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DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. list	re: Committee on Applications Information Infrastructure Task Force [partial] (1 page)	10/25/1993	P3/b(3)
002. list	re: Committee on Information Policy Information Infrastructure Task Force Participants To-Date [partial] (1 page)	00/00/0000	P3/b(3)

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P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
P4 Release would disclose trade secrets or confidential commercial or financial information [(a)(4) of the PRA]
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THE WHITE HOUSE

WASHINGTON

May 24, 1993

MEMORANDUM FOR DISTRIBUTION

FROM: JOHN H. GIBBONS, DIRECTOR, OSTP
ROBERT RUBIN, ASSISTANT TO THE PRESIDENT, NEC

RE: PROPOSED STRUCTURE OF THE INFORMATION INFRASTRUCTURE TASK FORCE

During the campaign, the President and the Vice President stressed the need to create the Infrastructure for the 21st Century. In particular, they called for the rapid development of a National Information Infrastructure (NII), a system of high-speed telecommunications links, databases, and advanced computer systems that will provide Americans the information they need, whether in the form of text, images, video, or sound. This infrastructure will consist of a "network of networks" run by many different companies and using different technologies (fiber-optics, cable, wireless) but all connected and inter-operable. Such a network would be as ubiquitous as the phone system, but capable of carrying at least 1,000 time more information, providing two-way video, access to massive data libraries, and hundreds of channels of HDTV programming.

The Administration's February 22 technology policy paper announced the President's plan to create a White House Information Infrastructure Task Force (IITF) which would, "work with Congress and the private sector to find consensus on and implement policy changes needed to accelerate deployment of a national information infrastructure." This memo is intended to provide more details about the IITF, raise several questions that need to be resolved, and outline the next steps for this group.

The Administration's vision of the NII

Development of the NII has the potential to dramatically improve American competitiveness, health care, education, and government services. For instance, by providing faster and less expensive access to information, the NII can accelerate the design, manufacture, sale, and servicing of new products, giving American companies an edge in world markets.

While the private sector will build almost all of the "information highway" system, the President and the Vice President have stated clearly that the Federal government has a key leadership role in the development of the NII. They have called for:

(1) Increased Federal investment in the development of the networking and computing technology needed for the NII.
(2) Federal funding for pilot projects to demonstrate this technology.
(3) Federal programs to ensure that schools, libraries, hospitals, and other non-profit institutions can afford to be connected to the NII.
(4) Forward-looking telecommunications policies that will encourage private-sector investment in a ubiquitous, telecommunications system and ensure that all Americans enjoy the benefits of such a system. Such policies will:
    - provide a stable regulatory environment,
    - promote competition,
    - promote interoperability of networks,
    - fairly allocate the electromagnetic spectrum,
    - encourage development of standards,
    - enable investment in the development and deployment of new technologies,
    - ensure access to users in poor and rural areas that otherwise might not enjoy the full benefits of the NII.
(5) Federal information policies that promote creation of new information services by:
    - using information technology to provide more Federal information on-line,
    - working with the private sector to disseminate Federal information,
    - creating new ways to protect intellectual property rights in a networked environment,
    - ensuring the privacy and security of users of the NII.

What will be the role of the IITF?

The IITF will be responsible for articulating and implementing the Administration's vision for the National Information Infrastructure. Working together, the participating agencies will develop comprehensive telecommunications and information policies that best meet the needs of both the agencies and the country. The IITF will address a variety of issues including regulatory policy, government information policy, standards issues, intellectual property rights, private sector input on the National Information Infrastructure, and transition of the National Research and Education Network.

The IITF will focus primarily on those issues that cannot be resolved without interagency cooperation and will have a key role in resolving interagency disputes. By helping build consensus on thorny policy issues, it will help agencies make and implement policy in areas where gridlock has been the norm in the past. The IITF is **not** designed to impose policies on the agencies. Specifically, it will not try to second-guess policy decisions which fall solely within the jurisdiction of a single agency.

Many and perhaps most of the issues the IITF will deal with will be handled in working groups (which may be quasi-permanent or ad hoc) created to address a single issue. Issues that could not be resolved by a single agency would go to one of these working groups. Only if the working group could not resolve the issue would it come before the full IITF. In general, the goal will be to make policy decisions at the lowest possible level. It is conceivable that the full IITF would meet only 3-6 times a year.

What will be the relationship between the IITF and the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET)?

Many of the issues related to the NII will be dealt with by the High Performance Computing, Communications, and Information Technology (HPCCIT) Subcommittee of the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET), which is chaired by the White House Office of Science and Technology Policy and which is responsible for coordinating Federal R&D activities. FCCSET, and particularly HPCCIT, will play a complementary role to the IITF. It will (1) provide technical advice to the IITF and its working groups and (2) coordinate the Federal research activities that support development of the National Information Infrastructure.

