMENDED BUDGET FOR FY 1978

OTHER THAN PERMANENT END-OF-YEAR EMPLOYMENT

	1977		RECOMMENDED FOR FY 1978			
	OMB CEILING	REQUEST	WITHIN CEILING CHANGE	TOTAL	OVER CEILING	TOTAL
General Administration.....	114	120	...	120	...	120
Bureau of the Census.....	4,864	4,860	1,283	6,143	...	6,143
Bureau of Economic Analysis.....	51	51	6	57	...	57
Economic Development Administration.....	73	194	-45	149	...	149
Regional Action Planning Commissions.....	5	6	...	6	...	6
Domestic and International Business Administration.....	85	85	...	85	...	85
Minority Business Enterprise.....	50	50	...	50	...	50
United States Travel Service.....	14	14	...	14	...	14
National Oceanic and Atmo- spheric Administration.....	1,360	1,707	-24	1,683	...	1,683
National Fire Prevention and Control Administration.....	...	10	...	10	...	10
Patent and Trademark Office.....	152	152	...	152	...	152
Science and Technology: National Bureau of Standards...	412	477	...	477	...	477
National Technical Information Service.....	50	50	...	50	...	50
Office of Telecommunications...	70	41	...	41	...	41
Subtotal, Science and Technology.....	532	568	...	568	...	568
Maritime Administration.....	95	95	...	95	...	95
Total, Department of Commerce....	7,395	7,912	1,220	9,132	...	9,132

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ENCLOSURE V

DEPARTMENT OF COMMERCE

SUMMARY OF 1978 BUDGET

BY PROGRAM AREA

## GENERAL ADMINISTRATION

### Summary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$21.2	\$22.5
Outlays.....	\$23.1	\$23.8
Permanent Employment.....	1,295	1,317

### Objectives

The General Administration appropriation provides for the general management of the Department and the principal support to the Secretary in formulating policy and providing advice to the President.

### 1978 Program

In FY 1978, the Department will:

- o evaluate the Local Public Works program;
- o increase its emphasis on energy and environmental policy research;
- o improve its personnel management evaluation system and its equal employment opportunity program;
- o improve the management of its ADP resources;
- o improve its ability to discharge its obligations under the Privacy Act of 1974; and
- o focus greater attention on international consultations on commodities.

In the area of energy and policy research the Department will enhance its ability to provide sound technical comments on the impact of proposed regulations and legislation on various industries. It will also study major energy consuming industries in order to develop policies for a balanced approach to the development and use of energy consistent with the need to protect our environment. The 1978 request includes two additional positions and \$640,000 for these purposes.

BUREAU OF THE CENSUSSummary of 1978 Budget

	(Dollar amount in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$91.3	\$118.8
Outlays.....	\$92.4	\$113.1
Permanent Employment.....	2,649	2,657

Objectives

To provide, in a timely and reliable fashion, the basic statistics about the people and the economy of the Nation. This is to be accomplished through:

- conduct of censuses and surveys of the major economic and demographic areas once or twice each decade;
- conduct of detailed surveys of economic and demographic data on a current basis; and
- collection and presentation of this data to the Congress, to the Executive Branch, and to the general public.

1978 Program

Legislatively mandated programs, particularly the periodic censuses, account for the bulk of the requested increases (\$34,476,000 and 44 positions). FY 1978 will be the year of data collection for the economic censuses, the year of final preparation for the census of agriculture, and a year of continued preparation for the 1980 decennial census. These cyclical efforts have been carefully examined and have been found to be consistent with prior experience and efforts to reduce respondent burden. Also included as a mandatory increase is the work associated with the Trade Act of 1974, involving correlation of international statistical codes and the collection of data related to the impact of imports on domestic production and employment.

A few major improvements in the statistical programs are requested (\$1,392,000 and 40 positions). Included here are revisions in inventory valuation, establishment of a methods test panel, and the collection of quarterly data on government finances. The pressure to change the valuation methods of inventories became intense when the economy began going through inflation/recession in 1974 with little prior indication from the inventory figures; it is regarded as the highest priority request by the Economic Policy Board. The methods test panel proposal provides an independent vehicle for testing the feasibility of new approaches and concepts in demographic surveys, primarily the Current Population Survey, which provides

monthly estimates on income and unemployment. The quarterly data on government finances is needed to reduce the error in the quarterly GNP estimates; these estimates are built from interpolations of annual government data and are sometimes in error by as much as \$5 billion.

Only one new program is requested, development of social indicators related to the quality of life (\$1,080,000 and 23 positions). This will be an ongoing research project which will concentrate on time series and correlations of available data to broad national concerns; it includes publication of the monthly chartbook STATUS. It is proposed to initiate this effort in 1977. A total of \$421,000 will be provided through reprogramming and is requested for annualization in 1978; the remaining \$659,000 is being transmitted as a 1977 supplemental request.

These program increases are partially offset by several program reductions (\$8,581,000 and 76 positions). Cyclical reductions in the census of governments, the 1974 census of agriculture, and the registration and voter survey account for much of the decrease. New management initiatives are proposed to reduce the frequency of some construction reports, to eliminate statistical assistance to State and local governments, to discontinue the bilateral reconciliation of foreign trade statistics, and to convert the registration and voter survey to every four years instead of two (legislation will be required to change the timing of the survey). Other decreases result from curtailing certain economic census improvements and from productivity savings realized throughout the Bureau's current programs.

It should be noted that the request for the 1978 census of agriculture assumes the revised definition of farm as accepted by OMB, Agriculture, and Commerce, i.e., gross sales of over \$1,000. Should legislation be enacted requiring the Bureau of the Census to revert to the previous definition, the costs could increase significantly. The additional amount which would be necessitated would range from \$250,000 for a sample survey to \$10 million for a complete census.

BUREAU OF ECONOMIC ANALYSIS

Summary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$12.6	\$13.3
Outlays.....	\$12.3	\$13.3
Permanent Employment.....	451	470

Objective

To provide a clear picture of the state of the economy through the preparation, development, and interpretation of the economic accounts of the United States.

1978 Program

Major improvements in the national economic accounts are requested in the proposals to develop measures of the quality of life and to expand the environmental studies program (\$567,000 and 24 positions). The first proposal is aimed at introducing qualitative variables into the accounts, such as the value of housewives' and other labor services not now included in the GNP, the value of human capital and its relationship to productivity, and the allocation of leisure time. It is proposed to initiate this effort in 1977 through a supplemental request. The second proposal provides for the expansion of estimates of national pollution abatement and control expenditures, including the comparison of emissions data to the cost of abatement. Both of these requests improve economic policy decisions by relating available statistical data to important national concerns.

Other increases are requested (\$453,000 and 7 positions) as necessary to maintain the timeliness and usefulness of the national accounts. They provide for publication of a balance of payments methodology and statistical supplement, an expansion of data processing capability, and improved general administrative services.

These increases are partially offset by productivity savings (\$100,000) realized throughout the Bureau's operating programs.

ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMSSummary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority <sup>1/</sup> .....	\$2,450.2	\$317.6
Outlays <sup>1/</sup> .....	1,284.3	1,147.0
Permanent Employment.....	904	836

<sup>1/</sup> Includes local public works appropriation.

