THE COMMERCE MISSION STATEMENT

The Department of Commerce promotes job creation, economic growth, sustainable development, and improved living standards for all Americans, by working in partnership with business, universities, communities, and workers to:

- 1. Build for the future and promote U.S. competitiveness in the global marketplace, by strengthening and safeguarding the nation's economic infrastructure;
- 2. Keep America competitive with cutting-edge science and technology and an unrivaled information base; and,
- 3. Provide effective management and stewardship of our nation's resources and assets to ensure sustainable economic opportunities.

The Commerce Mission Statement, containing our three Strategic Themes, provides the vehicle for understanding Commerce's aims, how they interlock, and how they are to be implemented through our programs. Working collectively, the bureaus of the Department (including the Office of the Secretary) developed it, with the intent that it serve as both a statement of Departmental philosophy and as the guiding force behind the Department's programs.

The importance that this Mission Statement and these Strategic Themes have for the Nation is amplified by the vision they pursue for America's communities, businesses, and families. Commerce is the smallest cabinet agency, yet our presence is felt, and our contributions are found, in every state.

The Commerce Department touches Americans, daily, in many ways — we make possible the weather reports that all of us hear every morning; we facilitate the technology that all of us use in the workplace and in the home each day; we support the development, gathering, and transmitting of information essential to competitive business; we make possible the diversity of companies and goods found in America's (and the world's) marketplace; we support environmental and economic health for the communities in which Americans live.

The Department of Commerce has a clear and powerful vision for itself, for its role in the Federal government, and for its roles supporting the American people, now and in the future. We confront the intersection of trade promotion, civilian technology, economic development, sustainable development, and economic analysis, and we want to provide leadership in these areas for the Nation. As a Department, we aspire to provide programs and services which serve our country's business, communities, and families, as initiated and supported by the President and the Congress. We are dedicated to making those programs and services as effective as possible and to be delivered in cost-effective ways. We seek to function in



close concert with other agencies having complementary responsibilities, so that collectively, our impact can be accurate and powerful. We seek to meet the needs of our customers quickly and efficiently, with the programs, information, and services they require and deserve.

As a permanent part of the Federal government, but serving an Administration and Congress that can vary with election results, we seek to serve the unchanging needs of the Nation, according to the priorities of the President and the Congress. We are able to do this effectively by functioning in accordance with the legislation that undergirds our programs and by working closely with the President and the committees in Congress which have program and financial oversight for our programs.

INTRODUCTION

ABOUT THE COMMERCE STRATEGIC PLAN

On behalf of the Department of Commerce, this document:

- responds to the requirement in the Government Performance and Results Act (GPRA) that agencies prepare a Strategic Plan;
- enunciates a Mission Statement, Strategic Themes, and goals and objectives for our programs, which are unlikely to change on a year-to-year basis;
- serves as the ongoing strategic framework within which Commerce bureaus can: develop and present specific performance measures for their goals and objectives; link with related agencies and programs, and; link to annual planning and budgeting activities;
- successfully integrates into a single plan all of the activities of the Department of Commerce, and:
- provides a flexible document which will serve as the forum for ongoing discussions with OMB, Congress, and stakeholder groups.

This Plan describes Commerce's experiences with strategic planning and the creative process we followed in developing the Plan. This description is useful in gathering an understanding of the Commerce perspective of the GPRA strategic planning process, and thus helps establish a context for reviewing the Commerce Strategic Plan itself.

GPRA REQUIREMENTS

The Government Performance and Results Act of 1993, P.L. 103-62, was enacted with a 4-year implementation lead time. (Starting with the FY 1999 budget, agencies are to have strategic plans and performance measures in place.) During this 4-year period, agencies had the opportunity to pilot test the strategic planning and performance measure concepts underlying the Act. Commerce prepared actively for the Act's full implementation, and four Commerce bureaus participated in two of the 70+ government-wide GPRA pilot tests. (OMB judged NOAAs pilot as one of the 10 best.)

In the Spring of 1996, Commerce created a draft Strategic Plan in accordance with OMB guidance, which: described our framework and process for developing a strategic plan; specified our Mission Statement and three underlying Strategic Themes; and provided a discussion of specific goals and objectives which will be followed under each Theme. Within the Department, work continued on the Plan through successive



drafts which built on that initial version — goals/objectives omitted from the original draft were included and existing ones were refined, and additional sections were added on several topics (the economic contributions of programs under each goal; their legislative bases; their international aspects; current trends and challenges influencing them; and the partnerships which help make them effective).

THE STRUCTURE OF THE COMMERCE STRATEGIC PLAN

The Department of Commerce's Strategic Plan consists of two Parts. Part One, "The Commerce Department and Its Strategic Plan", describes the ways in which the Plan was developed, provides the policy framework upon which the Plan is based, and responds to some of the overall narrative requirements of GPRA. Part One contains Chapters 1 and 2.

Chapter 1 describes the process followed by the Department of Commerce in developing this Plan, and contains key information about linkages to annual activities, and program evaluation.

Chapter 2 presents the policy framework within which our Mission Statement and Strategic Themes were formulated. No organization of Commerce's size can succeed in its collective mission unless it has an overriding philosophy and sense of how it must manage itself. In many ways, the messages contained in this Chapter of the Plan are fully as important as those contained in the three Strategic Theme Chapters of the Plan.

Part Two of the Plan, "Commerce's Goals, Strategies, and Objectives", contains the specific goals, strategies, and objectives which describe the ways in which Commerce programs seek to attain their missions.

In Chapter 3, the importance of the three Strategic Themes is discussed, focusing on the content of each Theme, and addressing the ways in which they are interrelated. In addition, this Chapter provides an index which shows the linkages between the three Themes and the bureau goals.

Chapters 4-6 comprise the heart of the Plan. They discuss the three Strategic Themes, using a common starting point — the Commerce Mission Statement — and then describe the goals, strategies, objectives, and specific programs which support that theme. (Illustrative performance measures which can serve as indicators of progress in reaching the goals and objectives are also provided. The full range of performance measures will appear in the FY 1999 budget request.) These chapters also address other critical topics which give important background information on each Theme, as shown in the Plan's Table of Contents.

The Appendix includes the authorities — legislative references, Executive Orders, and regulatory citations



— which mandate and support the programs conducted by Commerce bureaus contained in this Plan. This Appendix provides an additional dimension of information which is essential to a full grasping of the concepts underlying the Commerce Strategic Plan.

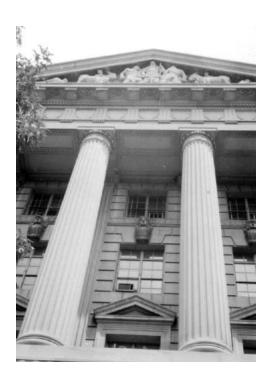
THE COMMERCE STRATEGIC PLAN IS MORE THAN "JUST A PLAN"

In preparing this Strategic Plan and implementing GPRA, the Department of Commerce has made a specific effort to create a process and produce a document which starts with the sound concepts underlying the Act, but then adds greater richness. We have consciously focused on developing a plan which successfully and clearly integrates all of Commerce's major activities, so that staff across the Department — as well as our stakeholders and the agencies with which we partner — will have no doubt about where they fit into the plan. We have consciously avoided developing a plan which was written from a "public relations" perspective, containing only general goals and objectives. For two main reasons, we want to produce and implement a plan that really works, and that serves as a true roadmap into the goals and objectives pursued by our bureaus and programs.

First, as the staff of the Department of Commerce, we are proud of our accomplishments on behalf of the American people and, using GPRA's acronym in another way — "Good Programs Really Advertise" — we want to communicate about what we do in ways that will be clear and measurable. Second, we believe that the true benefit of GPRA will come through the combined synergy of programs across the Federal government which can share resources in pursuit of a common mission, and we believe that being specific about our Strategic Themes and comprehensive about our program goals and objectives will provide a strong framework for those interagency linkages.



PART ONE



THE COMMERCE DEPARTMENT AND ITS STRATEGIC PLAN

CHAPTER 1

THE COMMERCE STRATEGIC PLANNING PROCESS



OVERALL APPROACH

Commerce followed a very clear "bottom-up" approach in creating this Strategic Plan. The Plan was created by, and is supported by, people representing every bureau and ranging from interns to Deputy Under Secretary. This active Strategic Plan Task Force continues to refine the Plan, in order to ensure that:

- the Mission Statement (and the three interrelated Strategic Themes which support it) combines enough flexibility to encompass our programs with enough specificity to describe Commerce clearly;
- the set of goals and objectives represents all of Commerce's key programs, and that the set is refined as needed:
- the narrative sections of each Strategic Theme's presentation describe our programmatic activities related to the Theme accurately and measurably;
- the Mission Statement and Strategic Themes provide a basis for the development and use of a consistent series of bureau performance measures, to be used in the annual budget process;
- on an ongoing basis, the Strategic Plan is both a management tool for the Secretary and bureau managers to use in channeling the Department's activities, and a communication device for ensuring that our programs are clear to our customers and the Congress.

The Strategic Plan was also shared with bureau stakeholder groups and Congress, in order to ensure that these key organizations had an opportunity to comment on bureau goals and objectives, prior to the draft Plan being provided to OMB in the Summer of 1997 (in preparation for delivery of the final version to the Congress in the Fall). Many bureaus are in routine and ongoing contact with the Congress and with stakeholder groups, and that dialogue is an important element in Commerce's capacity to keep the Plan and its contents reflective of Congressional and stakeholder concerns.



The ability to plan strategically in an environment which involves shrinking staffs and budgets, but constant or increasing programmatic demands, is a most significant challenge, yet the need to do so is clearly necessary. On an ongoing basis, Commerce bureaus will use the opportunity presented by GPRA, and the challenge presented by resource constraints, to evaluate their core functions. This will help determine the relevance of their programs to long-term mission requirements, priorities and goals, while at the same helping to identify and plan for new work which will position the Department to meet the demands of the 21st century. Bureaus increasingly will need to coordinate resources, talent and program objectives (within the Department and with other agencies) to achieve outcomes, and ensure that broader societal goals can be met as effectively as possible.

During the period in which this Strategic Plan was created, three dozen Commerce people, representing every Commerce bureau and ranging from interns to Deputy Under Secretary, participated in the planning process by attending work sessions, providing policy guidance, and/or participating on the teams that created the three Strategic Themes. (Staff from the Office of Inspector General participated as observers in this process.) This group will continue to refine the Strategic Plan as needed, and will be supported by the Department's and bureaus' public affairs and Congressional liaison professionals.

LINKAGES TO ANNUAL ACTIVITIES

The most important word to the Commerce Department in GPRA is "strategic". It is our intention throughout all of our GPRA activities to differentiate between truly strategic functions (of planning and long-term priority setting), and annual or short term (budgeting, operational planning, and program implementation) activities. This differentiation is important in order to ensure a focus on the larger intents of the GPRA legislation, and to avoid becoming diverted to technical issues surrounding specific performance measurements.

GPRA creates a sequence of activities and documentation through which our programs can be observed quite clearly. The Strategic Plan provides a basic, long-term framework addressing our overall and ongoing purposes; the annual budget process and the GPRA-required Annual Performance Plan will provide information on one year "slices" of the Strategic Plan, and will allow for focusing on specific priorities and emerging initiatives; and the Annual Performance Report, also required by GPRA, will provide the opportunity to match actual accomplishments against planned ones. The Commerce Department feels strongly that this chain of documentation must be examined in sequence, so that the true concepts behind our programs, and our capacities to implement that vision, are revealed.

The Commerce Strategic Plan has been structured to ensure that the linkages between strategic and annual activities are clear: the Plan starts with the Mission Statement and Strategic Themes for our Department, and then moves to the goals, strategies, objectives, and illustrative performance measures used to support all of our bureaus' major programs. Users of the Plan can easily utilize this information in parallel with our complete annual budget requests and program activities, which reveal annual priorities and performance measures/targets. Following full implementation of the Act, we will conduct annual assessments of our accomplishments by comparing performance targets with actual levels of achievements, and we will use the results of that assessment in fine-tuning our program activities.



We also look to an annual evolution in the government-wide implementation of GPRA. Over time, we know that agencies across the Federal government will sharpen their capacity to identify the most useful performance measures, to enunciate goals that support national needs, and most importantly, to work in close collaboration with related agencies. We actively are participating in government-wide initiatives to establish measures and measurement process that will help underscore critical inter-agency linkages, and we seek to work with stakeholders and the Congress to identify and implement ways of working through the challenging aspects of the GPRA implementation process.

THE ROLE OF PROGRAM EVALUATIONS

Current Evaluation Activities

In preparing to create this Strategic Plan, Commerce bureaus undertook a comprehensive inventory of programs which identifies and describes strategic goals, operational and measurable objectives, and (for the FY 1999 budget) specific performance measures which can be used to determine annual progress in meeting those objectives. All Commerce programs operate under legislation or Executive Orders which carry with them specific mandates, and in setting goals and objectives, Commerce officials looked to those foundations as the principal source of items that were important to measure. Many Commerce programs have used performance measurements for some time, as management tools yielding vital guidance on program impact, but all programs are preparing to do so now, in support of GPRA's implementation. The challenge in selecting performance measures is to develop a balanced set of output ("how many") and outcome ("what result") measures, which address the relatively few key indicators that can illuminate program accomplishments.

Program evaluations, as cited in the GPRA legislation, are one tool that can be used both in selecting useful performance measures, and in ensuring that the selected measures are valid. However, over the last several years, most Federal agencies — including the Commerce Department — have experienced a serious and steady decline in staff and funds available for conducting program evaluations, and important program information simply ceased to be available. (In some ways, this erosion may have been one factor leading to the creation of GPRA, because of weakened agencies' capacities to describe program accomplishments as thoroughly as desired.) Therefore, during the initial period covered by this Strategic Plan, Commerce bureaus must rely more on available evaluation information in developing performance measures.

The larger Commerce bureaus have been able to support reduced staff with ongoing evaluation responsibilities, while bureaus lacking this staff entirely (but still recognizing the importance of evaluations) have sought other ways to gather and use evaluation information, including contract evaluations, or evaluations of specific programs or projects. As appropriate, bureaus make use of evaluation studies by the General Accounting Office, the Congressional Budget Office, the Office of Inspector General, and program-oriented organizations (such as the Trade Promotion Coordinating Committee, in the case of ITA and BXA) in making management decisions.



Stakeholder feedback is another source of evaluation information which bureaus have used (and will continue to use) in selecting performance measures. GPRA recognizes this by requiring stakeholder consultations in the formulation of strategic plans, and Commerce bureaus — including those with structured, ongoing stakeholder input vehicles — conducted consultations specifically in the process of preparing this Plan. For example: NTIA received agreement on its goals from the Interdepartment Radio Advisory Committee; BXA has placed a greater emphasis on the national security aspects of their functions; EDA's regional offices sponsored conferences that resulted in clarified terminology of performance measures; PTO stakeholders (including the American Intellectual Property Law Association, and others) led PTO to emphasize more clearly its direct contribution to the Nation's economy, and; ITA stakeholders suggested an even greater emphasis on helping new-to-export firms. These and other stakeholder comments were used in establishing the Commerce Strategic Plan's goals, strategies, objectives, and performance measures.

Examples of the current bureau-specific and often independent evaluations of our activities include;

- NIST's programs are evaluated generally by its legislatively mandated Visiting Committee on Advanced Technology, which meets regularly with NIST management to review developments in each main program areas. In addition, NIST's Measurements and Standards Program is evaluated annually by National Research Council (NRC) expert peer-review panels assessing each laboratory's performance. The new National Advisory Board of the Manufacturing Extension Partnership (MEP) program will be a similar peer-review activity to assess MEP programs. The Advanced Technology Program (ATP) is the focus of a new evaluation program, initiated by the Secretary, to study its impact on the economy. NIST's Malcolm Baldrige National Quality Program evaluation criteria focus on the program's serving of the National interest.
- As one of the Federal government's early leaders in outcome-oriented management, NOAA follows a rigorous and ongoing approach to evaluation. The close link between evaluations, goal setting, and program measuring was one reason why NOAA's GPRA Pilot Project was identified as among the 10 best out of 70+ projects developed.
- NOAA's annual strategic planning and budgeting process provides for the development of operating plans and regular reviews of the work accomplished under these plans. Work requirements outlined in a previous year's plans are adjusted to be consistent with funding made available through Congressional appropriations. Managers report on progress at quarterly reviews, and adjustments are made to help ensure that any missed milestones are accomplished. In addition, NOAA's strategic planning teams participate in the 4th Quarter review by providing an independent assessment of how well the agency addressed overall strategic objectives.
- NOAA has conducted a far-reaching evaluation of its Weather Service modernization program, including technology, program direction, and resource needs, and has used the results both in selecting performance measures and making management decisions supporting the Strategic Plan.



- NOAA is using the results of NRC reports of their nautical charting mission to focus the direction to be taken in meeting the needs of the navigational community, responsible for moving billions of goods across the Nation and the world ever year. NOAA has also completed a review of its science enterprise, specifically within the context of the Strategic Plan, which examines such topics as the adequacy of identifying and linking science goals, and evaluating the effectiveness of linkages with external partners.
- NOAA has formulated its climate change programs to respond to NRC evaluations, which help identify basic needs and guide future activities. NOAA evaluated its National Marine Fisheries Service programs to determine their contributions toward defining specific measurable outcomes.
- EDA developed a comprehensive, ongoing program performance measurement system to gather performance data on projects approved after October 1, 1997. To complement this system, EDA is conducting a retroactive evaluation of its infrastructure investments and defense adjustment programs. EDA granted an award to a consortium led by Rutgers University to analyze the economic impacts that result from these programs. The Rutgers study demonstrated robust program performance and impact.
- A consortium led by the University of Michigan is evaluating the impact of EDA's small business incubator programs on local economies. EDA is studying the disaster assistance after the Midwest Flood of 1993, to assess whether communities had a better chance to enhance their economic recovery beyond their immediate emergency needs. EDA is also supporting a peer review of University Centers, developing performance measures for them, and gathering performance data under those measures.
- The NRC conducted a study of the fundamental requirements for the 2000 Census, including alternative census-taking methodologies. The results of this evaluation led directly to the formulation of strategic objectives for Census 2000.
- The Census Bureau has also conducted and used the results of an extensive series of user surveys evaluating its products and programs. For the Census 2000 alone, 70,000 non-Federal user were surveyed, to ensure that no legally required items were omitted from the questionnaire.

Future Evaluation Plans

With the benefit of program evaluations already clear, and now further emphasized under GPRA, Commerce bureaus are developing plans for future program evaluations. In a few instances, those future plans are already set through the mechanisms of legislation, ongoing professional and peer-review activities, interagency activities, and related approaches, and examples are provided below. In most cases,



however, year-by-year competition for funds makes it difficult to specify the level and focus of program evaluation activities in the future. As a result, future evaluations for many bureaus will be included in Annual Performance Plans and budgets. This competition for funds — but with an outcome only known on a year-to-year basis — will make the program manager's responsibilities for gathering and using evaluation information about their programs even more important.

Specific examples of our plans for future evaluations include:

- The Census Bureau will conduct a Dress Rehearsal in advance of the 2000 Decennial Census, and will evaluate the results of this Dress Rehearsal in preparing for the Decennial.
- EDA, as cited above, is engaging in a new performance measurement system which will establish baseline evaluation information (for the near term) and will extend to focused evaluation approaches in the longer term.
- ITA will continue working to establish linkages which can yield new information sources about the longer-term positive impacts on the economy of their trade promotion efforts.
- Commerce bureaus, including NOAA, TA, and NTIA, are among the agencies that are working with other science agencies in the Research Round Table to focus on alternative ways of measuring and evaluating long-term science and technology initiatives.
- NOAA is designing an agency-wide performance evaluation process linked to their internal strategic plan, which will review progress made towards achieving each of NOAA's seven strategic goals. This evaluation process will enable NOAA's senior management to evaluate and document the progress and value of work undertaken to meet the objectives under each strategic planning goal. The performance evaluation will stress relevance, effectiveness and impact, as compared with the more traditional, monitoring-type focus on compliance, efficiency and work measures. The evaluations will provide agency leaders with the necessary information to set priorities, make resource allocations, and improve NOAA's ability to meet its vision.
- On a long-term basis, NIST will continue to work with the Visiting Committee on Advanced Technology, the NRC, and the related peer-review bodies to provide for future evaluations of key programs.
- NTIA has established a special position which will be used for evaluating the longer-term contributions made by its telecommunications grant program.
- Other bureaus will continue to seek funding in support of program evaluation capacities which can be used, in conjunction with outside sources, to serve as a long-term evaluation capability.



CHAPTER 2

THE COMMERCE POLICY FRAMEWORK



WHAT COMMERCE IS ALL ABOUT

In his 1996 State of the Union message, the President said: "Now we move to an age of technology, information, and global competition. These changes have opened vast new opportunities, but they have also presented us with stiff challenges." The Vice-President sounded a similar call: "Americans also understand that in a global economy, the only way to maintain America's competitive edge is to lead the world in innovation and new technologies. Investments in science and technology mean better jobs, higher wages, and a growing economy." In the 1997 State of the Union address, the President said: "Over the last four years, we have brought new economic growth by investing in our people, expanding our exports, cutting our deficits, creating over 11 million new jobs, a four-year record... We face no imminent threat, but we do have an enemy. The enemy of our time is inaction." He continued: "To prepare America for the 21st century, we must harness the powerful forces of science and technology to benefit all Americans."

These words help to make clear the role of the Commerce Department: to help keep America as the world's technology leader, to help American companies compete globally, to enable communities to conquer economic challenges, to stimulate the growth of high-pay, high-quality jobs, to preserve and protect the environment and our natural resources as well as safeguarding the public from environmental changes, and to provide information vital for good business and policy decisions.

Commerce promotes and expedites American exports, helps nurture business contacts abroad, protects our firms from unfair foreign competition, and makes how-to-export information accessible to small- and mid-sized companies throughout the nation so that market opportunities span the globe.

Commerce encourages development in every community, by clearing the way for private sector growth by building or rebuilding economically deprived and distressed communities. We promote minority entrepreneurship to establish businesses that frequently anchor neighborhoods and create new job opportunities.



As the nation looks to revitalize our industries and communities, Commerce works as a partner with private entities to build America with an eye on the future. So through technology, research and development, and innovation, we are making sure America is on the winning side.

Commerce's considerable information capacities help businesses understand clearly where our national and world economies are going, and to take advantage of that knowledge by planning the road ahead. Armed with this information, businesses can undertake the new ventures, investments, and expansions that make our economy grow.

The capacity for managing the nation's assets and resources is another key policy driver for Commerce, an essential one in our ability to help the nation succeed in the future. These activities — ranging from protecting our fisheries to controlling the radio frequency spectrum to protecting intellectual property — affect the economy directly.

A key element of our policy framework is a concern for the necessary management underpinnings of our programs — it is essential to integrate the process of enunciating and setting policy, with the process directing programs effectively. Federal agencies, including Commerce, devote considerable resources in program direction activities, and they must have a role in this Strategic Plan. Successful policy development and program implementation rest on our capacity to:

- enunciate Administration and Departmental policy clearly, and integrate policy direction with program operations effectively;
- ensure the highest level of customer service for users of Commerce programs and products, and;
- provide the most forward-looking management practices and systems for the support and delivery of Commerce programs.

These functions are shared responsibilities of our bureaus and our executive-level offices. As such, they cut across all bureau and program lines, and have varying implementation implications. The priorities and performance measures associated with these functions are embedded in our bureau goals and objectives, and operational activities for them are contained in our annual budget documents.

MEETING MAJOR MANAGEMENT CHALLENGES

We believe that the purpose of the Commerce Strategic Plan is to focus attention on our program missions, to explain their importance, and to make clear how we are pursuing our responsibilities under them. At the same time, we are mindful — every day — of the complex management challenges that must be met in designing and implementing programs that are national, or worldwide, in scope.



Addressing management challenges is a core responsibility of all Commerce professionals, and most of these challenges are of a level, scope, or resource-intensiveness to be considered as part of ongoing management tasks. While important, most of these challenges are ones traditionally found in large organizations implementing complex tasks, and thus may not warrant being termed as "strategic" in the same sense our program missions are strategic. However, some issues — such as those cited as being "High Risk" by the General Accounting Office, or as "Material Weaknesses — do warrant special inclusion in this Strategic Plan, and some are discussed here. Goals, strategies, and objectives for addressing these challenges are included in the appropriate bureau-specific portions of Chapters 4-6 of the Plan and/or in bureau operational activities.

Weather Service Modernization

The Weather Service modernization risks identified by GAO include operational effectiveness and maintenance efficiency of observing systems, lack of sound decision making processes, and demonstration that proposed capabilities result in mission improvements.

NOAA is working to ensure the most effective and efficient development and deployment of the new systems which support National Weather Service modernization. NOAA has acted to reduce the occurrence of problems by identifying and implementing modern management, program oversight and systems procurement reforms. NOAA is developing a guiding systems architecture and has issued "The National Oceanic and Atmospheric Administration Plan for the Development, Documentation, and Promulgation of the NOAA National Weather System Architecture." Significant progress has been made toward completing the NWS modernization. All of the new radars have been deployed and most of the NWS Automated Surface Observing Systems have been installed. The third software build of the Advanced Weather Interactive Processing System (AWIPS) will be completed and fielded at operational test and evaluation sites this Fall. At the completion of Build 3, approximately 50 percent of the planned AWIPS functionality will be implemented.

Completing the NWS modernization continues to be a very high priority of both the Administration and Congress. NOAA continues to closely monitor the activities of the various contractors and to work closely with the Department of Commerce as these procurements progress. NOAA also continually coordinates with the Office of Management and Budget, Congress, the GAO, and other oversight groups to keep them informed of progress.

Decennial Census

GAO has issued a report on the Decennial Census entitled "2000 Census: Progress Made on Design, But Risks Remain". Among GAO's recommendations in this report were that the Census bureau: provides Congress and other stakeholders with detailed data to meet the objective of full and open disclosure on the expected effects of design proposals on cost, accuracy, and equity; works with Commerce and OMB officials to reach agreement on



design and funding levels as soon as possible, in order to make the Dress Rehearsal as useful as possible, and; conducts the Dress Rehearsal to mirror as closely as possible the design features for the full 2000 Census.

The Census Bureau and the Department of Commerce agree with each of those recommendations. Detailed materials were provided to the Congress regarding: estimated error rates (at the national, State, Congressional district, census tract, and census block levels); planned statistical methodologies; evaluation studies from the 1990 census and test results from 1992 to date, and; supporting data related to the 1995 Census Test. Each member of the House and Senate (as well as Census stakeholders, advisory committees, and the National Academy of Sciences) received a copy of "Report to Congress: The Plan for Census 2000" which included a discussion of sampling and nonsampling issues. Senior Census staff have provided an ongoing series of briefings for Congress.

The Dress Rehearsal will demonstrate all key activities planned for the full 2000 Census, using procedures and time schedules that mirror the full Census. Results of the test will be shared with all those expressing an interest.

Financial Management

Commerce's financial management systems are inadequate. Our bureaus operate eight financial management systems, most of which use old, out-of-date software, and are difficult and expensive to operate. None readily support streamlined administrative and financial processes, or comply fully with the relevant accounting and Federal financial systems standards. Some inhibit production of financial statements worthy of unqualified audit opinions. Most important, they fail, individually and collectively, to provide Commerce managers with the financial management information they need to manage effectively. This, in turn, harms our capacity to manage Commerce's program missions as effectively as desired.

The Commerce Administrative Management System (CAMS) is Commerce's remedy to this cluster of issues. CAMS is to be an integrated financial management system, implemented around a Core Financial System (including Budget Execution, Standard General Ledger, and other vital functions), and linked to key functional administrative systems, such as personal property, travel, and budget formulation. CAMS will depend on a standard set of largely commercial off-the-shelf software, and will comply with relevant accounting and Federal financial system standards. Commerce has acquired a commercial software package for the Core Financial System and is developing or acquiring functional systems. Current plans call for implementing the entire Core Financial Systems plus key functional systems initially at the Bureau of the Census by June 1998, and then proceeding to implement the software in the other bureaus.



INTERAGENCY LINKAGES ARE A KEY ELEMENT OF OUR POLICY FRAMEWORK

As the Cabinet agency with the smallest budget, Commerce is aware of the need to secure outside support in order to ensure that our programs have the maximum impact on the issues we must address on behalf of the American people. We are firmly committed to reaching out to agencies with complementary responsibilities and strengthening interagency ties, in order to achieve that maximum impact. The Chapters in this Plan which provide our goals, strategies, and objectives contain a special section on Partnerships, and include numerous examples of how our programs are made stronger through interagency ties. We have also made a conscious decision in developing this Plan to provide objectives that are specific enough to allow for other agencies to link their own goals and objectives to ours — this is a feature we have not seen in many other agency strategic plans.

Many of our interagency linkages go beyond single-program-to-single program relationships. Commerce leads and participates actively in critical, policy-level, government-wide initiatives which call on the specialized and leading-edge expertise and resources that we possess, and that are necessary for ensuring success for the Nation in the changing global marketplace, for addressing urgent national needs, and for linking and focusing Federal and private capacities in support of a brighter future. We Chair, or are highly active in, a comprehensive set of organizations including the National Science and Technology Council's crosscutting research and development programs, the Trade Promotion Coordinating Committee, the U.S. Global Change Research Program, the Interagency Council on Statistical Policy, the Interagency Task Force on Post-Disaster Economic Recovery, the National Oceanographic Research Council, the Interdepartment Radio Advisory Committee, the World Intellectual Property Association, and others.

We also seek to be a leader in interagency efforts to link programs together to focus on the unique needs of small- and medium-sized businesses, and on local communities in need of our products and services. As a result, we are especially active in promoting service delivery methods which stress ease of access and joint implementation, so that businesses and communities receive the information and assistance they need, and that our programs couple with those from related agencies in the most seamless and coordinated manner possible.

In recognition of the critical importance of close, interagency ties, we fully intend the Plan's description of our program goals and objectives to serve as linking pins with other agencies. Through the specificity of our Plan — rich in information about our programs — we communicate with other agencies and strengthen our mutual abilities to set "common denominator" objectives and performance measures. Reviews of other agency strategic plans confirm that this is an important next step in interagency implementation of GPRA.

Within the Department, we link closely and consciously in countless ways — MBDA utilizes ITA support to focus on the needs of minority-owned businesses seeking to export; NIST works closely with PTO on developing patents for inventions created in NIST laboratories; NTIS collects and disseminates information on the results of other Commerce bureau research; Census and BEA provide information to other bureaus needing statistical data about domestic and overseas populations and economies; NTIA



works with ITA on developing trade policy regarding telecommunications; NOAA and EDA combine resources to support coastal communities seeking to strengthen their sustainable development capabilities; EDA and NIST work together with communities in using technology as a tool supporting economic development.

COMMUNICATING OUR POLICY FRAMEWORK

This policy framework is a driving force in all of our activities. It shows up in everything that Commerce does, ranging all the way from the Secretary's actions with the President, Congress, and foreign heads of state, down to the day-to-day functioning of Commerce's program experts — our scientists, researchers, economists, statisticians, and other professionals. These same policy concepts provide for a constant and consistent focus throughout the year, reinforced in Congressional testimony and negotiations by the Secretary and bureau heads, in our budget, in our Executive Branch policy setting sessions, in our working with stakeholder groups and members of the public, in our interagency collaborations.

Bureau heads and program managers are responsible for translating this policy framework into action on an ongoing basis, for communicating about it within their bureaus, for tying program actions and decisions to it, and for managing their programs according to it. GPRA and the Commerce Strategic Plan provide the additional opportunity for emphasizing, quite specifically and measurably, each bureau's goals and objectives and for integrating them into a Department-wide whole. Outcome-oriented management is becoming an increasingly widespread practice across the Federal government, and it is being implemented in Commerce as bureaus develop the capacity to do it. For example, NOAA actively uses its set of goals, outcomes, and performance measures to establish internal priorities and develop budget proposals, which are agreed to by program and policy officials, and then implemented quite clearly and with bureau-wide staff buy-in.

PART TWO



COMMERCE'S GOALS, STRATEGIES, AND OBJECTIVES

CHAPTER 3

THE IMPORTANCE OF COMMERCE'S STRATEGIC THEMES



WHAT'S IN OUR STRATEGIC THEMES

The Mission Statement and three Strategic Themes — our support of the nation's economic infrastructure, our science, technology, and information activities, and our programs directed at America's resources and assets — will be discussed in detail in Chapters 4-6 of this Strategic Plan. However, this overview chapter provides a summary of the Commerce Strategic Themes and a brief discussion of how they are linked.

Theme 1 addresses the Nation's "economic infrastructure", a term which is defined broadly in the Strategic Plan, because of Commerce's comprehensive mandates. In Theme 1, Commerce is concerned with issues surrounding our domestic and international trading capacities, our nation's job-creation abilities, our support for minority business, our leading technological innovation and improvements in production (and our protection of those new ideas), the economic health of our communities, our production capacities, our information infrastructure, and our providing environmental predictions (essential to protecting life and property).

The issues underlying Theme 2 have grown in importance as science and technology have become increasingly pervasive in our society. Under Theme 2, we set national policy and examine issues of technological development and innovation, conduct the scientific studies and data analysis leading to longer-range environmental predictions, provide information-based support to domestic business/research and international trade (ranging from the census to specific market analyses), focus on the radio frequency spectrum and the technological ways in which broadcasting is conducted, and conduct scientific and technical research in support of National needs.

Theme 3 encompasses several of our responsibilities for the management of resources and assets. Under a series of legislative mandates (as well as references in the U.S. Constitution), Commerce has both direct management responsibilities for specific national resources, and stewardship responsibilities to ensure the optimal use of national assets. For example, Theme 3 focuses on intangible resources and assets — we grant access rights to intellectual property and to portions of the radio frequency spectrum. But at the



same time, within Theme 3, Commerce has direct responsibilities for fishery management activities, recovering protected species, and the wise use and development of coastal resources. Also under this Theme, we are concerned with the assets presented by closed military bases, and how best those assets can be converted for effective use by the local communities.

Collectively, the three Strategic Themes encompass the full breadth of the Department of Commerce's mission, but the organization of bureau activities under each of the Themes represents a new approach to linking these activities to the Departmental mission. In some cases, placement of program goals under a specific theme cuts across bureau lines. In other cases, programs making several principal contributions are cited under more than one Theme. For example, the Advanced Technology Program (NIST) can be listed under Theme 1 because its grants support the expansion of the economic infrastructure, but it also can be listed under Theme 2 because it focuses on technological innovation. Similarly, the content and application of patentable new scientific and technological discoveries fall under Theme 2. However, the protection of the rights to this intellectual property — an important asset — make these programs an equal candidate for Theme 3.

To pursue the Commerce mission, and to ensure the success of the three Strategic Themes, we need new insights, new information, and application of new technology, all brought together in a unique way. As America moves into the 21st century, the capabilities and services delivered by the Department will be key to our domestic security and global competitiveness. Commerce is the only Federal department whose existing structure encourages the integration of economics, trade, environmental stewardship, technology and information. The integrated whole is greater, and far more powerful on behalf of the Nation, than the sum of its parts.