For the last three years, HPCCIT has coordinated the High-Performance Computing and Communications (HPCC) Initiative, a $1.1 billion-a-year R&D program which is developing the more powerful supercomputers, faster networks, and more sophisticated software needed to build an advanced NII. By working with the IITF, the scientists and engineers on the HPCCIT can help ensure that new technology developed by this initiative is fully utilized in the NII. An HPCC advisory committee, required by Vice President Gore's legislation authorizing the HPCC Initiative, will be established to provide private sector advice on many of the research-related issues that the HPCCIT faces.

Who will be on the IITF?

Presumably, all the key agencies involved in telecommunications and information policy will be represented on the task force, including:

Council of Economic Advisers
National Economic Council
National Security Council
Office of Management and Budget
Office of Science and Technology Policy
Department of Commerce (includes the National Telecommunications and Information Administration, the National Institute of Standards and Technology, and the National Technical Information Service)
Department of Defense
Department of Justice (Antitrust Division)
Department of State (Directorate for International Communications and Information Policy)

In addition, several other agencies will either be members of the IITF or else be involved in working groups of the IITF which may be formed to address specific issues. These include:

Research agencies
    National Science Foundation
    Advanced Research Projects Agency (Defense Department)
Intelligence Community
U.S. Trade Representative

Clearly, there would also need to be close links to the Federal Communications Commission. When the members of the IITF are in place, they will help determine the membership and structure of the task force.

Because of the key role of the Department of Commerce, a high-level official of the Department, most likely the Deputy Secretary, will chair the IITF.

What will be on the IITF's agenda?

From discussions with agency personnel, industry, academia, and public interest groups, we have compiled a list of issues that might be on the task force's agenda. The list includes:

Increasing competition in the local loop
Cable-telco cross-ownership restrictions
Modified Final Judgment (which regulates the Regional Bell Operating Companies)
Spectrum Allocation
The Commercialization of the Internet computer network
Telecommunications standards (both domestic and international)

Computer security
Privacy
Encryption Technology
Intellectual Property Rights in a Networked Environment
Dissemination of Federal Information
Roles and structure of Federal telecommunications agencies

Clearly, the members of the IITF will add or delete items, as well as to prioritize them.

How will the IITF get input from industry?

To provide input from the private sector, it is likely that the IITF will establish one or more advisory committees. These committees will not only provide suggestions and new approaches to policy questions, they will also act as a sounding board for proposals from the IITF and help build public support for those proposals. A single large advisory committee might advise the IITF on high-level issues, while subcommittees of the advisory committee, perhaps joined by outside experts, could advise issue-specific working groups of the IITF.

What's next?

In response to our April 5 memo, agencies have provided names of agency liaisons to the IITF. A list of those names is attached. In addition, it would be useful if your agency determined whether it needs to devote additional staff or resources to the HPCCIT, given the additional, new roles that HPCCIT will be playing.

In the coming weeks, the IITF and the White House plan to draft a telecommunication policy paper (10-15 pages) laying out, in broad terms, the principles that the Administration intends to follow on telecommunications and information policy. It would be similar in form and function to the February 22 technology policy paper. Ideally, this paper would be released when the creation of the IITF is officially announced.

One of the first tasks for the IITF will be to define its agenda. There are a host of difficult telecommunications and information issues that need to be resolved and the IITF members will have to decide which ones are most pressing and most important. The IITF's agenda will be determined by many factors, including Congressional action and Administration priorities. We welcome your input on which items should be at the top of the agenda. The key White House staffers working with the IITF are Mike Nelson (at OSTP, 395-6175) and Tom Kalil (at the NEC, 456-2801).

Distribution:		Phone	FAX
DOC	Jonathan Sallet	482-4127	482-3610
DOC	Larry Irving	482-1840	482-1635
DOE	David Nelson	(301) 903-5800	(301) 903-7774
DOD	Ken Flamm	(703) 697-4172	(703) 693-2026
DOD	Steve Squires	(703) 696-2226	(703) 696-2202
FCC	Bob Pepper	653-5940	632-1587
GSA	G. Martin Wagner	501-1000	501-0022
GSA	Donald E. Scott	208-7493	501-2772
Interior	Debra Knopman	208-3862	371-2815
Interior	Robin O' Malley	208-3700	208-1873
State	John Boright	647-3004	647-0774
State	Dan Tarullo	647-5962	647-5713
DOT	Ed Weiner	366-5403	366-3393
USPS	Charles Chamberlain	268-5262	268-4492
USPS	Edwin Smith	268-4881	268-4882
CEA	Andy Joskow	395-5614	395-6947
CEA	Joe Stiglitz	395-5036	395-6947
NSC	Keith Hahn	395-6923	395-1185
OMB	Chris Edley	395-3120	395-4639
OMB	Matt Miller	395-5883	395-3174
OMB	Jim MacRae	395-5897	395-7285
OVP	Greg Simon	456-6222	456-6231

THE WHITE HOUSE

WASHINGTON

November 14, 1994

MEMORANDUM

To: Alice Rivlin

From: W. Bowman Cutter, NEC
John H. Gibbons, OSTP
Greg Simon, OVP

Re: The National Information Infrastructure and the FY96 budget

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This memo provides some background information on the Administration's NII initiative, and identifies several of the major FY96 NII budget issues. We would like to schedule a meeting at your convenience to discuss these issues prior to the completion of the budget process.