Objectives

The objectives of the economic development assistance programs are to reduce substantial and persistent employment in distressed areas and to assist in the solution of economic dislocation on a multistate basis to the maximum extent possible consistent with preserving local initiative and balancing the Federal budget.

1978 Program

The 1978 request level for the economic development programs is essentially the same as that proposed in the 1977 President's budget. The Department believes that this level most nearly represents the administration's priorities for economic development. It should be noted, however, that the 1978 request of \$317,605,000 is \$132,620,000 below the amount appropriated by Congress for 1977.

The 1978 request of \$273,405,000 for the Economic Development Administration exceeds the 1977 request in two major areas, supplemental grants to States and district planning grants. Funds for supplemental grants to States were eliminated from the 1977 request pending the completion of a program evaluation. Results of the evaluation indicate that the program, with some administrative modifications, could be an effective and innovative economic development tool at the State level. We are, therefore, reinstating the program at \$20,000,000 in the 1978 request. The funding for district planning grants had been eliminated in the 1977 ceiling because of a proposed rescission of that amount, added by the Congress, in 1976. The rescission failed, and the \$3,300,000 was again added by the Congress in 1977. By 1978, the 55 new districts supported by those funds will have been in existence for two years and it no longer makes sense to propose eliminating them. The 1978 request, therefore, includes a total of \$10,000,000 for district planning grants.

The 1978 EDA request also includes some program realignments, principally a greater emphasis on business loans and a reduction in public works. The increase for business development reflects the importance of direct job creation and reliance on the private sector

The 1978 budget also includes a total of \$30,000,000 for trade adjustment assistance, the same amount appropriated in 1977. Given the President's strong reliance on the adjustment mechanism for remedying import injury, it did not appear reasonable to return to the 1977 request level.

Since the Local Public Works program was a one time appropriation in FY 1977, there is no request in FY 1978. As of early November, EDA had received applications for \$7,000,000,000 worth of projects and will make recommendations on them by the end of December. The evaluation of the program will begin before the end of calendar 1976 and will extend into 1979 before completion. Preliminary reports are scheduled in the interim.

The 1978 request for the Regional Action Planning Commissions (\$44,200,000) differs from the 1977 request in only one area, the funding of new commissions. The Congress added \$1,000,000 to the 1977 appropriation for that purpose. The Southwest Border Region has been designated and the Antillian application is pending approval. We assume that these new commissions will be sufficiently developed to begin spending program funds in 1978 and have added another \$1,000,000 to the budget for that purpose, making a total \$2,000,000 for new commissions in 1978.

DOMESTIC AND INTERNATIONAL BUSINESS ADMINISTRATIONSummary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$57.5	\$57.5
Outlays.....	\$58.5	\$58.0
Permanent Employment.....	1,604	1,617

Objectives

The objective of the Domestic and International Business Administration is to assist in strengthening the U.S. economy through the promotion of progressive business policies. These include promoting and developing domestic and international trade, the formulation of international trade policy, and disseminating research material to U.S. businesses.

1978 ProgramIncreases Allowed

The FY 1978 requested increase of \$622,000 allows for implementing the new responsibilities assigned to the Commerce Department by Section 103 and 104 of the Energy Policy and Conservation Act, expanding the foreign buyers program, and obtaining increased participation by business in the energy conservation programs.

The requested increase of \$310,000 is to establish the materials and equipment priorities and allocation system for domestic energy supplies. The system will provide for special allocation of and priorities for materials needed for projects and contracts for the exploration, production, and conservation of the domestic energy supply.

The Foreign Buyers Program arranges for foreign businesses to come to the U.S. to visit U.S. business operations and, with the assistance of the Foreign Service Posts, for foreign businesses to visit domestic trade shows held in the U.S. With the requested increase of \$115,000 the Foreign Buyers Program will be able to promote 24 domestic trade shows, 10 more than are planned for FY 1977; and the number of foreign business participants will be increased by 6,500 over the 11,000 expected for FY 1977. U.S. export sales are expected to increase by approximately \$40 million with the expanded program.

The energy conservation industry association program enlists industry groups to participate in a voluntary energy conservation management program and to report the results of their efforts. By January 1977, 34 industry groups will be involved in the program and the requested increase of \$173,000 will permit participation of 28 more industry groups. With these additional industry groups, the program coverage will increase to 90% of the energy used in the U.S. in the manufacturing process. The industry groups with which DIBA now works spend about \$18.5

billion per year (1975 dollars) on energy. They have improved their energy efficiency by 1.3% last year which equates to \$240 million a year.

#### Reductions Requested

The FY 1978 requested decrease of \$1,160,000 would close the Sydney trade center, reduce the export promotion, the domestic business, and the resources and import programs.

Relative to other developed market trade centers, the Sydney trade center is the least effective performer. An analysis of all developed market trade centers shows Sydney performing below all other developed market trade centers. Also DOC efforts in the export promotion program are concentrated on increasing the base of nonestablished exporters; and the Sydney Trade Center, by contrast, mainly assists U.S. companies already established in the Australian market to increase their market share. The requested decrease is for \$425,000.

A further reduction of \$440,000 in the export promotion program was taken in light of the efforts to eliminate or reduce lower priority programs. The request would eliminate the Invest in USA program, three CAGNE trade fairs, and the in-store promotion program. Reductions are also requested in the domestic business area (\$214,000) and the resources and import programs (\$81,000) for the same reason.

OFFICE OF MINORITY BUSINESS ENTERPRISESummary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$50.0	\$49.8
Outlays.....	54.9	55.0
Permanent Employment.....	206	206

Objectives

The long range objective of the Office of Minority Business Enterprise is to assist in the achievement of parity between the percentage of minority population and the percentage of minority controlled business receipts. In the shorter term, this is translated into an objective of realizing a net increase in business receipts by minorities from \$2.1% of the U.S. total or an estimated \$32.8 billion by the end of calendar year 1977 to 2.7% or approximately \$67.4 billion by the end of 1982.

1978 Program

The 1978 request provides for essentially the same program level as 1977. OMBE will continue to implement improvements suggested in several recent reports including the Interagency Report on the Federal Minority Business Development Programs. The more significant areas for increased attention in 1977 and 1978 are:

- the involvement of the nonfederal sector in the stimulation and support of minority-owned business;
- coordination of planning and budgeting with the Small Business Administration;
- emphasis on the provision of management and technical assistance; and
- identification of high technology fields suitable for exploration by minority businesses.

A reduction of \$250,000 is proposed for 1978 as a result of anticipated savings resulting from the President's Management Initiatives Program.

# UNITED STATES TRAVEL SERVICE

## Summary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$14.5	\$13.9
Outlays.....	\$13.5	\$14.1
Permanent Employment.....	127	127

### Objectives

The 1978 objectives of the United States Travel Service are to achieve 684,000 international arrivals and \$329,000,000 in foreign exchange earnings as a result of USTS international marketing efforts and to increase the overall demand for travel within the U.S. by Americans.

### 1977 Program

Partial rescission of the Congressional add-ons for international and domestic tourism activities is proposed for 1977. The request calls for rescission of \$500,000 in domestic tourism, leaving a 1977 program of \$1,000,000. This is the maximum amount required to carry out a newly developed joint industry-government domestic program. The travel industry is expected to contribute up to \$8,000,000 or \$9,000,000 to a program on advertising and market promotion. Rescission of \$500,000 of the international Congressional add-on of \$750,000 is also proposed. The remaining \$250,000 will provide for additional staff in the International Congress office, an increase of \$100,000 for State and local matching grants, and initiation of a special marketing approach to expand European coverage to Italy, the Netherlands, Belgium, and Sweden from existing field offices (\$100,000).