The Themes within the Commerce Strategic Plan create a setting for identifying and capitalizing on relationships among bureaus, and on partnerships with other agencies and external parties. The Plan supports the concept that strong working relationships will serve to strengthen the effectiveness of the Department as a whole, as well as demonstrate how individual bureaus logically and critically support the core mission of the Department. Ultimately, the overall performance of the Commerce Department must be measured in terms of the contributions of its component bureaus.

The Commerce Strategic Plan provides the framework for a focus on strengthening existing (and for developing new) relationships among bureaus and with external partners. Success for Commerce programs in the changing technological world and global economy will depend increasingly on this type of collaboration, as well as on alliances with business and industry, universities, state and local governments, and international parties. Partnerships promote the leveraging of resources and talent, and often provide the means for meeting program requirements more effectively because of the mutual benefit involved. Partnerships will also be key to implementing the GPRA, to help establish performance measures or goals where one agency may lack complete authority or jurisdiction over the circumstances, activities, or policies which could lead to a particular outcome. By establishing partnerships with other agencies or entities, shared outcomes become more achievable, and broader societal goals can be met more effectively.



INDEX TO OUR THEMES, GOALS, AND OBJECTIVES

The table below illustrates the relationship between our three Strategic Themes and the bureau goals contained within each one. This Index is provided for users of the Plan which have specific interest in tracking Commerce bureaus on an individual basis, or interest in focusing on the bureau content of the individual Themes.

USING CHAPTERS 4 - 6

Chapters 4-6 of the Commerce Strategic Plan have been prepared with a common structure, to facilitate their use. Starting with a reiteration of the Mission Statement, each Chapter provides a discussion of the specific Strategic Theme and how the bureaus support it, and this is followed by the goals, strategies, objectives, and illustrative performance measures from these bureaus. Partnerships used in fulfilling our goals and objectives — a vital implementation tool for many of our programs, and a key element of our policy framework — are presented next. Program narrative discussions are contained in sections on each goal's economic contributions and other benefits, international activities (where applicable), and external factors and current trends and issues are also provided. These discussions are critically important to other agencies' understanding of, and having a basis for linking to, our programs.

Thus users of the Plan who seek to learn about Commerce programs under only one Theme will benefit from having a Chapter that is self-contained. Users having a broader interest, and who review all of the Plan's Themes, will find places where we have repeated — for emphasis — key language and concepts.

INDEX OF STRATEGIC THEMES AND BUREAU GOALS

THEMES			
Bureau	I	II	III
ITA	A,B,C	L	_
BXA	D,E,F	M	_
ESA	G,H	I,J,K	_
EDA	I,J,K	N	F,G,H
MBDA	L,M	_	_
TA	N,O,P,Q,R	A,B,C	_
PTO	S	F	D
NTIA	T,U,V,W	G,H	E
NOAA	X,Y	D,E	A,B,C



CHAPTER 4

STRATEGIC THEME 1: ECONOMIC INFRASTRUCTURE



THE COMMERCE MISSION STATEMENT: THEME 1

The Department of Commerce promotes job creation, economic growth, sustainable development, and improved living standards for all Americans, by working in partnership with business, universities, communities, and workers, to:

1. Build for the future and promote U.S. competitiveness in the global marketplace, by strengthening and safeguarding the nation's economic infrastructure.

This Mission Statement includes all activities of the Department of Commerce. Activities under Theme 1, highlighted in bold type above, will be discussed in this portion of the Strategic Plan.

THEME 1 AND THE COMMERCE MISSION STATEMENT

The Department of Commerce is committed to opening and expanding foreign markets for U.S. goods and services and to improving America's export performance. The DOC also is committed to improving coordination and planning among Federal export promotion programs and to reducing or eliminating unnecessary obstacles to private sector exports. In addition, Commerce actively promotes initiatives supporting development of the National Information Infrastructure, expansion of economic development and planning assistance to distressed areas, and expedited technology transfer to private sector users.

But the activities conducted or supported by the Department of Commerce under Theme 1 are not confined to domestic or international trade (as comprehensive as that mandate may be). Commerce's true



focus is the nation's economic infrastructure — the farms, factories, businesses, and universities that make up our economy and provide jobs in this country. Commerce programs combine to result directly in job creation and economic efficiency — through promoting trade, developing and protecting technological advances in production and communication — and in supporting the ways, and even the places, where those jobs are created by providing needed information, physical resources, and environmental predictions.

The activities conducted by Commerce under Theme 1 create jobs in all sectors of our economy. The benefits from job creation in the exporting sectors of the economy are especially valuable because they strengthen our competitive position in the world marketplace. Also, there is substantial evidence which indicates that in many exporting industries, the jobs created are significantly higher paying than some non-exporting sector jobs. We know that high-tech exporting companies create 36% more jobs, and that these jobs have 16% higher wages, than companies that do not use advanced technologies and that don't export. This is particularly important to improving national economic well-being and living standards.

III BUREAU SUPPORT OF STRATEGIC THEME 1

Many of the bureaus of the Commerce Department contain programs that work independently or together to support this Strategic Theme. Some of the planned actions we are taking in support of Theme 1 are:

- In coordination with the Administration and Congress, we will work with the World Trade Organization to ensure its effective implementation, to enforce full and fair consideration of U. S. economic and trade interests, and to ensure free and fair trading practices under the North American Free Trade Agreement.
- We will promote U.S. export growth through the implementation of the Administration's National Export Strategy, consistent with national security and U.S. foreign policy objectives, and will enhance cooperation with our partnership organizations in order that U.S. businesses can benefit from global business opportunities and increase American jobs. We will maintain a comprehensive platform of export promotion services accessible throughout the U.S. and abroad. U.S. firms and other partners can depend on this platform to establish and expand their presence in overseas markets. Through trade negotiations and case-by-case advocacy, we will ensure a "level playing field" for U.S. firms and combat predatory commercial practices.
- In parallel to this, we will work with the White House and other Cabinet departments to streamline and liberalize the U.S. export control system, while being mindful of the dual use nature of commercial technologies. We will enhance both export growth opportunities and the effective enforcement of export controls through cooperation with the independent states of the former Soviet Union, the Baltics, and Central Europe.



- Improved economic and demographic statistics are essential to sound business forecasting, and to an understanding of the strength and direction of the Nation's economy. Commerce is at the forefront of national efforts to improve these statistics and make them as timely and responsive to customer needs as possible.
- Although it is conducted only once every ten years, the decadal Census has such major and . . . ongoing implications for so many government, business and economic analysis and decisions that it cannot be considered simply a one-time event. The 2000 Census will be conducted with an effort to be as accurate, open, and user-friendly as possible.
- While many American communities are economically healthy, a large number have undergone stress that results from factors beyond local control. Making strategic economic investments in the Nation's distressed communities is one of Commerce's most effective strategies of direct assistance. In areas of chronically high unemployment, where a catalyst is essential to spark or attract local private investment, where natural disasters or sudden job losses have caused more dislocation than local resources can redress, or where military bases have been closed (or threatened with closing), Commerce helps the communities revive, stabilize, and sustain their local economies by fostering the growth of job-creating businesses and investment.
- Improving opportunities for minority-owned businesses helps strengthen an underutilized sector of the American economy. In the face of global completion, America cannot afford to waste the entrepreneurial talents of any of its citizens. Facilitating the opportunities for minority-owned businesses to compete in the mainstream economy is an essential part of the Commerce mission.
- We will lead development of the Administration's civilian technology policies, goals and strategies, including an emphasis on developing long-term, high-risk research and development partnerships with the private sector, assisting in advancing our technological and information infrastructure, protecting intellectual property rights, and improving deployment of technology to ensure that U.S. firms and workers remain world leaders in the highly competitive global marketplace.
- Working with U.S. industry to develop and apply technology, measurement and standards, has been a "growth area" for Commerce. Commerce supports technology development especially through grants for high-risk, cutting edge technologies which can lead directly to breakthroughs in innovative manufacturing and production methods. Technology has been clearly seen as more than the wave of the future it is simply the basic vehicle through which jobs will be created and the economy will grow. As much as anything else in this first Theme, technological advances create jobs and enable the economic infrastructure to thrive.
- Formulating domestic and international telecommunications policies, and conducting efficient spectrum planning, enables our nation to use telecommunications resources effectively an important function in a global marketplace that depends increasingly on telecommunications technology.



- Providing environmental predictions for the protection of life and property is a service critical to a number of basic American industries — agricultural, transportation, construction, insurance as well as to everyday community life. This protection is essential to assuring that our economic infrastructure remains safe, intact, and capable of the highest levels of output.
- There is also a strong linkage between the economic necessity for environmental prediction and stewardship, and the scientific necessity. Societal and economic decisions need to be strongly coupled with a comprehensive understanding of the environment. A major part of Commerce's mission is to ensure sustainable economic opportunities, and this requires managing the Nation's marine and coastal resources and predicting how changes in the Earth's environment will affect these resources.
- Accurate charts and modern navigation systems are required for safe and efficient maritime and air transport. Commerce collects, processes and distributes such information in support of national, commercial and individual needs. The Department is working to revolutionize U.S. marine and air navigation, mapping and surveying, and to provide a precise satellite-derived reference system as the basis for the Nation's 21st century positioning needs.

THEME 1 GOALS, STRATEGIES, AND OBJECTIVES

Commerce programs will address the Department's mission, and this Strategic Theme, in a number of ways. The goals to be pursued in this process, the strategies to be followed, the objectives to be met, and illustrative performance measures are included here.

A. Implement the President's National Export Strategy in conjunction with the Trade Promotion Coordinating Committee. In pursuing this goal, ITA will follow a strategy aimed at developing and implementing the National Export Strategy, our Nation's first-ever blueprint to generate high-paying jobs through exports.

- Strengthen trade advocacy, trade promotion, and the Trade Promotion Coordinating Committee. (ITA)
 - Percent of projects successfully completed. The percentage of foreign project and procurement contracts awarded to U.S. firms, as a result of ITA advocacy, will be compared to the total number of such contracts competed for and bid on by U.S. firms.
- Increase trade assistance targeted to small and medium-sized businesses. (ITA)
 - Number of counseling sessions. This will indicate the scope of one aspect of ITA assistance to U.S. firms regarding export of their goods and services, and relevant trade laws.



- More closely align trade objectives with U.S. foreign policy. (ITA)
 - Number of trade initiatives which foster foreign policy goals. This provides information on the scope of initiatives target toward specific goals.
- B. Enforce U.S. trade laws and agreements to promote free and fair trade. In pursuing this goal, ITA will follow a strategy of: expanding enforcement of U.S. anti-dumping and countervailing duty laws; identifying market access problems and initiating actions to overcome these obstacles, and; ensuring foreign government compliance with trade agreements the U.S. has concluded.
 - Expand trade law enforcement and compliance monitoring. (ITA)
 - Dollar value of AD/CVD collections made by the U.S. Customs Service. This information shows the effectiveness of our ability to enforce trade laws and to provide disincentives to firms seeking to circumvent them.
- C. Strengthen and institutionalize trade advocacy efforts, placing special emphasis on the "Big Emerging Markets" and major projects. To implement this goal, ITA will form Business Development Committees and Joint Commissions, and conduct major trade promotion initiatives directed at increasing the number of U.S. firms exporting to more mature markets in Western Europe, Japan, and Canada.
 - Continue emphasis on trade with the BEMs without losing focus on mature markets. (ITA)
 - Number of agreements (Market Development Cooperator grant awards). This shows the extent to which U.S. firms are addressing this important type of export market.
- D. Restructure export controls for the twenty-first century. BXA will work with U.S. business and other government agencies to facilitate low-risk export transactions and to deter high-risk transactions.
 - Streamline and reform U.S. export controls. (BXA)
 - Applications processed within statutory time frames. U.S. competitiveness will be enhanced as American business will be able to complete export transactions more rapidly.
 - Implement the Nation's encryption export control policy. (BXA)
 - Increased value of relevant licensing decisions. This makes it easier for companies to export encryption products, provided they commit to developing recoverable encryption products that promote U.S. security and public safety. The policy also allows for the export of stronger encryption to secure financial transactions, which is a critical prerequisite for the success of electronic commerce on the Internet.



- Oversee domestic implementation of the Chemical Weapons Convention. (BXA)
 - Chemical industrial inspections conducted. The CWC mandated that facilities which handle listed chemicals submit declarations of their activities and submit to inspections that certify the accuracy of their declarations. BXA's monitoring role insures treaty compliance. Also, protecting confidential business information contributes to both the national security and the economic strength of the U.S.
- E. Maintain a fully effective law enforcement program and protect U.S. national security, foreign policy, nonproliferation of dual-use commodities, counter-terrorism, nonproliferation of chemical weapons, and public safety interests. Maintaining a fully effective law enforcement program ensures our competitiveness in the global marketplace without compromising our national security and public safety interests.
 - Investigate criminal and administrative violations of the specific statutes and regulations, and impose civil sanctions for those violations. (BXA)
 - Investigations accepted for criminal remedies. Prosecuting violations of export control laws and imposing civil sanctions enhances our ability to detect and deter illegal transactions.
 - Develop and implement measures to prevent export control law violations, including reviews of unlicensed shipments as well as conducting pre-license checks and post-shipment verifications concerning licensed transactions. (BXA)
 - Increased pre-license checks completed. Pre-license checks establish the bona fides of foreign parties prior to export and prevents export control violations.
 - Conduct export enforcement outreach with the U.S. export community, and expand outreach and education programs to train U.S. exporters how to identify and avoid illegal transactions. (BXA)
 - Increased firms assisted. Export controls depend on the cooperation of the U.S. export community. Educating U.S. exporters to understand the export control laws will help them to identify and avoid illegal transactions, thus reducing the likelihood of transactions harmful to U.S. interests.
- F. Facilitate transition of defense industries. A strong economic infrastructure is partly dependent upon our country's ability to transition our defense industries to peacetime, commercial activities and products, while at the same time maintaining technological superiority to support the next generation of defense systems.



- Promote U.S. economic security, technological competitiveness, and defense diversification. (BXA)
 - Increased studies of critical defense industries. These studies help identify potential vulnerabilities and dependencies, as well as competitive opportunities.
- G. Strengthen the public's understanding of the U.S. economy and its competitive position by improving Gross Domestic Product (GDP) and other national, regional, and international economic accounts data. ESA's strategy will develop new estimating methods and work with other agencies to update and expand the coverage of source data used in estimating key components of the economic accounts.
 - Develop new and improved measures of real GDP and prices. (ESA)
 - Expansion of coverage of source data on wages and salaries. More timely and accurate data on non-production and supervisory workers will result in more accurate estimates of the income side of GDP.
 - Provide updated measures of the Nation's investment, savings, and wealth. (ESA)
 - Improvement of treatment of computer software in economic accounts. Updated comprehensive accounting for software will result in more accurate estimates of investment and will resolve at least part of the statistical discrepancy between the two measures of GDP.
 - Provide improved measures of U.S. international trade and finance. (ESA)
 - Extension of annual selected services surveys to cover key categories on a quarterly basis. More accurate measures of international trade in rapidly-changing and fast-growing categories will improve the coverage and reduce the revisions of the international services components of the GDP and balance of payments accounts.
- H. Improve national and local census and survey data through better business practices and public cooperation, through a strategy of systematic improvement and increased public involvement.
 - Develop efficient and innovative business practices to improve cost cycle time, and the quality performance of Census data, through strategies of using new statistical methods and information technologies, improving our cost and management information systems, and improving our corporate computing environment. (ESA)
 - Improved accuracy and timeliness of census and survey data. This will help data users make more precise and effective policy decisions.



- Increase the level of public cooperation through strategies of simplifying public response, building partnerships, and implementing a customer focused marketing plan. (ESA)
 - More simplified and user-friendly designs and procedures on all forms. By making forms easier to use, it is expected that response rates will increase.
- I. (EDA's strategies under Theme 1 are achieved through the activities of grants awarded to alleviate conditions of substantial and persistent unemployment and underemployment in economically-distressed areas of the Nation. All of EDA's performance goals relate directly to job creation, local capacity building, information dissemination, and recovery from economic dislocation.)

Stimulate the creation of private sector jobs through the growth of industry and the retention or expansion of existing businesses in economically distressed areas.

- Build, rebuild, or expand vital public infrastructure facilities that offer substantial employment potential and improve the capacity for economic growth in distressed areas. (EDA)
 - Jobs created and/or retained.
- Overcome specific capital market gaps and encourage greater private sector participation in economic development activities by establishing or expanding revolving loan funds in economically distressed areas. (EDA)
 - Non-EDA dollars invested.
- J. Help distressed communities build their capacity to stimulate, maintain, or expand economic growth.
 - Promote comprehensive, inclusive economic planning in distressed communities to identify economic problems, assess the availability of local and non-local resources, and formulate and implement realistic development strategies. (EDA)
 - Increased community participation.
 - Provide technical assistance to communities to solve specific economic development problems, respond to development opportunities, and build and expand local organizational capacity in distressed areas. (EDA)
 - Quality of evaluation or feasibility study.



- K. Provide new knowledge, analyses and technical information which serve both to assess economic development problems and to mobilize non-federal resources for their solutions at the local level.
 - Study and research emerging and anticipated economic development problems. (EDA)
 - Research results disseminated through conferences, publications, and the Internet to practitioners.
 - Provide technical assistance to local governments, community-based organizations and small businesses on economic development-related issues through colleges and universities. (EDA)
 - (Measures are being developed under a national research grant.)
 - Aid firms and industries injured by import competition by providing technical assistance in diagnosing problems and assessing opportunities through business assistance centers. (EDA)
 - Improved sales and employment after assistance.
- L. Improve opportunities for minority-owned businesses in major growth industries according to geographic demands. The major strategy used in this and the following goal is to market opportunities and provide public/private debt and equity financing for minority-owned businesses.
 - Identify industry sectors offering potential for high growth in geographic service areas, and assess networks of available public and private resources to assist minority-owned businesses to penetrate these industries. (MBDA)
 - Increased numbers and dollar values of contracts awarded to assisted companies. With information provided through this and the other MBDA performance measures, it will be possible to make adjustments and improvements in key strategies to achieve the stated goals and objectives.
 - Match minority-owned businesses with domestic and international opportunities. (MBDA)
 - Increased numbers and dollar values of contracts awarded to assisted companies.
 - Coordinate and leverage resources with those of the Federal, State, and local government and private sector purchasers to deliver timely procurement information to minority-owned businesses. (MBDA)
 - Increased numbers and dollar values of contracts awarded to assisted companies.



- Structure active advocacy programs that include trade fairs, media events, networking events, and product and service promotions. (MBDA)
 - Increased customer satisfaction.
- M. Improve the opportunities for minority-owned businesses to pursue financing.
 - Identify and maintain data on regional lending trends. (MBDA)
 - Increased dollar value of loans placed.
 - Attain agreements with financial institutions to commit new funds or increase current funding levels available for minority-owned businesses. (MBDA)
 - Increased dollar value of funds committed.
 - Implement a system to provide specialized consulting services to minority-owned businesses, to assist in development and implementation of effective capital formation strategies. (MBDA)
 - Increased dollar value of new funding available.
- N. Provide technical leadership for the Nation's measurement and standards infrastructure, and assure the availability of needed measurement capabilities. The strategy used in this goal is to perform laboratory research to anticipate important measurement needs, strengthen the national system of measurement standards, provide leadership for the national system of voluntary standards and conformity assessment, promote efficient delivery of measurement services, and create and maintain world-class measurement facilities to support U.S. industry.
 - Anticipate and address the most important measurement and standards needs in a timely fashion. (TA)
 - TA will use the GPRA "Alternative Format" based on peer review (to ensure that the program is appropriate, clear, effectively designed and executed, and revalidated) and retrospective economic impact studies (to provide qualitative assessments and quantitative estimates of the economic impacts resulting from the technology infrastructure that NIST provides to U.S. industry and the Nation's economy) to assess how well goals are achieved and to provide feedback to program planning efforts to ensure that goals and objectives are met.



- Strengthen the national system of standards, measurement, measurement traceability, and conformity assurance. (TA)
 - Increased number and availability of Standard Reference Materials.
- Provide leadership in harmonizing international measurements and standards to facilitate international trade. (TA)
 - Increased NIST staff engaged in/leading international measurements/standards committees.
- O. Support a nationwide system of manufacturing extension services that will improve the global competitiveness of small manufacturers. The strategy used in this goal regarding Manufacturing Extension Partnerships is to expand the number of clients served by providing a cost-effective nationwide system of assistance and to increase the performance of smaller manufacturers by assisting them in the use of efficient supply-chain mechanisms and effective information technology, and by accelerating their rate of new technology adoption.
 - Improve coverage of the small manufacturing sector, providing extension services to an increasing proportion of small manufacturers. (TA)
 - Increased number of companies served. The number of clients served, the number of jobs created or retained, the amount of client capital investment, the value-added benefits to clients from completed activities, direct economic impact studies providing qualitative and quantitative estimates of MEP impacts, and peer assessments are used to assess how effectively the goal is being achieved and to provide feedback to program planning efforts to ensure that the goals and objectives are being met.
 - Maintain high quality service delivery, providing useful and usable assistance in a timely fashion.
 (TA)
 - Activities completed by MEP centers.
 - Maintain service delivery that provides value to customers, delivering strong impact. (TA)
 - Increases in sales.

- P. Assist U.S. businesses in continuously improving their productivity and efficiency utilizing Malcolm Baldrige National Quality Award (MBNQA) framework core values, criteria, and assessment methods. The strategy used in this goal is to diversify and expand delivery of performance excellence concepts, conduct research to develop quality management as a business discipline, and promote quality awareness and business excellence practices in smaller service businesses and manufacturers.
 - Develop, continuously improve, and disseminate evaluation criteria, manage the MBNQA, and provide global leadership in promoting quality awareness and performance excellence. (TA)
 - Under GPRA's "Alternative Format", TA will use a Board of Overseers, and the National Quality Foundation for stakeholder review. In addition, the total number of quality awards issued nationwide, based on the Baldrige award, is used to assess how effectively goals are achieved and to provide feedback to program planning efforts to ensure that the goals and objectives are being met.
 - Foster effective partnerships with customers, suppliers, employees, and the public to enhance overall U.S. capability and effectiveness. (TA)
 - Increased requests for MBNQA documentation.
 - Lead an expanding national system of State and local quality programs and increase national awareness of the utility of the Baldrige model through the MEP program. (TA)
 - Increased State and local programs supported.
- Q. Stimulate U.S. economic growth by developing high-risk and enabling technologies through industry-driven cost-shared partnerships. The strategy used in this goal regarding the Advanced Technology Program is to identify and promote high-risk and enabling technologies, leverage resources for technological innovation by strengthening an expanding partnership connections, and leverage R&D investment and speed the pace of innovation by providing researchers with a common technical basis for describing, comparing, and exchanging results.
 - Partner with industry to develop innovative technologies which will enable novel and/or greatly improved products and services. (TA)
 - Results of increased number of competitions per year. Direct economic impact studies will provide qualitative and quantitative assessments of the economic impacts of ATP assistance and will assess how effectively goals are being met and provides feedback to program planning efforts to ensure that goals and objectives are being met.
 - Promote cooperative R&D ventures to encourage the rapid diffusion of new, enabling technologies throughout industry sectors. (TA)
 - Amount of industry cost sharing commitments.



- Maximize leverage in driving key strategic technologies by focusing on interdependent R&D projects with common, specific technical goals identified by industry. (TA)
 - Cumulative dollar level of industry cost-sharing commitments.
- R. Coordinate and lead interagency efforts to enhance industry competitiveness in partnership with industry, academia, and the States. The strategy used in this goal is to facilitate useful dialogues and to foster partnerships between industry, academia, the States, and appropriate agencies to identify and jointly address issues that will enhance the competitiveness of American industry.
 - Coordinate and lead interagency efforts to develop the technology base for next generation automobiles, improve productivity in construction, and enhance U.S. manufacturing competitiveness in partnership with industry. (TA)
 - Successful integration of Partnership for a New Generation of Vehicles (PNGV) technologies into Year 2000 concept cars. Information produced under this and the following performance measure provide important guidance on the effectiveness of efforts to identify and document: best practices; State and local needs; partnerships between the Federal government and State governments, industry and academia.
 - Coordinate and lead interagency efforts to strengthen technology partnerships between States and the Federal government. (TA)
 - Identification of "best practices" in State and regional technology-based economic development.
- S. Help protect, promote, and expand intellectual property rights systems throughout the U.S. and abroad. This goal is supported through a strategy of international negotiations, establishing new partnerships, and leveraging information technology.
 - Participate in international cooperative arrangements. (PTO)
 - Increased technical assistance to developing countries. As countries move to market economies, technical assistance can help them establish intellectual property systems compatible with a free global economy.
 - Cooperate with other government agencies to ensure that intellectual property concerns are adequately addressed. (PTO)
 - Increased number of cooperative efforts.



- T. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.
 - Administer the Information Infrastructure Grants program to assist educational, health care and other social service entities in planning and developing the telecommunications and information infrastructure. (NTIA)
 - Increased schools and libraries connected to the NII.
 - Improve delivery of communications products and services to the public through Executive Branch initiatives in legislative and regulatory forums. (NTIA)
 - Increased identification of new technologies and their application to government operations.
 - Ensure that educational and cultural benefits of public broadcasting are widely available, and the use of telecommunications technologies to improve effectiveness of distance learning. (NTIA)
 - Increased access by rural populations.
- U. Advocate international telecommunications policies to help open international markets and promote U.S. interests.
 - Improve international competitiveness of the U.S. telecommunications industry. (NTIA)
 - Adoption of U.S.-supported standards within the international telecommunications community.
- V. Set policies for efficiently and effectively managing the Federal use of the radio spectrum, and prepare for international radio spectrum setting conferences of the ITU.
 - Ensure that government needs for vital telecommunications services are met nationally and internationally. (NTIA)
 - Development of database of allocated bands and of automated method for accessing/using database.
 - Coordinate U.S. preparations for international frequency allocation conferences and lead U.S. delegations to these conferences. (NTIA)
 - Development of long-range plans to meet U.S. spectrum needs.



W. Provide leadership in developing telecommunications policy initiatives in emerging areas of national priority.

- Implement the President's Global Electronic Commerce initiative regarding the governance of the Internet domain system, Internet content restrictions, and international privacy. (NTIA)
 - Development of private sector approach to Internet governance.

X. Promote safe navigation by revolutionizing U.S. marine and air navigation, mapping and surveying; assist commercial shipping in moving increased cargoes safely and efficiently; and provide a precise satellite-derived reference system as the basis for the Nation's geographical positioning needs. NOAA's strategy for accomplishing this goal is to provide for continuous access to, and processing of, quality data used to construct navigation charts and their underlying databases.

- Build, maintain and deliver a digital nautical charting database to underpin new electronic navigational systems which integrate satellite positioning, tidal heights and currents, radars and sonars, and navigational aids. (NOAA)
 - Increased access to charts in electronic format. This will promote safe navigation as mariners begin to utilize this superior digital information format for routine navigation operations.
- Update nautical surveys of the Nation's coastlines and coastal areas using full-bottom coverage technologies. (NOAA)
- Increased percent of critical areas surveyed to produce up-to-date charts. Reducing the backlog of hydrographic surveys for critical areas will improve the information base upon which charts are developed and updated.
- Install measurement and communications systems to provide mariners with real-time observations and forecasts of water level, tides and currents, and weather conditions in major ports. (NOAA)
 - Increased access to full suite of data. New access to real-time physical conditions and predictions will improve the safety and efficiency of maritime operations.
- Transform the obsolete geodetic reference frame into a Global Positioning System-based system of monumented marks and continuously operating reference stations to support the digital revolution in mapping, charting, and surveying. (NOAA)
 - Increased availability to more users. User needs for improved geographical positioning will be met as more Continuously Operating Reference Stations (CORS) are installed, and the Federal base network is completed.



- Provide modern aeronautical navigation information and facilitate the transfer of this function to the Department of Transportation. (NOAA)
 - Percent of aeronautical charts and products revised on schedule. Up-to-date and accurate aeronautical charts are critical to safe airborne navigation.
- Y. Provide significantly improved short-term warning and forecast products and services that enhance public safety and the economic productivity of the Nation by enhancing the ability to observe, understand, and model the environment, and effectively disseminate products and services to users. NOAA's strategy will be to re-invest in research components in order to improve observation systems and develop a better understanding of environmental processes.
 - Maintain the modernized operations of the National Weather Service, to continue improving the timeliness and accuracy of short-range environmental predictions which have immediate impact on individuals and many sectors of the economy. (NOAA)
 - Increased lead time and accuracy for severe weather warnings. Improved warnings of severe weather events are a direct indicator of progress toward advancing short-term warnings and forecasts, and thus the protection of life and property.
 - Maintain continuous operational satellite coverage of the Nation critical for warnings and forecasts. (NOAA)
 - Increased accuracy of temperature, snow, aviation, and precipitation forecasts. Satellite operations underpin the ability to continuously monitor atmospheric conditions, and are a primary input for models and forecast guidance products.
 - Strengthen observing and prediction systems through scientific, technological and programmatic advances, and international cooperation. (NOAA)
 - Increased lead time and accuracy for hurricane landfall. Reducing the potential area of warning for hurricane landfall through the application of high resolution forecasting models and in-situ observations of storm development promotes cost savings while advancing forecast services.
 - Improve customer service to the public, emergency managers, the media, and private forecasters through effective communication and utilization of critical weather data and information necessary for protection of life and property. (NOAA)
 - Increased volume of data handled through NWS telecommunications gateway (Megabytes). Fast, reliable and high-volume data flows are critical to the effective conduct of operations and the preparation of information for the public.



PARTNERSHIP ACTIVITIES SUPPORTING ECONOMIC INFRASTRUCTURE INITIATIVES

Many of the Federal, State, and local agencies, and outside groups with which we partner, do not make distinctions about which specific Commerce goals they link to — their focus is on an overall program. Therefore, we believe that to show a partnership link between one specific goal/objective and a partner organization could be misleading. As a result, we will discuss our partnership relationships at the bureau level in this Plan.

ITA

The importance of international trade to the Nation's economy, the growing number of firms seeking to export goods and services, and the opportunities to collaborate with its partners, has led ITA to a proactive stance in supporting America's economic infrastructure. ITA works very closely with the U.S. business community, particularly with small and medium-sized firms which are either current or potential exporters. We supply these firms with technical, industry-sector, or country-specific data to promote the export of their goods or services abroad. We counsel U.S. firms on appropriate export strategies so they will be more competitive in the global marketplace; we plan, organize, and recruit participants for trade promotion events overseas; we organize and/or participate in privately organized domestic export conferences to promote industry awareness of foreign market opportunities; and we arrange to provide high-level U.S. government advocacy to help U.S. firms win major foreign procurement contracts.

But we do not work in a vacuum. The Department of Commerce chairs the Trade Promotion Coordinating Committee (TPCC), a 20-member interagency task force charged by the President and the Congress with developing and implementing the National Export Strategy. The TPCC is an excellent example of how agencies with complementary responsibilities can work together to develop common goals and strategies in support of a single but complex national purpose.

The TPCC works to ensure that the entire Federal government is doing all it can to help U.S. firms break into overseas markets and create jobs at home. As part of this Strategy, member agencies work to streamline and strengthen government trade promotion and finance programs. Last year, the National Export Strategy addressed practices that our competitors use to obtain market access in the world's fastest growing economies, set out the first government-wide plan to address critical issues affecting American industry, and provided for new initiatives to help small and medium-sized firms gain better access to trade finance.

In support of the USTR, ITA monitors and reports on foreign developments affecting the formulation of U.S. trade policy, including foreign government legislative, regulatory and procurement activities which affect U.S. trade in the host country, including the protection of intellectual property rights.



ITA establishes productive relationships with trade associations to ensure that industry views are considered in U.S. trade policy development. In an effort to identify U.S. industry's trade policy and promotion needs and concerns, ITA manages public/ private partnership activities, including the Industry Consultations Program and the President's Export Council. To support these efforts, ITA's sector groups work closely with Industry Sector Advisory Committees (ISACs) made up of private-sector authorities which advise on policy issues affecting specific industries.

ITA'S U.S. Export Assistance Centers (USEACs) and District Export Assistance Centers (DEACs) provide a network to improve the delivery of integrated trade promotion assistance to local communities. USEACs co-locate federal partners to deliver more complete and streamlined export assistance services to U.S. businesses, particularly information and access to finance sources. DEACs are positioned in high activity areas supporting the USEACs, at sites reflecting current trade patterns, bringing export assistance services closer to exporters. Both centers are electronically linked to facilitate communication among the colocated Federal agencies. The EAC concept also facilitates leveraging available resources through partnerships between local, state, Federal and private partners.

The nationwide network of District Export Counsels (DECs) leverage Federal export promotion resources and serve as ITA's primary partner by conducting export outreach efforts, offering mentor support for exporters, serving as catalysts for trade finance network development, and sponsoring thousands of promotional initiatives, including seminars and trade events in their local communities.

Overseas and domestically, ITA works closely with trade finance agencies — the Export-Import Bank (EXIM), the Overseas Private Investment Corporation (OPIC), the U.S. Trade and Development Agency (TDA), and the Small Business Administration (SBA). Historically, access to and information on trade and project finance has been an area which competitor nations and their firms have enjoyed a major advantage over U.S. companies. ITA's export marketing staff and programs operate in tandem with trade finance agencies and the banking community to address the finance dimension of international sales.

BXA

BXA's partnership activities with business leaders and government officials from the U.S. and foreign countries involve export administration, export enforcement and foreign export controls. In the area of Export Administration, representatives from the private sector serve on Technical Advisory Committees and the President's Export Council Subcommittee to provide advice and assistance to BXA on export controls.

As an important part of BXA's partnership activities, BXA works with small and large firms to assure compliance with the law and prevent activities that would damage national security, foreign policy, or public safety.



International cooperation in foreign export controls have focused on pro-active initiatives with the independent states of the FSU, the Baltic states, Central Europe, and other countries. The establishment and strengthening of foreign export controls systems will increase opportunities for trade in high-tech goods and technology with those countries and further deter smuggler and terrorist access to foreign sources for the materials needed to make nuclear, biological, and chemical weapons and their delivery systems.

BXA has developed several partnership programs to assist U.S. industry in its efforts to diversify into the commercial market.

The President's Export Council Subcommittee on Encryption will advise the Secretary on the implementation of an encryption policy that will support the growth of commerce while protecting public safety and national security.

BXA works with U.S. industry and other federal agencies to develop a unified strategy to begin consultations with our allies on offsets in defense trade, as mandated by the October 1996 TPCC report. Offsets are industrial compensation practices mandated by many foreign governments when purchasing defense articles.

BXA works actively with other agencies having complementary responsibilities for export control, foreign policy, and national security. Few of BXA's goals and objectives can be met without full cooperation from these agencies, which help in such activities as processing license applications, completing regulatory simplifications, informing the public, and representing BXA's concerns abroad. BXA recognizes that the Nation's crucial export enforcement program can only be achieved through the full cooperation of the U.S. Marshal's Service, the FBI, Treasury, State, and the Customs Service.

Some of these interagency activities grow out of BXA's awareness of the need to cooperate in attaining shared goals, while some are formalized Administration or Congressional policy. For example, the framework established by Executive Order 12981 defines the licensing responsibilities of the Departments of Commerce, State, Defense, Energy, and the Arms Control and Disarmament Agency.

BXA participates in the Nonproliferation Export Control Cooperation program, directly supporting both Congressional and Administration goals by implementing informational exchange programs and maintaining constant contact with the Departments of Defense and State.