I. What is the National Information Infrastructure?

The NII is a complex, evolving system that will improve the ability of Americans to (1) access information; and (2) communicate with each other. In its current form, it is composed of:

- Networks, such as the Internet, the public switched telephone network, cable networks, satellite and wireless telecommunications links;
- "Information appliances" that connect to these networks, such as computers, video-phones, interactive TVs, and personal digital assistant;
- Information, databases, and services that are available over these networks; and
- The human resources that are required to build and use the NII.

The functionality of our information infrastructure is continuously improving as a result of improvements in technology. The number of transistors on an integrated circuit, for example, is doubling every eighteen months, with corresponding improvements in price and performance. It is now possible to carry all of the phone traffic on Mother's Day on a single strand of fiber optic cable. New satellite technology offers the promise of "anytime, anywhere" communications.

II. Why is the NII an Administration priority?

The Administration views the NII as a powerful tool for addressing a wide range of economic and social challenges:

- The CEA estimates that telecom and related industries could grow from 9 percent of GDP to nearly 18 percent, assuming that legislation which promotes competition in this industry is passed.

- All industries are using information and communications technology to increase productivity, develop closer relationships with suppliers and customers, and respond more rapidly to changes in customer demand.

- Teachers are reporting that networking at the classroom can improve student performance by making learning more exciting. Students can communicate and collaborate with their peers and experts all over the world, take "virtual" field trips to museums and art galleries, access information through digital libraries that is ten minutes old instead of ten years old, and conduct real scientific exports using remote instruments or supercomputers.

- Information and communications technology can also be used to help achieve a wide variety of national objectives, such as expanding dissemination of government information, making the government "work better and cost less", reducing the administrative costs associated with our health care system, and improving environmental monitoring.

III. What is the government's role in promoting the NII?

The NII will be built, owned, and operated by the private sector. The government has an important role to play in the following areas:

1. **Telecommunications policy**: Our objective is to create an environment that will spur competition and private sector investment, while preserving universal service. Eventually, any company should be allowed to provide any service to any customer, and competition should replace rate regulation.

2. **Information policy**: The Administration seeks to make progress on issues such as dissemination of government information, protection of intellectual property in a networked environment, and privacy.

3. **Applications**: The Administration is promoting applications in areas such as life-long learning, health care, delivery of government services, digital libraries, telecommuting, electronic commerce, manufacturing, public safety and law enforcement, and environmental monitoring. In many cases, promoting the application requires that the government be a <u>better user</u> of information and communications technology.

4. **Research and development**: One of the Administration's highest priority research initiatives is the High Performance Computing and Communications program. This program will provide many of the technologies necessary to build and use the NII.

IV. What are the major budget (and management) issues for FY96?

1. Revenue generated from FCC spectrum auction

The Administration originally projected that granting the FCC auction authority would increase revenues by $12.6 billion over the next 5 years. It is quite likely that this estimate may have been low. Some analysts in the private sector believe that the auctions could raise as much as $20 billion. One issue that we think needs to be discussed is **whether some fraction of any revenue raised over $12.6 billion should be used to finance elements of the Administration's NII initiative**, such as the goal set by the President and the Vice President to connect all classrooms, libraries, and hospitals to the NII by the year 2000.

2. National Science and Technology Council priorities:

Several of the NSTC priorities identified in the October 24th Gibbons memo directly support the NII initiative, including:

- HPCC -- $100 million additional funding for NASA, ARPA, DoE, NSF);
- Technology for Learning Productivity -- $88 million additional funding for Education, Labor, NSF, NASA, and ARPA;
- Integrated Data Base for Environmental Change -- $15 million (several agencies);
- Digitization of federal resources ($5 million for the Smithsonian);

3. **Information Infrastructure Task Force report on NII applications**

At the request of Vice President Gore, the IITF, chaired by Secretary of Commerce Ron Brown, prepared a report for OMB on government activities to promote NII applications in digital libraries, education, electronic commerce, environmental monitoring, government services, health care, manufacturing, and transportation. Many of the "government services" applications were called for in the National Performance Review Information Technology Report.

We urge OMB to give these investments a high priority, while recognizing that it will be difficult to exempt any expenditures from cuts in the current environment.

4. **Additional investments required**:

Although the review conducted by the IITF concluded that the government is doing a great deal to promote NII applications, it also revealed some "holes" in the portfolio of government activities. We would like to have the opportunity to work with OMB to address some of these issues before the agency budgets are locked up.

5. **Use of technology for dissemination of government information and more efficient operations**

We believe that relatively small investments made in putting government information and resources "on-line" will yield tremendous benefits. Each agency should be encouraged to set aside resources for (1) making their information available to the public using the Internet and other technologies; and (2) meeting agreed-upon goals such as government-wide e-mail.