### 1978 Program

There are two significant program changes proposed for 1978: increases in the amount of \$279,000 to cover cost increases due to inflation, and the elimination of the multi-lingual receptionists program (\$307,000). The increases are needed to cover increases in the cost of publishing information materials both in the U.S. and abroad, and placing advertisements in print media in the United Kingdom. The reduction, which is the major change in the international area for 1978, will eliminate the program in which multi-lingual receptionists assist foreign tourists arriving at major ports of entry during the peak summer tourist season.

A class I international exposition is under consideration for Los Angeles in 1981. If the 1981 Expo is accepted, the U.S. will have to construct a pavilion, and USTS will be engaged in a major design and planning effort in 1978. The current submission does not contain any resources for this activity.

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

## Summary of 1978 Budget

(Dollar amounts in millions)

	1977	1978
	Appropriation	Request
Budget Authority.....	\$587.1	\$643.3
Outlays.....	\$574.6	\$573.9
Permanent Employment.....	13,718	14,008

### Objectives

The broad categories of objectives which are emphasized in NOAA's 1978 budget are summarized below. Details of the specific program proposals for achieving those objectives are provided in subsequent sections.

#### 1. Major Ocean Objectives

The Department's overall ocean objective has two main purposes:

- (1) To permit and encourage private sector investment in the development of ocean resources; and
- (2) To protect and conserve the oceans' environment and resources, so that they will be available for use and development.

Accomplishment of these objectives will be advanced in 1978 through:

- o Improvement of fishery management practices under the Fishery Conservation and Management Act of 1976.
- o Development of additional information for the protection of marine mammals and endangered marine species.
- o Initiation of an ocean engineering research and development program.
- o Provision of additional economic and environmental information to improve the climate for private investment in marine mining.
- o Evaluation of the effects on marine resources both living and non-living, of man's use of the ocean in selected areas, including:
  - Puget Sound;
  - The Great Lakes;
  - The Gulf of Mexico; and
  - Atlantic Ocean dumping areas.
- o Provision of additional applied research on ocean problems through Sea Grants to universities.
- o Provision of forecasts of environmental conditions (both weather and sea state) for offshore areas.
- o Evaluation of satellites as a means for obtaining better observations and measurements of ocean conditions.
- o Improvement of the productivity of NOAA's fleet of research and survey ships.

In total, the Department is recommending \$223,356,000 for NOAA's ocean programs in 1978. This is an increase of approximately 11 percent over the \$202,180,000 1978 base for ocean programs.

## 2. Major Weather and Climate Objectives

In the weather and climate area, the Department has three broad, interrelated objectives. These are:

- (1) To determine the nature and causes of weather and climate related events, including natural disasters caused by weather;
- (2) To provide timely and accurate forecasts and warnings of those events, both to the general public and to specialized users such as agriculture and aviation; and
- (3) To determine, experimentally, the scientific feasibility and impact of modifying severe and convective storms.

Specific objectives to be emphasized in 1978 at the requested level include:

- o Initiation of operations with the new series of polar-orbiting satellites; TIROS-N.
- o Continuation of operations with the current series of geostationary satellites, the GOES series.
- o Acquisition of better data for use in improving weather forecasts and warnings.
- o Provision of emergency power at Weather Service offices.
- o Establishment of a new River Forecast Center to provide river forecasts and flood warnings to the upper midwest.
- o Provision of community preparedness services on a nationwide basis.
- o Completion of agriculture weather services on a nationwide basis.
- o Continuation of an experimental program to determine the impact of short-term climate changes on world food production.
- o Initiation of a program to investigate the causes and effects of recent climatic events.
- o Expansion of research into the climatic effects of stratospheric changes.
- o Resumption of NOAA's hurricane modification experiment, Project STORMFURY.

The total request for weather and climate-related programs in 1978 amounts to \$337,064,000. This compares with a total 1978 base of \$321,513,000, an increase of approximately 5 percent.

## 3. Other Major NOAA Objectives

Other major NOAA objectives include:

- (1) Provision of accurate and up to date charts of U.S. airspace, and national networks for geodetic survey control.
- (2) Provision of worldwide data and related information services regarding the physical environment.
- (3) Provision of executive direction, program support, and facilities related to the administration of NOAA.

In 1978, these objectives will be advanced through accomplishment of the following:

- o Initiation of a five year program to improve the productivity of NOAA's aeronautical chart production process through automation.
- o Improvement of administrative services in the areas of financial management, data processing, labor relations, procurement and occupational safety and health.
- o Initiation of facilities construction for a consolidated western region headquarters at Seattle, Washington.

A total of \$52,642,000 is requested for these other program objectives in 1978, an increase of approximately 11 percent over the 1978 base of \$47,571,000.

### 1978 PROGRAM

#### 1. Ocean Programs

For NOAA's ocean programs in 1978, the Department is requesting increases of \$26,976,000. These increases are partially offset by base program reductions amounting to \$5,800,000. Additionally, two items totaling \$9,000,000 are proposed for deferral from 1977 to 1978 in order to delay the outlay impact and full-year cost of the projects.

##### a. Program Increases

A major category of increases in 1978 will provide for continuation of the Department's objective of implementing the Fishery Conservation and Management Act of 1976. A total of \$2,000,000 was appropriated for this purpose in the transition quarter and \$22,000,000 was appropriated in 1977. The primary emphasis to date has been on establishing the Regional Fishery Management Councils; on providing for additional analysis of existing data, especially from an economic viewpoint; on negotiating international fishery agreements under the new Act; and on providing for adequate enforcement and surveillance of foreign fleets. In 1978, these activities will be continued and an increase of \$7,188,000 is requested for:

- o Upgrading 3 additional fisheries research vessels (+\$1,000,000).
- o Conducting additional fishery stock assessment surveys in the North-east Pacific, Gulf of Mexico and Southeast Atlantic (+\$4,802,000).
- o Providing a regional data management system for processing fisheries statistics (+\$891,000).
- o Collecting and processing additional data on marine recreational fishing (+\$495,000).

With the offsetting reductions and program deferrals listed below, the total amount of budget authority proposed for implementation of extended jurisdiction in 1978 is \$20,188,000.

Other increases proposed for marine fisheries programs in 1978 amount to \$2,315,000 and have the following objectives:

- o Further reduce porpoise mortality through studies of porpoise behavior leading to gear modification (+\$206,000).
- o Reduce destruction of fisheries habitat in the Gulf of Mexico through in-depth reviews of 2,500 environmental impact statements (+\$906,000).
- o Determine the status of six species of whale populations (+\$309,000).
- o Relocate NOAA's Southeast Utilization Research Center from College Park, Maryland to Charleston, South Carolina (+\$894,000).