BXA has taken the lead in presenting interagency law enforcement training with Justice, Treasury, State, Defense, and intelligence agencies. This includes Strategic and Non-Proliferation Training, Fastener Quality Act training, and Counter-terrorism.



ESA

BEA's plan for maintaining and improving its economic accounts was developed in partnership with other Federal agencies (whose assistance is needed to implement some of the improvements) and with leading data users (who made suggestions that were incorporated in the final plan). BEA maintains close working partnerships with other statistical agencies (Census Bureau, Bureau of Labor Statistics, Treasury Department, Federal Reserve System) to obtain the source data it needs to produce its economic accounts estimates. BEA participates with these and other agencies in formal and informal projects to improve the quality, coverage, and timeliness of the source data. Senior BEA officials meet frequently with professional organizations and groups of data users to inform them of BERA's progress and plans for further improvements, as well as to solicit their comments.

The Census 2000 program is highly focused on creating partnerships, in order to both encourage participation in the Census and to disseminate information about it. This is being done through a network of academic institutions, State governors' offices and local and tribal governments, non-profit organizations, schools, foundations, and the entertainment industry.

BEA and the Census Bureau are active in the 14-member Interagency Council on Statistical Policy (ICSP) chaired by OMB. The ICSP represents the principal Federal agencies, and is finding that many of these agencies have identified common themes in their operational and strategic planning: customer focus, quality and efficiency, and partnerships and burden reduction. These common objectives are forming the basis for an expanding collaborate effort to strengthen the Federal statistical system.

EDA

EDA's Technical Assistance program partners with professional associations and organizations including the National Council for Urban Economic Development, National Association of Development Organizations, Public Works and Economic Development Association, and the National Association of Management and Technical Assistance Centers. New partnerships are being established with the National Congress for Community Economic Development and the National Association of Regional Councils.

EDA's Trade Adjustment Assistance (TAA) program funds a network of business assistance centers to aid firms and industries affected by import competition by providing technical assistance in diagnosing problems and assessing opportunities. It has partnership activities with industry trade associations, State and local economic and business development officials, and NIST MEP Centers. (TAA focuses on firms injured by import competition, while NIST's MEP Centers work with healthy firms.)

EDA grants to University Centers and grants under the Local Technical Assistance Program identify and help implement solutions to economic development problems. EDA's grants often are the only source of funding for analyzing and investigating potential projects and activities.



There are currently 315 Economic Development Districts and Redevelopment Areas being funded on an on-going basis under EDA's Planning Program. There are also 61 Indian tribes or organizations currently funded on an on-going basis under this program.

MBDA

MBDA's major partnership activities for improving opportunities for minority-owned businesses are with governmental entities within and outside of the Department of Commerce and with the Nation's leading lending institutions. These partnerships provide minority businesses with access to critical resources — management and technical assistance, access to capital, marketing leads, etc. — that are necessary to survive and compete. Partnership agreements with leading lending institutions included Chemical Bank, Bank of America, Community Bank, Bank One, Nations Bank, and The Money Store.

MBDA-assisted businesses generate over \$400 million dollars per year in Federal tax revenue. MBDA efforts to improve opportunities for minority businesses are conducted through cooperative agreements and private-public partnerships which are directed at strengthening and keeping these businesses in the economic mainstream.

TA

All of the TA's programs involve extensive interactions with its customers and stakeholders, including U.S. industry and government, universities, the technical and scientific communities, and foreign counterpart laboratories. These interactions take place through sales of standard reference materials and calibration services, collaborative projects, the publication of competitive assessments and policy analysis, national and international conferences with state and industry leaders, interactions of technical staff with their colleagues, and staff participation in trade and professional associations and on standards committees.

NIST's external programs (MEP, ATP, MBNQAP) are partnerships with business and industry. The MEP partners Federal support with State and local organizations in a network of manufacturing extension centers located throughout the country, which work directly with local manufacturers to address their critical needs. ATP research priorities are set with the input of industry: companies conceive, propose, co-fund, and execute ATP projects and programs based on their understanding of the marketplace and research opportunities. The MBNQAP works closely with trade, professional, and business groups to extend the benefits of quality management nationwide. The cooperative nature of this joint government/private-sector team is exemplified by the hundreds of quality experts from industry who volunteer their time reviewing applications, conducting site visits, providing feedback reports, and giving presentations in support of the program.



PTO

PTO partners with international organizations in order to enhance customer responsiveness and facilitate better working relationships among the businesses, agencies, and foreign nations and organizations for which PTO's overall success in delivering quality service is interdependent.

PTO's international partnerships include (but are not limited to) the World Intellectual Property Organization (WIPO) of the U.N., the European Patent Office (EPO), and the Japanese Patent Office (JPO). PTO is playing a lead role in WIPO in the pursuit of global protection for intellectual property, and is engaged in a trilateral agreement with the EPO and the JPO (with WIPO observing) to further international harmonization of patent practice and ultimately patent systems. PTO's trilateral activities have also resulted in the enhanced exchange of patent information and movement toward policies in the three regions that will improve the dissemination of patent information.

PTO provides international training and technical assistance, such as legal advice on drafting laws to modernize intellectual property systems, on-site lectures and training on patent and trademark matters to intellectual property specialists from developing and emerging market countries. Since 1985, officials from over 30 nations have participated in the annual Visiting Scholars Program.

In carrying out these activities, PTO partners with the Department of State and the United States Trade Representative and the International Trade Administration in the formulation and negotiation of proposals for the protection of intellectual property, both at home and abroad, and collaborates with other agencies in administering the patent and trademark laws.

NTIA

NTIA's responsibilities encompass telecommunications issues including domestic and international policy, spectrum management, research, and grant programs. Within the Federal government, the State Department, the U.S. Trade Representative, and other agencies address telecommunications as a peripheral aspect of their primary missions and rely on NTIA for telecommunications expertise. NTIA coordinates Federal use of the radio spectrum by chairing the Interdepartment Radio Advisory Committee (IRAC). The IRAC is made up of all Federal agencies that use spectrum and includes the Federal Communications Commission.



NOAA

Applying advanced technology to promote safe navigation supports major initiatives of the National Science and Technology Council Committee on Environment and Natural Resources (CENR), the President's Council on Sustainable Development, and other parts of the Commerce Department. Significant partnerships are being used by NOAA to provide the Nation with a suite of marine navigation services.

NOAA established a precedent-setting partnership with a private company through a Cooperative Research and Development Agreement (CRADA) under the Federal Technology Transfer Act to produce electronic nautical charts. This arrangement has enabled NOAA's private partner to create digital chart products for commercialization and sale, while enabling NOAA more quickly and efficiently to build an electronic chart database for future chart editions. NOAA has used other partnerships for development of technology to conduct nautical charting surveys and to compile nautical charts, and for geodetic and hydrographic survey technology transfer and instrument testing and evaluation. New partnerships are being forged with major ports to provide improved navigation information through technology transfer and cost-sharing.

NOAA is engaged in a Federal/State/local partnership to ensure consistency of spatial reference data, by working with surveyors in all states to develop uniform standards for the National Spatial Reference System that can be used to support modern geographic information systems. NOAA also operates a geodetic advisory program with 24 States on a 50/50 cost sharing basis to enable technology transfer to the States.

NOAA plays a major role in the interagency Federal Geographic Data Committee. Through leadership of the Federal Geodetic Control Subcommittee and the Global Positioning System (GPS) Interagency Advisory Committee, NOAA is guiding the Nation's GPS investments to serve military and civilian users. Under a cooperative agreement, NOAA also performs centralized quality control of GPS correction data received from a network of Continuously Operating Reference Stations that operated by other Federal, State, local, academic, and private entities. NOAA also works in close cooperation with the Federal Aviation Administration to perform aeronautical charting responsibilities and on the development of a National Spatial Data Infrastructure.

ECONOMIC CONTRIBUTIONS AND OTHER BENEFITS TO THE NATION'S ECONOMIC INFRASTRUCTURE

Commerce programs support the Nation's economic infrastructure in a large number of specific ways. Key ways in which that support is exhibited are described here, within the context of the Theme I goals.

- A. Implement the President's National Export Strategy in conjunction with the Trade Promotion Coordinating Committee,
- B. Enforce U.S. trade laws and agreements to promote free and fair trade, and
- C. Strengthen and institutionalize trade advocacy efforts, placing special emphasis on the "Big Emerging Markets" and major projects.

By assisting U.S. business and industry in developing and increasing their exporting capabilities and practices, ITA directly supports the Nation's economic infrastructure. ITA plays a central role in formulating and executing the principal components of the Administration's trade agenda, through trade initiatives for American businesses and communities to strengthen our economy and improve our competitiveness and an aggressive approach to opening markets abroad. With the economic information it produces and its high-profile advocacy efforts and business development missions, ITA's activities demonstrate that increased exports equal increased economic growth, opportunities, and jobs; and that, in today's environment of global competition, government can partner effectively with the private sector to boost opportunities for U.S. businesses abroad.

ITA also strives to increase the competitiveness of U.S. business in the world economy by fighting unfair foreign trade barriers and negotiating and implementing both multilateral and bilateral trade agreements. Additionally, ITA is the U.S. government's focal point for increasing market access for non-agricultural U.S. exports. ITA units promote and support exports in the global marketplace by uncovering market access problems, working directly with individual U.S. companies suffering market access difficulties and devising strategies for U.S. government efforts to implement the strategies.



D. Restructure export controls for the twenty-first century.

BXA is ensuring that export controls do not place U.S. firms at a competitive disadvantage in world markets by eliminating outdated controls and streamlining the process for obtaining export licenses for products that remain under control. For example, BXA has released more than \$32 billion worth of exports from validated licensing requirements in recent years. Through BXA's leadership the U.S. will be able to increase the sales of products of high technology when sufficient licensing policy and enforcement mechanisms exist to safeguard them from unauthorized end users and end uses.

E. Maintain a fully effective law enforcement program to protect U.S. national security, foreign policy, nonproliferation of dual-use commodities, counter-terrorism, nonproliferation of chemical and biological weapons, and public safety interests.

BXA's export enforcement arm furthers the Administration's nonproliferation of dual use commodities, counter-terrorism, foreign policy, nonproliferation of chemical and biological weapons, and public safety interests. By enforcing controls on those goods and technologies that contribute to the proliferation of weapons of mass destruction and the efforts of terrorists, BXA can facilitate safe and responsible export growth for our economy. BXA will investigate violations of the implementing legislation and regulations and impose civil sanctions for those violations.

F. Facilitate transition of defense industries.

BXA has taken a leadership role in facilitating the conversion and diversification of U.S. defense industries to commercial production, identifying market opportunities for U.S. defense manufacturers in foreign markets, and intervening at senior levels to help U.S. firms to obtain contracts through Defense Trade Advocacy.

G. Strengthen the public's understanding of the U.S. economy and its competitive position by improving Gross Domestic Product (GDP) and other national, regional, and international economic accounts data.

GDP and other national, regional, and international economic accounts data produced by BEA contribute significantly to the public's understanding of the U.S. economy and its competitive position, and hence are critical to supporting the economic infrastructure. They are the yardsticks of economic performance that are of vital interest to every American who runs a business, invests and creates wealth, saves for retirement, or takes out a mortgage on a house. BEA's statistics are used in formulating and evaluating



national economic policy, in Federal budget planning and formulation, and in the allocation formulae for over \$100 billion in Federal funds annually. They are used by State and local governments for a variety of planning and analytical activities, such as deciding on where to locate new construction projects or determining the local impact of closing a military base or building a new plant. Their use for these purposes and as barometers of U.S. economic conditions influence countless decisions by businesses and private citizens alike.

H. Improve national and local census and survey data through better business practices and public cooperation.

The Bureau of the Census compiles and publishes economic, social, and demographic data on a wide range of topics, such as manufacturing, population, housing, agriculture, and foreign trade. This crucial data provides invaluable insight into the Nation's economic infrastructure. National Statistical Profile data are used by agencies allocating Federal funds to state and local programs, show long-term economic trends, and define Congressional representation. National Performance Indicators are monthly to annual statistics driving today's markets and their analysis of the population.

1. Stimulate the creation of private sector jobs through the growth of industry and the retention or expansion of existing businesses in economically distressed areas.

EDA provides grants to communities for public infrastructure, economic adjustment assistance, planning, and technical assistance, and evaluation research which are critical to a distressed community's capacity to establish a sound economic infrastructure. EDA also provides assistance to communities for the conversion of military bases and defense contractor facilities to civilian uses.

J. Help distressed communities build their capacity to stimulate, maintain, or expand economic growth.

EDA's Economic Adjustment grants help economically-distressed communities by encouraging private investment, facilitating economic recovery from natural disasters, assisting communities adversely affected by Department of Defense downsizing, defense contract cutbacks and Department of Energy realignments.

K. Provide new knowledge, analysis, and technical information which serve both to assess economic development problems and to mobilize non-Federal resources for their solutions at the local level.

EDAs local Technical Assistance grants help communities conduct feasibility and industry studies. National Technical Assistance and Research studies examine the causes of economic distress and propose solutions to counteract and prevent such problems.



L. Improve opportunities for minority-owned businesses in major growth industries according to geographic demands, and

M. Improve the opportunity for minority-owned businesses to pursue financing.

MBDA is mandated to coordinate Federal efforts to develop and strengthen new and existing minority businesses.

Since the global marketplace has become so diverse, the contributions of minority businesses have become increasingly essential. Improving opportunities for minority businesses allows these businesses to help keep America's competitive edge in world markets and provide for the general economy, particularly in minority communities. Every component of the U.S. economy must be effective if our Nation is to thrive in the global marketplace.

Since 1982, MBDA has coordinated and participated with the Small Business Administration in Minority Enterprise Development (MED) Week event. MED Week honors the accomplishments of minority entrepreneurs and the corporate and government groups that support them. MED Week promotes business growth through networking opportunities such as information gathering and interaction with governmental and private sector officials for market development, joint ventures, mentorship, and capital opportunities.

N. Provide technical leadership for the Nation's measurement and standards infrastructure, and assuring the availability of needed measurement capabilities.

The Technology Administration works with U.S. industry to maximize technology's contribution to the Nation's economic infrastructure. It seeks to encourage the development of the technological foundation required to support U.S. industry into the 21st century.

NIST laboratories provide industry and the science and technology community with the "common language" needed in every stage of technical activity. In furthering the technical aims and capabilities of U.S. industry, the NIST laboratory program serves as a source of expertise, developing highly leveraged measurement capabilities and other infrastructural technologies that are beyond the reach of individual companies, needed widely by industry, and likely to have economic impact.

Large and small firms tap the laboratories' technical expertise in many ways. NIST delivers Standard Reference Materials, organized collections of thoroughly evaluated data, and calibration services to businesses, government, and academic organizations. NIST accredits public and private sector testing and measurement laboratories, and participates in (and provides technical support to) more than 800 national



and international standards committees. Studies of the economic impact of NIST laboratory services and research projects show that significant benefits flow back to U.S. society and economy. In the studies completed to date, the median rate of return is 147%, which compares favorably with rates reported in other studies of public investments in technology and on private-sector R&D.

O. Support a nationwide system of manufacturing extension services that will improve the global competitiveness of small manufacturers.

The Manufacturing Extension Partnership (MEP) is a network of manufacturing extension centers located throughout the country. MEP works with local organizations to either establish a new program or expand existing services for smaller manufacturers. The 381,000 small and mid-sized manufacturers in the U.S. account for more than half the total value of U.S. production and employ nearly 12 million people. The MEP provides these manufacturers with access to a wealth of national tools, techniques, and other resources through nearly 700 partnerships with federal agencies, national associations, and other organizations.

Surveys of client firms indicate that MEP centers are fostering significant improvement in client performance, yielding company-estimated benefits that greatly exceed the federal investment in MEP. The Census Bureau now administers a rigorous survey protocol of MEP clients, asking them to report cumulative impacts actually realized as a direct result of MEP services. Impacts are expressed as the difference between what has happened and what would otherwise have occurred in the absence of those services. Preliminary results, which are updated regularly, show significant impacts through job creation and retention, increases in sales, and savings from both lower inventories and reductions in labor an material costs.

P. Assist U.S. businesses in continuously improving their productivity and efficiency utilizing Malcolm Baldrige National Quality Award framework core values, criteria, and assessment methods.

A commitment to quality is no longer an option for American business. It has become a necessity for doing business in today's customer-oriented competitive world market. The Malcolm Baldrige National Quality Award, developed and managed by NIST with the cooperation and financial support of the private sector, was established not only to recognize individual companies for their quality achievements, but also to promote quality awareness and to provide information on successful quality strategies. The Council on Competitiveness has stated that "more than any other program, the Baldrige Quality Award is responsible



for making quality a national priority and disseminating best practice across the United States." The Council continues "the Baldrige National Quality Award and its state and local offshoots have been key to the effort to strengthen U.S. competitiveness. The annual government investment...is leveraged by over \$100 million of private sector contributions. The impact of the Baldrige Award on the competitiveness of U.S. industry and the dividends it pays to the U.S. economy far exceed [the] investments."

Q. Stimulate U.S. economic growth by developing high-risk and enabling technologies through industry-driven cost-shared partnerships.

The NIST ATP program is a unique partnership between government and private industry to accelerate the development of high-risk technologies that promise significant commercial pay-offs, an enhanced quality of life, and widespread benefits for the Nation's economic infrastructure. Since its inception, the ATP has made economic evaluation of the outcomes of ATP projects a central element of its operations. ATP projects are expected to make significant contributions to scientific and technical knowledge, produce new technologies that will be developed and introduced into the marketplace by the awardees, and yield substantial benefits to the economy and American citizens beyond those accruing directly to the award recipients.

Several studies have documented important near-term results of the ATP, including: the pursuit of challenging research projects that would have been delayed or scaled down without the ATP; new commercial opportunities and some early growth based on the new technical capabilities; and, greater use of cooperative research ventures and industrial alliances which can facilitate the rapid diffusion of results of ATP projects throughout an industry. NIST has put into place systematic mechanisms to gather data and provide the analysis as the long-term effects unfold.

R. Coordinate and lead inter-agency efforts to enhance industry competitiveness in partnership with industry, academia and the States.

The competitiveness of U.S. industry is enhanced by Federal partnerships which target U.S. strengths and weaknesses in order to best leverage the billions of dollars that the U.S. invests annually in R&D and technology programs. Government-industry partnerships like the new generation vehicle program leverage Federal dollars to encourage civilian utilization of government laboratories, support expanded exports and job-creation, and allow technology development to be separated from product development, enabling U.S. firms to be more competitive in the long-run.



S. Help protect, promote, and expand intellectual property rights systems throughout the U.S. and abroad.

Intellectual property protection is critical to the U.S. economy and to America's operating in the global economy. By protecting intellectual endeavors and encouraging intellectual progress, the PTO seeks to preserve our Nation's technological edge, which is a key to our current and future competitiveness. Innovation is a national resource that contributes to the Nation's economic base and provides a catalyst for economic prosperity through the accumulation of scientific knowledge and the introduction of new products and services. By ensuring adequate protection for innovations through patents, trademarks and copyrights, the U.S. encourages businesses to risk investment for research, development, and marketing. Consumers benefit from the availability of new/improved products, jobs, and wealth.

The PTO is working to update and make more efficient the U.S. system for protecting patentable innovations to meet the needs of the fast-moving electronic age and to seek agreements with other governments to protect patentable innovations and marks worldwide. This includes the PTO's leadership role in refocusing the World Intellectual Property Organization's programs to take full advantage of modern information technologies to improve patent protection throughout the world; negotiations on the Trademark Law Treaty, the Patent Law Treaty, the Trademark Mailbox proposal; and efforts related to the President's Framework for Global Electronic Commerce, such as developing acceptable legal and procedural regimes for settlement of trademark domain name disputes.

T. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.

The information superhighway is a key component of the Nation's economic infrastructure, and through the Telecommunications and Information Infrastructure Assistance Program (TIIAP), NTIA provides matching grant funds to ensure that local communities and non-profit institutions can offer all Americans the benefits of advanced telecommunications technologies. NTIA's National Information Infrastructure (NII) program holds tremendous potential for applications ranging from information dissemination and virtual conferences to gain public input, to common databases available to Federal, State, and local government agencies. NTIA's leadership actions are stimulating private sector interest and investment in the Nation's information infrastructure.



U. Advocate international telecommunications policies to help open international markets and promote U.S. interests.

The field of telecommunications is clearly a very active one across the world, as technology becomes cheaper and more pervasive, and as people, business and industry, governments, and other institutions seek to communicate more rapidly and efficiently with each other. As a world leader in telecommunications, the U.S. has major commercial and public policy interests in advancing the use of telecommunications across the globe. NTIA champions foreign market access by advocating competition and liberalization of telecommunications and information technology policies around the world, participating in international negotiations to open markets for U.S. companies, and negotiating with foreign governments to ensure that there is adequate spectrum for national defense, public safety, and U.S. business interests.

V. Set policies for efficiently and effectively managing the Federal use of the radio spectrum, and prepare for international radio spectrum-setting conferences of the International Telecommunications Union (ITU).

NTIA provides efficient allocation of radio frequency spectrum to the public and private sectors to assure essential services such as air traffic control, defense communications, and law enforcement. In managing the Federal government spectrum, NTIA recently made 235 Mhz of spectrum available to the private sector, which will spur innovation and development of new telecommunications services, and bring billions of dollars into the U.S. treasury. NTIA is a key source of support in the development and deployment of new technologies such as personal communications and millimeter-wave systems.

W. Provide leadership in developing telecommunications policy initiatives in emerging areas of national priority.

The Commerce Department has the lead responsibilities in national telecommunications initiatives, such as the Global Electronic Commerce program. Electronic commerce over the Internet is making profound changes in the global trade of goods and services. Policies must be developed to promote non-regulatory, market-oriented approaches to global electronic commerce to ensure widespread competition and increased consumer choice.

X. Promote safe navigation by revolutionizing U.S. marine and air navigation, mapping, and surveying; assist commercial shipping in moving increased cargoes safely and efficiently; and provide a precise satellite-derived reference system as the basis for the nation's geographical positioning needs.

Modern navigation systems are required for safe and economically viable maritime and air transport. The digital "revolution" in mapping, charting and surveying requires the National Spatial Reference System. In the last 50 years, ship length, width, and draft have doubled, seagoing commerce has tripled, and 50% of that tonnage is oil or other hazardous material, leading to increased risk in the Nation's ports. Yet, one-third of maritime accidents could be avoided by the use of electronic charts, a loss saving of \$3.6 million each day. The cost-effectiveness of electronic charts is 6 times better for that for double hull vessels.

A 1% improvement in the overall efficiency of America's maritime transportation system would translate into more than \$2 billion in savings across our economy within a decade. For example, using real-time current and water level information, revenue increased \$20,000 per shipload of grain exported from Portland, and coal exports from Philadelphia tripled. Ships might avoid delays costing \$3,000 per hour and reap as much as \$24,000 in revenues for each inch of increased draft.

These modern navigational systems allow the Nation to take full benefit from the hundreds of millions of dollars spent annually on dredging and hundreds of millions expected to be spent for vessel traffic systems for major ports. Of equal economic significance, implementation of the National Spatial Reference System provides the required framework for national expenditure for spatial data collection. The marine and air transportation industry, the survey community, engineers and scientists working in the coastal zone, and the general public would all derive benefit from application of the new technologies, products, and services by NOAA under this program.

NOAA's National Ocean Service (NOS) manages ocean and coastal resources and improves quality, quantity, geographic distribution, and timeliness of ocean observations, resulting in aeronautical and nautical charts and supporting documents which are compiled and sold to the public and other Federal agencies. Modern navigational systems are required for safe and economically viable maritime and air transport, critical methods of moving goods produced across the Nation and around the world.

Y. Provide significantly improved short-term warning and forecast products and services that enhance public safety and the economic productivity of the nation by enhancing the ability to observe, understand, and model the environment, and effectively disseminating products and services to users.



Our environment has profound effects on our Nation's human welfare and economic well-being. Eighty-five percent of all Presidentially-declared disasters result from severe weather events that produce considerable loss of life and annual private, public, and industrial property damage, estimated in billions of dollars. NOAA has a unique opportunity to improve our Nation's total environment prediction and warning capabilities.

Advanced short-term warnings and forecasts will result in decreasing our Nation's vulnerability to environmental disturbances which will save hundreds of lives, avert thousands of injuries, and save billions for the economy. The enhanced observations, coupled with the development of advanced models and satellite continuity, will result in earlier, more accurate warnings. Increases in economic efficiency provided by more accurate outlooks of future environmental conditions will provide critical planning information. The sophisticated environmental technologies developed for monitoring these conditions feed into new growth industries and help maintain the Nation's status as a global technology leader.

NOAA's NWS provides weather and flood warnings and forecasts to the general public and other users. NOAA has a unique opportunity to improve our Nation's total environment prediction and warning capabilities for the safety of life and property.

Weather forecasts are essential to the Federal Aviation Administration and commercial aircraft operations. NOAA/NWS and the private weather service industry established a public/private partnership statement delineating the NWS and private sector roles in delivering weather services to the public. This balance is a fundamental strength of the partnership, and has enabled the private meteorological sector to grow to an over \$200 million industry.

Oceanic and Atmospheric Research (OAR) provides the research and technology development necessary to improve NOAA weather services, solar-terrestrial forecasts and marine services, and the scientific basis for national policy decisions in climate change, air quality, and stratospheric ozone depletion. OAR also promotes economic growth through efforts in marine biotechnology and development of environmental observing technologies.

NOAA's National Environmental Satellite, Data, and Information Service (NESDIS) covers procurement and operation of the polar and geostationary environmental observing satellites that provide meteorological data to the National Weather Service for use in developing warnings and forecasts. NESDIS also provides for the future operation of the LANDSAT 7 remote sensing satellite, whose data assist scientists in studying climate and global change.



INTERNATIONAL ACTIVITIES RELATED TO THE NATION'S ECONOMIC INFRASTRUCTURE

Many of the Commerce programs supporting the Nation's economic infrastructure have international aspects. The major international activities are cited below, in the context of Theme I goals.

- A. Implement the President's National Export Strategy in conjunction with the Trade Promotion Coordinating Committee,
- B. Enforce U.S. trade laws and agreements to promote free and fair trade, and
- C. Strengthen and institutionalize trade advocacy efforts, placing special emphasis on the "Big Emerging Markets (BEM)" and major projects.

ITA offices in 70 countries are staffed by commercial officers and foreign service nationals who develop and analyze information on foreign markets and represent U.S. business interests abroad. ITA: (1) identifies trade opportunities for U.S. businesses and products; (2) counsels U.S. business, including sources of trade finance; (3) identifies potential overseas representatives for U.S. firms; (4) develops market research and analysis of trade policy issues; (5) advocates on behalf of U.S. company interests in major projects, procurement, and market access issues; and (6) organizes and manages U.S. trade promotion events.

ITA continues to emphasize trade with the Big Emerging Markets (BEMs) which present exceptional opportunities for U.S. exporters. Advocacy efforts (including trips by Cabinet and Sub-Cabinet officials) have been instrumental in promoting U.S. exports in the BEMs, where clear rules and bid processes are often lacking. To further our relations with the BEMs, U.S. policy makers have concluded agreements with a number of BEMs as well as the NIS to form Business Development Committees and Joint Commissions — cornerstones of ITA's support of the Department's BEMs Initiative. At the same time, ITA can emphasize trade with the BEMs, without losing focus on mature markets — major trade promotion initiatives aimed at increasing the number of U.S. firms exporting to traditional markets, e.g., "Showcase Europe", "Canada First", and the Trans-Atlantic Business Dialogue.



- D. Restructure export controls for the 21st century,
- E. Maintain a fully effective law enforcement program to protect U.S. national security, foreign policy, nonproliferation of dual-use commodities, counter-terrorism, nonproliferation of chemical and biological weapons, and public safety interests, and
- F. Facilitate transition of defense industries.

BXA's activities are essentially international in scope, and encompass all three of these goals.

BXA has taken a lead role in increasing the effectiveness of multilateral control regimes by limiting the scope of U.S. unilateral controls, and concentrating greater attention on effective implementation/harmonization of multilateral non-proliferation control regimes. BXA represents U.S. industry in international efforts to strengthen the Biological Weapons Convention. The U.S. will play a key role in developing policy and implementation plans for the Chemical Weapons Convention (CWC) treaty, especially in the area of commercial facility inspection procedures. BXA's program implementation role provides the U.S. chemical industry with a voice in the development of policies that affect that industry.

BXA's Export Enforcement function reviews export transactions to ensure the "bona fides" of end-users and end-uses. It also works cooperatively with foreign export control officials on export enforcement issues. Export Enforcement also has worked with several countries of the Former Soviet Union (FSU), Central Europe, and East Asia to implement the enforcement arms of their own export control programs. Finally, BXA has export control staff in some Central Europe and East Asia U.S. Embassies, to work with Embassy staffs and host governments on enforcement-related issues.

Export control cooperation includes technical exchanges between U.S. export control officials and their foreign counterparts. These exchanges, which take place both within the U.S. and foreign countries, cover the full range of export control infrastructure development and implementation including: legislation and regulations, licensing processing and procedures, preventive practices, industry-government relations, and systems automation and administration. The result of these activities is to establish a comprehensive and effective export control capability in each country.

BXA is participating in the development of a unified strategy to begin consultations with our allies on offsets in defense trade, as mandated the October 1996 TPCC report. BXA plays a major role in discussions to build key management infrastructure that will support both electronic commerce and public safety needs.

G. Strengthen the public's understanding of the U.S. economy and its competitive position by improving Gross Domestic Product (GDP) and other national, regional, and international economic accounts data.

BEA's participation in international standards-setting organizations helps bring uniformity and higher quality to the international statistical system, which improves the U.S. Government's ability to assess and compare economic developments. Examples of these activities are the United Nations' System of National Accounts and the International Monetary Fund's Balance of Payments Manual. With the implementation of new standards, U.S. measures of economic growth, investment, and trade will be more comparable to those in other nations and will better reflect new and rapidly growing sectors, increased globalization of production and investment, and other features of today's and tomorrow's economy.

The present Standard Industrial Classification (SIC) system — the one on which BEAs GDP and other key accounts data are classified — presents an outdated picture of the organization of economic activity. Work on the North American Industry Classification System (NAICS) was begun in 1992 under OMB and carried forward with our Canadian and Mexican NAFTA partners' statistical agencies. The design of the new system is now complete and it will replace the outdated SIC system in 1997. BEA will work with the Census Bureau and the Bureau of Labor Statistics to oversee the introduction of NAICS in the U.S. and the integration into the accounts of the new data collected using NAICS.

Increased integration in world markets for goods, services, and capital, in combination with major advances in computer and communications technology, have resulted in large gaps in BEA's coverage of international transactions. In recent years, BEA has been closing gaps in coverage through data exchanges with other countries' statistical agencies and with foreign central banks. Efforts to reconcile import and export statistics of other countries with our own have improved U.S. trade data.

BEA, Treasury, and the Federal Reserve System — in cooperation with the International Monetary Fund, the Organization for Economic Cooperation and Development, the Bank for International Settlements, and the other G-7 nations — are working to agree on common definitions to use in collecting consistent data on portfolio investments. Participating countries will modify their data collection systems to improve consistency and fill existing gaps in coverage by exchanging data with each other.

1. Stimulate the creation of private sector jobs through the growth of industry and the retention or expansion of existing businesses in economically distressed areas.

EDA's primary focus is the United States, but assistance is also provided, by legislative mandate, to the Commonwealth of Puerto Rico, the Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, Federated States of Micronesia, the Republic of the Marshall Islands, and Guam. In addition, EDA provides assistance to communities in the U.S. that seek to create export-related opportunities.



K. Provide new knowledge, analysis, and technical information which serve both to assess economic development problems and to mobilize non-Federal resources for their solutions at the local level.

Technical assistance to domestic communities has been limited primarily to export related activities. For example, EDA awarded Local Technical Assistance grants to the City of Vineland, NJ to develop a domestic and export marketing program. EDA provided assistance to TradePoint USA in Columbus, OH to establish a Central Ohio Export Development Program of on-line information and training in export management for small and medium sized businesses. EDA also helped the Atlanta Paralympic Organizing Committee forge long-term relationships between the U.S. manufacturers of assistive products and the policy and procurement decision makers in emerging international markets.

The Trade Adjustment Assistance Program helps client firms conduct international market research, comply with foreign safety and performance requirements, and develop capacity to meet ISO-9000, ISO-14000 and other foreign standard requirements.

- L. Improve opportunities for minority-owned businesses in major growth industries according to geographic demands, and
- M. Improve the opportunity for minority-owned businesses to pursue financing.

Contributions of minority businesses toward America's competitiveness in the global marketplace are important. In improving opportunities for minority-owned businesses, MBDA seeks to assist these businesses to participate actively in the global marketplace and contribute to the U.S. competitiveness. MBDA supports this endeavor through "matchmaker" trade missions with ITA that allow minority businesses to expand their market base internationally.

N. Provide technical leadership for the Nation's measurement and standards infrastructure, and assuring the availability of needed measurement capabilities.

NIST provides leadership in harmonizing international measurements and standards to facilitate international trade. Through its measurement and standards-related services, NIST promotes market efficiencies that provide the means for assessing and demonstrating conformance and for resolving technical disputes. These efforts are especially important for international trade, where technical trade barriers have arisen.

NIST is helping to develop Mutual Recognition Agreements that specify conditions under which testing for conformance with foreign and international standards can be done within the U.S.



In 1994 NIST established a National Voluntary Conformity Assessment System Evaluation Program to evaluate and recognize U.S. testing laboratories, accreditors, certifiers, and quality assurance organizations with demonstrated competence in determining whether products satisfy foreign regulatory requirements.

NIST activities have been formalized by the passage of the National Technology Transfer and Advancement Act (PL 104-113), where Congress has directed NIST to take responsibility to provide public sector leadership in standards and conformity assessment and in working cooperatively with other government agencies and the private sector to support the creation and maintenance of a sound technical infrastructure for the U.S. NIST is in a unique position to provide coordination and policy input for standards and conformity assessment structures and activities in the U.S. and lead the development of a realistic, workable technical infrastructure to support the goal of an effective global market.

S. Help protect, promote, and expand intellectual property rights systems throughout the U.S. and abroad.

The PTO will continue to play a pivotal role in intellectual property rights policy development both at home and abroad. In cooperation with the Office of the U. S. Trade Representative, the State Department, and ITA, the PTO will participate in efforts to improve international standards for the protection of intellectual property. PTO participates actively in WIPO regarding agreements to improve protection for patents, trademarks, and copyrights. Examples of current activities include the Trademark Law Treaty, the Patent Law Treaty, the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty.

PTO will continue to collaborate with the EPO and the JPO on activities leading to enhanced dissemination of patent information, and shared information on best practices and experiences in processing patent applications and automating systems. PTO also will be working more closely with regional organizations, such as the Asia-Pacific Economic Cooperation (APEC).

- U. Advocate international telecommunications policies that will help open international markets and promote the interests of the U.S.,
- V. Set policies for efficiently and effectively managing the Federal use of the radio spectrum, and prepare for international radio spectrum-setting conferences of the ITU, and
- W. Provide leadership in developing telecommunications policy initiatives in emerging areas of national priority.