6. **Training/personnel**:

Ultimately, much of our success in the NII initiative will require attracting and retaining skilled personnel to carry it out. Agencies should be encouraged to:

- Devote sufficient resources to train employees to use new technologies, and to determine how it could be used to carry out agency missions; and

- Explore alternative mechanisms of attracting experts in information and communications technology such as IPA authority (Intergovernmental Personnel Act). This allows agencies to bring in people from non-profit organizations such as universities.

7. **Ongoing management of government programs:**

Many existing government programs have the potential to contribute substantially to the Administration's NII agenda. In many cases, the Administration doesn't have to spend any new money, it just has to target existing resources more effectively. For example:

- The Department of Education's Eisenhower Professional Development could be used to train teachers how to use technology more effectively in the classroom;

- The Department of Labor's training programs could be used to foster the development of a market for interactive courseware;

- USAID could explore the use of telecommunications technologies as a tool for development assistance;

- USDA's National Agricultural Library could take the lead on digitizing information needed by rural Americans;

- A National Wireless Network for Public Safety and Law Enforcement would allow greater cooperation between law enforcement officials at all levels.

We would like the opportunity to work with OMB to identify some of these opportunities.

THE WHITE HOUSE

WASHINGTON

October 18, 1993

MEMORANDUM FOR THE VICE PRESIDENT

FROM: Tom Kalil (National Economic Council)

THROUGH: Bo Cutter

SUBJECT: Using the "Bully Pulpit" to promote the NII

Although fiscal constraints will limit the ability of the Administration to make major new investments, leadership can be a powerful (and inexpensive) tool for promoting the Administration's vision of the National Information Infrastructure.

Below are a few concrete proposals. If you think these are worthwhile, we can develop them further and begin to discuss them with relevant agencies and outside groups.

1. **Establishing National Goals**:

The NII is such an all-encompassing and amorphous concept that many believe it is critical to set some national goals -- an equivalent of a "Man on the Moon."

One such goal might be providing all schools with some level of access to the Internet by a date certain (e.g. 1996). *Fortune* recently reported that:

> "From Harlem to Honolulu, electronic networks are sparking the kind of excitement not seen in America's classrooms since the space race."

Access to the Internet, combined with digital libraries, improvements in "user friendliness", and teacher training, could accelerate progress towards the six national education goals.

2. **NII Fellows**:

The development of the NII and its applications will require an unprecedented level of collaboration between all sectors of American society (government, industry, academia, public interest, etc.) Current examples of NII collaborative activities include Smart Valley, the Cross-Industry Working Team,

standards-setting, and policy projects of groups such as the Council on Competitiveness.

Most of the individuals participating in these projects also have full-time jobs, which can make progress slow and uneven.

The Administration could encourage companies, universities and other institutions to provide 1-2 year sabbaticals to "NII Fellows" -- professionals who would have the freedom to participate in a wide range of collaborative activities such as those mentioned above.

3. **State Information Infrastructure Trust Funds**:

Some states use any "overearnings" from local telephone companies to finance telecommunications projects with a public interest dimension -- such as distance learning.

The Administration could encourage representatives of the relevant stakeholders (e.g. states, telephone companies, consumer advocates) to draft model legislation for consideration by all 50 states.

4. **States as "Laboratories of Democracy" for the NII**

There is a vast array of NII-related activity going on at the state and local level. If each of the states would take responsibility for providing information on-line about their activities, the federal government could learn from the states and states could learn from each other.

5. **Pilot projects in the District of Columbia**:

Ideally, you should not have to travel 3,000 miles to Cupertino to see how this technology can be applied to solving community and local government needs. The White House could support local grassroots projects such as Cap Access, a Washington, D.C.-based Freenet. ARPA is already considering networking local schools in Southeast D.C.

THE WHITE HOUSE

WASHINGTON

October 18, 1993

MEMORANDUM FOR THE VICE PRESIDENT

TAK

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THE WHITE HOUSE
WASHINGTON

To: John Podesta, Tim Newell
Fr: Tom Kalil

Let me know what you think.

I like it

especially a focus on workplace issues eg. productivity + individual privacy

Podesta

Economic and Social Impact of Information Technology: (Kalil -- Draft 7/23/97)

I. Background

Information and communications technologies are having a pervasive impact on our economic, political, social, and cultural life. As we enter the 21st century, we should expect this trend to accelerate, as information technology becomes more powerful and widely available. For example:

- Our ability to store, process, and transmit information is continuing to improve at exponential rates. The semiconductor industry is already developing the technology that will allow them to put billions of transistors on a single integrated circuit. Fiber optics technology will eventually allow us to transmit all of the phone traffic on Mother's Day on a single strand of fiber.

- The Internet, which connected 2,000 computers in 1985, now connects 16 million computers, and is continuing to double in size every year.

- Satellite and wireless systems will soon providers users with "anytime, anywhere" communication.