In the marine technology area, which includes Departmental objectives related to encouraging private sector investment in ocean engineering and marine mining, increases amounting to \$3,730,000 are requested for 1978. Objectives to be emphasized are:

- o Establishment of an ocean engineering research and development program, with initial emphasis on solving design and standards problems with instruments used in the marine environment (+\$1,200,000).
- o Continuation of NOAA's Office of Marine Minerals, established during fiscal year 1975; provision of information on the environmental, economic, and legal impacts of offshore mining; and provision of technology transfer services related to seabed mining. (+\$850,000).
- o Conducting Phase II of NOAA's Deep Ocean Mining Environmental Study (DOMES), which will be a 3-4 year effort involving analysis of the impact of actual prototype mining operations involving various alternative technologies (+\$1,680,000).

In the area of marine environmental analysis and monitoring, new and expanded programs involving budget increases of \$5,416,000 are requested. These increases will provide for advancement of the following objectives:

- o Completion of an analysis of the marine ecosystem of Puget Sound by 1981 in order to assess the impact of petroleum transportation and treated waste discharge on the Sound (+\$1,970,000).
- o Evaluation of three additional ocean dumpsites, one in the Gulf of Mexico, one off New England, and one off Southern California (+\$1,000,000).
- o Initiation of planning and technical studies for a program to determine the long-term effects of man-induced changes in ocean ecosystems, as authorized by Title II of the Marine Protection, Research, and Sanctuaries Act of 1972 (+\$600,000).
- o Development of additional information on the environmental condition of the Great Lakes, including research on physical characteristics of the Lakes and analysis of the Lakes' ecosystem (+\$1,846,000).

For the Sea Grant program, an increase of \$2,000,000 is requested. This increase will be used to sponsor additional applied university research in the following areas:

- o Development of marine resources, primarily living resources (+\$450,000).
- o Development of marine technology, with emphasis on seafood processing systems and fishing vessel technology (+\$900,000).
- o Marine environmental research, with emphasis on the effects of man's activities on living marine resources (+\$300,000).
- o Marine socio-economic and legal research, especially in determining the impact of extended jurisdiction (+\$350,000).

In the area of marine weather and ocean conditions forecasting, one increase, in the amount of \$1,600,000, is requested. The objective of this request is to improve the timeliness, and accuracy of marine environmental forecasts through acquisition of additional marine observations. To this end, nine existing deep ocean moored data buoys will be deployed and operated, and six additional buoys will be refitted and deployed. These 15 buoys will be located so as to gather data critical to predictions for offshore energy development installations and for hurricane tracking.

The objective in the ocean satellite area, for which an increase of \$2,800,000 is requested, is to evaluate the usefulness of instruments on and data from NASA's SEASAT-A satellite by 1980, the end of the program. The capabilities of SEASAT-A will be evaluated to determine the potential of satellites to improve operational programs in marine weather forecasting, fisheries stock assessment, environmental analysis, and coastal mapping. NOAA will be the primary user of experimental data from SEASAT-A, for which NASA is expected to spend about \$75,000,000.

An increase of \$1,927,000 is also requested in 1978 to improve the productivity of NOAA's fleet of 25 research vessels through improved maintenance of electronic equipment. Lost productive time on ships amounting to about 755 days per year is now attributable to electronic equipment failures. The proposed program would reduce this by 80 percent, or 604 ship days, per year. This is the equivalent of 2.9 ship years, and would be worth approximately \$3,322,000, a benefit-to-cost ratio of approximately 1.7:1.

#### b. Program Reductions

To partially offset these increases, the Department is recommending 1978 ocean program reductions totaling \$5,800,000. Of this amount \$1,616,000 is in fisheries programs. The following reductions are proposed in this area:

- o Assistance to the southern New England fishing industry (\$500,000). These funds, which were added to NOAA's appropriation in 1976 by the Congress, have been used to develop harvesting and processing techniques for underutilized species.
- o Close Port Aransas, Texas, fishery laboratory (\$196,000). This laboratory is new, and not yet fully operational. Its programs now involve assessment of marine recreational species in the western Gulf of Mexico.

- o Reduce funding for education aid to the Pribilof Islands (\$420,000). Alaska has agreed to fund, with aid from HEW, the education of school age children on the Pribilof Islands. This will release NOAA funds previously used for that purpose.
- o Terminate Columbia River hatchery pollution abatement program (\$500,000). Two hatcheries, scheduled to be fitted with pollution abatement facilities, will continue to be operated without such facilities.

Additional reductions amounting to \$538,000 will result from disposal of the fisheries research vessels BOWERS and OREGON. Although the stock assessment capability provided by these vessels will have to be replaced eventually, the age and condition of these two ships is such that they must be disposed of in 1978.

NOAA will also terminate its special marine boundary surveys related to extended jurisdiction in 1978. Through 1977, \$1,650,000 will have been spent on special surveys to determine the exact location of the 200 mile boundary in critical areas. Termination of the program will result in reliance on less accurate determinations in many areas, but will reduce the budget by \$1,500,000.

Another reduction will be made in the deepwater ports program. Specifically, \$300,000 will be reduced through terminating the development of an improved methodology for assessing oil spill trajectories and the impact of oil spills on coastal areas. NOAA will continue to rely on existing methodologies.

A further reduction of \$1,846,000 results from the phasing down of the International Field Year for the Great Lakes project. This project, which involved a major field investigation in FY 1973, will be completed in FY 1977.

#### c. Proposed Deferrals

Two projects, totaling \$9,000,000 are proposed for deferral from 1977 until 1978. These are:

- o Initiation of the design and construction of a mobile underwater laboratory, for which Congress appropriated \$1,500,000 in 1977. Total costs over 5 years are estimated at \$21,500,000.
- o Construction of 2 new 120 foot crabber-trawlers to conduct fisheries stock assessment surveys. A total of \$7,500,000 was appropriated for their construction in 1977.

## 2. Weather and Climate Related Programs

Program increases totaling \$32,023,000 are requested for weather and climate related objectives in 1978. Program reductions amounting to \$17,472,000 are proposed as a partial offset to these increases.

a. Program Increases

Further program increases of \$14,010,000 are required in 1978 to permit continuation of NOAA's programs of satellite coverage of environmental events. For the most part, however, these increases are offset by corresponding reductions. Increases requested will provide for:

- o Continued procurement of instruments, spacecraft, and launch services for the new generation of polar-orbiting satellites, TIROS-N, which will become operational in FY 1978 (+\$10,346,000).
- o Continued procurement of spacecraft, launch vehicles, and data collection units for NOAA's geostationary series of disaster warning satellites, GOES (+\$3,664,000).

Program increases of \$2,553,000 are requested for acquisition of better data to improve weather forecasts and warnings. Specific objectives include:

- o Provide quantified rainfall maps from radar data within 10 minutes, instead of an hour, through installation of 70 radar data processors over the next four years (+\$1,900,000).
- o Reduce error in calculating the water equivalent of snowmelt from 50 percent to 5 percent using new aerial measurement techniques (+\$258,000).
- o Obtain basic data for hurricane predictions from 7 stations in Latin America (+\$395,000).

In the area of natural disaster warning services, increases amounting to \$2,593,000, exclusive of satellite programs, are requested for 1978. Specific objectives include:

- o Installation of emergency power generators at 205 Weather Service Offices over the next five years to insure the operation of these offices during severe weather (+\$1,285,000).
- o Provision of community preparedness specialists to 21 additional offices to offer assistance to communities in preparing for weather related natural disasters (+\$891,000).
- o Establishment of a new river forecast center in the upper midwest to reduce the forecast time for that area by one-third and provide flood warning services not now available (+\$412,000).