NTIA represents the U.S. in all international frequency allocation and standards setting conferences. NTIA promotes development of the Global Information Infrastructure through reduction of regulatory barriers to trade and through bilateral and multilateral negotiations.

Through the Global Electronic Commerce program, NTIA leads discussions with our trading partners regarding the development and implementation of international privacy policies which both protect privacy and support the broadest flow of data over the Internet.

X. Promote safe navigation by revolutionizing U.S. marine and air navigation, mapping, and surveying; assist commercial shipping in moving increased cargoes safely and efficiently; and provide a precise satellite-derived reference system as the basis for the nation's geographical positioning needs.

Ninety eight percent of our international trade, valued at nearly \$500 billion annually, moves through U.S. ports. Real-time water level and current information is needed for safe navigation and to permit increased exports by maximizing use of limited channel depths. Expansion of foreign markets and increased American exports are supported by assuring harbor and airport operations are safe and efficient. NOAA's international leadership in geographical spatial technology will help industry develop markets in Global Positioning equipment and Geographical Information Systems software.

Y. Provide significantly improved short-term warning and forecast products and services that enhance public safety and the economic productivity of the nation by enhancing the ability to observe, understand, and model the environment, and effectively disseminating products and services to users.

NOAA is an international leader in environmental science and technology. NOAA programs advance the interests of the U.S. meteorological, hydrological, geographic and oceanographic communities by accessing international resources and providing vital and timely data for aviation and transportation safety, as well as developing markets for weather forecast technologies and related specialized equipment, software, and systems. Through its international leadership, NOAA advances its mission in cost-effective ways.

The National Weather Service's International Activities Program advances the interests of the U.S. by improving the levels of science, technology, operations and services, which enhance short-term warning and forecast services. As an international leader in scientific research and operational weather forecasting, NOAA's Tropical Prediction Center has been designated as the World Meteorologist Organization Regional Specialized Meteorological Center for tropical storm warnings in the Atlantic and Pacific oceans. In addition, NOAA provides vital timely and accurate data for the aviation industry by supporting the satellite dissemination of the World Area Forecast System data and products.



EXTERNAL FACTORS, AND CURRENT TRENDS AND ISSUES AFFECTING COMMERCE ACTIVITIES SUPPORTING THE NATION'S ECONOMIC INFRASTRUCTURE

All of Commerce's programs supporting the Nation's economic infrastructure must operate in the real world, and must be aware of outside events which will have impacts on them. Major trends and challenges are cited here, in the context of Theme 1 goals.

- A. Implement the President's National Export Strategy in conjunction with the Trade Promotion Coordinating Committee,
- B. Enforce U.S. trade laws and agreements to promote free and fair trade,
- C. Strengthen and institutionalize trade advocacy efforts, placing special emphasis on the "Big Emerging Markets" and major projects.

ITA has developed a comprehensive, government-wide strategy to meet foreign competition and ensure U.S. companies and workers are able to take advantage of the trade agreements the U.S. has concluded. This strategy includes identification of obstacles to U.S. exports (including failure of foreign governments to implement or comply fully with trade agreements) and plans for removing such obstacles, and marshalling U.S. government resources to eliminate barriers. ITA examines promotional issues — trade finance, advocacy, and efforts to help small business — from the perspective of our competitors, and improves its approaches accordingly for U.S. companies. ITA has also looked ahead to a new frontier of strategic commercial policy issues — bribery and corruption, standards, technical assistance and offsets — which must be addressed now if our firms and workers are to be at the forefront of the world economy in the future.

The world economy continued to grow at a moderate rate at the time this Strategic Plan was being prepared. Estimated world economic growth was at about the same level as the previous year, below potential in the industrial countries as a group, and disappointing in the European Union. In the near term, world growth is expected to accelerate, with a rebound in European growth leading the way. Continued good economic performance in most developing regions and further recovery in the transition economies are also expected.

During the last decade U.S. exports have grown at a rate more than five times higher than the economy as a whole, and export growth accounted for fully one-third of total U.S. growth in the decade. The total number of U.S. jobs supported by exports continues to increase strongly, and wages in export-related jobs averaged more than overall U.S. wages.



While U.S. exports and the jobs dependent on them are growing at a healthy rate, and are projected to continue to outperform the economy as a whole, the overall U.S. trade position has deteriorated in recent years. Since the recession year of 1991 when the U.S. goods and services trade deficit fell, the deficit has grown in each of the last three years.

The U.S. trade deficit is projected to increase somewhat in 1997, but should begin to decrease as U.S. economic growth slows to long term trend levels, the rate of growth of imports decelerates, and economic growth picks up in other industrial countries. Nevertheless, trade deficit levels are unlikely to return to the low levels of 1991. Our demand for imports is strong as U.S. firms globalize their production, and foreign producers find our markets very attractive. Thus, if we are to make strides in lowering the trade deficit, our export growth rate must rise above historic levels. Generating exports — and the jobs dependent on them — must continue to be one of our highest economic priorities.

- D. Restructure export controls for the twenty-first century,
- E. Maintain a fully effective law enforcement program to protect U.S. national security, foreign policy, nonproliferation of dual-use commodities, counter-terrorism, nonproliferation of chemical and biological weapons, and public safety interests, and
- F. Facilitate transition of defense industries.

A principal challenge for BXA is achieving a delicate but critical balance between the protection of U.S. national security and foreign policy interests, and combating the proliferation of weapons of mass destruction, without unduly hindering the growth of U.S. exports. In developing these policies, BXA has taken into account such new security concerns as the proliferation of weapons of mass destruction and terrorist activity that have arisen since the end of the Cold War, while supporting the interests of the exporting community.

The end of the Cold War has led to the decontrol of many previously-controlled dual-use commodities. However, they remain subject to licensing, and effective enforcement of the EAA and EAR remain critical. Additionally, BXAs Export Enforcement arm investigates threats to not only the traditional national security, nonproliferation, and foreign policy controls, but also threats posed by terrorists. It will also have enforcement responsibilities under Chemical Weapons Convention implementing regulations and public safety aspects of the Fastener Quality Act.

Since the break up of the Soviet Union, threats to national and global security are increasingly defined in terms of the threat posed by terrorists groups and rogue states possessing weapons of mass destruction. The break up of the FSU shattered the Soviet central economy and military industrial complex, but that



central economy had served as an effective export control system. The democracies that emerged from the old system recognize the threat posed to themselves and the world, but they lack the capacity to develop and implement an effective export control system. The primary challenge now is to convince them to develop a new, equally effective export control system.

G. Strengthen the public's understanding of the U.S. economy and its competitive position by improving Gross Domestic Product (GDP) and other national, regional, and international economic accounts data.

By eliminating non-core programs and reallocating those resources, BEA has made good progress in improving its economic accounts. However, these efforts have not fully offset general concerns over data accuracy and reliability and their ability to measure changes in the economy. These concerns have been raised by both public and private decision makers. Alan Greenspan, Chairman of the Federal Reserve Board, highlighted them in Congressional testimony: "...the list of shortcomings in U.S. economic data is depressingly long. There are biases in aggregate price indexes, incomplete reporting of international transactions, a significant amount of mere interpolation in the service portion of our national income accounts, uneven coverage of the financial accounts of households and firms, and unreported economic activity." In addition, the National Academy of Sciences has released two studies which explore how U.S. systems for collecting and analyzing data have fallen behind the times. The challenge for BEA is to improve GDP and related data so that these yardsticks of economic performance will continue to reflect accurately the ever-changing economy.

H. Improve national and local census and survey data through better business practices and public cooperation.

Two major challenges provide the opportunity to change the way the Census Bureau does business. First, both Congress and OMB have directed that Census 2000 must be simpler, less costly, and more accurate than the 1990 census. Census 2000 must: count every resident, using easy-to-use forms and new ways to respond; follow an open process that diverse groups can support; eliminate the differential count of racial and ethnic groups; and produce a single result that is accurate.

Second, Census 2000 must achieve the highest levels of quality, by ensuring that its products and services meet/exceed customer expectation, and are appropriate for end users.



- 1. Stimulate the creation of private sector jobs through the growth of industry and the retention or expansion of existing businesses in economically distressed areas,
- J. Help distressed communities build their capacity to stimulate, maintain, or expand economic growth, and
- K. Provide new knowledge, analysis, and technical information which serve both to assess economic development problems and to mobilize non-Federal resources for their solutions at the local level.

Under EDA's current statutory criteria, 39% of the country, with 34% of the population, is eligible for EDA assistance because of high unemployment, high poverty, or low per capita income. Under eligibility criteria proposed in EDA reauthorization legislation currently under consideration in Congress, almost 38% of the Nation's population would be eligible for assistance because of high unemployment or low per capita income. Recent appropriation levels allow EDA to provide economic development assistance to only a fraction of the distressed communities that are eligible for funding. The challenge to EDA is to provide assistance as efficiently and effectively as possible to address the greatest need with limited resources.

As the Federal government delegates some of its responsibilities — such as resulted from welfare reform — to local communities, the need to build local capacity grows. Planning and local technical assistance to distressed communities is out-paced by the needs of communities to manage the new burdens as well as facing the challenges of an economy that is increasingly technology-based and globally-linked.

NAFTA and GATT/WTO have resulted in increased imports that, in turn, augment significantly the client caseloads for EDA's Trade Adjustment Assistance Program. In addition to greater demand for assistance in restructuring plans and operations, firms injured by increased imports will need more specialized assistance, including assistance in adopting greater technology.

EDA's programs are flexibly designed to enable the agency to address the widespread need for economic development and to target its funds to the most distressed areas of the Nation. An agency analysis determined that 94% of Public Works projects were made to communities with unemployment at least one percent above the national average, per capita income less than 80% of the national average, or both. EDA's support of America's communities is bolstered by a large national network of partnerships with local delivery organizations, including 320 economic development districts that prepare regional economic development strategies, 61 Native American planning districts, 68 University Centers that utilize academic expertise to provide technical assistance to local communities, state and urban planning offices, and 12 independent regional Trade Adjustment Assistance Centers.

- L. Improve opportunities for minority-owned businesses in major growth industries according to geographic demands, and
- M. Improve the opportunity for minority-owned businesses to pursue funding.

Recent efforts to dismantle federal affirmative action programs provide a serious challenge to MBDA's efforts to improve opportunities for minority-owned businesses. These efforts make it difficult to provide minority entrepreneurs with the unique information and management capacity that facilitate minority business's contributions to America's competitiveness in the global economy, thus threatening the creation of jobs in the general economy, particularly in minority communities, and constraining the minority community from generating substantial Federal tax revenue.

N. Provide technical leadership for the Nation's measurement and standards infrastructure, and assuring the availability of needed measurement capabilities.

A central mission of the NIST laboratory program is to continually improve the U.S. system of measurement needed by industry and science. NIST facilities in Gaithersburg, Maryland and Boulder, Colorado, currently valued at \$3 billion, were built 30 to 40 years ago, and house laboratories that conduct advanced research in areas such as semiconductor electronics, biotechnology, manufacturing engineering, atomic scale physics, computer science, and advanced materials. The combination of advancing age and increasingly sophisticated needs has made NIST's current facilities inadequate for providing U.S. industry with key technology, measurements, and standards in those areas, some of which (microprocessors, lasers, biotechnology, nanomaterials) were undreamed of when NIST facilities were built. NIST facilities lack the high-quality environmental system controls needed to make precision measurements under predictable, stable conditions. The deterioration and obsolescence of the NIST laboratories is a critical issue that must be addressed.

P. Assist U.S. businesses in continuously improving their productivity and efficiency utilizing Malcolm Baldrige National Quality Award framework core values, criteria, and assessment methods.

NIST is the focal point for quality and business performance in the U.S., and is aware that the performance of organizations in health care and education lags that of the Nation's top businesses. NIST has the opportunity to positively impact these fields, while at the same time improving the delivery of both services to the public. Improved performance in these fields would help U.S. businesses as well,



since the cost of health care for employees is a major concern of U.S. businesses and it contributes to the price of U.S. goods and services. Today's workplace increasingly requires multi-disciplinary and technological skills. The health care and education communities see the need for quality improvement and welcome the Baldrige approach. Extending the Baldrige program to these sectors will require that it be adapted to the unique characteristics which make these sectors different from business, and it will require expanded legislative support.

R. Coordinate and lead inter-agency efforts to enhance industry competitiveness in partnership with industry, academia and the states.

The United States Innovation Partnership (USIP) creates a new working relationship between the States and Federal agencies with science and technology missions, to stimulate technology-intensive, state-based economic growth, high quality jobs, and globally competitive businesses by promoting innovation in the American economy. The USIP redefines the Federal/State relationship by changing the Federal science and technology system into a national innovation system. USIP is an interactive partnership to develop a national innovation system that can sustain long-term economic growth and rising living standards for all Americans.

Through the partnership, the States and the Federal government can collectively and more productively address such issues as: streamlining regulatory review of environmental technologies, linking high-tech entrepreneurs and investors through the virtual network on the World Wide Web, making Federal science and technology resources accessible to local governments and inventors, and facilitating electronic commerce and telemedicine.

S. Help protect, promote, and expand intellectual property rights systems throughout the U.S. and abroad.

As American businesses expand their operations across national boundaries, there is a greater demand for global patent and trademark protection. PTO is exploring potential opportunities for enhancing global protection of intellectual property with its Trilateral partners (the European and Japanese Patent Offices) and with the World Intellectual Property Organization.

T. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.



Information technology and telecommunications sectors are both dynamic growth sectors themselves, and also engines of development and economic growth in other sectors of the economy. Telecommunications products and services make factories more efficient, speed the creation of new and better goods and services, develop new jobs and markets, and increase trade. A primary goal of NTIA is to support the Administration's intention to make the benefits of the NII available to this Nation's schools, libraries, and other public institutions by the year 2000.

U. Advocate international telecommunications policies that will help open international markets and promote the interests of the U.S.

NTIA represents the U.S. position in all international frequency allocation and standards setting conferences. NTIA promotes development of the Global Information Infrastructure (GII) through reduction of regulatory barriers to trade and through bilateral and multilateral negotiations.

V. Set policies for efficiently and effectively managing the Federal use of the radio spectrum, and prepare for international radio spectrum-setting conferences of the ITU.

The radio frequency spectrum is an extremely limited, but highly sought-after resource. NTIA promotes efficient usage through technical and economic means and promotion of technological innovation. NTIA assesses spectrum usage, identifies areas where spectrum can be shared between government and private sector uses, and identifies spectrum that can be shifted to other priority uses.

W. Provide leadership in developing telecommunications policy initiatives in emerging areas of national priority.

The Internet, developed and made accessible to broad public use a relatively short time ago, has captured the imagination of business and industry, researchers, consumers, and simply curious people in this country and around the world. The use of the Internet literally expands daily as new information is posted and new users come on line. But the astonishing capacity, flexibility, and pervasiveness of the Internet can also allow for improper or restrictive use, and thus the need for protection arises. Initiatives such as the Global Electronic Commerce program are intended to protect users and support consistent domains in this country and overseas.

X. Promote safe navigation by revolutionizing U.S. marine and air navigation, mapping, and surveying; assist commercial shipping in moving increased cargoes safely and efficiently; and provide a precise satellite-derived reference system as the basis for the Nation's geographical positioning needs.



By 2005, merchant ships, naval vessels, fishing vessels, and recreational boats will safely ply our coastal waters, electronically guided by space-based navigation and advanced information technologies. NOAA will revolutionize U.S. marine and air navigation, mapping and surveying and assist commercial shipping in moving increased cargoes through U.S. ports and harbors with unsurpassed safety and efficiency. While maritime navigation will always be hazardous, the new technologies promise significantly to reduce the risk of accidents and spills.

Key factors will influence NOAA's ability to achieve the goal of promoting safe navigation, among these being the rate at which change should occur and the ability of the Federal government to support these changes. Essential Federal roles, including ensuring safety of the public, protection of the environment, and viability of the means to move commerce, must be carried out efficiently. These services are even more vital today than they have been in the past, considering the impacts on transportation, defense, international trade and public works. NOAA must position itself to discharge its responsibilities effectively, while recognizing that: U.S. exports are expected to grow from about 22% of GDP today to over 30% in the year 2000, yet products and services are growing inadequate due to the lack of essential maintenance; productivity gains from new navigation and positioning technology will rapidly change user needs, and; demand for geographic information to guide economic development is increasing.

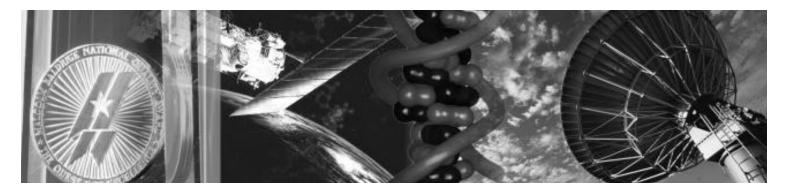
Y. Provide significantly improved short-term warning and forecast products and services that enhance public safety and the economic productivity of the nation by enhancing the ability to observe, understand, and model the environment, and effectively disseminating products and services to users.

NOAA improves our Nation's environmental prediction and warning capabilities for the safety of life and property. As we head into the 21st century, benefits and service improvements in natural hazard warnings will be realized through enhanced observations and predictions, made possible by the development and implementation of new observing systems, and the development of data crucial to improving warnings and forecasts. These improvements enhance national capabilities to mitigate the impacts of environmental events, to reduce catastrophic impacts of natural disasters, and to improve economic productivity of the Nation.

While NOAA provides the information needed to make informed decisions, the public must understand how to utilize and act on this information. Because the manner in which the public responds to weather information is not under NOAA's control, education and awareness are important keys to successfully achieving the outcome of advancing short-term warnings and forecasts. In addition, NOAA must continue to nurture the unique partnership which exists between the National Weather Service and the private meteorological sector for the provision of weather and climate services to the public and industry. This balance is a fundamental strength of the partnership, and has enabled the private meteorological sector to grow to an over \$200 million industry.



CHAPTER 5 STRATEGIC THEME 2: SCIENCE/TECHNOLOGY/INFORMATION



THE COMMERCE MISSION STATEMENT — THEME 2

The Department of Commerce promotes job creation, economic growth, sustainable development, and improved living standards for all Americans, by working in partnership with business, universities, communities, and workers, to:

2. Keep America competitive with cutting-edge science and technology and an unrivaled information base

This Mission Statement includes all activities of the Department of Commerce. Activities under Theme 2, highlighted in bold type above, will be discussed in this portion of the Strategic Plan.

THEME 2 AND THE COMMERCE MISSION STATEMENT

Maintaining cutting-edge science and technology and an unrivaled information base is a critical element in keeping America competitive. Commerce bureaus work in concert to carry out this strategy and, in so doing, support the Departmental Mission in promoting job creation, economic growth, sustainable development, and improved living standards for all Americans.

Promoting the application of cutting-edge science and technology by American businesses in their daily operations is critical to strengthening the international competitive position of American firms. Commerce



programs in bureaus throughout the Department support this Strategic Theme and play an important part in fulfilling the Departmental Mission. The Department implements programs that support basic R & D and promote the application of innovative technologies to commercialization of business processes, that ensure protection of intellectual property, that expand opportunities in international markets through export licensing, that provide management and technical assistance to minority businesses and economically distressed areas, and that collect and disseminate economic data and environmental information used by private and public sector policy makers and to measure our national economic well-being.

Programs in all bureaus of the Department are coordinated and through a series of linked services, assistance, and stewardship support achievement of the Departmental Mission. Their effective implementation is reflected in the increasing level of economic well-being in the United States.



BUREAU SUPPORT OF STRATEGIC THEME 2

DOC bureaus are committed to achievement of the DOC Mission and, as such, are principal advocates for minority, small and medium-sized businesses. They have, as a common goal, the enhancement of America's competitive position in the global market place.

The following DOC bureaus implement Strategic Theme 2 through a series of linked services, assistance, and stewardship.

- Technology Administration (Office of Technology Policy, National Institute of Standards and Technology, National Technical Information Service)
- National Oceanic and Atmospheric Administration (Oceanic and Atmospheric Research, National Environmental Satellite, Data and Information Service, and National Weather Service)
- Patent and Trademark Office
- National Telecommunications and Information Administration
- Economics and Statistics Administration (Bureau of Economic Analysis and Bureau of the Census)
- International Trade Administration
- Bureau of Export Administration
- Economic Development Administration



Coupling cutting-edge science and technology programs and initiatives with the development and maintenance of unrivaled information bases is an important element in achieving the DOC mission. DOC bureaus collect and disseminate information to American businesses and the American public which strengthens our economic presence world-wide and improves living standards for all Americans. The Patent and Trademark Office (PTO), the Bureau of Economic Analysis (BEA) and the Bureau of the Census, ESA's STAT-USA, the National Institute of Standards and Technology (NIST), the National Technical Information Service (NTIS), and the National Oceanic and Atmospheric Administration (NOAA) collect and disseminate vital information which is used to stimulate and protect American innovation and ingenuity, deliver government information, provide vital information for public and private analytical purposes, assure the basis for the U.S. measurement and standards in commerce and industry, and provide preventative warning and information systems that save lives and property and increase society's ability to mitigate economic losses and social disruption.

Programs administered by the Technology Administration including the Under Secretary/Office of Technology Policy, NIST, and the NTIS implement a broad range of programs promoting technology based growth and the transfer of cutting-edge science and technology to private sector users. These programs are designed to translate the results of R&D and development of innovative technologies to profitable commercial applications by American firms. Speeding the flow of technology transfer to reduce the time between R&D and commercial application improves the return on R&D investments and enhances a firm's competitive position.

With a half million active users, NTIS is a modern information processor, focused on servicing the Federal governments information customers. Scientific and technical information from Federal research investments must be preserved and made readily accessible for public use.

Success in a global economy is linked not only on the ability to respond or react to events but to anticipate or forecast them. The ability to deliver effective climate services will be as important to economies and societies in the 21st century as weather forecasting is today. NOAAs improved climate predictions enable resource managers in the climate sensitive sectors such as agriculture, water, energy and health management to alter strategies and ensure sustainable and efficient operations in the future. Foresight of climate related events will reduce economic and human vulnerability, and secure America's competitive edge in the global marketplace.

A failure to conduct the research needed to characterize the potential for global change will leave societies and economies ill-prepared to deal with real impacts, should they occur. NOAA works to provide science-based options for these types of decisions — focusing on climate change and greenhouse warming, ozone layer depletion, and air quality improvement. For example, NOAA is assisting industry in the selection of "ozone-layer friendly" substitutes for chlorofluorocarbons (CFCs). Without research to evaluate the impact on the atmosphere of proposed CFC substitutes, industry could spend millions of dollars to bring a substitute to market, only to find later that it depletes stratospheric ozone.

The PTO is a major contributor to the effort to develop, implement, and enforce fair and effective protection of intellectual property. In addition to its role of helping to protect, promote, and expand



intellectual property rights systems in support of Theme I and its role of granting rights to inventors and enhancing trademark protection in support of Theme III, PTO plays a significant role in the dissemination of patent and trademark information. One way of doing this is to provide information regarding current trademarks in use by the business community. The temporary right to exclude others from practicing the invention protected by a patent ensures that an innovator's investment is protected. In exchange for this limited right, the inventor discloses the invention and enriches the Nation's technology base. In our free enterprise system, this technical disclosure leads to further innovation and progress through competition. Registered marks used in commerce must be protected from interference and unfair competition.

The NTIA promotes the development of an advanced telecommunications and information infrastructure. Their programs in spectrum management and promotion of a national telecommunications and information policy strengthen the capacity of U.S. firms to compete more effectively in both the domestic and international market place.

The BEA and the Bureau of the Census provide a broad and comprehensive range of data and information to both public and private sector decision makers. This information measures the performance of the American economy and the well-being of the American public. It provides the basis for public and private policy decisions and the impact of these decisions is felt in markets and economies world-wide.

The International Trade Administration (ITA), drawing upon its comprehensive industry and country information bases, counsels small and medium-sized U.S. firms on export strategies that will make them more competitive in the global marketplace. Additionally, ITA plans to expand the services of its Trade Information Center (at D.C. Headquarters) for the purpose of providing more extensive and timely trade information to the U.S. business community. ITA also supplies comprehensive, up-to-date technical, country, and industry sector information and analysis to the U.S. Trade Representative for use in trade negotiations.

The Bureau of Export Administration (BXA) is also combating the proliferation of weapons of mass destruction with export control, and licensing and enforcement programs, while further encouraging the growth of U.S. exports.

The Economic Development Administration (EDA) uses an array of program tools to address the challenges facing the nation's distressed communities. By applying technology and information to promote sustainable economic development, many of the nation's distressed communities are developing programs that are critical building blocks for their economic development.

Commerce bureaus have also worked extensively to develop interagency linkages as a part of the Departments science, technology, and information policy framework, and to coordinate effectively with activities throughout the Federal government. For example, the Department has a key role at all levels of the National Science and Technology Council (NSTC), an example of the effective ways in which agencies come together to coordinate and share the results of science and technology programs. Commerce staff serve and provide leadership on NSTC working groups spanning computing, information and



communications; construction and building; manufacturing; environmental technology; toxic substances; and fundamental science. Based on NSTC strategies, Commerce has responded to a number of crosscutting initiatives including the Partnership for a New Generation of Vehicles, Rapid Commercialization, Next Generation Manufacturing, and Natural Disaster Reduction (proposed for FY 1999). Commerce has also figured prominently in the President's Council on Sustainable Development, which impacts the science and technology agenda across Federal, State, and local agencies, and the private sector.

The collective efforts of bureaus within the Department of Commerce to apply cutting-edge science and technology and maintain "world class" information bases enhance the competitive capabilities of American firms and promotes improved living standards for all Americans.

THEME 2 — GOALS, STRATEGIES, AND OBJECTIVES

Through the strategically developed goals, strategies, objectives, and illustrative performance measures listed below, DOC bureaus efficiently and effectively serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of United States industry in the global marketplace.

A. Partner with industry to accelerate the development and application of cutting-edge technologies. The strategy pursued in accomplishing this goal is to use NIST programs (including laboratories, the Manufacturing Extension Partnerships, and the Advanced Technology Program) to perform research in world-class facilities, render technical assistance to the small and medium-sized industry sectors, and leverage resources for technological innovation.

- Develop the measurement tools for advanced science and technology. (TA)
 - GPRAs "Alternative Format" based on peer review (to ensure that the program is appropriate, clear, effectively designed and executed, and revalidated) and economic impact studies (to provide qualitative and quantitative assessments) are used to assess how effectively these goals are achieved and to provide feedback to program planning efforts to ensure that goals and objectives are met.
- Introduce modern technology to U.S. small and medium sized manufacturers. (TA)
 - Increased companies served by extension services.
- Create world-class research facilities for U.S. economic advantage. (TA)
 - Increased laboratories enrolled in the National Voluntary Laboratory Accreditation program.



- Open new opportunities for U.S. business and industry by fostering enabling technologies that lead to new, innovative products, services, and industrial processes. (TA)
- Increased number of technologies commercialized.
- B. Collect, preserve, and disseminate government technical, scientific, and business information.
 - Play a leadership role in assisting Federal agencies with dissemination of their scientific, technical, and business information. (TA)
 - Increased number of information users reached.
 - Provide services and infrastructure to control scientific, technical, and business related information, and increase the effectiveness of systems for locating and delivering information in the form required by customers. (TA)
 - Decreased number of customer complaints.
- C. Monitor and assess international R&D and barriers faced by U.S. industrial sectors, and develop policy options in partnership with industry, academia, and the States. The strategy to be used in this goal is to conduct relevant research and analysis, conduct industry roundtables and partnership events that bring together the Federal government, States, industry, and academia, as well as advocating for issues identified through comprehensive analysis.
 - Monitor and assess what competitor nations are doing to support R&D and enhance their industrial competitiveness. (TA)
 - Research and analysis on the use and effectiveness of technology policy tools employed by other nations to foster economic development. Information provided by this and the following performance measure is used to identify and document the competitive position of U.S. industries and the technology policies of other countries, the effective synthesis of analysis into publicly available reports, the dissemination of analysis to the public and private sectors, and the influence that analysis and advocacy have.
 - Monitor and assess the technological strengths, weaknesses and barriers faced by U.S. industrial sectors, and translate those assessments into policy options with partners in industry, academia, and the States. (TA)
 - Conduct analysis of "best practices" in government to industry technology partnerships.



D. Implement seasonal to interannual climate forecasts. The strategy for this effort requires a permanent observing capability for those ocean and atmospheric observations needed for predictions and a strong research program in modeling and process research to improve forecasts.

- Deliver useful seasonal to interannual climate forecasts for the U.S. and collaborate in a multinational effort to generate and use similar forecasts. (NOAA)
 - Increased lead time and skill score for U.S. temperature and precipitation. Improving the accuracy and timeliness of predictions of temperature and precipitation will promote the use of climate forecasts, leading to economic benefits.
- Enhance global observing and data systems required to provide data for the initialization and validation of model predictions of seasonal to interannual climate variations. (NOAA)
 - Increased percent of Tropical Oceans/Global Atmosphere (TOGA) observing system operational. Wind observations and surface and subsurface temperature measurements are the essential components of an in-situ tropical Pacific observing system required for skillful El Nino-Southern Oscillation (ENSO) predictions.
- Invest in process and modeling research that leads to improved predictability of temperature and rainfall distributions. (NOAA)
 - Increased percent of key research goals implemented. Continuing research will improve seasonal-to-interannual predictions, and NOAA will expand efforts beyond the initial focus on predictability in the tropical Pacific to examine the impacts of other oceans and surface processes.
- Assess the impacts of climate variability on human activity and economic potential, and improve public education so that climate forecasts are understood and acted upon. (NOAA)
 - Quantify economic and social benefits of climate forecasts. User surveys will be undertaken to assess the extent and satisfaction with NOAAs seasonal-to-interannual forecasts, and scientific studies will be conducted to determine the economic and social benefits of applying these forecasts on a regular basis.

E. Predict and assess decadal to centennial change. Building upon its strengths in climate research, NOAA will address the societal questions that the U.S. and the world face in air quality, ozone depletion, greenhouse warming, and climate change. NOAA seeks to provide both the science needed for policy decisions and the information on emerging scientific issues that have policy relevance.



- Characterize the agents and processes that force decadal to centennial climate change. (NOAA)
 - Improved understanding of trends and forcing of greenhouse gases. Trends in the concentration and characteristics of greenhouse gases must be monitored and assessed to explain global change trends being observed.
- Examine the role of the ocean as a reservoir of both heat and carbon dioxide to address a major source of uncertainty in climate models. (NOAA)
 - Improved representation of the ocean in coupled climate prediction models. The potential for the ocean in redistributing heat on the planet is a major source of uncertainty in modern climate models; reducing this uncertainty will improve predictions of long-term potential change.
- Ensure a long-term climate record by enhancing domestic and international weather networks, observing procedures, and information management systems. (NOAA)
 - Updated and improved data bases for documenting climate variability and change on time scales of decades to centuries. International and national climate assessments will have updated and more reliable information to develop policies for addressing climate change; engineers and planners will have access to long-term climate time series required for infrastructure design and operation.
- Guide the rehabilitation of the ozone layer by providing the scientific basis for policy choices associated with ozone-depleting compounds. (NOAA)
 - Percentage of commercially viable CFC substitutes evaluated for their ozone depleting potential. NOAA research is helping define ozone-friendly replacement compounds and documenting that the recovery of the ozone layer is as expected.
- Provide the scientific basis for better air quality by improving the understanding of high surface ozone episodes in rural areas and by establishing a monitoring network to detect cleaner air quality. (NOAA)
 - Percentage completion of initial state of science assessment for rural ozone chemistry. Air quality decision makers in government and industry will have information for planning improvements to State Implementation Plans.
- Develop models for the prediction of long-term climate change, carry out scientific assessments, and provide human impacts information. (NOAA)
 - Percent completion of the inventory of NOAA research contributing to the Year 2000 IPCC scientific assessment of climate change. NOAA will develop better models for climate prediction based on the understanding of radiation science, leading to improved assessments of greenhouse gas policy options.



- F. Promote awareness of, and provide effective access to, patent and trademark information. A strategy of leveraging information technology and effectively managing resources is followed in pursuing this goal.
 - Consistently achieve customer satisfaction by understanding and supporting customer needs. (PTO)
 - Increased customer satisfaction. This information will help guide changes in the services and products provided, and the delivery mechanism used.
 - Promote the use and accessibility of intellectual property information. (PTO)
 - Increased awareness of patent and trademark information. This measure will be used to assess program effectiveness, since timely availability of, and ease of access to, patent and trademark information is critical to the user community.
 - Develop the highest quality information products and services which deliver information when, where, and in the format needed. (PTO)
 - Increased State, local, and business partnerships. This will be used to assess program effectiveness, as serving the most populated metropolitan areas enables greater access to patent and trademark information.
- G. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.
 - Administer the Information Infrastructure Grants program of grants to assist State and local governments, universities and school systems, hospitals and other health care providers, and other social service entities. (NTIA)
 - Increased number of entities connected to the NII.
 - Improve the delivery of communications services and products to the public, through Executive Branch attention to the issues, legislative initiatives, and Federal Communications Commission (FCC) dockets. (NTIA)
 - Increases in access for rural areas.
 - Improve the international competitiveness of the U.S. telecommunications industry and the ability of U.S. businesses and consumers to have access to high quality, reasonably-priced international services. (NTIA)
 - Increased adoption of U.S.-supported standards.



- H. Engage in technical research to improve telecommunications system planning, design, and evaluation and to support government and industry efforts in these areas.
 - Ensure that all government needs for vital telecommunications services can be satisfied nationally and internationally. (NTIA)
 - Increased identification of new technologies for governmental application.
 - Ensure that: the educational and cultural benefits of public broadcasting are available to as many people as possible; educational entities are able to use a variety of telecommunications technologies to improve the effectiveness of distance learning; minorities and women have increased access and control of public telecommunications; and blind and hearing-impaired persons are able to participate more fully in society through the use of telecommunications. (NTIA)
 - Development of content policy models adaptable to different cultural beliefs.
- I. Provide Gross Domestic Product (GDP) and related national, regional, and international economic statistics in the most accurate, timely, cost-effective, and easily accessible way possible. ESA will reengineer its computer systems to reduce respondent burden and improve the accuracy, reliability, timeliness, and accessibility of data for its customers.
 - Reduce respondent burden and increase accuracy and timeliness through electronic filing of BEAs surveys of direct investment and international services. (ESA)
 - Establishment of electronic interchange system standards. Standardized interchange systems will result in less time required to prepare survey responses, quicker availability of survey results, and fewer data problems.
 - Increase accuracy, reliability, and timeliness, across the national, regional, and international programs, through standardized data transfer and on-line interactive editing and processing systems for source data. (ESA)
 - Increased re-engineering of critical processes. The resulting processes will support more efficient data transfers within ESA and between ESA and outside data sources, more timely data availability, and fewer data errors.
 - Increase the timeliness and accessibility of data products to a wide range of customers through Internet and other electronic gateways. (ESA)
 - Increases in e-mail system capacities to handle customer inquiries. Increased use of e-mail will result in more timely and efficient communication of information about ESA data and programs to customers.



J. Provide products and services of greater value and satisfaction to Census national and local information base customers.