- Remote sensing systems offering 1-meter resolution imagery of the entire planet will be commercially available in 1998.

- "Building blocks" for new applications are being developed such as digital signatures, electronic payments, shared virtual environments for collaboration, intelligent agents, audio and video-on-demand, reusable software objects, tools for discovering and retrieving information, and speech recognition.

- Applications are being developed in areas such as entertainment, electronic commerce, delivery of government services, digital libraries, health care, life-long learning, environmental monitoring, geographical information systems, "collaboratories" for scientific research, community networks, intelligent transportation systems, access to information for people with disabilities, collaborative design, crisis management, etc.

Despite the significant economic and social impacts of this technology, the federal government has not sponsored a great deal of social science research in this area. For example, there is no equivalent in the information technology area of the ESLI (Ethical, Legal and Social Implications) Research Program of the National Human Genome Research Institute. ELSI supports basic and applied research that identifies and analyzes ethical, legal and social issues surrounding human genetics research, such as: discrimination in insurance and employment based on genetic information; when and how new genetic tests should be integrated into health care services; and informed consent in genetics research

Additional support for social science research on information and communications technology -- and greater interaction between social scientists and specialists in IT -- is critical for a variety of reasons:

- As discussed above, this technology will have a pervasive impact on our economy, society, culture, and political system. Although there are plenty of pundits who are willing to speculate on the impact, much of this speculation is occurring in the absence of solid, empirical data.

- Insights derived from social science research may be able to contribute to the design of information systems. The design of groupware, for example, should be informed by an understanding of how groups of people actually share information and make decisions.

- The technology is raising a series of important, complicated policy issues, such as privacy, intellectual property rights in a digital environment, the emergence of information "haves" and "have-nots", and the impact of state and national regulation on the global Internet. Social scientists may be able to make a contribution to these ongoing debates by conducting additional empirical research on the impact of IT, but also engaging in normative discussions about what "ought" to be.

- Some of the social issues raised by information technology may be partially addressed through technical solutions. For example, the World Wide Web Consortium is developing a set of technologies known as the Platform for Privacy Preferences (P3). Using the technology, a user will be able specify his or her privacy preferences. Web sites that fall within the range of a user's preference will be accessed "seamlessly," otherwise users will be notified of a site's practices and have the opportunity to agree to those terms or other terms and continue browsing if they wish. Support for these kinds of activities could solve some of the problems raised by new technology while reducing the need for legislation or regulation.

- Many of the barriers to realizing the benefits of these new information and communications technologies are not technical, but social, political or legal. For example, deployment of telemedicine is being slowed by state-by-state licensure of doctors. The use of geographical information systems is hampered by the difficulty of sharing GIS data across organizational boundaries. Widespread use of electronic commerce will require mechanisms for creating trust between parties in an online environment. Social science research could shed light on these barriers and possible solutions.

II. Examples of research topics

Clearly, there is a large number of potential research topics in this area. Below are a few examples:

1. **Diffusion of innovation**: Companies are scrambling to develop mechanisms to share "best practices" within their firm - often using groupware and intranets. Texas Instruments, for example, found such wide disparity in the yields of their wafer fabrication sites that they launched an effort to create a "free fab" by closing the productivity gap between their world-class fabs and the manufacturing facilities that were lagging behind. These same techniques could be used to promote diffusion of socially useful innovation that is occurring at the state and local level. Does the literature on diffusion of innovation (e.g. Rogers, 1995) and computer-supported collaborative work shed any light on how to design technical and social systems that will encourage diffusion of best practices, not only within a firm, but within a community of practice?

2. **Evolution of knowledge**: Drexler argues that properly designed hypertext systems can contribute to the evolution of knowledge, by, for example: enabling authors to link pithy ideas to existing content (meaningful one-sentence publications); allowing critics to attach comments directly to a target work; enabling easier formation of intellectual communities; and allowing authors to express networks of facts and relationships. How are new tools (the Web, public annotation, collaboratories, e-print archives, etc.) changing the conduct of science, scholarly debate, and public discourse? Why are they having different impacts in different fields? What are the limitations of today's tools, and how might they be overcome?

3. **Self-regulation**: Some argue that many of the social issues associated with information and communications technology (e.g. consumer privacy) - can and should be dealt with through industry codes of conduct and self-regulation. Under what circumstances can industry self-regulation be effective?

4. **Residential broadband deployment**: Why have local telephone and cable companies curtailed their plans for deployment of broadband services to the home? What effect will current pricing and unbundling regulations have on incentives by telecommunications companies to invest in broadband networks?

5. **Network externalities**: What public and private mechanisms have proven effective in dealing with the "chicken and egg" nature of network industries?

6. **Applications**: A wide range of applications for information and communications technologies have been identified (see above). What can social science contribute to (a) evaluation of the costs and benefits of IT in these application domains; and (b) identifying barriers to the adoption of these applications?