Special weather and climate related services and research are also proposed for expansion in 1978. Specific objectives, for which increases of \$5,530,000 are requested, include:

- o Provide special agricultural weather services to the 50 percent of U.S. agricultural areas not now receiving such services in order to reduce weather related crop and livestock losses by approximately \$800 million annually (+\$2,835,000).
- o Continue the development of models and forecast services for predicting the impact of climate changes on major world sources of food, including wheat, corn, soybeans, and fish (+\$950,000).

- o Establish a Climate Diagnostics Center to determine the nature and causes of climate variation and predict future climatic events (+\$600,000).
- o Conduct a long-term program of stratospheric research and climate monitoring to improve understanding of the chemistry, physics, and dynamics of climatic change (+\$1,145,000).

In the weather modification area, an increase of \$6,203,000 is requested to resume NOAA's hurricane modification experiment, Project STORMFURY. Funds will provide for a full-scale seeding experiment in the Western Atlantic Ocean in 1978. Agreements with Mexico are also being sought, under the guidance of the National Security Council, to conduct experiments in the Eastern Pacific. Additional funding would be needed for these experiments, and will be requested once agreement has been reached.

Two other projects, involving increases of \$1,134,000, are also requested in 1978. The objectives of these projects, both international in scope, are:

- o Provide for NOAA's participation in the 40-nation International Magnetospheric Study by funding central data acquisition and processing activities (+\$435,000).
- o Provide for NOAA's participation in the First GARP Global Experiment, to be initiated in 1978 (+\$699,000).

b. Program Reductions

To partially offset 1978 increases, several program reductions in weather and climate related areas have been included in the 1978 budget. In total, these reductions amount to \$17,472,000. Specific reductions include:

- o Reduced costs of polar orbiting satellite procurement and launch (\$4,383,000).
- o Cancellation of the launch of one ITOS-series polar orbiting satellite (\$6,200,000).
- o Reduced requirements for geostationary satellite launch services (\$2,490,000).
- o Reduction of funding for data processing equipment at NOAA's main computer center (\$1,500,000).
- o Reduction due to phase down of activities of the GARP Atlantic Tropical Experiment, GATE (\$1,699,000).
- o Terminate development of new statistical techniques, and discontinue publication of rocketsonde data at the National Climatic Center in Asheville, N.C. (\$200,000).
- o Close NOAA's Atmospheric Physics and Chemistry Laboratory in Boulder, Colorado, terminating research on nucleation chemistry, atmospheric electricity, and stratospheric radiation and humidity (\$1,000,000).

3. Other Major NOAA Programs

Increases totaling \$21,571,000 are requested for other major NOAA programs. Of this amount, \$3,705,000 is in the mapping and charting area, and will provide for accomplishment of the following objectives:

- o Provide for a workload increase of 30 percent by 1982, without additional staffing, by automating the production of NOAA's aeronautical charts (+\$1,030,000).
- o Relevel, over a seven-year period, the National Vertical Geodetic Control Network, including approximately 25,000 miles of primary lines (+\$2,675,000).

An additional increase of \$1,000,000 is proposed to improve services and productivity at the National Climatic Data Center in Asheville, N.C., through acquisition of a new data storage device. This device will eliminate the need for 9 additional people, reduce the cost of data to users by 50-90 percent, and reduce storage space requirements by 80 percent.

In the area of executive direction and administration, increases amounting to \$1,366,000 are requested for the following activities:

- o Support for the National Advisory Committee on Oceans and Atmosphere, NACOA (\$205,000);
- o Improvement of NOAA's financial management, accounting, data processing, and procurement functions (\$834,000);
- o Expansion of labor-management relations support (\$141,000); and
- o Compliance with Federal occupational safety and health regulations (\$186,000).

The Department is also requesting a total of \$15,500,000 for construction of a consolidated western region headquarters facility at Sand Point in Seattle, Washington. The project is expected to cost a total of approximately \$74 million over the next five years. The 1978 funds would provide for site preparation, including dredging; installation of utilities; construction of an operations building; and project engineering and management services.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Coastal Zone Management Programs

	<u>(Dollar amounts in millions)</u>		
	<u>1977</u>	<u>Proposed 1977</u>	<u>1978</u>
	<u>Appropriation</u>	<u>Supplemental</u>	<u>Request</u>
Budget Authority.....	\$18.0	\$177.2	\$260.0
Outlays.....	\$15.2	\$ 86.3	\$175.0
Permanent Employment.....	39	67	106

Objectives

The objective of NOAA's Coastal Zone Management program is to assist the states in developing and administering plans for the rational use of the Nation's coastal areas, i.e., plans which provide for both conservation and development of the resources of the zone.

1977 Program

The original program, as authorized by the Coastal Zone Management Act of 1972, provided for assistance to the States in the form of three types of grants:

- o Program development grants, authorized for a period of three years, under which states would develop plans for management of their coastal zones.
- o Program administration grants, which would be used to implement State management plans.
- o Estuarine Sanctuary grants, which can be used to purchase land for the creation of permanent sanctuaries in the coastal zone.

All 34 eligible states and territories are receiving program development grants and one State, Washington, has had its plan approved by the Secretary and is receiving a program administration grant. Three estuarine sanctuary grants have been made, one each to the States of Oregon, Georgia, and Hawaii.

Major amendments to the Coastal Zone Management Act were enacted into law in July, 1976. These amendments provide for additional types of grants to the States, including:

- o Interim grants, which allow States to partially implement their plans prior to formal approval by the Secretary.

- o Interstate grants, to encourage interstate compacts for development and administration of coordinated programs.
- o Energy impact formula grants, for the retirement of state and local bonds guaranteed under other provisions of the Act; for planning and constructing public facilities and services required as a result of Outer Continental Shelf energy development; and for ameliorating the unavoidable loss of environmental or recreational resources due to coastal energy activities.
- o Beach access acquisition grants, to assist States in acquiring land to provide for access to public beaches or other public coastal areas.
- o Research and technical assistance, to provide support for the development and implementation of State programs.

The major feature of the 1976 amendments, however, is the establishment of a Coastal Energy Impact Fund to provide for loans, loan guarantees, and repayment assistance to States stemming from the onshore impact of offshore energy development. A total of \$1.2 billion is authorized to be appropriated to this fund over 8 years.

The Department is requesting 1977 supplemental appropriations totaling \$177,150,000 to implement these new amendments. These funds would be used as follows:

	<u>Amount</u>
o Program development grants..... (Interim grants to 5 states; increase Federal share to 80 percent and meet new planning requirements in 33 states)	\$10,800,000
o Energy impact formula grants..... (Amount required to be available under formula set by law)	15,000,000
o Research and technical assistance..... (Funding for physical research, economic studies, management studies, and publication distribution)	2,550,000
o Program management..... (Funding for additional staff to administer the program)	2,800,000
Subtotal.....	<u>31,150,000</u>

	<u>Amount</u>
o Coastal Energy Impact Fund..... (Amount estimated to be needed for loans and loan guarantees, plus 2 types of new grants, based on assumptions regarding the rate and extent of impact on the coastal zone of offshore energy development)	\$146,000,000
Total, 1977 supplemental...	<u>177,150,000</u>

Regulations to implement the new program must be issued by March 1, 1977. The Department's objective is to issue regulations in January. Applications are expected to be received for processing in April and May, and grants could be made beginning in June or July.