- Develop customer- and market-driven Census products through a strategy of regularly soliciting, surveying, and responding to customer needs. (ESA)
 - Improved public perception and cooperation. Greater cooperation is expected to lead to the availability of more complete data.
- Provide easier access to, and greater customer satisfaction with, Census products and services through a strategy of developing a faster, better, and cheaper electronic data dissemination system for Census products. (ESA)
 - Increased data accessibility. Greater availability of data is expected to lead to increased use and impact of information.

K. Provide information on economic events and the workings of the economy.

- Provide information, analyses and guidance on pending economic policy decisions. (ESA)
 - Monthly assessments of macroeconomic impacts.
- Provide a focal point for data dissemination bringing together business, economic, and trade statistics in formats that are easy to use and located at a "one-stop shop." (ESA)
 - Increased subscription rates.

L. Employ ITAs comprehensive industry sector, technical, and country information bases to counsel U.S. firms (especially small and medium-sized firms) on appropriate export strategies, and provide comprehensive and up-to-date information to these firms to support business strategies, and related analyses to the USTR for trade negotiations. To do this, ITA will implement a strategy of expanding its information bases, distribution network, and marketing efforts.

- Expand and enrich ITA's general trade, industry sector, technical, and country information, and increase their utility to ITA's industry clients' export decision making. (ITA)
 - Number of custom agency reports. This will show the areas and extent of customer interest, and help ITA fine-tune its activities.



- Broaden and improve ITAs information distribution network (e.g., use of the Internet, increased support of the National Trade Data Bank, etc.) to ensure that information reaches a larger universe of small- and medium-sized companies in a more timely fashion. (ITA)
 - Number of matching services. This will help show the market relevance of some of ITA's products and services.
- Expand and improve marketing activities undertaken to make ITAs clients more aware of ITAs extensive information resources. (ITA)
 - Percentage of satisfied customers. This will provide important feedback and help ITA respond to topics of high customer interest.
- Complete identification of the trade agreements negotiated by the U.S. and construct a searchable database of these agreements. (ITA)
 - Number of new-to-export firms. This will show the extent to which ITA is helping firms export for the first time.
- Continue to update the Commercial Service's client contact and management system, and migrate the client information to a widely-used and robust application platform to maintain our ability to provide trade and economic data worldwide. (ITA)
 - Number of new-to-market firms. This will show the extent to which ITA is helping experienced firms to do more exporting.
- M. Restructure export controls for the twenty-first century, and facilitate transition of defense industries.
 - Ensure that the automated export control system (EAIS) can assist exporters and provide necessary information to ensure compliance with the U.S. export control regulations. (BXA)
 - Increased applications processed in less than statutory time frames. Technology can contribute greatly to faster processing of export license applications, and timely processing is important for U.S. competitiveness.
 - Implement the Nation's encryption export policy. (BXA)
 - Increased number of encryption key recovery agent reviews. The U.S. is promoting the use of key recovery agents in encryption products to ensure the uses of secure and safe encryption technology.



- Oversee domestic implementation of the Chemical Weapons Convention (CWC) by the business community. (BXA)
 - Chemical industrial inspections conducted. By ensuring CWC treaty compliance, these inspections promote national security and economic strength. By safeguarding business confidential information, they keep America competitive with cutting edge technology.
- Promote U.S. economic security, technological competitiveness, and defense diversification. (BXA)
 - Completion of critical defense industry studies. These studies help to identify potential vulnerabilities and dependencies, as well as competitive opportunities.

N. (EDAs strategies under Theme 2 are achieved through grants to alleviate conditions of substantial and persistent unemployment and underemployment in economically-distressed areas of the Nation through technology-based solutions. EDAs performance goals relate directly to job creation, capacity building, information dissemination, and recovery from economic dislocation.)

Help both rural and urban communities incorporate technology as a tool for their economic development.

- Help distressed communities plan for technology-led economic development. (EDA)
 - Increased community participation.
- Help distressed communities build infrastructure necessary for technology-based economic development, including business incubators, industrial technology research centers and laboratories, technical skills training centers, and entrepreneurial development centers. (EDA)
 - Jobs created and/or retained.
- Provide technical assistance to communities to develop the networks and linkages necessary for technology-based economic development, including the creation of electronic networks and trade and commerce organizations. (EDA)
 - Improvement to the community through evaluation or feasibility study.



PARTNERSHIP ACTIVITIES SUPPORTING SCIENCE/ TECHNOLOGY/ INFORMATION INITIATIVES

Many of the Federal, State, and local agencies, and outside groups with which we partner, do not make distinctions about which specific Commerce goals they link to — their focus is on an overall program. Therefore, we believe that to show a partnership link between one specific goal/objective and a partner organization could be misleading. As a result, we will discuss our partnership relationships at the bureau level in this Plan.

TA

NIST partners with industry to accelerate the development of cutting edge technologies, in four main areas:

- Develop and apply measurement and standards tools for advanced science and technology.
- Introduce modern technology to U.S. small and medium sized manufacturers.
- Create world-class research facilities for U.S. economic advantage.
- Open new opportunities for U.S. business and industry by fostering enabling technologies that lead to new, innovative products, services, and industrial processes.

The NTIS has the authority to enter into joint ventures with companies in the private sector, which has broadened its ability to reach larger audiences with the development of new information products. An active joint venture program has produced innovative solutions to increase information access points for businesses by working together with notable leaders such as Kinkos, Inc., The McGRAW-HILL Companies, Inc., and Bernan.

NTIS also partners with other government agencies by assisting them in fulfilling their needs for information collection, processing or dissemination. Service support work for other Federal agencies continues to build in the electronic information processing areas. On-line services provided through the FedWorld system cover a full range of information dissemination provided to several Cabinet level and over 60 other federal agencies. Special facilities to provide 2-way, on-line communication with agency constituents are now offered for on-line rulemaking or other consensus building processes. Transactions in real-time using industry standard methods have been pioneered with NTIS' own automated on-line ordering system. NTIS also develops audio-visual and CD-ROM products for agencies.



NOAA

NOAA co-chairs the National Science and Technology Council Committee on Environment and Natural Resource (CENR), including 20 Federal agencies charged with developing cost-effective strategies to optimize the Nations' Federal investment in our \$5 billion R&D investment. This partnering organization promotes complementary and coordinated research efforts across the Federal government. In coordination with OMB, the CENR assures that Federal research efforts are not redundant, and as a result, the best scientific R&D information is both developed and disseminated for the benefit of the Nation in increasingly efficient and cost-effective ways.

NOAAs climate prediction effort is a key component of the U.S. Global Change Research Program (USGCP), a Presidential and CENR priority. Climate variability has emerged as one of the four thrusts recommended for the USGCP by the National Research Council in its recent review of this program. While maintaining a leadership role in the research, NOAA actively coordinates its efforts with its partner Federal agencies, principally the NSF, NASA, and DoE. This program also supports the CENR Water Resources and Coastal and Environmental Subcommittee, the CENR Subcommittee on Natural Disaster Reduction, and the Presidents Council on Sustainable Development.

Longer-term climate information gathered by NOAA and coordinated with efforts of other Federal agencies contribute science-based information though the USGCP to assist decision-makers in understanding issues concerning the global environment. Key NOAA contributions include improved understanding of climate change and greenhouse warming, ozone layer depletion, and air quality improvement. Due in part to the Global Change Research Act of 1990, Federal agency global climate change research efforts, such as those involving NOAA, USDA, DOD, DoE, EPA, HHS, DOI, NASA, NSF and others are now more effectively coordinated.

PTO

PTO's domestic and international partnerships enhance its customer responsiveness and facilitate better working relationships among the businesses, communities, Federal agencies, and foreign countries and organizations which produce and/or depend on patents and trademarks. PTO has taken an aggressive approach to its public policy role in the dissemination of patent and trademark information. At the international level, PTO has partnered with the European and Japanese Patent Offices (its Trilateral partners) in developing dissemination policies for the respective regions which will enhance effective dissemination of patent and trademark information. Through this partnership, the scope of information available for use by PTO employees and the network of Patent and Trademark Depository Libraries (PTDLs) has expanded significantly; for example, a database of AIDS-related patents and electronic information products offered by CD-ROM.



PTO partners with regional, State, university, and public libraries around the country to make patent and trademark information accessible locally through the PTDLs. Enhanced partnerships were developed between the PTO and the Sunnyvale Center for Innovation, Invention, and Ideas in Sunnyvale, California, and the Great Lakes Patent and Trademark Center of the Detroit Public Library, which in turn has a relationship with the Toledo-Lucas County (Ohio) Public library.

NTIA

NTIAs responsibilities encompass telecommunications issues including domestic and international policy, spectrum management, research, and grant programs. Within the Federal government, the State Department, the U.S. Trade Representative, and other agencies address telecommunications as a peripheral aspect of their primary missions and rely on NTIA for telecommunications expertise. NTIA coordinates Federal use of the radio spectrum by chairing the Interdepartment Radio Advisory Committee (IRAC). The IRAC is made up of all Federal agencies that use spectrum and includes the Federal Communications Commission.

ESA

ESA works with all Commerce bureaus, and, as a representative of Commerce, with White House policy councils and similar economic policy forums on issues affecting the economy. ESA reviews material prepared by other Commerce bureaus to ensure that it contains accurate and timely information, and reflects Departmental policy positions. ESA prepares information, analyses, and guidance for presentation to White House policy councils and other policy-making forums on pending economic policy decisions.

ITA

ITAs partnership initiatives are not limited to co-location of offices, or joint trading and sharing of staff. We are providing for electronic links between Commercial Service offices and our private sector partners and clients to enable information to be shared across the country. We continue to develop concepts such as the "mobile trade specialist", videoconferencing, and home pages on the World Wide Web. Hard copies of documents are giving way to CD-ROM, and the Commercial Service is actively pursuing a program to upgrade its telecommunications and information technology capabilities worldwide.

ITAs industry specialists prepare forecasts for U.S. industries, industry sectors, or subsectors. To disseminate this information, ITA prepares and distributes industry-specific reports or research on foreign market opportunities and U.S. competitiveness in specific markets. This information is also becoming available on an ever-increasing number of Web pages.



BXA

BXA continues to assess the capabilities and competitiveness of various critical domestic supplier industries as the economy moves into the 21st century. A major project which is in its early stages is an assessment of the high performance explosives sector which serves as sources for the Defense Department, and the specialty chemicals supplier base upon which these explosives manufacturers are dependent for key ingredients. BXA is also working on a new study of the industries which comprise optoelectronics; this assessment is a follow-on to a major publication which BXA completed in 1994.

ECONOMIC CONTRIBUTIONS AND OTHER BENEFITS OF SCIENCE, TECHNOLOGY, AND INFORMATION ACTIVITIES

Commerce programs support the Nation's science, technology, and information initiatives in numerous ways. The key activities are cited here, in the context of Theme 2 goals.

A. Partner with industry to accelerate the development and application of cutting-edge technologies.

NIST's primary mission is to promote economic growth by working with industry to develop and apply technology, measurements, and standards. NIST laboratories further the technical aims and capabilities of U.S. industry by serving as an impartial source of expertise, developing measurement capabilities and other infrastructural technologies that are beyond the reach of individual companies, needed widely by industry, and likely to have significant economic impact.

In partnership with states and local governments, the MEP provides U.S. small- and medium-sized manufacturers with an array of tools, including implementation assistance in adoption of new, more advanced manufacturing and information technologies. The MEP provides this assistance through some 700 partnerships with Federal agencies, national associations, and other organizations.

The ATP program is a unique partnership between government and private industry to accelerate the development of high-risk technologies that promise significant commercial pay-offs and widespread benefits for the economy, and an enhanced quality of life for American citizens.

Studies of the economic impact of these NIST programs indicate that significant benefits flow back to U.S. society and the economy. For instance, preliminary Census surveys of MEP clients indicate that the program does create and save jobs, and has helped companies increase sales and reduce costs. Studies have documented important near-term results of the ATP which include: the pursuit of challenging



research projects that would have been delayed or scaled down without the ATP; new commercial opportunities based on the new technical capabilities; and, greater use of cooperative research ventures and industrial alliances. In tackling with industry the key tasks that companies cannot accomplish on their own, NIST provides timely, indispensable support that companies themselves fashion into competitive advantages.

B. Collect, preserve, and disseminate government technical, scientific, and business information.

NTIS provides public access to information in several formats, on an extremely wide range of R&D, engineering, and program subjects, regarding activities of U.S. and foreign governmental agencies and agency-supported research. Information is available in the form of periodicals, stand-alone hard copy, microfiche, and data files and software (on tape, diskette, or CD-ROM). NTIS adds an average of almost 300 titles to its collection every business day. By making its holdings widely accessible, in ways that are most useful, and on topics that are of current market or research importance, NTIS provides key information resources that are essential to the business, research, academic, and governmental communities.

C. Monitor and assess international R&D, barriers faced by U.S. industrial sectors; and develop policy options in partnership with industry, academia and the States.

The TA develops technology policies that increase the competitiveness of U.S. industry. Economic research has long indicated the important role that the development and deployment of new technologies play in improving industrial productivity and generating economic growth. Recent estimates suggest that as much as one-half of recent growth in our economy is attributable to such innovation; government policies and programs play an important role in defining the context within which such innovations occur.

As part of its work, the TA attempts to define more clearly the interconnection between government policy and technological innovation. Through studies of the competitiveness of key industrial sectors, it brings to policy-makers current information concerning the technological challenges facing our industries and the role which government policies play in helping meet those challenges. These studies provide a basis for more comprehensive consideration of the ways in which government policy should be shaped to further technological advantages of U.S. industry. A related part of this effort is the periodic review of government technology partnership programs intended to help industry develop and deploy new technologies. It develops recommendations for improvements in those programs and seeks to carry out those recommendations throughout the executive branch.

The link between technology policy and industrial performance is long and complex in a large, marketdriven economy like ours. In a basic sense, government policies developed by the TA provide important elements of the climate within which private sector technological competitiveness can be achieved.



D. Implement seasonal to interannual climate forecasts

A broad range of commercial, business, and public users, making up a substantial segment of the U.S. economy, benefit directly from interannual climate forecasts. The \$820 billion U.S. food system, for which agricultural productivity is the core, is particularly sensitive to climate fluctuations. Recent studies estimated the value of El Nino Southern Oscillation (ENSO) climate forecasts for U.S. agricultural sector range from \$240-\$323 million annually. In each case, prior knowledge of the onset and intensity of the next season's or next year's climate fluctuations can lead to far more efficient decision making. Although economic benefits derived from the use of climate information will vary from year to year, conservative estimates place the average value of an ENSO forecast at \$1 billion annually in terms of mitigated losses (including jobs saved and social disruption minimized) in the U.S. economy, and exceed several billion dollars globally.

E. Predict and assess decadal to centennial change

Research on climate change enables society to make sound decisions to mitigate and adapt to climate change, to assess the utility of investment to reduce greenhouse gas emissions. The purpose of this research over time is to improve regional air quality. Performing research, presenting results in up-to-date assessments, and describing the implications in policy-relevant terms to government and industrial leaders are cornerstones of environmental stewardship and can have enormous benefits. The value of reducing climate-related uncertainty in the implementation of policies on stabilizing anthropogenic greenhouse gas emissions is estimated to be \$100 billion for the U.S. alone between now and the year 2020. Assisting industry to choose the most "ozone-layer friendly" substitutes for chlorofluorocarbons will promote protection of the stratospheric ozone layer while continuing economic development. Scientific findings will assist Clear Air Act decisions to reduce surface ozone, with benefits to human health and agriculture.

F. Promote awareness of, and provide effective access to, patent and trademark information.

Intellectual property is a potent force in, and a fundamental component of, the world's competitive and technologically-based free enterprise system. By protecting intellectual endeavors and encouraging technological progress, the PTO preserves the U.S.' technological edge, which is a key to our current and future competitiveness. In market-driven economic systems, innovation provides a catalyst for economic prosperity through the accumulation of scientific knowledge, introduction of new products and services, and improvements in the productivity levels of land, labor, and capital resources.



In addition to the benefits for ensuring adequate protection for innovations through patents and trademarks, the knowledge disclosed through a patent grant contributes to the base of science and technology on which the Nation's economy is built. Disclosure of the information contained in a patent grant provides the public with information about the most recent state of technological development. In addition, a patent offers the necessary information and stimulation for continuing development, and directs those interested in the exploitation of an invention to the relevant source of technology. The trademark system helps promote order and certainty in the Nation's economic infrastructure. The introduction of new products and services is made easier and less risky by the availability of information concerning trademarks in use by others. Using this information, a mark can be selected which will distinguish new products and services from others and thereby avoid confusion on the minds of customers.

In addition to meeting customer needs in traditional ways, the PTO will use the Internet for customer ordering and delivery of patent and trademark information products and services, providing customers with the status of patent and trademark applications, and with access to patent and trademark assignment data. The PTO will also be able to produce and transmit products electronically to major international patent offices (e.g., WIPO, the EPO and the JPO).

At the same time, the PTO will enhance the effectiveness of the PTDL network by controlled expansion into major metropolitan areas which are not currently served by a PTDL.

G. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.

The NII is an effort to use new telecommunications and information technologies to connect Americans to one another, to services, and to information. The private sector is building the NII, but Federal government actions are necessary as a catalyst to facilitate and encourage private development of it. NTIA continues to demonstrate leadership in the development of the NII through its management of the Telecommunications and Information Infrastructure Assistance Program, to promote the expansion and effective use of the NII by public and nonprofit entities at the community level.

H. Engage in technical research to improve telecommunications system planing, design, and evaluation and to support government and industry efforts in these areas.

Over the years, NTIA's Institute for Telecommunication Sciences has pursued numerous technical research and engineering projects, on a reimbursable basis, for other Federal agencies, including the Departments of Defense, Agriculture, and Transportation, the Federal Communications Commission, and others. These efforts, which include telecommunications planning, consultation and evaluation services, provide agencies with a centralized capability to address their mission-related telecommunications problems



effectively. This would not be possible without NTIA assistance because of the lack of agency in-house expertise, or because of changing requirements for sophisticated telecommunications support that only NTIA could fulfill. Other-agency sponsored work undertaken by NTIA has contributed to efficient Federal resource management and reduced unnecessary duplication of effort, and at the same time, has reinforced and supported NTIAs overall telecommunications policy and spectrum management responsibilities in support of the Department and the Administration.

I. Provide Gross Domestic Product (GDP) and related national, regional, and international economic statistics in the most accurate, timely, cost-effective, and accessible way possible.

BEA has begun a critical move to an integrated micro-computer network. BEAs Information Technology Strategic Plan, benchmarking BEAs existing system against the computer systems used by statistical offices in other countries and against best-practices technology in the U.S., brings together BEAs customer service, Mid-Decade Strategic Plan, and computer re-engineering efforts. The integrated environment will increase the accuracy, reliability, and timeliness of BEAs data. Re-engineering BEAs data collection, analysis, and dissemination will enhance its ability to provide accurate, timely, and relevant estimates to its customers, while reducing respondent burden.

J. Provide products and services of greater value and satisfaction to Census national and local information base customers.

The Bureau of the Census compiles and publishes economic, social, and demographic data on a wide range of topics, such as manufacturing, population, housing, agriculture, and foreign trade. This crucial data provides invaluable insight into the Nations economic infrastructure. National Statistical Profile data are used by agencies allocating Federal funds to State and local programs, show long-term economic trends, and define Congressional representation. National Performance Indicators are monthly to annual statistics driving today's markets and their analysis of the population.

K. Provide information on economic events and the workings of the economy.

ESA provides information to other Commerce bureaus, and to other Federal agencies, on matters related to economic developments and forecasts, and the development of options and positions relating to both macroeconomic and microeconomic policy. In turn, this information drives Federal, State, and local government investment decisions, program decisions within the Federal, State, and local governments, and decisions of countless private sector entities.



In addition, ESAs STAT-USA is a focal point for data dissemination that brings together business, economic and trade statistics in formats that are easy to use and located at a "one-stop shop". By building on earlier successes with new technologies to deliver information, STAT-USA is now a leader in the delivery of Federal government information to the public.

L. Employ ITAs comprehensive industry sector, technical, and country information bases to counsel U.S. firms (especially small and medium-sized firms) on appropriate export strategies, and provide comprehensive, up-to-date, technical, country, and industry-specific information to these firms to support business strategies, and related analyses to the USTR for trade negotiations.

ITAs counseling, information, and related services contribute directly to the export sales by thousands of American companies. These efforts resulted in over \$1 billion in exports in FY 1995, when over 275,000 small- and medium-sized firms received counseling. ITAs Trade Information Center alone handled nearly 65,000 inquiries, 90% of which were from small businesses.

As the essential link between the economic interests of U.S. industries and the Nations broader public policy concerns, ITA works closely with the USTR to ensure that trade agreement negotiations give full consideration to the requirements of the private sector. ITA participates annually in thousands of multilateral negotiations and consultations, and produces briefing papers which provide vital international trade information for U.S. business and industry. The success of many trade negotiations hinges on the quality of analysis ITA provides. In addition, through ITAs Industry Consultations Program, U.S. negotiators draw upon the advice of over 500 industry representatives who provide essential information on the impact of foreign trade barriers on U.S. business interests.

M. Restructure export controls for the twenty-first century, and facilitate transition of defense industries.

BXA focuses on restructuring export controls for the 21st century and on facilitating the transition of defense industries as relevant. These objectives contribute to keeping the Nation's economy competitive while remaining within the limitations imposed to keep this Nation secure. BXA works with various countries as well as other agencies in furthering these objectives. BXA also seeks to keep the exporting community informed by disseminating its revised export regulations and technological information in a timely manner.



N. Help both rural and urban communities incorporate technology as a tool for their economic development.

EDA programs support the Nation's science, technology, and information initiatives by working in conjunction with State and local governments and the private sector to promote the use of technology to increase trade and thereby create jobs. For example, EDA funded the establishment of BAYTRADE, a regional public-private partnership that links eight one-stop-shop centers to assist export-ready businesses by developing an electronic communication network, which provides information on international markets. The economic benefits of this initiative are the increased exports by U.S. companies using the system.

EDA public works grants have enabled the construction of science and technology learning centers for the purpose of providing training to disadvantaged youths and long-term unemployed residents of inner cities. For example, EDA funded a multi-tenant technological incubator at the Johns Hopkins Bayview Medical Center in Baltimore, Md., and helped Baltimore construct the Maryland Bioprocessing Center, generating over 1000 jobs and \$42 million in new capital investment.



Many of the Commerce programs supporting the Nation's science, technology, and information have international aspects. Key examples are cited here, in the context of Theme 2 goals.

A. Partner with industry to accelerate the development and application of cutting-edge technologies.

NIST stimulates the Nation's economic growth through technology, measurements, and standards. As economic growth is intimately connected with global trade, NIST has specific responsibilities and opportunities internationally.

NIST's measurements and standards program cooperates with other countries, through the International Bureau of Weights and Measures and other international standards bodies, on comparisons of the measurement capability in each country. NIST supports state-of-the-art measurement capabilities that keep it at the forefront of these international comparisons. These capabilities give U.S. companies access to processes other countries use to assure that private industry makes accurate measurements and supports U.S. companies who want to compete internationally.



Through its measurement and standards-related services, NIST promotes market efficiencies that provide the means for assessing and demonstrating conformance and for resolving technical disputes, efforts especially important where technical trade barriers have arisen. NIST is helping to develop Mutual Recognition Agreements that specify conditions under which testing for conformance with foreign and international standards can be done within the United States. In 1994, NIST established a National Voluntary Conformity Assessment System Evaluation Program to evaluate and recognize U.S. testing laboratories and organizations with demonstrated competence in determining whether products satisfy foreign regulatory requirements.

NIST activities have been formalized by the passage of the National Technology Transfer and Advancement Act (PL 104-113), which directed NIST to take responsibility to provide public sector leadership in standards and conformity assessment and in working with other Federal agencies and the private sector to support the creation and maintenance of a sound technical infrastructure for the U.S. NIST is in a unique position to provide coordination and policy input for standards and conformity assessment structures and activities in the U.S., and to lead the development of a realistic, workable technical infrastructure to support the goal of an effective global market.

The ATP program works with multinational corporations to assure that those corporations do not merely sell in the U.S. market, but also find it profitable to perform research and development and to manufacture products in this country. The MEP helps forge links between small and medium-sized countries in the U.S. with those abroad to improve domestic manufacturing practice and to provide new markets for domestically manufactured goods. In general, NISTs support of U.S. industry bolsters U.S. competitiveness in the global marketplace.

B. Collect, preserve, and disseminate government technical, scientific, and business information.

NTIS maintains international relationships with similar information sourcing and dissemination entities throughout the world in more than 20 countries. NTIS is recognized by the foreign information providers as a primary source providing U.S. businesses and industry information about foreign technology. NTIS obtains the foreign information through governmental and in-country business channels.

C. Monitor and assess international R&D and barriers faced by U.S. industrial sectors; and develop policy options in partnership with industry, academia and the States.

The TA conducts technology and innovation-related international activities that complement its domestic initiatives by creating opportunities for beneficial international partnering, providing information and policy analyses, and directly addressing existing international impediments. Because technological leadership means operating effectively in an international environment, the TAs international activities are expanding.



The TA negotiates international science and technology agreements and other joint arrangements, represents the U.S. in multinational fora such as the OECD and APEC, and advises senior government and industry officials on the potential impact of foreign science and technology policies and programs. The TA provides value-added information through electronic and printed publications, business counseling, conferences and other special activities. Since other countries do not provide the same open access to science and technology, the TA plays a role in making this information more accessible, educating Americans on finding such information and cooperative opportunities.

The TA supports Presidential and other high-level initiatives to increase international technology cooperation, facilitating peace restoration and economic reconstruction in important areas of the world. The TA works closely with other U.S. agencies, U.S. industry, and foreign partners to establish business activities and relationships that provide tangible benefits by creating a business climate supportive of innovation and an opportunity for balanced collaboration.

D. Implement seasonal to interannual climate forecasts.

International cooperative activities are an integral part of climate research, observing systems, and assessments. NOAAs Seasonal to Interannual Forecasts program is a principal U.S. contribution to the World Climate Research program, Global Ocean Observing System (GOOS), and Global Climate Observing System (GCOS). NOAA supports the International Research Institute, which produces climate forecasts a season to a year or two in advance, as well as societally and economically useful forecast guidance. NOAA will maintain and develop international partnerships to build a global ocean observing system to operationalize ENSO climate observations, leveraging the expertise and resources of partner nations.

E. Predict and assess decadal to centennial change

NOAA is a recognized major source of research and information on international environmental issues. NOAA and NOAA-supported research has made discoveries driving international environmental policy decisions. NOAAs predictions and assessments are key input for the United Nations scientific assessments (e.g., the Intergovernmental Panel on Climate Change, IPCC) on greenhouse warming. To understand the role of the oceans in global change, NOAA leads planning and implementation efforts for the U.S.'s contributions to the international GCOS to provide necessary observations as part of the GOOS. Since weather in the U.S. is influenced by weather throughout the world, international contributions of data and observations figure into all of NOAAs key climate research and global and regional observing programs. As part of this effort, NOAA also supports the International Geosphere-Biosphere Program as well as the associated World Data Centers.



F. Promote awareness of, and provide effective access to, patent and trademark information.

PTO's formal agreements and informal working relationships with the European and Japanese Patent Offices significantly help to enhance awareness of, and access to, patent and trademark information. The PTO has collaborated with the WIPO in developing dissemination policies for the respective regions which will enhance the effective availability of information. Further, through this partnership, the scope of information available for use by PTO employees and the PTDL network has expanded significantly.

- G. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans, and
- H. Engage in technical research to improve telecommunications system planning, design, and evaluation and to support government and industry efforts in these areas.

With burgeoning global growth in demand for advanced telecommunications and information services and facilities, effective U.S. standards development efforts — at the Federal, national, and international levels — are vital to achieving U.S. telecommunications policy objectives. NTIA has been at the forefront of U.S. telecommunications standards development efforts, and continues to play a leading role in domestic (e.g., Standards Committee T1 Telecommunications) and international telecommunications standards conferences (e.g., ITU-T and ITU-R) and negotiations in cooperation with other interested agencies/ administrations/industry groups.

NTIA has spearheaded highly successful efforts to enhance domestic competition and improve foreign trade opportunities for U.S. telecommunication firms by developing user-oriented, technology-independent quality-of-service network performance standards. This work is providing key contributions to the development of the NII and Global Information Infrastructure (GII). In today's competitive multi-vendor environment, the NII and GII will provide the linchpin for the delivery of new and innovative multimedia services in such areas as distance learning, health and safety, law enforcement, entertainment, finance, and others. Telecommunications standards development is a primary mechanism for cooperative planning of these future capabilities.



I. Provide Gross Domestic Product (GDP) and related national, regional, and international economic statistics in the most accurate, timely, cost-effective, and accessible way possible.

BEA's participation in international organizations brings uniformity and higher quality to international statistics and improves the U.S.'s ability to compare economic developments here and abroad. BEA helps set international standards, such as the U.N.'s System of National Accounts and the IMF's Balance of Payments Manual. With the implementation of the new standards, U.S. measures of economic growth, investment, and trade will be more comparable to those in other nations and will better reflect new and rapidly growing sectors of the economy, increased globalization of production and investment, and other features the changing world economy.

The present Standard Industrial Classification (SIC) system — the basis for BEAs GDP and gross State product-by-industry estimates, input-output accounts, and foreign direct investment and services data — presents an outdated picture of economic activity. Work on the North American Industry Classification System (NAICS) was begun in 1992 under OMB and carried forward with our Canadian and Mexican NAFTA partners' statistical agencies. The design of the system is now complete, and it will replace the outdated SIC system in 1997. BEA will work with the Census Bureau and BLS to oversee the introduction of NAICS in the U.S. and the integration into the accounts of the new data collected using NAICS.

Increased integration in world markets for goods, services, and capital, in combination with major advances in computer and communications technology, have resulted in large gaps in BEAs coverage of international transactions. These gaps pose difficulties which BEA is seeking to address through data exchange with other countries' statistical agencies and with foreign central banks. Efforts to reconcile import and export statistics of other countries with our own have improved U.S. trade data.

BEA, Treasury, and the Federal Reserve System — in cooperation with the IMF, the Organization for Economic Cooperation and Development, and the other G-7 nations — are developing common definitions for collecting consistent data on portfolio investments. Participating countries and organizations will then modify their data collection systems to improve consistency and fill existing gaps in coverage by exchanging data with each other.

K. Provide information on economic events and the workings of the economy.

ESA participates in policy deliberations of such international organizations as the Organization for Economic Cooperation and Development, the International Labor Organization, the Asia Pacific Economic Cooperation Forum, and the Conference on Security and Cooperation in Europe.



L. Employ ITAs comprehensive industry sector, technical, and country information bases to counsel U.S. firms (especially small and medium-sized firms) on appropriate export strategies, and provide comprehensive, up-to-date, technical, country, and industry-specific information to these firms to support business strategies, and related analyses to the USTR for trade negotiations.

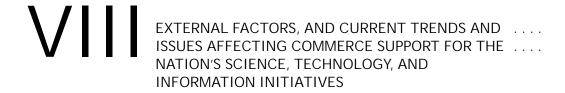
The very essence of ITA is its focus on international activities, specifically in its ability to provide strategic support in the development of U.S. international trade and commercial policies. It is the only Federal agency with the proven capacity to provide hands-on assistance to U.S. companies that seek to broaden their markets by exporting or doing business abroad. The majority of ITAs counseling of small- and medium-sized businesses and much of the preparatory work for trade negotiations takes place in the United States. ITA maintains staff, allied with American embassies, in some 70 foreign countries. These staff both directly assist American companies seeking to do business in those countries, and provide information on those countries back to the U.S. Also, ITA experts participate on international negotiating teams and may lead the negotiations. Finally, ITAs desk officers provide the expertise needed by U.S. trade negotiating teams and by the USTR, by producing market barrier analyses and the detailed understanding of technical problems necessary for successfully negotiating trade agreements.

M. Restructure export controls for the twenty-first century, and facilitate transition of defense industries.

BXAs export control agenda for the 21st century is focused on preventing the proliferation of weapons of mass destruction while seeking to promote U.S. competitiveness in the global marketplace. BXA recognizes that U.S. industry cannot successfully compete internationally if the export control system does not reflect a changed security environment. Actions have already begun to remove unnecessary obstacles to exporting and strengthen multilateral regimes.

BXA plays a major role in discussions to build key recovery management infrastructure that will support both electronic commerce and public safety needs.





All of the Commerce programs supporting the Nation's science, technology, and information initiatives must operate in the real world, and must be aware of outside events that affect them. The key trends and issues are cited here, in the context of Theme 2 goals.

A. Partner with industry to accelerate the development and application of cutting-edge technologies.

The NIST laboratory program assures that the U.S. has the measurement capability needed by industry to continually improve products and services, by conducting research and providing the infrastructural technologies, such as measurements, standards, reference materials, and test methods.

NIST laboratory research is targeted at identifying and addressing the critical measurement needs of U.S. industry. Laboratory research programs encompass such diverse areas as microchemical analysis; microelectronics processing and materials analysis; acoustics, mass and vibration measurement; chemical kinetics; and photonic materials. NIST experts also support U.S. industry in roadmapping efforts, including The National Technology Roadmap for Semiconductors; Technology Vision 2020; The Next Generation Manufacturing Initiative; and The Action Plan for Achieving High Priority Construction in the Residential Sector. Roadmaps help NIST research programs anticipate and respond to industry measurement needs, consistent with the NIST mission.

However, the current state of NIST facilities hampers our efforts to respond to these needs effectively. NIST facilities in Gaithersburg, Maryland and Boulder, Colorado, valued at \$3 billion, were built 30 - 45 years ago, and house laboratories that conduct advanced research in semiconductor electronics, biotechnology, manufacturing engineering, atomic scale physics, computer science, and advanced materials. The combination of advancing age and increasingly sophisticated technological needs are rapidly making NIST's current facilities inadequate for supporting its mission of providing U.S. industry with essential infrastructural technology, measurements, and standards.

NIST also cannot adequately support the major technologies that were undreamed of when NIST facilities were built — lasers, microprocessors, biotechnology, and nanomaterials — that have become commonplace in U.S. industry. Finally, NIST facilities lack the high quality environmental system controls need to make precision measurements under predictable, stable conditions. It is critical that the deterioration and technical obsolescence of the NIST laboratories are addressed.



B. Collect, preserve, and disseminate government technical, scientific, and business information.

Since 1945, NTIS has served as a central acquisition and clearinghouse and government-wide resource for scientific, technical, engineering and related information, as a means of strengthening the U.S. competitive position in global markets.

As a component of the Technology Administration, NTIS operates three core information dissemination lines of business: clearinghouse; production and brokerage services to other government agencies; and FedWorld, an on-line information services platform. Information seekers continue to drive the trend towards providing easier location, access, and delivery of information electronically. The trend is clear that seekers of government information want the ability to search, locate and retrieve their information electronically.

Throughout its history, NTIS has pro-actively expanded channels of access for users of the government information in its possession. In recent years, the trend of increasing access to government information has been posing both challenges and opportunities for NTIS. NTIS acquires its information material from Federal agencies and their contractors and grantees, as well as from foreign (primarily governmental) sources. Between 85,000 and 100,000 new titles are acquired, cataloged and included into the archive collection each year. Annually, the number of customers served continues to grow.