7. **Productivity paradox**: Economists continue to argue about why increases in U.S. productivity have remained sluggish despite large private sector investments in information technology. What additional empirical research, particularly at the sectoral level - could shed light on this issue?

8. **Informed participation**: Some argue that these new information and communications technologies will allow more opportunities for "informed participation" and higher levels of transparency and disclosure in political and community affairs at the national, state and local level. For example, residents of Los Angeles were able to see 3-D visualizations of proposals for rebuilding the city after the riots before zoning changes were made. Community activists are being trained to use the Toxic Release Inventory data to discover which companies are emitting high levels of pollution in their neighborhood. More and more elected officials accept e-mail from constituents. What are the circumstances in which technology can be effective in expanding opportunities for informed participation? How will elected officials and policy-makers cope with the "information overload" problem?

9. **Changing role of key institutions**: Information and communications technologies will create both threats and opportunities for existing organizations. For example, some universities may be able to serve non-traditional students (e.g. adult students who can't attend a university full-time) by expanding distance learning services. Others may lose students and tuition to "virtual universities" or publishers that can offer courses at a lower cost per credit hour. Some have suggested that the functions of the university (administration, degree-granting, instruction, physical facility) will be "unbundled." How are key organizations responding to IT-related challenges and opportunities? If existing organizations are unable or unwilling to adapt, will new organizations emerge?

III. Current efforts

NSF is currently supporting some research in this area. The Social Dimensions of Engineering, Science, and Technology (SDEST) program, which has a budget of approximately $2.3 million per year, is supporting several projects related to information and communications, such as an evaluation of whether a community network project in Minnesota is expanding access to resources and civic participation, and a study of the costs and benefits of anonymous communication online. In addition, there is another NSF program called Information Technology and Organizations which is supporting some social science research, such as a study of the impact of IT on American households, and an analysis of the development of trust among groups working online. NSF is also sponsoring a National Research Council study to develop a research agenda on the economic and social impact of information technology.

Although both the SDEST and ITO programs are supporting some worthwhile research, more needs to be done. The SDEST program, for example, only has a budget of $2.3 million to support research on <u>all</u> issues related to both: the ethical and value dimensions of science,

engineering, and technology; and the management and direction of research, science, and technology.

IV. Elements of an initiative:

(1) **The government should establish a program focused on information and communications similar to the ESLI (Ethical, Legal and Social Implications) Research Program of the National Human Genome Research Institute.**

As noted earlier, there is no "ELSI" for information and communications. Such a program could support:

- One or more "centers" (which could be either real or virtual).
- Social science research by individual researchers.
- Inter-disciplinary teams of computer scientists and social scientists that seek to address social issues at the "protocol level" - such as the Platform for Internet Content Selection (PICS) and the Platform for Privacy Preferences (P3).
- Graduate or post-graduate fellowships for social scientists interested in exploring information and communications issues, or computer scientists interested in exploring social issues.
- Workshops and other community-building activities.

An ELSI program could also support efforts to "mediate" between policy makers and social scientists. Unfortunately, policy makers usually don't have time to pour over scholarly journals or attend conferences. These efforts might include:

- "Headlines" of relevant social science research with links to full text.
- Regularly updated, on-line literature reviews covering key topics.
- Directories of specialists in particular areas.
- Mechanisms that allow for funding of "snap" studies if policy makers are forced to make decisions under time constraints.

(2) **Certain government-supported information and communications initiatives should include a social science component**.

For example:

- The Digital Libraries Initiative has convened workshops on the social aspects of digital libraries. [See http://www.dlib.org/groups/socialaspects.html]

- One of the foci of the Next Generation Internet initiative is "quality of service" - which will not be widely deployed without a workable economic/business model.

- The President's Council of Advisers on Science and Technology is recommending that the Administration substantially expand its investment in evaluation of educational technology.

(3) **Statistical agencies (e.g. Census Bureau, BLS) should expand their collection of data in this area**.

An example of this is Census data on computer use and ownership.

(4) **Companies could agree to share market-research data with a consortium, which could be made available to social scientists.**

Although companies conduct market-research data for proprietary reasons, some of the data might be helpful for social scientists.

References:

K. Eric Drexler. "Hypertext Publishing and the Evolution of Knowledge," *Social Intelligence*, Vol. 1, No. 2, pp.87-120.

NSF Workshop on Information Technology and Organizations. See http://www.cs.colorado.edu/~laurav/workshop/itograntees.html. This page has pointers to the abstracts of the roughly 50 PIs whose work is being supported by the NSF ITO program.

Everett Rogers. Diffusion of Innovations. New York: The Free Press, 1995.

Ref. 1

CURRENT AND POTENTIAL AGENCY ROLES (10/27/93)

Below is a first draft of existing and potential agency roles in promoting the NII and its applications. This list is not intended to be exhaustive -- merely intended to demonstrate the broad impact of the NII on agency missions. Many agencies play a role in the High Performance Computing and Communications Initiative, which is helping to develop the technology for the NII.