#### 1978 Program

The budget proposed for 1978 continues the new program to be started in 1977, and also provides for initial funding of interstate grants and beach access acquisition grants. Specific plans and amounts requested include:

	<u>Amount</u>
o Program development grants..... (Additional planning by all 34 states; interim grants to 9 states; and fourth year funding for 7 states)	\$15,750,000
o Program administration grants... (Grants for implementation of approved programs to 16 states)	22,250,000
o Interstate grants..... (One or two grants for specific interstate cooperation projects to be awarded)	150,000
o Energy Impact formula grants.... (Amount estimated to be needed under the formula included in the Act)	25,500,000
o Estuarine sanctuaries..... (One or two grants to be awarded based on applications submitted)	1,500,000

	<u>Amount</u>
o Beach access acquisition grants.... (Acquisition of one or two coastal islands plus several small scale acquisitions)	\$2,400,000
o Research and technical assistance.. (Additional technical, economic, and management studies; workshops and seminars; publication dissemination)	3,442,000
o Program management..... (Administration of Coastal Zone Management program)	4,008,000
Subtotal.....	<u>75,000,000</u>
o Coastal Energy Impact Fund..... (Planning and environmental grants to about 10 states; loans and guarantees resulting from increased energy development)	185,000,000
Total, 1978.....	<u>260,000,000</u>

NATIONAL FIRE PREVENTION AND CONTROL ADMINISTRATION

Summary of 1978 Budget

	Amount (Dollar amounts in millions)	
	1977	1978
	<u>Appropriation</u>	<u>Request</u>
Budget Authority.....	\$12.2	\$15.5
Outlays.....	\$11.3	\$19.1
Permanent Employment.....	92	126

Objectives

The overall objective of the National Fire Prevention and Control Administration is to reduce the loss of life and property caused by fires by 50 percent in the next generation. In 1978, this objective will be advanced through emphasis on the following program objectives:

- o Development and delivery of 15-20 courses to approximately 1,700 students at the National Academy for Fire Prevention and Control.
- o Provide assistance to 39 States in the development of their own fire service education and training programs.
- o Provide technical assistance to approximately ten State public education efforts.
- o Analysis and validation of data from States participating in the National Fire Data System.
- o Expansion of basic and applied research related to fire problems.

1978 Program

Program increases amounting to \$3,466,000 are requested for the Department's fire programs in 1978, including both the programs of the National Fire Prevention and Control Administration and the Fire Research Center at the National Bureau of Standards. These are partially offset by program reductions amounting to \$421,000.

1. Program Increases

For the programs of the National Academy for Fire Prevention and Control, increases of \$1,825,000 are requested in 1978. This will provide for advancement of the following specific objectives:

- o Develop five additional model course packages, usable either in-house or by nonfederal educational institutions, for instruction of public education specialists, fire prevention managers, fire service officers, fire inspectors, and aircraft crash rescue personnel (+\$950,000).
- o Develop and administer a student instruction program of 18 courses using 90 part-time faculty (+\$230,000).
- o Provide partial reimbursement to 900 students attending courses at the Fire Academy (+\$265,000).
- o Provide grants to 13 additional States for the development of State-wide fire prevention education and training plans (+\$380,000).

In the public education area, one increase of \$210,000 is requested. This increase will provide technical assistance to approximately 10 States in the development and use of effective public fire education programs. Public education programs have been shown to reduce fire losses by over 50 percent in communities where the programs were properly designed, implemented, and evaluated. The purpose of the requested 1978 increase is to insure that State and local funds spent on public fire education programs can have this kind of an impact.

For the programs of the National Fire Data Center, increases of \$595,000 are recommended. This will provide for accomplishment of the following objectives:

- o Collecting data on life and property losses from fires which are not included in the Fire Incident Reporting System because they are not reported to fire departments (burns due to clothing fires, for example) (+\$100,000).
- o Validating the data already in the National Fire Incident Reporting System through verification of State reports and statistical compilation methods (+\$220,000).
- o Analysis and computer processing of data from nine new States which will be joining the reporting network in 1978 as a result of 1977 activities (+\$275,000).

For the NFPCA research and development program, one increase of \$200,000 is requested. This increase will provide for up to seven studies a year of the productivity improvements possible in local fire service operations through the use of new technology, such as quick connect and disconnect couplings, fire stream additives, and lightweight hoses.

For the National Bureau of Standards Fire Research Center, an increase of \$353,000 is requested for research leading to improvements in the design and engineering of buildings that will improve fire safety in residences. More than 70 percent of all deaths resulting from fires occur in residences, but most fire safety efforts to date have concentrated on commercial structures. The increase will be used to develop data and engineering criteria for making residences less of a fire hazard.

Increases amounting to \$283,000 are requested for NFPCA's general administration program. Because the agency is still relatively new, many administrative and program support areas have not yet been provided for. The 1978 increase will:

- o Establish an internal program planning and evaluation staff;
- o Initiate a program to process claims by local units for reimbursement for fighting fires on Federal property (as required by the Act); and
- o Provide additional staff for budget formulation and review of contract and grant proposals.

## 2. Program Reductions

One program reduction, in the amount of \$421,000, is proposed. This reduction, in the research and development area, involves:

- o Reduction of Federal interagency coordination of fire related activities.
- o Discontinuance of NFPCA's formal technology transfer program.
- o Termination of advisory committee support.

This reduction will partially offset the increases proposed for 1978.

## 1977 Supplemental

A supplemental appropriation, in the amount of \$5,000,000, is requested in 1977 to acquire a permanent site and facility for the National Academy for Fire Prevention and Control. As required by the Federal Fire Prevention and Control Act of 1974, a Site Selection Board was appointed by the Secretary in February 1976. The Board has recommended, and the Secretary has selected, the Marjorie Webster College site in Northwest Washington, D.C. as the site. The site has numerous advantages, including existing buildings appropriate to the program to be carried out at the Academy. Departmental analyses indicate

that this site is the most cost-effective of all locations identified by the Board, and it also offers the advantage of providing for co-location of the Academy and NFPCA headquarters. The estimated cost includes:

o Site acquisition.....	\$2,600,000
o Renovation and rehabilitation.....	2,000,000
o Moving, occupancy and contingencies.....	400,000
Total.....	<u>5,000,000</u>

This amount is \$4,000,000 less than is authorized.

The proposed acquisition of this site has no impact on the proposed 1978 program of the Academy or other NFPCA units, since it is estimated that the site could not be occupied by NFPCA until September 1978, the end of the fiscal year.

## PATENT AND TRADEMARK OFFICE

Summary of 1978 Budget

	(Dollars in millions)	
	1977	1978
	<u>Appropriation</u>	<u>Request</u>
Budget Authority.....	\$86.4	\$80.2
Outlays.....	\$86.2	\$80.9
Permanent Employment.....	2,694	2,770

Objectives

The major objectives of the Patent and Trademark Office are:

1. To provide early patent protection and disclosure together with high quality examination of patent applications.
2. To protect business investments through the prompt registration of trademarks.