NTIS continues to respond to the challenges of addressing and meeting customer demands through the development and delivery of new information products and services. The FedWorld platform increased the capacity of NTIS to serve far more customers, at the lowest possible costs, while increasing information locating and access.

C. Monitor and assess international R&D, barriers faced by U.S. industrial sectors; and develop policy options in partnership with industry, academia and the States.

In the past ten years, there has been increasing recognition of the important role technology plays in generating economic growth. Government, academia and industry have all sought to improve their understanding of this interconnection, and government has been particularly concerned with improving the social return on its considerable investments in research and development. More recently, government policy makers have given increased attention to the effects policy has on the climate for innovation within our country. As a consequence of these developments, technology policy has changed from a tool for management of research budgets to an important complement to economic and trade policy.

In this new environment, there is continuing need to develop a common understanding among policy makers of the dynamic relationship between technology and the economy. The TA anticipates continuing opportunities to reiterate these themes in the context of trade, taxation regulation and other policy issues that help to shape the climate for private sector innovation.



Internationally, other nations are implementing science and technology policies to develop cutting-edge domestic industries and attract the engines of economic expansion to their shores. Our trading partners explicitly recognize the connection between technology and economic growth in their science and technology policies. The TA must address the increasingly complicated technology policy issues that arise from the science and technology activities of our trading partners such as Japan and Europe as well as rapidly emerging areas such as China, Southeast Asia, Russia and the Newly Independent States. Effectively monitoring and analyzing the technology efforts of other nations allows the Commerce Department to better focus U.S. technology efforts to ensure that the U.S. business climate remains internationally competitive.

D. Implement seasonal to interannual climate forecasts

Society is accustomed to dealing with climate variations, but growth in human population and infrastructure pressures leaves society increasingly vulnerable to unanticipated departures from the norm. Agriculture, fishing, water management, and fuel distribution take into account the climatological mean annual cycle, and have evolved to function optimally under accustomed seasonal changes. However, in the absence of forecasts, the best society can do is to prepare for "normal" seasonal trends. Long-term climate forecasts allow society to reduce or avoid the losses that occur with changes in the annual climatological cycle. The immediate challenge is to introduce an operational program for the systematic production and application of regionally-tailored climate forecasts. NOAA plans to establish a system, including the multinational infrastructure to generate useful climate information and forecasts.

Optimal utilization of monitoring and forecast efforts depends on a coherent process for translating improved climate predictions and forecasts into products and services that are directly beneficial to users. For example, improved forecasts of precipitation variability in California must be brought down to the river basin scale, combined with regional/local observations and models of water resources, to ensure that the forecasts are of maximum benefit. It will be critical to develop this type of cooperative relationship with pooled resources with players on the regional and local scale. An infrastructure must also be developed to deliver climate services. NOAA will work to use regional and local information dissemination mechanisms of the USDA, USGS and other Federal agencies, the Sea and Land Grant structures, and the various trade associations.

In addition to the tropical Pacific, the tropical and subtropical Atlantic is important to the climate of Africa and South America and for generation of hurricanes impacting the U.S. Deployment of observing systems in this region and development of the capability to assimilate these data into models will lead to major advances in climate prediction capability. NOAA plans to expand ocean-atmosphere research measurements, through international cooperation, into these other ocean regions with the aim of improving skill in the seasonal climate predictions. NOAA is currently discussing joint observing system efforts with potential international partners, to extend the current NOAA TAO Array into the tropical Atlantic.



E. Predict and assess decadal to centennial change

Our planet is naturally a place of change, often with severe impacts on humans. Human activities now are inducing additional changes, including atmospheric pollution and thinning of the ozone layer, with impacts of considerable magnitude. Greenhouse gases being added to the atmosphere will reside there for decades to centuries and are predicted to increase average global surface temperatures. Those changes create critical prediction and assessment needs for the world community. Global models providing predictions must be strengthened through implementing global observing systems. The challenge is to understand and foresee the natural and human-induced variations of the approaching few decades in order to make sound economic and social decisions. NOAA will provide options for decisions regarding decadal to centennial changes in the global environment regarding climate change and air quality improvement.

Although scientific documentation concerning global climate change, stratospheric ozone health, and air quality and human health is being steadily advanced, policy options continue to be debated. NOAA has assembled data documenting an increase of greenhouse gas levels in the atmosphere over decades and centuries. However, this trend, as well as its implications and significance, is the subject of strong debate. NOAAs role remains clear — to predict and assess decadal to centennial changes in the global environment — but NOAA must also describe the implications of its research in policy-relevant terms to ensure that the outcomes have impact and that policy makers understand how proposed research directions must continue to be supported or modified. The framework for these policy choices already exists in the United Nations Montreal Protocol, the Framework Convention on Climate Change, and the U.S. Clean Air Act.

Decadal-and-longer changes place a special credibility requirement on predictions and associated assessments. In contrast to the credibility of "tomorrows weather forecast" (which is tested quickly), the predictions of changes decades ahead are input to decisions faced long before the predicted change can be observed. The keys to such credibility lie in the completeness and rigor of the research and its results. A prime need facing our Nation and the governments of the world is to predict the possible natural and human-induced environmental changes of the coming decades and to predict how best to repair the problems at hand. The separation of the natural variability from human-induced changes is one of the most significant aspects of this research. Only then can public policy, private-sector economic strategies, and other societal decisions be made effectively over the coming years.

F. Promote awareness of, and provide effective access to, patent and trademark information.

There has been a significant rise in the number of patent and trademark applications being filed at the PTO. In part, this can be attributed to a more competitive global marketplace and the need to secure protection of intellectual property throughout the world. This, in turn, leads to greater demand for access to patent and trademark information. As American businesses expand their operations across national boundaries, there is a greater demand for global patent and trademark protection, which in turn requires



a more global perspective on the dissemination of patent and trademark information. PTO works with national, regional, and international intellectual property offices to enhance the content and quality of information that is disseminated.

American businesses are recognizing the value of their intellectual property by including the ownership of patents and trademarks as part of their financial portfolio, and are listing these as assets on financial income statements.

G. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.

On February 8, 1996, the President signed landmark telecommunications reform legislation into law. NTIA was deeply involved with other elements of the Administration in shaping the legislation as it moved through Congress. The overwhelming bipartisan support for this law demonstrates Americas commitment to ensuring that all citizens benefit from the information superhighway now and in the next century. Among other things, the new law: opens up competition among local telephone companies, long distance providers, and cable companies; helps connect all classrooms, libraries, and hospitals to the information superhighway by the end of this decade; gives families control of the programming that comes into their homes through television; and prevents undue concentration in television and radio ownership so that a diversity of voices and viewpoints can continue to flourish in this Nation.

The Federal Communications Commission (FCC) is adopting regulations to implement the Act. NTIA participates actively in these proceedings on behalf of the Department of Commerce and the Administration.

H. Engage in technical research to improve telecommunications system planning, design, and evaluation and to support government and industry efforts in these areas.

NTIA is providing key technical support to the Department of Transportation in its development of Intelligent Transportation Systems, to the Federal Railway Administration in improving rail traffic management and safety, to the Federal Highway Administration in planning for the Global Positioning System (GPS) to provide more accurate navigation and positioning information, to the National Communications System in enhancing communications survivability during national emergencies, and to other Department of Defense and security agencies in improving their strategic and tactical communications capabilities.



I. Provide Gross Domestic Product (GDP) and related national, regional, and international economic statistics in the most accurate, timely, cost-effective, and accessible way possible.

Increasing numbers of customers, their increasingly sophisticated needs and capabilities, and increasing reliance on automation, are all clear trends which are impacting BEA. In response to these trends, BEA is committed to maintaining the high level of customer satisfaction with its products' quality, availability, usefulness, and cost-effectiveness.

J. Provide products and services of greater value and satisfaction to Census national and local information base customers.

Two major challenges provide the opportunity to change the way the Census Bureau does business. First, both Congress and OMB have directed that Census 2000 must be simpler, less costly, and more accurate than the 1990 census. Census 2000 must: count every resident, using easy-to-use forms and new ways to respond; follow an open process that diverse groups can support; eliminate the differential count of ethnic groups; and produce a single result that is accurate.

Second, Census 2000 must achieve the highest levels of quality, by ensuring that its products and services meet/exceed customer expectations, and are appropriate for end users.

L. Employ ITAs comprehensive industry sector, technical, and country information bases to counsel U.S. firms (especially small and medium-sized firms) on appropriate export strategies, and provide comprehensive, up-to-date, technical, country, and industry-specific information to these firms to support business strategies, and related analyses to the USTR for trade negotiations.

In response to the growing trend of increased automation, ITA is making greater use of technology to improve the trade information made available to its customers. By dialing 1-800-USA-TRADE or by accessing ITAs Internet homepage, users can be connected to a comprehensive information resource for export assistance programs available government-wide. The 1-800 telephone number also connects customers to a network of Fax-On-Demand from which they can receive detailed trade information. Over one billion documents were supplied in response to business requests in

FY 1996. ITA is installing a database throughout its offices, to improve the development and management of information and allow for better tracking of client needs and export activity. It also will dramatically improve the ability of U.S. exporters to utilize trade agreements and comprehend the market openings created by these agreements.



business.

To complement USTR's trade agreements compliance tasks, ITA is assessing the results of trade agreements and monitoring whether foreign governments are keeping their trade agreement commitments. ITAs industry and country specialists in the Trade Compliance Center: supply information and analysis to assist USTR in its expanding enforcement activities; provide the information to sharpen ITAs advocacy efforts, ensuring that American business and American workers get the benefits from successfully negotiated the trade agreements; and develop and expand ITAs relationship with the private sector, acquiring information about compliance problems, and becoming more proactive in efforts to intercede on behalf of American

M. Restructure export controls for the twenty-first century, and facilitate transition of defense industries.

BXA moves forward into the 21st Century by instigating more appropriate and orderly procedures in various programs including streamlining the inter-agency process and fostering further reliance on updated technology. BXA has initiated development of an automated database to provide electronic images of export requests and related documentation to replace an outdated microfiche system. In addition, BXA is undertaking a comprehensive review of its automated support system to determine changing needs and requirements for the 21st Century, including requirements related to implementing the President's encryption policy and compliance with the Chemical Weapons Convention. In addition, BXA will also use EAIS to help detect/deter violations of exports not subject to export licensing.

N. Help both rural and urban communities incorporate technology as a tool for their economic development.

To regain their former position as engines of economic growth, the distressed urban and rural areas of the country need to build capacity to promote and use technology. They need to focus on improved education for their future labor force and its readiness for the information age. While technology offers the opportunity for development of new industries and high wage jobs, it also demands a highly trained and motivated workforce. The challenge to EDA is to support America's rural and urban communities in their need to restructure their economic base to be innovative, flexible, and competitive.

EDAs University Center program, for example, promotes such use of technology through the technical assistance it provides to local communities and businesses. At a time when many such public institutions face cuts in general State support for higher education, reduced funding at the Federal level will stifle the efforts to promote technology literacy among local economies.



CHAPTER 6

STRATEGIC THEME 3: RESOURCE AND ASSET MANAGEMENT/STEWARDSHIP



THE COMMERCE MISSION STATEMENT — THEME 3

The Department of Commerce promotes job creation, economic growth, sustainable development, and improved living standards for all Americans, by working in partnership with business, universities, communities, and workers, to:

3. Provide effective management and stewardship of our Nation's resources and assets to ensure sustainable economic opportunities.

This Mission Statement includes all activities of the Department of Commerce. Activities under Theme 3, highlighted in bold type above, will be discussed in this portion of the Strategic Plan.

THEME 3 AND THE COMMERCE MISSION STATEMENT

The Department of Commerce plays a significant role in the management of our national resources to ensure that the economic benefits of these resources are available, on a sustainable basis, to the Nation as a whole. Departmental initiatives promote community and individual use of our national assets to ensure continuing increases in the economic well-being of the Nation.

The Department of Commerce has a diverse role in the management of our national resources. Illustrating this diversity in its resource management role, the Department of Commerce provides economic adjustment assistance to communities impacted by military base closures and defense facility downsizing.



It also implements grant programs supporting development of the National Information Infrastructure (NII). These programs enhance NII access by schools, libraries, and other public institutions, promote public broadcasting, and expand children's educational programming initiatives.

The resources and national assets managed by the Department include intellectual property rights, the radio frequency spectrum, and ocean and coastal resources. Utilization of these resources by both the public and private sector contributes significantly to growth in the Gross Domestic Product of the U.S. and they are integral in improving technological innovation and communication, the quality of life, and the environment. The Department of Commerce also plays a major role in representing the U.S. in international negotiations related to the management of these resources.

BUREAU SUPPORT OF STRATEGIC THEME 3

A distinction can be made between those bureaus in the Department of Commerce that are directly involved in the management of resources in support of the Departmental mission and those bureaus that enable individuals, communities, and private-sector firms to invest in national assets. The National Oceanic and Atmospheric Administration (NOAA), the Patent and Trademark Office (PTO), and the National Telecommunications and Information Administration (NTIA), are involved in the direct management of national resources. The Economic Development Administration (EDA), the PTO, and the NTIA are principally engaged in enabling investment in our national assets.

A unique feature of each of these national resources — intellectual property rights, frequency spectrum, ocean and coastal resources (especially fisheries), and military installations and defense facilities — is that each resource has the characteristic of "common property resources." Unless property rights (or rights that define the user's ability to make decisions concerning an asset or resource's use) are created for these resources, their use will create a "common property resource" problem. This problem exists when users are permitted to enjoy the benefits of a resource without paying the cost their use imposes upon society and the economy. Absent a fee that reflects these costs, users will have too great an incentive, relative to the economic optimum, to consume the resource. This type of use results in inefficient use of these resources, and a loss to our nation and the global economy.

To ensure that common property resources are used in an efficient manner, these resources would be assigned a property right and made available to the entities that value them most highly in terms of their economic worth. To ensure optimum utilization of these resources, managers must identify instances in which the rights of such users are violated and implement corrective action.



Commerce has developed considerable experience in the management of these unique resources. These include:

- The establishment of some form of "transferrable harvesting privileges" in fisheries management. There is debate over the issue of property rights in reauthorization of the Magnuson-Stevens Act, which requires the National Academy of Sciences to study Individual Fishing Quotas (IFQs) and establishes a moratorium on new IFQs until October 1, 2000. (IFQs do create a property right, but rights do not accrue until fish are actually harvested.)
- The Patent and Trademark examination process, and subsequent issuance of a patent grant or registration of a trademark.
- The specification of a portion of the frequency spectrum for a specific use such as satellite communication.
- The implementation of defense facility reuse or disaster recovery plans to help communities develop in a sustainable manner.

Each of these interventions by the Department of Commerce represent the definition of some form of property right for each of these resources.

The careful development, evolution, and implementation of these forms of property rights by the Department of Commerce results in improved efficiencies in our market-based economy, conservation and stewardship of these resources, and increased benefits to society. The experience gleaned from the management of these complex resources will become increasingly important as the demand for them increases, both domestically and internationally.

THEME 3 — GOALS, STRATEGIES, AND OBJECTIVES

Bureaus within the Department of Commerce implement coordinated programs that provide effective management of certain common national resources and ensure their most efficient utilization. Aggressive management of national resources is critical to maintaining the competitive position of U.S. firms in markets that are increasingly international in scope. The goals, strategies, objectives, and illustrative performance measures and guide our activities in this Theme are:

A. Build sustainable fisheries that increase the Nation's wealth and quality of life, support increased fishing industry job opportunities, improve the safety and wholesomeness of seafood resources, and expand recreation opportunities. To support implementation, NOAA pursues partnerships with those affected by living marine resources, to support approaches that mitigate inevitable short-term costs during



rebuilding stocks, so that efforts will be repaid many times over. The goal includes the application of solutions such as growth in a U.S. marine aquaculture industry to help restore depleted populations.

- Assess the status of fishery resources, to improve the scientific basis for policy decisions, including the elimination of overfishing, the rebuilding of overfished stocks, the conservation of fish habitat, and the minimization of bycatch-related mortality. (NOAA)
 - Increased percentage of 201 fish stocks fully assessed. NOAA conducts stock assessments to provide the basis for fisheries management decisions, including the determination of the annual total allowable catch.
- Advance fishery predictions through research and applications. (NOAA)
 - Number of new models/syntheses delivered from fisheries oceanographic studies to Fishery Management Councils. This is a measure of NOAA's efforts to develop new ecosystem-based fisheries oceanography models and syntheses of these models to forecast fisheries long-term productivity.
- Manage for economic growth and sustainable fisheries by working with Fishery Management Councils, foreign nations and others to plan for reducing excessive fishing and capital investment. (NOAA)
 - Number of Fishery Management Plans with controlled access implemented. Access controls
 provide an important means to address the market failure and overcapitalization that occurs in
 an open-access, common property fishery resource.
- Ensure adequate compliance with fishery regulations. (NOAA)
 - Increased number of fleets using vessel monitoring systems for spatial/temporal regulations. This measure tracks the number of fleets using state-of-the-art satellite monitoring and communications systems as part of their fishing operations, resulting in improved and more cost-effective fisheries enforcement capabilities.
- Provide research and services for fishery-dependent industries to maximize the potential benefits from the Nation's marine resources. (NOAA)
 - Percentage reduction in the time and cost of permitting environmentally sound aquaculture ventures. NOAA research and technical assistance in aquaculture will help maximize the potential benefits from the Nation's marine resources.



- B. Recover protected species through conserving marine species, recovering those in danger of extinction, and maintaining healthy marine ecosystems upon which they depend. The effort utilizes NOAAs research and management expertise to understand and quantify how species, ecosystems and biological diversity are affected by human impacts and to implement effective programs to recover species or prevent their decline while minimizing the impact to affected users. Conservation programs rely upon a solid investment in research and decision-making to conserve marine species.
 - Assess the status of, and impacts to, protected species. (NOAA)
 - Improved assessment of human-induced and other sources of mortality of protected species. This measure reports the number of adverse impacts to protected species identified and acted upon by NOAA, including the detection, monitoring and verification of incidental takes. Understanding and quantifying these impacts enables NOAA to implement mitigation measures to protect species.
 - Develop and implement conservation and recovery plans for depleted marine mammals and endangered and threatened species. (NOAA)
 - Number of species with annual status improved. This measure tracks progress for each species to show improvements in their status, which depends upon the degree of successful implementation of recovery and conservation plans.
- C. Sustain healthy coasts to achieve more productive and diverse habitats for fish and wildlife, cleaner coastal waters for recreation and the production of seafood, and sustainable economies for coastal communities based on well-planned development and healthy ecosystems. NOAA's strategy involves: providing greater understanding of interactions among the components of healthy ecosystems; designing and implementing comprehensive and integrated management solutions; and communicating information about coastal environmental problems and solutions.
 - Protect, conserve and restore coastal and all living marine resource habitats and their biodiversity. (NOAA)
 - Percentage of the Nation's 40 major coastal ecosystems with reduced risks of habitat loss from releases of oil and hazardous chemicals due to response planning, mitigation, modeling, monitoring and assessments. This indicates how many of the major coastal ecosystems have information on living resources and hazardous materials, to reduce additional risks.
 - Promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood and economic vitality. (NOAA)
 - Percentage of Nation's 40 major coastal ecosystems with enhanced water quality and natural resources. NOAA will provide the tools and knowledge to improve coastal water quality and natural resources, including efforts to assess, remediate and restore coastal ecosystems.



- Foster well-planned and revitalized coastal communities that sustain economies, are compatible with the natural environment, minimize the risks from natural hazards, and provide access to resources for the public's use and enjoyment. (NOAA)
 - Number of models for new commercial products and approaches to industrial processing and bioprocessing based on biochemical products and processes in marine organisms. NOAA works with industry to develop new technologies and products to support environmentally sound economic development.
- D. Grant exclusive rights, for limited times, to inventors for their discoveries, and enhance trademark protection. A strategy of enhancing human resources, employing better processes, leveraging information technology, and effectively managing resources supports this goal.
 - Maximize the business contribution of patents by reducing cycle time for inventions, reengineering business processes, achieving electronic processing of patent applications, assessing fees commensurate with resource utilization and customer efficiency, and exceeding customer expectations through the competencies and empowerment of employees. (PTO)
 - Reduced pendency time for patents. Since the term of utility patent protection begins on the filing date of an invention and ends 20 years later, cycle time directly impacts the term of patent protection for our customers.
 - Maximize the business contribution of trademarks by reducing pendency time, implementing reengineered processes, and transforming trademark processing into a fully electronic operation. (PTO)
 - Reduced pendency time for trademarks. Prompt action on a trademark application, particularly a first action, enables an applicant to reach the market as quickly as possible.
- E. Promote the development of an advanced telecommunications and information infrastructure to efficiently serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of U.S. industry in the global marketplace.
 - Set policies for efficiently and effectively managing the federal use of the radio spectrum, and prepare for international radio spectrum-setting conferences of the International Telecommunications Union (ITU). (NTIA)
 - Long-range plans to meet public safety and emergency needs.
 - Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans. (NTIA)
 - Development of models for utilization of the information infrastructure.



- Promote national policies to increase competition and efficient investment in telecommunications and information industries, enhance consumer welfare and economic and social opportunities for all, and remove impediments to the growth and vitality of these sectors. (NTIA)
 - Increase in the national average for telephone penetration.
- Administer the Information Infrastructure Grants program which provides grants to assist State and local governments, universities and school systems, hospitals and other health care providers, and other social service entities. (NTIA)
 - Increased numbers of entities connected to the NII.
- Ensure that all government needs for vital telecommunications services can be satisfied nationally and internationally. (NTIA)
 - Increased identification of new technologies applicable to government operations.
- Ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible, educational entities are able to use a variety of telecommunications technologies to improve the effectiveness of distance learning, minorities and women have increased access and control of public telecommunications, and blind and hearing-impaired persons are able to participate more fully in society through the use of telecommunications. (NTIA)
 - Development of content policy models adaptable to different cultural beliefs.
- F. (EDA's strategies under Theme 3 are achieved through grants awarded to alleviate conditions of substantial and persistent unemployment and underemployment in economically-distressed areas of the Nation having specific resources or assets. EDA's performance goals relate directly to job creation capacity building, information dissemination, and recovery from economic dislocation.)

Enable communities that have acquired military installations during the recent defense downsizing to convert their use to civilian functions for local economic benefit.

- Help communities design and implement strategies for adjusting to base closures or natural disasters that are causing, or threaten to cause, serious structural damage to the underlying economic base. (EDA)
 - Extent of community participation.
- Help communities replace, transform or expand infrastructure facilities of military installations to retain or create substantial employment potential. (EDA)
 - Number of jobs created and/or retained.



- G. Enable communities to achieve long-term economic recovery from the devastation of their productive resources by natural disasters.
 - Help communities adversely affected by natural disasters to improve their capacity for economic recovery or adjustment. (EDA)
 - Additional funds invested in local projects.
- H. Enable distressed communities to practice and implement sustainable economic development.
 - Help communities develop an integrated approach that incorporates early local planning, full participation of stakeholders, and a comprehensive strategy to conserve resources and sustain community and quality of life. (EDA)
 - Extent of community planning.
 - Help communities redevelop Brownfields. (EDA)
 - Applications of construction grant funding.
 - Help distressed communities develop eco-industrial parks. (EDA)
 - Increased amount of non-EDA funds invested.

PARTNERSHIP ACTIVITIES SUPPORTING RESOURCE AND ASSET MANAGEMENT AND STEWARDSHIP INITIATIVES

Many of the international, Federal, State, and local governmental agencies, private industries, and outside professional groups with which we partner do not make distinctions about which specific Commerce goals they link to — their focus is on an overall Commerce program. As a result, we will discuss our partnership relationships at the bureau level in this portion of the Plan. By establishing partnerships with other agencies or entities, shared goals or outcomes become more achievable, and broader societal goals can be met, often in a more cost-effective way.

NOAA

NOAA has especially developed a longstanding partnership with our Nation's coastal States — recognizing the coastal States' longstanding authority for managing, and their stewardship of, the critical habitat for marine species encompassed by our Nation's rivers, bays, estuaries and coastal waters.



NOAA works with other Federal agencies, States, private and public utilities, treaty tribes, and others in carrying out its responsibilities under the Endangered Species and Marine Mammal Protection Acts for the protection and recovery of large whales, dolphins, other marine mammals, sea turtles, salmon and other listed fishes, and marine plants. While NOAA has jurisdiction over all or part of the biological range of these unique and important species, other Federal and State agencies have authority over many of the human activities which may impinge on these species and their habitats.

NOAA works with the fishing industry to ensure sustainable fishing opportunities. The Regional Fishery Management Councils are a partnership bringing resource managers and fishing interests to the same table to address concerns. NMFS' novel Fix-It Program is an alternative enforcement mechanism that helps fishing interests voluntarily correct technical violations in lieu of paying a fine.

NOAA depends on universities to help accomplish science objectives in its mission areas. NOAA and university scientists collaborate on climate and fisheries research via a network of Joint and Cooperative Institutes at universities, and the National Research Council's Post-Doctoral Investigator Program. NOAA is actively involved with implementing the National Oceanographic Partnership Act, which encourages partnering among the various Federal agencies, academic institutions, national and private research laboratories, and industry. The Under Secretary of NOAA serves as the Vice-Chair of the Council created under this Act.

NOAA also funds academic researchers through competitive, peer-reviewed programs, including the Climate and Global Change Program, Coastal Ocean Program, the National Estuarine Research Reserve System and the National Sea Grant College Program. The Sea Grant program in research, education and outreach extends the partnership to coastal industry and local and state governments. NOAA has established cooperative institutes at several universities and has launched the Sea Grant Industrial Fellows program to promote interactions between academia and industry. Despite research funding reductions, NOAA will maintain current proportions of in-house and extramural research.

Through cooperative efforts with other nations, NOAA is improving access to space technologies and reducing costs of data collection, including the joint Canadian/NASA/NOAA RADARSAT program, and the planned EUMETSAT/DOD/NOAA next generation polar-orbiting satellites. International leadership and collaboration also help ensure the conservation of living marine resources, especially straddling fish stocks and endangered marine species.

NOAA and 31 coastal states have a partnership to ensure safe and sustainable coastal zone development. NOAA provides technical assistance and financing for development and implementation of state coastal zone management plans. NOAA's assistance promotes proactive land-use planning to keep people and property out of high-risk coastal areas and reduce loss of life, property, and natural resources from natural hazards like coastal storms and changing sea levels. The plans are also designed to maintain strong coastal economies by enabling waterfront development and sustaining healthy coastal ecosystems on which coastal communities and economies depend.



PTO

In carrying out two of its core function — to examine patent applications and grant patents, and to examine trademark applications and register trademarks, the PTO partners with international organizations (WIPO, EPO, JPO) to develop and improve systems for the effective granting and protection of intellectual property rights. These international activities lead to harmonization of patent and trademark practices around the world to the benefit of American applicants who also seek protection in other countries.

Nationally, PTO partners with other Federal agencies to develop proposals that will strengthen the U.S. intellectual property system. For example, PTO collaborates with: the State and Justice Departments, and the U.S. Trade Representative to formulate intellectual property policy proposals; the Departments of Defense and Energy, and NASA, in handling patent applications having national security implications; the U.S. Customs Service regarding counterfeit goods or services. PTO's role in disseminating the information contained in patent grants and trademark registrations involves partnerships with regional, State, university, and public libraries in the PTDL network, already described.

The PTO also partners with user groups to get feedback and customer input to help improve its products and services. These partnerships include, but are not limited to, the Intellectual Property Owners, Inc., the American Intellectual Property Law Association, the American Bar Association, the International Trademark Association, the International Intellectual Property Alliance, the Coalition for Patent Information Dissemination, and inventors' groups around the country.

NTIA

NTIA's responsibilities encompass a range of telecommunications national interests, including domestic and international policy, spectrum management, research, and grant applications. Within the Federal government, the State Department, the Voice of America, the U.S. Trade Representative, and other entities address telecommunications as key aspects of their primary missions. Frequently, these agencies rely upon their partnership with NTIA for specific telecommunications expertise, and NTIA coordinates with them in the development of Administration positions.

NTIA coordinates federal use of the radio spectrum through the Interdepartment Radio Advisory Committee (IRAC), which it chairs. The IRAC is made up of all Federal agencies that use spectrum and includes a representative of the FCC. NTIA is responsible for the development and presentation of the U.S. government position at all international telecommunications administration and standards setting conferences.



EDA

EDA's planning program supports 315 local Economic Development Districts and 61 Indian Tribes or representative organizations to help communities build the capacity to focus on long-term economic challenges. Activities under this program include preparation and continuation of an Overall Economic Development Program, and planning, implementation and technical assistance services to communities and local governments. Economic Development Districts coordinate a number of other Federal and State programs.

EDA provides assistance to seriously affected communities to respond to defense-related military base closures and defense contractor reductions. OEA also provides support to EDA's Office of Economic Conversion Information clearinghouse for information on military base reuse initiatives and successful economic recovery efforts.

EDA reviews all economic development plans referred from the Department of Transportation's Maritime Administration related to port facilities under the National Defense Authorization Act. EDA helps the FAA to make supplemental grant assistance available for airport facilities.

EDA works with the USDA's Office of Rural Development to make supplemental grants available for the construction of public works and development facilities.

EDA works with the Appalachian Regional Commission to assist communities in alleviating unemployment and underemployment in areas threatened with or suffering from economic distress or dislocation and provides grants for public works and development facilities.

EDA works with the U.S. Army Corps of Engineers, EPA, and other Federal and State agencies to support EDA's Levee Restoration Program associated with the Midwest Floods of 1993 and the Northwest Floods of 1996. This program establishes procedures for providing technical assistance and amending existing Memoranda of Understanding related to long-term disaster economic recovery efforts. EDA also works with the Corps of Engineers to clean up environmentally contaminated property owned by EDA. EDA works with EPA to coordinate the review of federally financed projects affecting water quality.

EDA works with the Agriculture Conservation and Stabilization Service of USDA to establish a planning and management program of flood-related technical assistance to better facilitate the Federal disaster aid provided to state and local governments associated with the midwest floods of 1993.

EDA works with the Minority Business Development Agency to assist minority businesses in southern California with their recovery from the impacts of the Northridge earthquake.

EDA works with the EPA in the implementation of the Brownfields Economic Redevelopment Initiative. Brownfields are vacant and abandoned industrial sites (some contaminated) with potential for redevelopment. EDA has assisted in the selection of Brownfields pilot projects and works with EPA in the development and implementation of the EPA Revolving Loan Fund Program for grants aimed at the cleanup of pilot sites.



ECONOMIC CONTRIBUTIONS AND OTHER BENEFITS OF COMMERCE RESOURCES AND ASSETS

A. Build sustainable fisheries that increase the Nation's wealth and quality of life, support increased fishing industry job opportunities, improve the safety and wholesomeness of seafood resources, and expand recreation opportunities.

Overcapitalization of fisheries and biological overfishing results in reduced long-term economic growth, lost jobs, and declining recreational fishing opportunities. Many fishing areas are severely depleted — for example, parts of Georges Bank, an historically important New England Groundfish area, closed in 1994 due to the collapse in fishing stocks — and more effective and efficient federal oversight and fisheries management will enhance commercial and recreational opportunities for all Americans. NOAA estimates that restoring fisheries may add as much as \$2.9 billion in potential net value to the U.S. economy as overfished stocks recover and overcapitalization is reduced.

Along with the economic gains which can be realized by pursuing this NOAA Goal, this activity will enhance recreational opportunities for all Americans. It will also assist in reducing our seafood trade deficit, and improve the domestic supply of safe and healthy seafood, which many Americans increasingly prefer. This goal will also save lives by reducing the risk from the dangerous and wasteful race for fish which occurs in a common property fishery. The safety issue, a problem associated with many fisheries, is expected to be addressed in a National Academy of Sciences study.

B. Recover protected species through conserving marine species, recovering those in danger of extinction, and maintaining healthy marine ecosystems upon which they depend.

Many populations of marine organisms are depleted or declining due to human activity in marine ecosystems or from other causes. West coast salmon populations, which reflect a diverse array of cultural, historic, recreational, and commercial values, are at risk due to a combination of factors including habitat loss and commercial overexploitation. Several sea lion and seal populations in Alaska are declining rapidly and the causes are uncertain. Through conservation of the Nation's living marine resources, NOAA will enhance economic and cultural opportunities for current and future generations. Because they exist as unique and valuable natural resources, there is broad public support for protection of marine mammals and endangered or threatened species.



C. Sustain healthy coasts to achieve more productive and diverse habitats for fish and wildlife, cleaner coastal waters for recreation and the production of seafood, and sustainable economies for coastal communities based on well-planned development and healthy ecosystems.

Sustainable economies depend on healthy ecosystems. Nowhere is this interdependence more evident than in coastal areas, where regional and national economic prosperity is closely linked to the health and productivity of coastal ecosystems. Fifty percent of the U.S. population lives on the 10% of U.S. land called the coastal zone. Over one-third of all U.S. jobs are located in coastal areas; one-third of the Nation's Gross Domestic Product is produced there; coastal recreation and tourism generate between \$8 and \$12 billion annually; and commercial fisheries and associated industries contribute over \$25 billion every year. This economic activity depends on healthy coastal habitats, clean coastal waters, and well-planned coastal communities for survival. The economic engine powering the U.S. economy is fueled, in large part, by the special resources of our coasts and oceans.

NOAA provides the science, technology, education and management tools to help ensure that the ecological and economic productivity of coastal areas can be fully and sustainably realized. The benefits of this include providing public access to beaches and other special marine and coastal resources through coastal zone management planning, National Marine Sanctuaries and National Estuarine Research Reserves. They also include recovering over \$150 million from polluters for use in restoring damaged natural resources, restoring wetlands and other habitats important to fisheries and local economies, and tracking, predicting and responding to oil spills and other disasters to minimize impacts in coastal areas. These activities directly benefit NOAA's other stewardship activities, which are critically dependent on healthy coastal ecosystems for their success.

D. Grant exclusive rights, for limited times, to inventors for their discoveries, and enhance trademark protection.

By protecting intellectual endeavors and encouraging intellectual progress, the PTO preserves our Nation's technological edge, a key to our current and future competitiveness. Innovation is a national resource that provides a catalyst for economic prosperity through the accumulation of scientific knowledge and the introduction of new products and services. By ensuring adequate protection for innovations through patents, trademarks and copyrights, the U.S. encourages businesses to risk investment for research, development, and marketing.

In providing effective management and stewardship of the Nation's intellectual property resources, PTO is cognizant of its responsibility for administering the laws related to patents and trademarks and providing its customers with the highest level of quality and services. In doing this, PTO emphasizes timeliness in processing applications and the quality of issued patents and registered trademarks. These high levels can be provided only through enhancing human resources, leveraging information technology, employing better processes and effectively managing resources, which are the foundations on which PTO's operational plans are built.



E. Promote the development of an advanced telecommunications and information infrastructure to efficiently serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of U.S. industry in the global marketplace.

The radio frequency spectrum is a limited, common property resource which is in very high demand. Its efficient and effective use is critical for promoting the nation's commerce, supporting technological innovation for U.S. industry, and realization of its full economic benefits. The NTIA directly manages that portion of the spectrum available to federal users and plays a major role in determining the portion of the spectrum available for public auction to private users by the Federal Communications Commission. Recent auctions administered by the FCC have yielded approximately \$19 billion to the U.S. treasury. Efficient and effective spectrum planning and management supports technological innovation for U.S. industry.