1. Agriculture

   - Explore link between telecommunications infrastructure and rural development
   - Promote access to information through Extension Service and grass-roots activities of Americans Communicating Electronically

2. Commerce

   - Chair of IITF
   - Lead agency on telecommunications policy, spectrum management (NTIA)
   - NTIA grants program
   - Promoting interoperability and applications in manufacturing (NIST)
   - Dissemination of information (e.g. global change, economic statistics)

3. Defense

   - Technology Reinvestment Project funding many NII-related pilot projects and consortia
   - ARPA programs in scalable computing, gigabit networks, simulation, Advanced Internet, agile manufacturing, digital libraries, health care, conceptualization of NII architecture
   - Proposed program in "information appliances"
   - Responsible for National Security/Emergency Preparedness dimensions of NII, including reliability and security

- Use of purchasing power to stimulate innovation
- "Global Grid"
- Dissemination of open source information

4. Education

- Develop links between NII and our six national education goals
- Star Schools Program
- Explore role of libraries in NII (Library Services Construction Act, Higher Education Act)
- Professional development for teachers
- National strategy for K-12 networking
- Evaluation and assessment of educational technology
- Involve Chapter 1 schools in networking activities

5. Energy

- Role of National Labs: CRADAs in NII-related topics, computational test-beds
- Energy demand and supply management (e.g. role of utilities in NII)
- NII applications for Environmental Restoration and Waste Minimization
- On-line information to accelerate technology transfer process

6. Health and Human Services

- Health applications of NII: such as computer-based patient records, unified electronic claims, personal health information systems, digital libraries.
- Electronic benefits transfer
- Applications of NII for Americans with disabilities

7. Housing and Urban Development

- Role of telecommunications in empowerment zones

8. Interior

- National Biological Survey
- Environmental monitoring
- Geographic Information Systems

9. Justice

- Competition policy
- Telecommunications for law enforcement

10. Labor

- Contribution of NII to life-long learning and labor markets

11. State

- Electronic embassies
- Support for networking in developing countries

12. Transportation

- Telecommuting

13. Treasury

- Development of regulatory regime that will permit electronic commerce
- Depreciation policy
- Export financing for telecommunications equipment

14. Veterans Affairs

- Health care applications

Independent Agencies:

1. Environmental Protection Agency

   - Environmental monitoring

2. General Services Administration

   - Support for "electronic government" -- e.g. electronic commerce, inter-agency e-mail, procurement reform, etc.

3. National Aeronautics and Space Administration

   - ACTS satellite
   - Remote sensing
   - Digital libraries

4. National Science Foundation

   - Major participant in HPCC program, NREN
   - "Collaboratories" as tool for scientific research
   - Networking for universities, K-12

5. Small Business Administration

   - SBIR as a tool for encouraging small business participation in NII research
   - Small business applications of NII (e.g. electronic commerce)

The National Information Infrastructure and the Public Interest
November 12, 1993
2:00 p.m. to 4:00 p.m.
Room 476, OEOB

Agenda:

1. Introductions

2. The Administration's Perspective:

   - Administration's vision of the NII
   - Telecommunications policy and the NTIA grant program
   - Information policy
   - Opportunities for collaboration

3. The Foundation's Perspective

   - The role foundations can play
   - Reactions to Administration's view of collaboration

4. Next Steps

   - Improving communication between foundations and Administration
   - Discussion of specific collaborative efforts

The NII and the Public Interest
Discussion Paper for November 12 meeting

1. The Information Technology Revolution

The Clinton-Gore Administration believes that the emerging "National Information Infrastructure" will have an impact on virtually every impact on America's economic and social life. The NII will enable Americans to access information and communicate with each other using voice, video, data, or images at any time, anywhere. The rate of technological change and the rapid diffusion of that technology is astounding:

- Productivity in the information technology sector is increasing at a rate of at least 25 to 30 percent per year, as opposed to the 1-2 percent rate of the U.S. economy as a whole.

- By the year 2000, U.S. companies will be able to manufacture semiconductors with hundreds of millions of transistors on a finger-nail-sized piece of silicon, leading to the advent of a "supercomputer on a chip."

- U.S. companies are developing fiber optic technology capable of transmitting terabits (trillions of bits) of information per second.

- The Internet now connects 10-20 million users and is growing at a rate of 7 percent per month.

The development of the NII is a top Administration priority. On September 15, 1993, Vice President Gore and Secretary of Commerce Ron Brown issued an Agenda for Action, providing nine core principles to guide the development of the National Information Infrastructure. The Administration recognizes the potential of the NII for increasing economic growth, empowering citizens, improving democratic participation, and, generally, enhancing the quality of life. In the broadest sense, these nine principles are intended to promote greater commerce as well as citizenship.