In 1978, these broad objectives will be advanced through continuing to reduce the average pendency time of a patent application. The objective is to achieve an average pendency time of 18 months; in 1978, at the requested level, pendency will be 19 months. During the past year, the office reached its pendency goal in the trademark area--an average pendency time of three months to first action on the application, which results in initial legal protection for the applicant.

1978 Program

Program increases of \$2,592,000 are requested for the Patent and Trademark Office in 1978. These are more than offset by program reductions and financing changes totaling \$8,307,000.

1. Program Increases

Two program increases amounting to \$1,756,000 are requested in the patent examining area. These increases will:

- o Implement the Patent Cooperation Treaty when it comes into force during the latter part of FY 1977 or the first part of FY 1978 (+\$478,000).

- o Fund 98 additional man-years of patent examination in 1978 to continue reducing patent pendency (+\$1,728,000).

The Patent Cooperation Treaty was ratified by the United States in 1973 and put into effect by Public Law 94-31 of November 19, 1975. The Treaty will be fully operational when implemented by three more major nations. This should occur by 1978. Implementation of the Treaty will require \$478,000 to process an estimated 4,500 international applications of domestic origin and an estimated 5,400 applications of foreign origin.

An additional 98 man-years of patent examination effort are required in 1978 to avoid increases in backlogs and pendency time. At current workload and productivity levels, the existing staff will not be able to dispose of sufficient applications each year to maintain average pendency at its 1976 level of 19.5 months. Without additional examination effort, pendency will increase to an estimated 25 months by 1981. Adequate authorized positions are available, but these have never been filled and the funding has been reduced over the past few years due to budgetary constraints. The Department is proposing to shift funds from other areas freed up due to reduced costs of patent printing to pay for additional examination man-years. Increases in employment ceilings (48 in 1977 and 50 more in 1978) will also be required. Approval of this request will alleviate the problem and reduce average pendency time from 19.5 months in 1976 to 19.0 months in 1977 and 1978.

An increase of \$836,000 is also requested to replace the current computer system of the Office. The present system, acquired as an interim solution to a computer capacity problem in 1975, must be replaced on a competitive basis to meet GSA requirements and to provide the additional capacity still needed. When installed and operating, the new system will permit actions to be taken which will return annual savings of \$250,000-\$300,000. Since the new computer system will be leased, part of the cost (approximately \$400,000) will recur annually. The balance of the request is non-recurring.

## 2. Program Reductions

Two program reductions, totaling \$8,307,000, are included in the 1978 budget. These are:

- o A reduction in the cost of patent printing resulting from the negotiation of a new contract for the computerized data base printing system (\$1,658,000).
- o Financing of the total cost of Patent and Trademark Office customer services through fees and reimbursement to the appropriation (\$6,649,000).

Renegotiation of the data base management contract, now in process, indicates that significant reductions can be achieved in the unit cost of printing patents by computerized type setting methods. In total, an estimated \$1,658,000 will be saved in 1978 through negotiation of a new contract. Part of these savings are proposed to be transferred to patent examination to fund additional man-years of effort in that area, as described above. The balance of the savings, \$380,000, are proposed as a net reduction in the budget.

The other reduction, involving a \$6,649,000 reduction in customer services appropriations, requires new legislation. Currently, fees received by the Office for performing customer services (such as providing copies of patents) are deposited in the Treasury General Fund. These receipts amounted to \$5.1 million in 1975. The Department is proposing legislation to use these fees to reimburse the appropriation for customer services, and to raise the fees to cover the full cost of the program. Enactment of the legislation will result in a reduction of \$6,649,000 in direct appropriations.

# SCIENCE AND TECHNOLOGY PROGRAMS

## Summary of 1978 Budget

	<u>(Dollar amounts in millions)</u>	
	<u>1977</u>	<u>1978</u>
	<u>Appropriation</u>	<u>Request</u>
Budget Authority.....	\$68.8	\$74.9
Outlays.....	\$70.8	\$71.6
Permanent Employment.....	3,088	3,141

### Objectives

The broad objectives of the Department's science and technology programs, which include the National Bureau of Standards, the National Technical Information Service, and the Office of Telecommunications, are:

1. To provide the basis for an accurate, up-to-date system of standards and measurements for:
  - Physical quantities;
  - Materials; and
  - Technological devices and systems.
2. To provide a central source for the purchase of reports of government-sponsored R&D, statistical and economic information, and special engineering information.
3. To provide research and services related to the effective use of the electromagnetic spectrum, especially by Federal agencies, and to the more effective application of telecommunications technology.

In 1978, the following major objectives will be carried out:

- o Initiation of a program to provide basic measurements for improving the accountability of nuclear materials, both in the U.S. and abroad.
- o Development of improved test methods and standards for the nondestructive evaluation of materials and systems.
- o Development of three voluntary programs by which private sector test laboratories can receive accreditation.
- o Development of additional standards and guidelines for safeguarding the security of Federal agencies' computers.

- o Screening, evaluation, and selection of Government-owned patents for promotion and licensing.
- o Development of measures of the extent to which spectrum space could be conserved through improved antenna design.

#### 1978 Program

#### National Bureau of Standards

For NBS, the Department is requesting a total of \$71,891,000 in 1978. This includes program increases of \$4,517,000, which are partially offset by proposed reductions of \$3,101,000.

#### 1. Program Increases

The objectives of the program increases proposed for NBS in 1978 are:

- o Development, over the next 11 years of new basic measurement techniques, standard reference materials, and applied measurement services to insure the safeguarding and accountability of nuclear materials. (+\$1,000,000).
- o Development of standards, calibration methods, and measurement procedures for the six most widely used methods of non-destructive evaluation (+\$300,000).
- o Initiation of an operational voluntary laboratory accreditation program through development of accreditation procedures and criteria for three types of products (+\$750,000).
- o Development of guidelines and standards, by 1981, for access control, security auditing, and data integrity in Federal computer systems (+\$450,000).
- o Modification of general purpose laboratory space to insure the safety of employees (+\$1,422,000).
- o Continuation of the long-term program to upgrade and modernize NBS equipment (+\$595,000).

The nuclear safeguards program proposed by NBS will be a joint effort between them and the Nuclear Regulatory Commission, the Energy Research and Development Administration, and industry. The role of NBS will be to develop new and more accurate measurement methods, services, and reference materials needed for proper accounting and safeguarding of nuclear materials. The projected growth of nuclear energy production (139 new nuclear power plants in the next ten years) coupled with the necessity to accurately account for nuclear fuels, requires better accountability than can be achieved with existing measurement methods

and standards. NBS will provide the responsible Federal agencies, international agencies, and industry with improved measurement methods and services needed for inspection, reprocessing, fabrication, and waste disposal of nuclear materials. An increase of \$1,000,000 is requested for this purpose.

In the nondestructive evaluation area, similar growth is projected. Private Sector sources indicate that, by 1980, over half of all materials and systems test standards will be based on nondestructive evaluation. Better characterization and measurement of the most common NDE techniques will be necessary for these standards to be effective. Major economic decisions will depend on the accuracy of the techniques used, as exemplified by the recent controversy over the adequacy of the welds used in constructing the Alaska pipeline. An increase of \$300,000 is requested in this program.