- F. Enable communities that have acquired military installations during the recent defense downsizing to convert their use to civilian functions for local economic benefit,
- G. Enable communities to achieve long-term economic recovery from the devastation of their productive resources by natural disasters, and
- H. Enable distressed communities to practice and implement sustainable economic development.

EDA helps communities develop sustainable economies. EDA helps communities affected by base closing and reductions in base facilities ameliorate the adverse economic effects through the conversion of technology and support services to civilian use. EDA also assists communities in recovering from natural disasters by restoring to full economic use properties impacted by these disasters.



INTERNATIONAL ACTIVITIES RELATED TO COMMERCE RESOURCE AND ASSET MANAGEMENT

A. Build sustainable fisheries that increase the Nation's wealth and quality of life, support increased fishing industry job opportunities, improve the safety and wholesomeness of seafood resources, and expand recreation opportunities.

Living marine resources do not recognize geopolitical boundaries. Therefore, effective management of these resources often requires international cooperation. The U.S. is party to numerous international and regional fisheries management organizations that cooperatively manage species which migrate beyond national boundaries. The U.S. will continue to work to implement several important recently concluded international agreements to improve fisheries management. These include the U.N. Agreement on Straddling and Highly Migratory Fish Stocks, the U.N. Food and Agriculture Organization (FAO) Reflagging Agreement, the Panama Declaration, and the FAO Code of Conduct for Responsible Fisheries.

B. Recover protected species through conserving marine species, recovering those in danger of extinction, and maintaining healthy marine ecosystems upon which they depend.

NOAA will continue to seek international cooperation to recover many depleted, threatened or endangered species that migrate beyond national waters. The U.S. is currently negotiating a convention to protect endangered sea turtles and has been a member of the International Whaling Commission (IWC), which was founded to halt the worldwide decline in whales, for almost fifty years. The U.S. is an active party to the Convention on International Trade in Endangered Species of Wild Flora and Fauna, which limits trade in threatened and endangered species. The U.S. has also sought to enhance the protection of endangered species through the imposition of trade sanctions against countries who do not implement conservation measures for dolphins, sea turtles, whales and other species.

C. Sustain healthy coasts to achieve more productive and diverse habitats for fish and wildlife, cleaner coastal waters for recreation and the production of seafood, and sustainable economies for coastal communities based on well-planned development and healthy ecosystems.

NOAA is actively involved in assisting sustainable management of coastal resources in nations adjacent to, and far beyond, U.S. borders. NOAA has provided technical and other support internationally in coastal zone management, the development of marine and coastal protected areas, the reduction of land-based sources of marine pollution, and the conservation and restoration of coastal habitats and their biodiversity. For example, coral reefs and related ecosystems found within tropical and sub-tropical coastal environments are of particular international concern due to serious patterns of degradation and risk,



primarily from anthropogenic stresses. NOAA has taken an active role to contribute to these and other international concerns for coastal resources including The International Coral Reef Initiative, The Convention on Biological Diversity, the Framework Convention on Climate Change, and The Global Plan of Action to Protect the Marine Environment from Land-Based Activities.

D. Grant exclusive rights, for limited times, to inventors for their discoveries, and enhance trademark protection.

The U.S. plays a pivotal role in intellectual property rights policy development at home and abroad. In cooperation with the State Department, the U.S. Trade Representative, and ITA, the PTO participates in efforts to improve international standards for the protection of intellectual property, thereby enhancing Americans' ability to obtain intellectual property protection abroad. The PTO participates actively in negotiations regarding agreements to improve protection for patents, trademarks, copyrights, industrial designs, and plant varieties, and collaborates on activities leading to enhanced dissemination of patent information, and shared information on best practices in processing patent applications and automating systems.

E. Promote the development of an advanced telecommunications and information infrastructure to efficiently serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of U.S. industry in the global marketplace.

The NTIA coordinates and represents the U.S. government position in all international frequency allocation and standards-setting conferences affecting the radio frequency spectrum. These international negotiations have significant implications for the domestic public and private sector use of the frequency spectrum in the U.S.

EXTERNAL FACTORS, AND CURRENT TRENDS AND ISSUES AFFECTING COMMERCE RESOURCES

A. Build sustainable fisheries that increase the Nation's wealth and quality of life, support increased fishing industry job opportunities, improve the safety and wholesomeness of seafood resources, and expand recreation opportunities.

To reduce overcapitalization in commercial fisheries, NOAA has been moving in the direction of establishing some form of access controls. In addition to IFQs, NOAA also has been considering the establishment of Individual Transferrable Quotas (ITQs) in some of its fisheries as a means of addressing the common property resource problem by using a market-based mechanism with clear transferability. ITQs are intended to have the effect of promoting efficiency within a fishery, creating an incentive to conserve the resource on the part of individual fishermen, and reducing the overall transaction costs associated with engaging in the fishery.

In the recently reauthorized Magnuson-Stevens Act, a moratorium was established on the development of any new IFQ or ITQ-based fisheries until October 2000. In the interim, a study of IFQ-type programs is being conducted by the National Academy of Sciences, in consultation with the Secretary of Commerce and the Regional Fishery Management Councils, and will produce recommendations on implementing a national IFQ policy.

NOAA's goal of building sustainable fisheries is based on the successful accomplishment of objectives that in part are dependent on external factors. Under law, marine fisheries management is achieved by NOAA in close cooperation with the Congressionally-established Fishery Management Councils, regional Marine Fishery Commissions, numerous State, Federal, tribal, trust and international partners, and non-governmental organizations representing the commercial and recreational fishing and conservation communities.

The long-standing tradition of open access to fisheries that has existed in the U.S. and throughout the world has resulted in serious overcapitalization. Attempts to limit catch of overutilized species, reduce vessel over-capacity and minimize wasteful bycatch, have been strongly opposed by already economically stressed fishery participants and their communities. Allocation decisions between commercial, recreational and tribal fisheries have become controversial, and an increasing number of cases are requiring action at the highest levels of the Federal government, resulting in costly litigation. These factors are exacerbated by uncertainty in scientific information and the need for approaches to help the fishing industry and affected coastal communities through the rebuilding period.



B. Recover protected species through conserving marine species, recovering those in danger of extinction, and maintaining healthy marine ecosystems upon which they depend.

Since the passage of the Endangered Species Act in 1973, NOAA has made significant progress in recovering protected species. Many marine species that were once threatened with extinction, have stabilized and begun to recover. One of NOAA's greatest successes to date has been the recovery of the Gray Whale and its subsequent removal from the endangered species list. However, other recently endangered species continue to decline. NOAA has sought to improve the effectiveness of those recovery efforts by shifting from an exclusive focus on fisheries-related causes of mortality to focusing on all of the problems facing depleted, threatened, and endangered species. These threats include pollution, habitat destruction and removal of prey.

Numerous external factors contribute to the decline of living marine resources. Many human activities contribute to habitat loss, including offshore and coastal development, vessel traffic, and water diversions. A lack of scientific information on which to base decisions complicates effective resource protection. For example, cumulative effects of long-term exposure to human activities, climatic and oceanographic influences and levels of mortality from interactions with fishing activities are poorly understood.

Successful conservation of protected marine resources requires the cooperation of stakeholders, including government agencies, conservation organizations, and user groups and individuals whose knowledge and experience are necessary for effective partnerships in conservation. Approaches to protect and recover depleted, threatened and endangered marine resources can affect land and marine commercial and recreational pursuits. Management decisions may result in controversy over the uses of private property, impacts to major economic sectors (such as mining, logging and hydropower), and allocation of marine resources between human consumption and prey for protected resources.

C. Sustain healthy coasts to achieve more productive and diverse habitats for fish and wildlife, cleaner coastal waters for recreation and the production of seafood, and sustainable economies for coastal communities based on well-planned development and healthy ecosystems.

One out of every two Americans lives in a coastal area. That is 116 million people in only 10% of the U.S. land area. By 2010, coastal populations will increase 65 % from 80 million in 1960 to 132 million. Increasing coastal populations and the cumulative effects of human activities are the major threat to the future health and productivity of coastal ecosystems. NOAA's information and management capabilities will help prevent careless or uninformed development decisions that lead to continued losses from natural disasters, losses of habitats for commercial and recreational species, negative impacts on tourism and other coastal businesses, and degraded coastal water quality. The social and economic consequences of



this degradation are extremely high. Avoiding these outcomes requires continued support for NOAA's coastal science, monitoring, management, and education activities.

Several external factors may hinder NOAA's ability to achieve their goal of sustaining healthy coasts. Divergent national policies, for example, may prevent achievement of certain objectives. Different policies guiding agricultural practices and regulated run-off into coastal watersheds, or land-use and development in the coastal fringe, may prevent progress on issues such as reducing coastal nonpoint source pollution and reducing the costs of hurricanes and other natural disasters. There is a clear need to harmonize national policies to sustain healthy coasts. Similarly, differences between Federal, State and/or tribal interests and abilities will affect achievement of the goal. NOAA relies on many of these and other partners for implementation of programs, enforcement of regulations, and monitoring of performance.

D. Grant exclusive rights, for limited times, to inventors for their discoveries, and enhance trademark protection.

There has been a significant increase in the number of patent and trademark applications being filed at the PTO. In part, this can be attributed to a more competitive global marketplace, and the need to secure protection of intellectual property throughout the world. This, in turn, leads to a greater demand for access to patent and trademark information. As American businesses expand their operations across international boundaries, there is greater demand for global protection. PTO continues to work with its trilateral partners to explore potential opportunities for enhancing global protection of intellectual property.

Domestically, the PTO is seeing a greater emphasis on assigning economic value to patents and trademarks. Businesses frequently include the ownership of patents as part of their financial portfolio, and have begun to list these patents as assets in a manner similar to other property rights on financial income statements. Prominent and strong trademarks continue to command significant renumeration as companies are bought and sold.

E. Promote the development of an advanced telecommunications and information infrastructure to efficiently serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of U.S. industry in the global marketplace.

The radio frequency spectrum is an extremely limited, but highly sought-after resource. Needs in this area of Commerce resource management include promotion of efficient usage through technical and economic means and promotion of technological innovation.



- F. Enable communities that have acquired military installations during the recent defense downsizing to convert their use to civilian functions for local economic benefit,
- G. Enable communities to achieve long-term economic recovery from the devastation of their productive resources by natural disasters, and
- H. Enable distressed communities to practice and implement sustainable economic development.

Current trends toward adoption of sustainable development practices affirm EDA's founding principles. From its establishment more than thirty years ago, EDA's various programs have served as the model for sustainable economic development at the local level. All of EDA's construction and implementation assistance is based on comprehensive, inclusive local planning that considers all aspects of the economic, social and natural resource bases. This foundation is regularly bolstered by updated analyses and adoption of lessons from previous implementation efforts.

A further opportunity is presented to EDA by the renewed interest in the redevelopment of Brownfields. Recent activities at the Federal and local level present opportunities to exploit EDA's experience, flexibility and expertise.

Challenges remain: In the area of defense adjustment assistance, the need for Federal economic development assistance is acute. More than 1.6 million jobs were lost in the defense industry between 1988 and 1997 in the wake of closures or realignments targeted by the Base Realignment and Closure Commission (BRAC). The BRAC announced that 119 bases are to be closed or realigned by the year 2001, of which only 51 were closed through September, 1996. EDA has provided defense conversion assistance to only 63 of the affected bases thus far. Continued limitation of resources, or possible elimination of funding for defense adjustment assistance will frustrate the ability of communities adversely affected by Federal policies and decisions to respond to the economic dislocation caused thereby.

APPENDIX

AUTHORITIES FOR COMMERCE ECONOMIC INFRASTRUCTURE, SCIENCE/TECHNOLOGY/INFORMATION, AND RESOURCE AND ASSET MANAGEMENT AND STEWARDSHIP ACTIVITIES

AUTHORITIES FOR COMMERCE ECONOMIC INFRASTRUCTURE, SCIENCE/TECHNOLOGY/INFORMATION, AND RESOURCE AND ASSET MANAGEMENT AND STEWARDSHIP ACTIVITIES

The overall mission of the Department of Commerce is set out in its organic statute:

It shall be the province and duty of said Department to foster, promote, and develop the foreign and domestic commerce, the mining, manufacturing, and fishery industries of the United States; and to this end it shall be vested with jurisdiction and control of the departments, bureaus, offices, and branches of the public service hereinafter specified, and with such other powers and duties as may be prescribed by law. (15 U.S.C. section 1512)

The specific statutory or executive authority applicable to each of the Department's organizational units, major programs, and goals and objectives in the Strategic Plan, are provided and footnoted below. ¹



¹ At the risk of some duplication, a "General" category is also provided for some Departmental units, which mentions the major general authorities of the unit. Formatting may differ somewhat by sub-agency, as the Department's units vary substantially in the scope and complexity of their programs and the specificity of their legal authorities.

INTERNATIONAL TRADE ADMINISTRATION (ITA)

I. GENERAL ITA AUTHORITIES FOR ALL GOALS AND OBJECTIVES

The major authorities and functions of the Secretary of Commerce exercised through the International Trade Administration ("ITA") are: (1) export promotion and commercial representation abroad; (2) trade policy development and monitoring of and compliance with trade agreements; and (3) implementation of trade remedy laws.

A. EXPORT PROMOTION AND COMMERCIAL REPRESENTATION ABROAD

The Department's export promotion authority has six principal bases: "Organic" authority enacted in 1903, Reorganization Plan No. 3 of 1979, the Export Administration Amendments Act of 1985, the Omnibus Trade and Competitiveness Act of 1988, the Export Enhancement Act of 1992 and the Jobs Through Trade Expansion Act of 1994.

1. "Organic" Authority

The Department's "organic" legislation, the Act of February 14, 1903 (15 U.S.C. § 1501 et seq.) charges it to "foster, promote, and develop...the foreign and domestic commerce of the United States". The Secretary relied exclusively upon this broad authority for virtually all export promotion functions until 1980, when Reorganization Plan No. 3 of 1979 became effective.

2. Reorganization Plan No. 3 of 1979

Reorganization Plan No. 3 of 1979 (19 U.S.C. § 2171 note) was implemented by President Carter through Executive Order 12188 on January 2, 1980. Reorganization Plan No. 3 provided the Secretary with -

"general operational responsibility for major nonagricultural international trade functions of the United States government, including export development, commercial representation abroad, the administration of the antidumping and countervailing duty laws, export controls, trade adjustment assistance to firms and communities, research and analysis, and monitoring compliance with international trade agreements to which the United States is a party."

Reorganization Plan No. 3 also transferred to the Secretary "all trade promotion and commercial functions of the Secretary of State...that are performed in full-time overseas trade promotion and commercial positions;" or "performed in such countries as the President may from time to time prescribe."



The transfer of State's export promotion authority to Commerce was done in conjunction with the establishment, by Secretarial Order, of the International Trade Administration and, within ITA, U.S. and Foreign Commercial Service (US&FCS). The President's message accompanying Reorganization Plan No. 3 stated that the transfer to Commerce of responsibility for commercial representation abroad -

"would place both domestic and overseas export promotion activities under a single organization,... charged with aggressively expanding U.S. export opportunities. Placing this Foreign Commercial Service in the Commerce Department will allow commercial officers to concentrate on the promotion of U.S. exports as their principal activity."

3. The Export Administration Amendments Act of 1985

Title III of the Export Administration Amendments Act of 1985 (P.L. 99-64, July 12, 1985)

authorized for the first time Congressional appropriations for the Department's export promotion programs. Prior to 1985, these programs were not separately authorized; funding was subject only to

The Act defines "export promotion program" in a manner that includes all ITA's programs except those carried out by Import Administration. The Authorizing Committees are International Relations (House) and Banking (Senate). ²

4. The Omnibus Trade and Competitiveness Act of 1988 tion 2301 of the Omnibus Trade and Competitiveness Act of 19

the general Departmental appropriation. See 15 U.S.C. § 4051 et seq.

Section 2301 of the Omnibus Trade and Competitiveness Act of 1988, P.L. 100-418 (August 23, 1988), provided for the establishment by the Secretary of a United States and Foreign Commercial Service, thereby providing a statutory basis for this organization which, since 1980, had existed only by Secretarial Order. ³ Section 2301 states: "[t]he Commercial Service shall place primary emphasis on the promotion of exports of goods and services from the United States, particularly by small businesses and medium-sized businesses, and on the protection of United States business interests abroad...." See 15 U.S.C. § 4721.



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² Import Administration is not separately authorized. Oversight of Import Administration programs is under the purview of the Committees on Ways and Means (House) and Finance (Senate).

³ The position of Director General of the US&FCS was established in 1982 by Pub. L. No. 97-377. See 19 U.S.C. § 2171 note.

5. The Export Enhancement Act of 1992

(a) The Trade Promotion Coordinating Committee

Section 201 of the Export Enhancement Act of 1992, P.L. 102-429 (October 21, 1992), established the Trade Promotion Coordinating Committee ("TPCC") by statute (the TPCC was originally established by Presidential Memorandum dated May 23, 1990). The purposes of the TPCC, as set forth in section 201, are -

- (i) to provide a unifying framework to coordinate the export promotion and export financing activities of the United States Government; and
- (ii) to develop a government-wide strategic plan for carrying out Federal export promotion and export financing programs.

TPCC membership, as established by section 201, includes Commerce (Chair), State, Treasury, Agriculture, Energy, Transportation, USTR, SBA, AID, TDA, OPIC and Eximbank.

President Clinton implemented section 201 through Executive Order 12870, issued September 30, 1993. Executive Order 12870 added the Departments of Defense, Labor and Interior as members, as well as a number of Executive agencies including EPA, USIA, CEA, OMB, and the NEC and NSC.

Both section 201 and the Executive Order require the submission to the Congress of a "Strategic Plan" for Federal trade promotion efforts. The Strategic Plan was prepared and submitted on September 30, 1993. The Trade Promotion Coordinating Committee's annual National Export Strategy, is prepared pursuant to the 1992 Act. The fourth annual National Export Strategy was submitted to the Congress on September 30, 1996. See 15 U.S.C. § 4727.

(b) Environmental Trade Promotion

Section 204 of the Export Enhancement Act of 1992 (15 U.S.C. § 4730) required the establishment, within the TPCC, of the Environmental Trade Working Group, the purposes of which are -

- "(A) to address all issues with respect to the export promotion and export financing of United States environmental technologies, goods, and services; and
- "(B) to develop a strategy for expanding United States exports of environmental technologies, goods, and services."

The Working Group is Chaired by Commerce.



The 1992 Act also authorized a number of additional export promotion functions for the US&FCS, including the Market Development Cooperator Program.

6. The Jobs Through Trade Expansion Act of 1994

The Jobs Through Trade Expansion Act of 1994, P.L. 103-392 (October 22, 1994), further amended the 1988 Act to provide for the establishment of an Environmental Technologies Trade Advisory Committee, and added certain other environmental trade provisions.

B. TRADE AGREEMENTS MONITORING AND COMPLIANCE

Reorganization Plan No. 3 of 1979 contemplated for Commerce the additional role of monitoring the implementation of multilateral trade agreements. The President's message accompanying Reorganization Plan No. 3 stated:

"The Department of Commerce will be responsible for day-to-day implementation of non-agricultural aspects of the MTN agreements....Building implementation of MTN around [Commerce] will assure that the government's institutional memory and expertise on MTN is most effectively devoted to the challenge ahead. When American business needs information or encounters problems in the MTN area, it can turn to the Department of Commerce for knowledgeable assistance."

ITA recently restructured and renamed its International Economic Policy unit to reemphasize its important role in trade agreements monitoring and compliance. Market Access and Compliance ("MAC"), including the newly formed Trade Compliance Center, will now focus more clearly on the implementation of U.S. multilateral, plurilateral and bilateral trade agreements.

C. TRADE REMEDIES LAWS

The Secretary of Commerce has exclusive responsibility within the Executive Branch for administering the Antidumping ("AD") and Countervailing Duty ("CVD") laws. The Secretary, acting through the Import Administration of the ITA, processes petitions from firms that allege they have been harmed by unfair competition from imports (or, on rare occasions, self-initiates investigations), makes preliminary and final determinations about whether such imports were dumped or benefitted from government subsidies, and conducts periodic administrative reviews of final determinations. Merchandise found to be subsidized or dumped is subject to duties as needed to offset the advantage conferred by the unfair practice.



- Dumping: The AD law addresses the unfair trade practices of price discrimination among national markets or selling below cost. It provides for the imposition of antidumping duties when the Secretary of Commerce finds that the subject merchandise is being, or is likely to be, sold in the United States at less than normal value (below the price charged for the like product in the producer's home market, or below the cost of production). Before AD duties may be imposed, the International Trade Commission must determine that an industry in the United States is materially injured or threatened with material injury, or that establishment of an industry is materially retarded, by reason of imports of the dumped goods.
- Subsidization: The CVD law provides for the imposition of countervailing duties on goods exported to the United States which the Secretary of Commerce has determined have received a bounty or grant provided by a foreign government. Countervailable subsidies may take the form of direct cash grants, tax credits, or the provision on preferential terms of loans, equity, or goods. For WTO members, or countries that have assumed substantially equivalent obligations (most of our trading partners), the International Trade Commission must determine that the imports are causing or threatening to cause material injury to the U.S. industry, or are materially retarding the establishment of an industry, before countervailing duties may be assessed.

The Antidumping and Countervailing Duty Program is authorized by Title VII of the Tariff Act of 1930, as amended, 19 U.S.C. § 1671, et seq.

D. OTHER AUTHORITIES AND FUNCTIONS

1. Export Trading Companies

Title I of the Export Trading Company Act of 1982 (15 U.S.C. §§ 4001 et seq.) directs the Secretary to establish an office to promote the formation of export trade associations and export trading companies. Title III of the Act gives the Secretary authority to issue a certificate of review, providing substantial immunity from the antitrust laws, to any person whose export trade activities and methods of operation will not cause substantial domestic anti-competitive effects. The Attorney General must concur in the issuance of a certificate.

2. Textiles and Apparel

Executive Order 11651, as amended, establishes the Committee for the Implementation of Textile Agreements ("CITA"), chaired by Commerce. CITA supervises the implementation of all bilateral textile trade agreements entered into by the United States under section 204 of the Agricultural Act of 1956 (7 U.S.C. § 1854). Other key CITA members are State, USTR, Labor and Treasury. The bilateral agreements generally limit through quotas the amount of textile and apparel products entering the United States. Commerce implements and monitors the quota system, in consultation with other CITA members.



II. AUTHORITIES FOR SPECIFIC ITA GOALS AND OBJECTIVES

Theme I — Build for the future and promote U.S. competitiveness in the global marketplace, by strengthening and safeguarding the Nation's economic infrastructure.

- A. Implement the President's National Export Strategy in conjunction with the Trade Promotion Coordinating Committee. ⁴
- B. Enforce U.S. trade laws and agreements to promote free and fair trade. ⁵
- C. Strengthen and institutionalize trade advocacy efforts, placing special emphasis on the "Big Emerging Markets". ⁶

Theme 2 — Keep America competitive with cutting-edge science and technology and an unrivaled information base.

L. Employ ITA's comprehensive industry sector, technical, and country information bases to counsel U.S. firms (especially small and medium-sized firms) on appropriate export strategies and provide up-to-date technical, country, and industry-specific information to the U.S. business community. ⁷

Theme 3 — "Provide effective management and stewardship of our Nation's resource and assets to ensure sustainable economic opportunities."

There are no ITA goals or objectives under Theme 3.

⁷ 15 U.S.C. § 1501 et seq.; Reorganization Plan No. 3 of 1979, 44 Fed Reg. 69,273 (December 3, 1979) (19 U.S.C.A. § 2171 note); Title III, Export Administration Amendments Act of 1985, P.L. 99-64 (15 U.S.C. § 4051 et seq.)



⁴ 15 U.S.C. § 1501 et seq.; Reorganization Plan No. 3 of 1979, 44 Fed. Reg. 69,273 (December 3, 1979 (19 U.S.C.A. § 2171 note); Title III, Export Administration Amendments Act of 1985, P.L. 99-64 (15 U.S.C. § 4051 et seq.); P.L. 102-42, § 202, 203, 205 (15 U.S.C.A. § 4721); P.L. 102-42, § 201 (15 U.S.C. § 4727); Executive Order 12870 (September 30, 1993)

⁵ 15 U.S.C. § 1501 et seq.; Reorganization Plan No. 3 of 1979, 44 Fed Reg. 69,273 (December 3, 1979) (19 U.S.C.A. § 2171 note); Title III, Export Administration Amendments Act of 1985, P.L. 99-64 (15 U.S.C. § 4051 et seq.); The Antidumping and Countervailing Duty Program is authorized by Title VII of the Tariff Act of 1930, as amended, 19 U.S.C. § 1671, et seq. The Foreign Trade Zones program is authorized by the Foreign Trade Zones Act of 1934, 19 U.S.C. § 81a et seq.

⁶ 15 U.S.C. § 1501 et seq.; Reorganization Plan No. 3 of 1979, 44 Fed Reg. 69,273 (December 3, 1979 (19 U.S.C.A. § 2171 note); Title III, Export Administration Amendments Act of 1985, P.L. 99-64 (15 U.S.C. § 4051 et seq.); P. L. 102-42, § 201 (15 U.S.C. § 4727); Executive Order 12870 (September 30, 1993)

BUREAU OF EXPORT ADMINISTRATION (BXA)

Theme 1

- D. Restructure export controls for the twenty-first century. 8
 - Streamline and reform U.S. export controls. ⁹
 - Improve export administration awareness. ¹⁰
 - Promote export control cooperation with the independent states of the former Soviet Union (FSU), the Baltics, and Central Europe in order to facilitate legitimate trade in high-tech goods and technology, and to help stop the proliferation of nuclear, biological, and chemical weapons, missile delivery systems, and other sensitive items to rogue states and terrorists. ¹¹
 - Implement an encryption liberalization plan. 12
 - Oversee domestic implementation of the Chemical Weapons Convention. ¹³

¹³ Note 1 authorities and the following authority: legislation to be enacted relating to implementation of the Chemical Weapons Convention.



⁸ Export Administration Act of 1979, as amended (P.L. 96-72, 93 Stat. 503, 50 U.S.C. app. §§ 2401 - 2420); International Emergency Economic Powers Act, as amended (P.L. 95-223, 91 Stat. 1628, 50 U.S.C. §§ 1701 - 1706); E.O. 12002 - Administration of the Export Administration Act of 1969, as amended (42 FR 35623, 3 CFR, 1977 Comp., p. 133); E.O. 12214 - Administration of the Export Administration Act of 1979 (45 FR 29783, 3 CFR, 1980 Comp., p. 256); E.O. 12867 - Termination of Emergency Authority for Certain Export Controls (58 FR 51747, 3 CFR, 1993 Comp., p. 649); E.O. 12924 - Continuation of Export Control Regulations (59 FR 43437, 3 CFR, 1994 Comp., p. 917); Presidential Notices of August 15, 1995 and August 14, 1996 - Continuation of Emergency Regarding Export Control Regulations (E.O. 12924) (60 FR 42767, 3 CFR, 1995 Comp., p. 501, and 61 FR 42527, 3 CFR, 1996 Comp., p. 298); E.O. 12981 - Administration of Export Controls (License Processing) (60 FR 62981, 3 CFR, 1995 Comp., p. 419.

⁹ Note 1 authorities.

¹⁰ Note 1 authorities.

[&]quot;Note 1 authorities and the following authorities: Mutual Educational and Cultural Exchange Act of 1961, as amended (22 U.S.C. §§ 2451 et seq.); Support for East European Democracy (SEED) Act of 1989 (P.L. 101-179, 103 Stat. 1299, 22 U.S.C. §§ 5401 et seq.); Nunn-Lugar (Soviet Nuclear Threat Reduction Act of 1991) (Title II of Pub. L. 102-228, 105 Stat 1693, 22 U.S.C. § 2551 nt.); Former Soviet Union Demilitarization Act of 1992 (Title XIV of Pub. L. 102-484 (National Defense Authorization Act for FY 1993), 106 Stat 2563, 22 U.S.C. §§ 5901-5931); Freedom Support Act (Pub. L. 102-511, 106 Stat. 3321, 22 U.S.C. §§ 5801 et seq.); Foreign Operations Appropriations Act (Sec. 575 of P.L. 103-87, 107 Stat.931, 22, U.S.C. ___); Cooperative Threat Reduction Act of 1993 (Title XII of Pub. L. 103-160 (National Defense Authorization Act for FY 1994), 107 Stat. 1777, 22 U.S.C. §§ 5951-58).

¹² Note 1 authorities and the following authority: E.O. 13026 (61 FR 58767, 3 CFR, 1996 Comp., p. 228).

- E. Maintain a fully effective law enforcement program and protect U.S. national security, foreign policy, non- proliferation of dual-use commodities, counter-terrorism, non-proliferation of chemical weapons, and public safety interests. ¹⁴
 - Investigate criminal and administrative violations of the Export Administration Act, the International Emergency Economic Powers Act, the Chemical Weapons Convention, the Fastener Quality Act, related statutes and regulations, and impose civil sanctions for those violations. ¹⁵
 - Develop and implement measures to prevent export control law violations, including reviews of unlicensed shipments as well as conducting pre-license checks and post-shipment verifications concerning licensed transactions. ¹⁶
 - Conduct export enforcement outreach with the U.S. export community. Expand outreach and education programs to train U.S. exporters how to identify and avoid illegal transactions. ¹⁷
 - Work cooperatively with foreign governments on enforcement issues related to fully effective export control programs. Provide training and technical assistance to foreign export enforcement officials and increase coordination of enforcement efforts. ¹⁸

¹⁸ Notes 1, 4, and 7 authorities.



¹⁴ Note 1 authorities and the following authorities: Nuclear Non-Proliferation Act, § 309(c)(Sec. 309(c) of Pub. L. 95-242, 92 Stat. 141,42 U.S.C. § 2139a); Cuban Democracy Act, §§ 1705-1706 (§§ 1705-1706 of P.L. 102-484, 106 Stat. 2575,22 U.S.C. §§ 6004-6005); Cuban Liberty and Democratic Solidarity (Libertad) Act of 1996, §§ 102, 109 and 114 (§§ 102, 109 and 114 of Pub. L. 104-114, 110 Stat. 785); Missile Technology Controls Policy (Sec. 1701 of Pub. L. 101-510, 104 Stat. 1738, 50 U.S.C. app. § 2402 (note)); Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (Title III of Pub. L. 102-182, 105 Stat. 1245, 22 U.S.C. §§ 5601 et seq.); Nuclear Proliferation Prevention Act (Sec. 826 of Pub. L. 103-236, 108 Stat. 515, 22 U.S.C. § 2799aa); "Tiananmen Square Sanctions" (Title IX of Pub. L. 101-246, 104 Stat. 83, 22 U.S.C. § 2151 (note)); Iraq Sanctions Act of 1990(Secs. 586-586J of Pub. L. 101-513, 104 Stat. 2047, 50 U.S.C. § 1701 (note)); Iran-Iraq Arms Non-Proliferation Act(Secs. 1601-1608 of Pub. L. 102-484, 106 Stat. 2571,50 U.S.C. § 1701 (note)); Mutual Educational and Cultural Exchange Act of 1961, as amended (22 U.S.C. §§ 2451 et seq.); Anti-Terrorism and Effective Death Penalty Act, § 321 (Sec. 321 of Pub. L. 104-132, 110 Stat. 1214, 18 U.S.C. §§ 2332b et seq.); Fastener Quality Act, as amended (Pub. L. 101-592, 104 Stat. 2943, 15 U.S.C. §§ 5401 et seg.; legislation to be enacted relating to implementation of the Chemical Weapons Convention; E.O. 12058 -Functions Relating to Nuclear Non-Proliferation (43 FR 20947, 3 CFR, 1978 Comp., p. 179); E.O. 12851 - Administration of Proliferation Sanctions, Middle East Arms Control, and Related Congressional Reporting Responsibilities (58 FR 33181, 3 CFR, 1993 Comp., p. 608); E.O. 12854 - Implementation of the Cuban Democracy Act (58 FR 36587, 3 CFR, 1993 Comp., p. 614); E.O. 12865 - Prohibiting Certain Transactions involving the National Union for the Total Independence of Angola (UNITA) (58 FR 51005, 3 CFR, 1993 Comp., p. 636); E.O. 12918 - Prohibiting Certain Transactions With Respect to Rwanda and Delegating Authority with Respect to Other United Nations Arms Embargoes (59 FR 28205, 3 CFR, 1994 Comp., p. 899); E.O. 12938 - Proliferation of Weapons of Mass Destruction (59 FR 59099, 3 CFR, 1994 Comp., p. 950); E.O. 12959 - Prohibiting Certain Transactions with Respect to Iran (60 FR 24757, 3 CFR, 1995 Comp., p. 356); E.O. 13047 - Prohibiting New Investment in Burma (62 FR 28301); Presidential Memorandum of Sept. 27, 1994 - Delegation of Authorities Under the Iran-Iraq Arms Non-Proliferation Act of 1992 (59 FR 50685, 3 CFR, 1994 Comp., p. 1032).

¹⁵ Notes 1 and 7 authorities.

¹⁶ Notes 1 and 7 authorities.

¹⁷ Notes 1 and 7 authorities.

- F. Facilitate transition of defense industries. 19
 - Promote U.S. economic security, technological competitiveness, and defense diversification. ²⁰
 - Promote foreign defense conversion in the Independent States of the Former Soviet Union. ²¹
 - Enhance the U.S. defense industrial base. ²²

Theme 2

- M. Restructure export controls for the twenty-first century, and facilitate transition of defense industries. ²³
 - Ensure that the automated export control system (EAIS) can assist exporters while at the same time provide necessary information to ensure compliance with the U.S. export control regulations. ²⁴
 - Implement an encryption export liberalization plan. ²⁵

¹⁹ Defense Production Act of 1950, as amended (50 U.S.C. app. §§ 2061 et seq.); Strategic and Critical Materials Stockpiling Act, as amended, § 335(Pub. L. 96-41, 50 U.S.C. §§ 98-98h et seq.); Public Health Service Act, as amended by the Safe Drinking Water Act, § 1441 (42 U.S.C. § 300j); Trade Expansion Act of 1962, § 232 (19 U.S.C. § 1862); Tariff Act of 1930, as amended, (§ 339(b)(19 U.S.C. § 1339(b)); National Defense Authorization Act, FY 1989, § 824, as amended by the National Defense Authorization Act, FY 1990 and 1991, § 815 (10 U.S.C. § 2504, redesignated § 2531) (defense memoranda of understanding and related agreements); National Defense Authorization Act, FY 1989, § 825, as amended by the National Defense Authorization Act, FY 1990 and 1991, § 816 (10 U.S.C. § 2505, redesignated § 2532) (offset policy; notification); Selective Service Act of 1948 (Sec. 18, 50 U.S.C. app. § 468; 50 U.S.C. § 82 (procurement of ships and material during war); E.O. 12656 - Assignment of Emergency Preparedness Responsibilities(53 FR 47491, 3 CFR, 1988 Comp., p. 585); E.O. 12742 - National Security Industrial Responsiveness (56 FR 1079, 3 CFR, 1991 Comp., p. 309); E.O. 12919 - National Defense Industrial Responsiveness (59 FR 29525, 3 CFR, 1994 Comp., p. 901)

²⁰ Notes 1 and 12 authorities.