The Department has initiated a voluntary program for accrediting private sector test laboratories to perform tests on certain classes of products. This accreditation is important to manufacturers, consumers, and Federal regulatory agencies who need competent, objective test results. In 1978, an increase of \$750,000 is requested for the development of accreditation procedures and criteria for three new classes of products, to be selected from among five candidates. Candidates include insulation materials, carpets and rugs, concrete, medical diagnostic devices, and power and attenuation tests. Once procedures have been developed, accreditation will be carried out on a self-sustaining basis, through user charges.

The computer security program, for which an increase of \$450,000 is requested, will provide guidelines and standards to other Federal agencies for safeguarding the integrity of computer systems and networks. This effort is in response to the provisions of the Privacy Act of 1974 (P.L. 93-579).

Modifications to the technology building at Gaithersburg are necessary to provide a safe working environment for employees. Fire research tests are performed in the laboratories in this building, and the system for removing toxic fumes from the building is inadequate. This exposes employees to harmful toxic gases. The cost of modifying the fume removal system is estimated at \$1,422,000.

NBS will also continue its program of modernizing and upgrading its equipment in 1978 with a requested increase of \$595,000. Of this amount, \$432,000 will be used to maintain a level of new equipment procurement equal to that which was started several years ago. Subsequent inflation has reduced buying power to the point where equipment cannot be replaced through normal depreciation. The balance of the request, \$163,000, will pay the increased depreciation cost of new equipment purchased in 1977.

## 2. Program Reductions

Program reductions totaling \$3,101,000 are proposed for NBS as a partial offset to the above increases. These reductions are in the following areas:

- o Termination of flow measurement program (\$580,000); involves measurement methods and standards for determining flow rates of liquids and gases other than liquefied natural gas.
- o Termination of dimensional metrology program (\$378,000); involves the development of three dimensional gage blocks used in the control of automated machine tools.
- o Termination of humidity measurements program (\$363,000) involves measurement services and methods related to humidity.
- o Reduction of electromagnetic measurements program (\$480,000); involves discontinuing the development of new time-domain and dielectric constant measurements.
- o Reduction in metallurgical materials program (\$500,000); involves termination of projects in alloy physics and metallic phase transformations.
- o Reduction of polymeric materials program (\$300,000); involves reduced effort to provide data and standards on the performance of plastics.
- o Reduction of building science and technology program (\$500,000); involves termination of projects in building safety standards, support to other Federal agencies, and architectural psychology and behavioral assessment.

### National Technical Information Service

A total budget of \$1,363,000 is proposed for NTIS in 1978, including \$345,000 in program increases. These increases will provide for:

- o Screening 2,500 government-generated patents each year, evaluating their commercial potential, and selecting about 100 patents for promotion and possible licensing (+\$170,000).
- o Conducting an engineering evaluation and design study of NTIS operations and equipment (+\$175,000).

The government patents program, which involves both screening and evaluation of government-owned patents and foreign filing of U.S. government patents, has just issued its first royalty bearing license. With the proposed increase, NTIS expects to be able to issue about 5-15 royalty bearing licenses each year. The royalties are expected to increase each year for the next several years, and the program is expected to be fully self-sustaining by 1983.

An industrial engineering study of NTIS operations is requested to develop methods for improving the efficiency and productivity of NTIS customer services. It is expected that service improvements and reduced operating costs far in excess of the cost of the study (\$175,000) will result.

#### Office of Telecommunications

A total budget of \$1,676,000, including program increases of \$250,000, is requested for OT in 1978. The program increases requested have the following objectives:

- o Development of measurement techniques to determine the signal emitting characteristics of microwave antennas (+\$200,000).
- o Continuation of feasibility studies related to the use of small earth station satellite networks in the U.S. (+\$50,000).

OT studies have indicated that improved microwave antenna design could improve the spectrum consuming properties of such antennas by 400 percent. With the requested increase, OT will provide the basis for reducing spectrum crowding by evaluating and measuring waste radiation from two of the five basic types of microwave antennas.

With the \$50,000 increase, OT will continue to investigate the feasibility of using satellite communications networks in the U.S. that involve small earth stations (receivers). The increase will provide for analysis of the results of the 1977 preliminary World Administrative Radio Conference and the preparation of related information for the 1979 general conference. These conferences could produce decisions which would preclude U.S. development of small earth station satellite networks unless proper preparation is made.

MARITIME ADMINISTRATIONSummary of 1978 Budget

	(Dollar amounts in millions)	
	1977	1978
	<u>Appropriated</u>	<u>Recommendation</u>
Budget Authority.....	\$432.9	\$536.5
Outlays.....	\$671.6	\$652.5
Permanent Employment.....	1,392	1,429

Objectives

- o Revitalize U.S. commercial shipbuilding through program support of LNG and general ship demand.
- o Modernize the U.S. flag fleet to make it more competitive.
- o Provide a responsive National Defense support capability.
- o Train merchant marine officers and seamen.

1978 ProgramShip Construction

Current demand for new merchant ship construction is rising following the recent two year period in which nearly no new ship contracts were signed. Shipyard employment levels have remained high due to substantial orderbook backlogs. However, the lack of any substantial new contracting activity has greatly drawn down the backlogs. Recovery in 1977 and 1978 is forecast based on general cargo ship replacement and new LNG ship demand. Within the new LNG importation policy guidelines, the ship construction program for the transition quarter through 1978 will include six new LNG ships.

The total number of new ships for the same period is projected to be as follows:

	(dollars in millions)		
	<u>TQ</u>	<u>1977</u>	<u>1978</u>
Ships.....	4	12	7
Obligations.....	\$18	\$244	\$242

The 1978 program will be funded by \$107,000,000 in prior year funds and \$135,000,000 in new budget authority.

### Operating-differential subsidies

This program has been reduced from the 1977 program level due to a lower forecast of Soviet grain purchases and the termination of subsidized services for the passenger ships SS Mariposa and SS Monterey. Soviet grain purchases are projected at 6 million metric tons for 1978, down from the 10 million metric ton level in 1977. The resulting reduction in subsidy accruals totals \$32.2 million. Elimination of subsidies for the two passenger ships reduce accrual requirements by \$9.9 million. Operating subsidies cost escalations result in increased net accruals of \$5.4 million. Progress will continue in the payment of prior year bills so that the payment backlog will be reduced an additional year by the end of 1978.

The ODS program is projected as follows:

	<u>TQ</u>	<u>1977</u>	<u>1978</u>
Shipyards.....	47.1	218.7	202.4
Budget Authority.....	\$77	\$366	\$330
Outlays.....	85	388	386
Appropriation.....	71	388	386

### Research and development

Base program reductions totaling \$2.2 million have been made to offset increased and new program activities. Several internal program changes reflect a re-ordering of research priorities for 1978 within the ongoing activity levels. The competitive nuclear ship program is largely terminated by 1978. New and expanded program changes include: research utilizing MARAD's advanced ship simulator to improve ship handling safety and to test the effectiveness of new equipment concepts; development of an advanced mobilization ship concept for national defense needs; and an expanded energy and environmental control research program as related to the maritime industry.

### Operations and training

New initiatives in 1978 focus on necessary improvements in the training of merchant marine officers and seamen. The improvements include the funding of a new addition to a marine sciences academic building (\$4.0 million) at the Merchant Marine Academy, Kings Point, N.Y., increased habitability maintenance for the federally supplied state marine academy schoolships (\$.8 million) and an expanded and substantially improved shipboard firefighting training program for merchant seamen (\$1.2 million).