²¹ Notes 1, 4 and 12 authorities.

²² Note 12 authorities.

²³ Notes 1, 4 and 12 authorities.

²⁴ Note 1 authorities.

²⁵ Note 1 authorities and the following: E.O. 13026 (61 FR 58767, 3 CFR, 1996 Comp., p. 228).

- Oversee domestic implementation of the Chemical Weapons Convention (CWC) by the business community. 26
- Promote foreign defense conversion in the New Independent States. ²⁷
- Enhance the U.S. defense industrial base. ²⁸
- Promote U.S. economic security, technological competitiveness, and defense diversification. 29

ECONOMICS AND STATISTICS ADMINISTRATION (ESA)

Theme I —

- G. Strengthen the public's understanding of the U.S. economy and its competitive position by improving the Gross Domestic Product (GDP) and other national, regional, and international economic accounts data. ³⁰
- H. Improve national and local census and survey data through better business practices and public cooperation. ³¹

³¹ Title 13 United States Code (establishing the Bureau of the Census and providing for surveys and their confidentiality; Section 401 of Executive Order 12656 (directing the Secretary of Commerce to provide for the collection and reporting on census information and to maintain the capability to perform emergency surveys as required by national emergencies).



²⁶ Note 1 authorities and the following authority: legislation to be enacted relating to implementation of the Chemical Weapons Convention.

Notes 1, 4 and 12 authorities.

²⁸ Note 12 authorities.

²⁹ Notes 1 and 12 authorities.

³⁰ 15 U.S.C. § 171 et seq. (providing for the establishment of the Bureau of Foreign and Domestic Commerce, the predecessor of the Bureau of Economic Analysis (BEA), and defining its functions and responsibilities, including the authority to collect data); 22 U.S.C. § 286f, the Bretton Woods Agreement Act (providing that the President shall make available balance of payments information); Executive Order No. 10033, as amended (providing for the collection of certain balance of payments data and the publication of the U.S. balance of payments accounts); 22 U.S.C. § 3101 et seq, the International Investment and Trade in Services Survey Act (providing that the President shall undertake mandatory surveys of U.S. direct investment abroad, foreign direct investment in the United States, and international services transactions); Executive Order 11961 (assigning to BEA responsibility for conducting the direct investment and international services surveys); 15 U.S.C. § 4908 of the Omnibus Trade and Competitiveness Act of 1988 (directing the Secretary of Commerce to conduct a benchmark survey of international services transactions).

Theme II —

- I. Provide Gross Domestic Product (GDP) and related national, regional, and international economic statistics in the most accurate, timely, cost-effective, and easily accessible way possible. 32
- J. Provide products and services of greater value and satisfaction to Census national and local information base customers. 33
- K. Provide information on economic events and the workings of the economy. 34

³⁴ 15 U.S.C. § 1501 et seq. and § 1512 (providing the Secretary of Commerce with authority to carry out economic and statistical analysis function and providing the authority to foster, promote, and develop the foreign and domestic commerce of the U.S.); 30 U.S.C. § 1604 (providing that the Secretary of Commerce consult with other members of the Cabinet, including Interior, Defense, CIA and FEMA on ensuring an adequate and stable supply of materials to meet national security, economic well-being and industrial production needs); 15 U.S. § 1527a (establishing the ESA revolving fund for the payment of expenses incurred in the electronic dissemination of data, including the acquisition and public sale of domestic, Federally funded and foreign business, trade and economic information); 15 U.S.C. § 4901 et seq. (providing the Secretary of Commerce with the authority to establish and operate the National Trade Data Bank, a major product line of the ESA revolving fund operation).



³² 15 U.S.C. 171 et seq. (providing for the establishment of the Bureau of Foreign and Domestic Commerce, the predecessor of the Bureau of Economic Analysis, and defining its functions and responsibilities, including the authority to collect data); 22 U.S.C. 286f, the Bretton Woods Agreement Act (providing that the President shall make available balance of payments information); Executive Order No. 10033, as amended (providing for the collection of certain balance of payments data and the publication of the U.S. balance of payments accounts; 22 U.S.C. 3101 et seq., the International Investment and Trade in Services Survey Act (providing that the President shall undertake mandatory surveys of U.S. direct investment abroad, foreign direct investment in the United States, and international services transactions); Executive Order 11961 and subsequent Departmental delegation (assigning to BEA responsibility for conducting the direct investment and international services surveys); 15 U.S.C. 4908 of the Omnibus Trade and Competitiveness Act of 1988 (directing the Secretary of Commerce to conduct a benchmark survey of international services transactions).

³³ Title 13 United States Code (establishing the Census Bureau and authorizing it to collect economic and demographic data); Section 401 of Executive Order No. 12656 (directing the Secretary of Commerce to provide for the collection and reporting on census information and to maintain the capability to perform emergency surveys as required by national emergencies).

ECONOMIC DEVELOPMENT ADMINISTRATION (EDA)

Theme I — Goals and Objectives

- I. Stimulate the creation of private sector jobs through the growth of industry and the retention or expansion of existing businesses in economically distressed areas. 35
 - Construct or expand infrastructure facilities that offer substantial employment potential and improve the capacity for economic growth through the establishment, retention or expansion of commercial, industrial, and high-technology enterprises.
 - Overcome specific capital market gaps and encourage greater private sector participation in economic development activities.
- J. Help distressed communities build their capacity to stimulate, maintain, or expand economic growth. ³⁶
 - Promote comprehensive, inclusive economic planning in distressed communities to identify economic problems, assess the availability of local and non-local resources, and formulate and implement realistic development strategies.
 - Provide technical assistance to communities to solve specific economic development problems, respond to development opportunities, and build and expand local organizational capacity in distressed areas.
- K. Provide new knowledge, analyses and technical information which serve both to assess economic development problems and to mobilize non-federal resources for their solutions at the local level. ³⁷
 - Fund studies and research on emerging and anticipated economic development problems.
 - Provide funds for the establishment of programs in colleges and universities that provide technical assistance to local governments, community-based organizations and small businesses on economic development-related issues.
 - Fund a network of business assistance centers that aid firms and industries affected by import competition by providing technical assistance in diagnosing problems and assessing opportunities.

³⁷ EDA administers these programs under PWEDA and Chapter 3 of the Trade Act of 1974, as amended, Pub. L. 93-618 (19 U.S.C. 2341 *et seq.*) (Trade Act).



The Economic Development Administration (EDA) administers these programs under the Public Works and Economic Development Act of 1965, as amended, Pub. L. 89-136 (42 U,S.C. 3121 et seq.). (PWEDA).

³⁶ EDA administers these programs under the PWEDA.

Theme II —

- N. Help both rural and urban communities incorporate technology as a tool for their economic development. 38
 - Help distressed communities plan for technology-led economic development.
 - Help distressed communities build infrastructure necessary for technology-based economic development, including business incubators, industrial technology research centers and laboratories, technical skills training centers, and entrepreneurial development centers.
 - Provide technical assistance to communities to develop the networks and linkages necessary for technology-based economic development, including the creation of electronic networks and trade and commerce organizations.

TECHNOLOGY ADMINISTRATION (TA)

Theme I —

- N. Provide technical leadership for the Nation's measurement and standards infrastructure, and assuring the availability of needed measurement capabilities.
 - Anticipate and address the most important measurement and standards needs in a timely fashion. 39
 - Strengthen the national system of standards, measurement, measurement traceability, and conformity assurance. 40
 - Provide leadership in harmonizing international measurements and standards to facilitate international trade. 41
- O. Support a nationwide system of manufacturing extension services that will improve the global competitiveness of small manufacturers.
 - Develop a fully integrated national manufacturing extension delivery system, fully accessible to all small manufactures, accountable to industry. 42

³⁸ EDA administers these programs under PWEDA and the Trade Act.

³⁹ The National Institute of Standards and Technology Act, Section 2, as amended, 15 U.S.C. § 272(b)(1), (6), (12).

⁴⁰ The National Institute of Standards and Technology Act, Section 2, as amended, 15 U.S.C. § 272(b)(2), (10), (13).

⁴¹ The National Institute of Standards and Technology Act, Section 2, as amended, 15 U.S.C. § 272 (b)(9)-(10).

⁴² The National Institute of Standards and Technology Act, Section 25, as amended, 15 U.S.C. § 278k.

- Achieve integration of publicly supported industrial resources, providing consistent delivery of high quality products and services. ⁴³
- Achieve economies of scale to eliminate barriers faced by smaller manufacturing firms and maximize industry investment to achieve a level of operational stability. 44
- P. Assist U.S. businesses in continuously improving their productivity and efficiency utilizing Malcolm Baldrige National Quality Award framework core values, criteria, and assessment methods.
 - Develop, continuously improve, and disseminate evaluation criteria, manage the Baldrige Quality Award, and provide global leadership in promoting quality awareness and performance excellence, and in the learning and sharing of successful practices, principles and strategies. ⁴⁵
 - Foster effective partnerships with customers, suppliers, employees, and the public to enhance overall U.S. capability and effectiveness. ⁴⁶
 - Lead an expanding national system of state and local quality programs and increase national awareness of the utility of the Baldrige model through the MEP program. ⁴⁷
- Q. Stimulate U.S. economic growth by developing high-risk and enabling technologies through industry-driven cost-shared partnerships.
 - Partner with industry to develop innovative technologies with strong commercial potential
 technologies which will enable novel and/or greatly improved products and services.
 - Promote cooperative R&D ventures to encourage the rapid diffusion of new, enabling technologies throughout industry sectors. ⁴⁹

⁴⁹ The National Institute of Standards and Technology Act, Section 28, as amended, 15 U.S.C. § 278n(b)(1) and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seq.



The National Institute of Standards and Technology Act, Sections 2, 25, as amended, 15 U.S.C. §§ 278k, 272(b)(1).

⁴⁴ The National Institute of Standards and Technology Act, Section 25, as amended, 15 U.S.C. § 278k(b)(3).

⁴⁵ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3711a(d)(2)(B).

⁴⁶ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3711a.

⁴⁷ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3711a and the National Institute of Standards and Technology Act, Section 25, as amended, 15 U.S.C. § 278k.

⁴⁸ The National Institute of Standards and Technology Act, Section 28, as amended, 15 U.S.C. § 278n and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seg.

- Maximize leverage in driving key strategic technologies by focusing on interdependent R&D projects with common, specific technical goals identified by industry. ⁵⁰
- R. Coordinate and lead interagency efforts to enhance industry competitiveness in partnership with industry, academia, and the states.
 - Coordinate and lead interagency efforts to develop the technology base for next generation automobiles, improve productivity in construction, and enhance U.S. manufacturing competitiveness in partnership with industry. ⁵¹
 - Coordinate and lead interagency efforts to strengthen technology partnerships between states and the federal government. ⁵²

Theme 2 — (Technology Administration, cont'd)

Through the strategically developed goals and objectives listed below, DOC bureaus serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of United States industry in the global marketplace.

- A. Partner with industry to accelerate the development of cutting-edge technologies.
 - Develop the measurement tools for advanced science and technology. ⁵³
 - Introduce modern technology to U.S. small and medium-sized manufacturers. ⁵⁴
 - Create world-class research facilities for U.S. economic advantage. ⁵⁵
 - Open new opportunities for U.S. business and industry by fostering enabling technologies that lead to new, innovative products, services, and industrial processes. ⁵⁶

The National Institute of Standards and Technology Act, as amended, 15 U.S.C. § 271 et seq. and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seq.



⁵⁰ The National Institute of Standards and Technology Act, Section 28, as amended, 15 U.S.C. § 278n and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seq.

⁵¹ Presidential Announcement regarding the Clean Car Initiative (also known as the Partnership for a New Generation Vehicle (PNGV)), dated September 29, 1993 and the Stevenson-Wydler Technology Innovation Act, of 1980, as amended, 15 U.S.C. §§ 3704(c).

⁵² The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3704(c).

⁵³ The National Institute of Standards and Technology Act, as amended, 15 U.S.C. § 271 et seq. and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seq.

The National Institute of Standards and Technology Act, as amended, 15 U.S.C. § 271 et seq. and the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3701 et seq.

⁵⁵ The National Institute of Standards and Technology Act, Section 2, as amended, 15 U.S.C. § 272(c)(19).

- B. Collect, preserve, and disseminate government technical, scientific, and business information.
 - Play a leadership role in assisting federal agencies with dissemination of their scientific, technical, and business information. ⁵⁷
 - Provide services and infrastructure to bring under control scientific, technical, and business-related information, and increase the effectiveness of systems for locating and delivering information in the form required by customers. ⁵⁸
- C. Monitor and assess international R&D, barriers faced by U.S. industrial sectors; and develop policy options in partnership with industry, academia, and the states.
 - Monitor and assess what competitor nations are doing to support R&D and enhance their industrial competitiveness. ⁵⁹
 - Monitor and assess the technological strengths, weaknesses and barriers faced by U.S. industrial sectors, including manufacturing, and translate those assessments into policy options with partners in industry, academia, and the States. 60

⁶⁰ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3704(c)(2), (7)-(9), (11)-(12).



⁵⁷ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. §§ 3704b-2, 3704b(e)(2)-(3), (5), 3710(d)(1), (6) and 15 U.S.C. §§ 1151-1157.

⁵⁸ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. §§ 3704b-2, 3704b(e)(1), (4)-(6), 3710(d)(1), (6) and 15 U.S.C. §§ 1151-1157.

⁵⁹ The Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. § 3704(c)(5)-(6).

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA)

General Authorities

The activities of NTIA in support of the Department of Commerce's mission are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); the Communications Act of 1934, as amended (47 U.S.C. § 151 et seq.); Title III of the Department of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act (set out in Division A, Title I of the Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208); the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. § 3701 et seq.); the Submarine Cable Act of 1921, as amended (47 U.S.C. § 34 et seq.); and Executive Order 12046.

Theme 1—

- T. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans. 61
 - Administer the Information Infrastructure Grants program to assist educational, health care and other social services entities in planning and developing the telecommunications and information infrastructure.
 - Improve delivery of communications products and services to the public through Executive Branch policy initiatives in legislative and regulatory forums.
 - Ensure that education and cultural benefits of public broadcasting are widely available, and the use of telecommunications technologies to improve effectiveness of distance learning.
- U. Advocate international telecommunications policies that will help open international markets and promote the interests of the United States. ⁶²
 - Improve international competitiveness of U.S. telecommunications industry.

⁶² These activities are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); and Executive Order 12046.



⁶¹ These activities are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Act of 1934, as amended (47 U.S.C. § 151 et seq.); Title III of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act (set out in Division A, Title I of the Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208); and Executive Order 12046.

- V. Set policies for efficiently and effectively managing the Federal use of the radio spectrum, and prepare for international radio spectrum setting conferences of the ITU. 63
 - Ensure that government needs for vital telecommunications services are met nationally and internationally.
 - Coordinate U.S. preparations for international frequency allocation conferences and lead U.S. delegations to these conferences.
- W. Provide leadership in developing telecommunications policy initiatives in emerging areas of national priority.
 - Implement the President's Global Electronic Commerce initiatives regarding the governance of the Internet domain system, Internet content restrictions, and international privacy.

Theme II —

- G. Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans. ⁶⁴
 - Administer the Information Infrastructure Grants program, which provides grants to assist state and local governments, universities and school systems, hospitals and other health care providers, and other social service entities to purchase equipment, develop new applications and undertake the planning needed to ensure effective development of the telecommunications and information infrastructure.
 - Improve the delivery of communications services and products to the Public, through Executive Branch attention to issues, legislative initiatives, and Federal Communications (FCC) dockets.
 - Improve the international competitiveness of the U.S. telecommunications industry and the ability of U.S. businesses and consumers to have access to high quality, reasonably-priced international services.

these activities are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S. C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); the Communications Act of 1934, as amended (47 U.S.C. § 151 et seq.); Title III of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act (set out in Division A, Title I of the Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208); the Submarine Cable Act of 1921, as amended (47 U.S.C. § 34 et seq.); and Executive Order 12046.



These activities are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); and Executive Order 12046.

- H. Engage in technical research to improve telecommunications system planning, design, and evaluation and to support government and industry efforts in these areas. 65
 - Ensure that all government needs for vital telecommunications services can be satisfied nationally and internationally.
 - Ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible; educational entities are able to use a variety of telecommunications technologies to improve the effectiveness of distance learning; minorities and women have increased access and control of public telecommunications; and blind and hearing-impaired persons are able to participate more fully in society through the use of telecommunications.

Theme III —

- E. Promote the development of an advanced telecommunications and information infrastructure to efficiently serve the needs of all Americans, create job opportunities for American workers, and enhance the competitiveness of U.S. industry in the global marketplace. ⁶⁶
 - Set policies for efficiently and effectively managing the federal use of the radio spectrum, and prepare for international radio spectrum-setting conferences of the International Telecommunications Union.
 - Support the development of a National Information Infrastructure (NII) that will be accessible to all Americans.
 - Promote national policies to increase competition and efficient investment in telecommunications and information industries, enhance consumer welfare and economic and social opportunities for all, and remove impediments to the growth and vitality of these sectors.

These activities are authorized by the National Telecommunications and Information Administration Organization Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); the Communications Act of 1934, as amended (47 U.S.C. § 151 et seq.); Title III of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act (set out in Division A, Title I of the Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208); the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. § 3701 et seq.); the Submarine Cable Act of 1921, as amended (47 U.S.C. § 34 et seq.); and Executive Order 12046.



the Submarine Cable Act of 1992, as amended (47 U.S.C. § 701 et seq.); the Communications Act of 1992 (47 U.S.C. § 901 et seq.); the Communications Satellite Act of 1962, as amended (47 U.S.C. § 701 et seq.); the Communications Act of 1934, as amended (47 U.S.C. § 151 et seq.); Title III of the Departments of Commerce, Justice and State, the Judiciary and Related Agencies Appropriations Act (set out in Division A, Title I of the Omnibus Consolidated Appropriations Act of 1997, Pub. L. No. 104-208); the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. § 3701 et seq.); the Submarine Cable Act of 1921, as amended (47 U.S.C. § 34 et seq.); and Executive Order 12046.

- Administer the Information Infrastructure Grants program which provides grants to assist state and local governments, universities and school systems, hospitals and other health care providers, and other social service entities to purchase equipment, develop new applications and undertake the planning needed to ensure effective development of the telecommunications and information infrastructure.
- Ensure that all government needs for vital telecommunications services can be satisfied nationally and internationally.
- Ensure that the educational and cultural benefits of public broadcasting are available to as many people as possible, educational entities are able to use a variety of telecommunications technologies to improve the effectiveness of distance learning, minorities and women have increased access and control of public telecommunications, and blind and hearing-impaired persons are able to participate more fully in society through the use of telecommunications.
- Support television programming directed toward the development of fundamental intellectual skills.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

Theme I — Goals and Objectives

- X. Promote safe navigation by revolutionizing U.S. marine and air navigation, mapping and surveying; assist commercial shipping in moving increased cargoes safely and efficiently; and provide a precise satellite derived reference system as the basis for the Nation's geographical positioning needs.
 - Build, maintain and deliver a digital nautical charting database to underpin new electronic navigational systems which integrate satellite positioning, tidal heights and currents, radars and sonars, and navigational aids; update nautical surveys of the Nation's coastlines and coastal ocean areas using full-bottom coverage technologies; and provide modern aeronautical navigation information. ⁶⁷

⁶⁷ Coast and Geodetic Survey Act, 33 U.S.C. §§ 883a-838k (authorizes the Secretary of Commerce to conduct hydrographic and geodetic-control surveys, tide and current observations, and related geophysical measurements and investigations, and to compile, analyze, process and disseminate geophysical and survey data and information, including publication of nautical charts, employment of public vessels, and research, processing and dissemination of ocean satellite data to the maritime community).



- Install measurement and communications systems to provide mariners with real-time observations and forecasts of water level, tides and currents, and weather conditions in major ports. ⁶⁸
- Transform the obsolete geodetic reference frame into a Global Positioning System-based system of monumented marks and continuously operating reference stations to support the digital revolution in mapping, charting, and surveying. ⁶⁹
- Y. Improve short-term warning and forecast products and services to enhance public safety and the Nation's economic productivity by enhancing the ability to observe, understand, and model the environment, and effectively disseminate products and services to users.
 - Complete the modernization and restructuring of the National Weather Service which will continue to improve the timeliness and accuracy of short-range environmental predictions of severe weather, floods, and coastal storms, which have immediate impact on individuals and many sectors of the economy. ⁷⁰
 - Maintain continuous operational satellite coverage of the Nation critical for warnings and forecasts. ⁷¹
 - Strengthen observing and prediction systems through scientific, technological and programmatic advances, and international cooperation. This objective will be achieved in cooperation with the U.S. Weather Research Program (USWRP) by incorporating the scientific and technological advances from the USWRP into service improvements. ⁷²

Coast and Geodetic Survey Act (33 U.S.C. §§ 883a-838k); and the Act entitled "An Act to increase the efficiency and reduce the expenses of the Signal Corps of the Army, and to transfer the Weather Bureau to the Department of Agriculture, approved October 1, 1890 (hereinafter "Weather Service Organic Act"), as amended, 15 U.S.C. 312 et seq. (duties of the Secretary of Commerce, including forecasting weather and issuing storm warnings) and the Federal Aviation Act, 49 U.S.C. 44720 (Meteorological activities to be conducted by the Director of the National Weather Services); National Weather Service Modernization Act, Title VII of Public Law 102-567 (provided for NWS Modernization and restructuring certification process).

⁶⁹ Coast and Geodetic Survey Act (33 U.S.C. §§ 883a-838k).

Weather Service Organic Act, as amended, 15 U.S.C. 312 et seq.; 49 U.S.C. 44720; National Weather Service Modernization Act, Title VII of Public Law 102-567 (provided for NWS Modernization and restructuring certification process).

Weather Service Organic Act, as amended, 15 U.S.C. 312 et seq; Title I of Public Law 102-567 (authorized the NWS to carry out satellite observing systems, including spacecraft procurement, launch, and associated ground station modifications for polar orbiting and geostationary environmental satellite systems, as well as operation of such satellites and land remote-sensing satellites).

⁷² United States Weather Research Program Act (Oct. 29, 1992), Title I of Public Law 102-567, 106 Stat. 4276.

Improve customer service to the public, emergency managers, the media, and private forecast planners through effective communication and utilization of critical weather data and information necessary for protection of life and property. ⁷³

Theme II —

- D. Implement seasonal to interannual climate forecasts.
 - Deliver useful seasonal to interannual climate forecasts for the U.S. and collaborate in a multinational effort to generate and use similar forecasts. ⁷⁴
 - Enhance global observing and data systems required to provide data for the initialization and validation of model predictions of seasonal to interannual climate variations. ⁷⁵
 - Invest in process and modeling research that leads to improved predictability of temperature and rainfall distributions. ⁷⁶
 - Assess the impacts of climate variability on human activity and economic potential, and improve public education so the climate forecasts are understood and acted upon. ⁷⁷
- E. Predict and assess decadal to centennial change.
 - Characterize the agents and processes that force decadal to centennial climate change. 78
 - Examine the role of the ocean as a reservoir of both heat and carbon dioxide to address a major source of uncertainty in climate models. ⁷⁹

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961.



Weather Service Organic Act, as amended, 15 U.S.C. 312, et seq.; Title I of Public Law 102-567, 106 state. 4276 (includes authority to carry out data and information services activities, including climate data services, ocean data services, geophysical data services, and environmental assessment and information services).

Weather Service Organic Act, as amended, 15 U.S.C. 312 et seq.; the Federal Aviation Act, as amended, 49 U.S.C. 44720; the Department's joint project statute, 15 U.S.C. 1525; the National Climate Program Act, 15 U.S.C. 2904-2908; and the U.S. Global Change Research Act, 15 U.S.C. 2921-2961.

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961; and Title I of Public Law 102-567.

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961; and Title I of Public Law 102-567.

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961; and Title I of Public Law 102-567.

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961.

- Ensure a long-term climate record by enhancing domestic and international weather networks, observing procedures, and information management systems. 80
- Guide the rehabilitation of the ozone layer by providing the scientific basis for policy choices associated with ozone-depleting compounds. 81
- Provide the scientific basis for better air quality by improving the understanding of high surface ozone episodes in rural areas and by establishing a monitoring network to detect cleaner air quality. 82
- Develop models for the prediction of long-term climate change, carry out scientific assessments, and provide human impacts information. 83

Theme III —

- A. Build sustainable fisheries that increase the Nation's wealth and quality of life, support increased fishing industry job opportunities, improve the safety and wholesomeness of seafood resources, and expand recreation opportunities.
 - Assess the status of fishery resources, through stock assessments and population dynamics research, to improve the scientific basis for policy decisions, including the elimination of overfishing, the rebuilding of overfished stocks, the conservation of fish habitat, and the minimization of bycatch-related mortality. 84
 - Advance fishery predictions through research and applications. 85



⁸⁰ The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961.

The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961; and the Clean Air Act, as amended, 42 U.S.C. 7401 et. seq. (the amendments of 1990 require NOAA to provide scientific assessments relating to stratospheric ozone depletion).

⁸² The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961; and the Clean Air Act, as amended, 42 U.S.C. 7401 et. seq.

⁸³ The National Climate Program Act, 15 U.S.C. 2904-2908; the U.S. Global Change Research Act, 15 U.S.C. 2921-2961

The Magnuson-Stevens Fishery Conservation and Management Act (the Magnuson-Stevens Act, as amended), 16 U.S.C. 1801 et seq. (the principal authority for managing the nation's marine fisheries, creates a nationwide system of eight regional fishery management councils which develop Fishery Management Plans (FMPs), including fisheries stock assessment and related research and assessment activities).

⁸⁵ The Magnuson-Stevens Act, as amended, 16 U.S.C. 1801 et seq.

- Manage for economic growth and sustainable fisheries by working with Fishery Management Councils, foreign nations and others to develop plans for reducing excessive fishing and capital investment. 86
- Ensure adequate compliance with fishery regulations. 87
- Provide research and services for fishery-dependent industries to maximize the potential benefits from the Nation's marine resources. 88
- B. Recover protected species through conserving marine species, recovering those in danger of extinction, and maintaining healthy marine ecosystems upon which they depend.
 - Assess the status of, and impacts to, protected species. Information is needed to better focus management actions, limit the scope of restrictions, and promote the recovery of all protected species. 89
 - Develop and implement conservation and recovery plans for depleted marine mammals and endangered and threatened species. This will be done in part through developing new partnerships with state and private sectors. Technologies and measures will be developed to reduce or avoid detrimental interactions between marine species and human activities. ⁹⁰
- C. Sustain healthy coasts to promote more productive and diverse habitats for fish and wildlife, cleaner coastal waters for recreation and the production of seafood, and achieve thriving, sustainable economies for coastal communities based on well-planned development and healthy ecosystems.
 - Protect, conserve and restore coastal and all living marine resource habitats and their biodiversity. 91

⁹¹ The Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1361 et seq., and the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.; and the Coastal Zone Management Act, as amended, 16 U.S.C. 1451 et seq.; the National Marine Sanctuaries Act, as amended, 16 U.S.C. 1431 et seq.; the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.; the 0il Pollution Act, 33 U.S.C. 2701 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. 9601 et seq.; the Magnuson-Stevens Fishery Conservation and Management Act, as amended, 16 U.S.C. 1801 et seq.; the Fish & Wildlife Coordination Act, as amended, 16 U.S.C. 661 et seq. and the Aquatic Nuisance Prevention and Control Act, as amended, 16 U.S.C. 4701 et seq.



⁸⁶ The Magnuson-Stevens Act, as amended, 16 U.S.C. 1801 et seq.

⁸⁷ The Magnuson-Stevens Act, as amended, 16 U.S.C. 1801 et seq. (provides authority for the Department to promulgate and enforce fisheries regulations).

⁸⁸ The Magnuson-Stevens Act, as amended, 16 U.S.C. 1801 et seq.

⁸⁹ The Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1361 et seq., and the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq. (both statutes give the Department specific responsibilities for the protection and recovery of living marine resources, including threatened or endangered and their habitats).

⁹⁰ The Marine Mammal Protection Act of 1972, as amended, 16 U.S.C. 1361 et seq., and the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

- Promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood and economic vitality. 92
- Foster well-planned and revitalized coastal communities that sustain coastal economies, are compatible with the natural environment, minimize the risks from natural hazards, and provide access to coastal resources for the public's use and enjoyment. 93

PATENT AND TRADEMARK OFFICE

Theme I —

- S. Help protect, promote, and expand intellectual property rights systems throughout the U.S. and abroad. 94
 - Participate in international cooperative arrangements.
 - Cooperate with other government agencies to ensure that intellectual property concerns are adequately addressed.

Theme III —

D. Grant exclusive rights, for limited times, to inventors for their discoveries, and enhance trademark protection. 95

⁹⁵ 15 U.S.C. 1051-1127 (containing provisions of the Trademark Act of 1946 that govern the administration of the trademark registration system of the PTO); 35 U.S.C. 1 et seq. (providing authority for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments); Department Organization Order 10-14, section 4(I) (Commissioner serves "as focal point within the department and is prepared, when requested by appropriate authority, to serve as spokesperson for the executive Branch on the broad range of domestic and intellectual property issues confronting the Nation").



⁹² The Coastal Zone Management Act, as amended, 16 U.S.C. 1451 et seq.; the National Marine Sanctuaries Act, as amended, 16 U.S.C. 1431 et seq.; the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.; the Oil Pollution Act, 33 U.S.C. 2701 et seq.; the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. 9601 et seq.

⁹³ The Coastal Zone Management Act, as amended, 16 U.S.C. 1451 et seq.

⁹⁴ 15 U.S.C. 1511 (placing the Patent and Trademark Office under the jurisdiction and supervision of the Department of Commerce); 35 U.S.C. 6 ("authority to carry on studies, programs, or exchanges of items or services regarding domestic and international patent and trademark law"); Departmental Organization Order 10-14, section 4(I) (Commissioner, when requested, serves as "spokesperson for the Executive Branch on the broad range of domestic and international intellectual property issues confronting the Nation".

- Maximize the business contribution of patents. 96
- Maximize the business contribution of trademarks.

Theme II —

- F. Promote awareness of, and provide effective access to, patent and trademark information. 97
 - Constantly achieve customer satisfaction by understanding and supporting customer needs.⁹⁸
 - Promote the use and accessibility of intellectual property information. ¹⁰⁰
 - Develop the highest quality information products and services which deliver information when, where, and in the format needed.

¹⁰⁰ PTO promotes intellectual property protection by issuing patents and registering trademarks. 15 U.S.C. 1051-1027 and 35 U.S.C. 1 et seq. See also Department Organization Order 10-14, section 4(I) (Commissioner serves "as focal point within the Department and is prepared, when requested by appropriate authority, to serve as spokesperson for the Executive Branch on the broad range of domestic and intellectual property issues confronting the Nation").



⁹⁶ 15 U.S.C. 1051-1127 (containing provisions of the Trademark Act of 1946 that govern the administration of the trademark registration system of the PTO); 35 U.S.C. 1 et seq. (providing authority for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments); 35 U.S.C. 6 (authorizes the Commissioner to carry on studies, programs, or exchanges of items or services regarding domestic and international patent and trademark law); Department Organization Order 10-14, section 4(I) (Commissioner serves "as focal point within the department and is prepared, when requested by appropriate authority, to serve as spokesperson for the Executive Branch on the broad range of domestic and intellectual property issues confronting the Nation").

⁹⁷ 35 U.S.C. 1 et seq. (providing authority for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments); 15 U.S.C. 1051-1127 (providing authority for the administration of trademark laws); 35 U.S.C. 41(I) (2) (providing for deployment of automated search systems of the Office to the public); 44 U.S.C. 1337-1338 (authorizing the PTO to print patents, trademarks, and other matters related to the business of the Office).

⁹⁸ 35 U.S.C. 6 (authorizes the Commissioner to carry on studies, programs, or exchanges of items or services regarding domestic and international patent and trademark law); 35 U.S.C. 351 et seq. (authorizing the PTO to accept applications under the Patent Cooperation Treaty); 35 U.S.C. 376 (authorizing the Commissioner to charge Patent Cooperation Treaty fees).

⁹⁹ 35 U.S.C. 6 (authorizing the Commissioner to carry on studies, programs, or exchanges of items or services regarding domestic and international patent and trademark law); Departmental Organization Order 10-14, section 4(I) (Commissioner, when requested, serves as "spokesperson for the Executive Branch on the broad range of domestic and international intellectual property issues confronting the Nation").

MINORITY BUSINESS DEVELOPMENT ADMINISTRATION (MBDA)

General Authorities

MBDA's programs and activities are authorized by Executive Order 11625 (1971), Executive Order 12432 (1983) and the Agency's appropriations act, which provides funds "for necessary expenses of the Department of Commerce in fostering, promoting and developing minority business enterprise, including the expenses of grants, contracts and other agreements with public or private organizations."

Theme I —

- L. Improve opportunities for minority-owned businesses in major growth industries according to geographic demands.
 - Identify industry sectors offering potential for high growth in geographic service areas, and assess networks of available public and private resources to assist minority-owned businesses to penetrate these industries. 101
 - Match minority-owned businesses with domestic and international opportunities.
 - Coordinate and leverage resources with those of the Federal, State, and local government and private sector purchasers to deliver timely procurement information to minority-owned businesses. ¹⁰²

¹⁰² Executive Order 11625, at Section 1, paragraph 2, authorizes the activities of the above two statements. It states that the Secretary shall: "Promote the mobilization of activities and resources of State and local governments, businesses and trade organizations, universities, foundations, professional organizations, and volunteer and other groups towards the growth of minority business enterprises, and facilitate the coordination of the efforts of these groups with those of Federal departments and agencies."



¹⁰¹ Executive Order 11625, at Section 1, paragraph 4, authorizes the activities of the above statement. It states that the Secretary shall: "Within constraints of law and appropriations therefor, and according to his discretion, provide financial assistance to public and private organizations so that they may render technical and management assistance to minority business enterprises, and defray all or part of the costs of pilot or demonstration projects conducted by public or private agencies or organizations which are designed to overcome the special problems of minority business enterprises or otherwise to further the purposes of this order."

- M. Improve the opportunities for minority-owned businesses to pursue financing.
 - Identify and maintain data on regional lending trends.
 - Attain agreements with financial institutions to commit new funds or increase current funding levels available for minority-owned businesses.
 - Implement a system to provide specialized consulting services to minority-owned businesses, to assist in the development and implementation of effective capital formation strategies.

Theme II — Goals and Objectives

- N. Provide nationwide information and management and technical assistance to minority-owned businesses through the Internet. 103
 - Generate, collect, and disseminate research data and information on best practices to minority firms and service providers for minority-owned businesses using data bases on the Internet.
 - Develop interactive systems on the Internet to provide management and technical assistance to minority-owned businesses.

Executive Order 11625, at Section I, paragraph 4, authorizes the activities outlined in the following two goals and objectives. It states that the Secretary shall: "within the constraints of law and appropriations therefor, and according to his discretion, provide financial assistance to public and private organizations so that they may render technical and management assistance to minority business enterprises, and defray all or part of the costs of pilot or demonstration projects conducted by public or private agencies or organizations which are designed to overcome the special problems of minority business enterprises or otherwise to further the purposes of this order."