2. Civic Applications of the NII

Although the media has focused on entertainment and home-shopping as the major applications of the "information superhighway", the Administration believes that the NII can also be used as a tool for tackling some of our toughest economic and social challenges, including:

- Improving our education and training system;

- Reducing the administrative costs associated with our health care system while improving access and quality;

- Increasing public access to government information;

- Fostering economic development in distressed rural and urban areas;

- Monitoring the environment;

- Expanding opportunities for Americans with disabilities through assistive technologies;

- Energy efficiency (telecommuting, demand-side management);

- Promoting participatory democracy at all levels of government; and

- "Reinventing" government and improving the delivery of government services.

3. Potential areas for collaboration

The Administration firmly believes that the success of the NII hinges on developing meaningful collaboration with different sectors, including business, philanthropy, nonprofits, and others. The Administration is eager to develop a partnership with the philanthropic community, and believes that such a partnership has advantages for both parties.

For purposes of discussion, we have suggested some possible areas for collaboration, including:

1. **Support for NII pilot projects** in areas such as education, health care, libraries, civic networking, sustainable development, community involvement in government decision-making (e.g., electronic rulemaking, town hall meetings on substantive issue areas, etc.) and delivery of government services and information, possibly in partnership with the federal government and other stakeholders.

2. **Research** (broadly defined) on the NII and its applications:

   - Policy development on issues such as universal service and privacy;

   - Evaluation and assessment of pilot projects; and

- Strategies for "scaling up" pilot projects to the national level.

3. Sponsorship of **clearinghouses** for state and local NII initiatives so that practioners and policy-makers can learn from one another.

4. **Training** to enable end-user communities to use these technologies.

5. Formation of an **NII Foundation** to enable the foundation community to pool their resources.

6. **Distribution** of donated hardware.

7. Support for **NII Fellows** to increase the ability of nonprofit organizations to participate in the development of the NII.

The Administration is not interested in attempting to control the types of activities that foundations fund, nor the types of grantees that foundations support. Rather, we are more interested in developing an ongoing communications channel that may lead to improved planning for complimentary initiatives. This could result in more strategic use of resources.

Potential next steps:

We hope that our November 12 meeting serves as a first step in developing a long-term collaboration in fulfilling the ultimate goals of the NII. We would suggest the following next steps:

1. The foundations could establish a mechanism for the foundation community to communicate with one another and with the Administration around NII issues. The Administration would be prepared to identify a liaison to work with a foundation-led liaison in order to pursue more defined agendas. Such a liaison could serve as a clearinghouse vehicle for sharing activities being pursued by each partner.

2. Further meetings between the Administration and the foundations on more specific topics (e.g. education, sustainable development).

3. Selection of topics for pilot projects.

INFORMATION INFRASTRUCTURE TASK FORCE

MEETING MATERIALS
October 27, 1993

A. Agenda

B. IITF Introduction

C. NII Agenda for Action

D. Telecommunications Policy Committee

1. Proposed Charter
2. Membership List
3. Work Plan
4. Private Sector Outreach Plan
5. Summary of Activities to Date

E. Applications Committee

1. Proposed Charter
2. Membership List
3. Work Plan
4. Private Sector Outreach Plan
5. Summary of Activities to Date

F. Information Policy Committee

1. Proposed Charter
2. Membership List
3. Work Plan
4. Private Sector Outreach Plan
5. Summary of Activities to Date

G. NII Advisory Council Overview,
Executive Order

H. *National Performance Review: Reengineering Through the Use of Information Technology,* Press Release and Draft Report Summary

INFORMATION INFRASTRUCTURE TASK FORCE

VICE PRESIDENT'S CEREMONIAL OFFICE
OLD EXECUTIVE OFFICE BUILDING
October 27, 1993

Agenda

1:00 p.m.	Opening Remarks	Vice President Albert Gore
1:05 p.m.	IITF Overview	Ronald H. Brown, Secretary of Commerce
1:15 p.m.	IITF Committee Reports (7 minutes each)	Larry Irving, Chair, Telecommunications Policy Committee
		Dave Barram, Deputy Secretary of Commerce (IITF Applications Committee)
		Sally Katzen, Chair, IITF Information Policy Committee
1:35 p.m.	Discussion, Approval of Committees' charters, plans	Task Force
1:45 p.m.	Discussion of agency activities, responsibilities in promoting development of the NII	Task Force
2:00 p.m.	Adjourn	

THE INFORMATION INFRASTRUCTURE TASK FORCE

MISSION

The White House formed the Information Infrastructure Task Force (IITF) to articulate and implement the Administration's vision for the NII. The task force consists of high-level representatives of the Federal agencies that play a major role in the development and application of information technologies. Working together with the private sector, the participating agencies will develop comprehensive telecommunications and information policies that best meet the needs of both the agencies and the country. By helping build consensus on thorny policy issues, the IITF will enable agencies to make and implement policy more quickly and effectively.

A high-level Advisory Council on the National Information Infrastructure has been established by Executive Order to provide advice to the IITF. It will consist of representatives of the many different stakeholders in the NII, including industry, labor, academia, public interest groups, and state and local governments. The Secretary of Commerce will appoint the 25 members of the advisory committee.

The IITF will work closely with the High Performance Computing, Communications, and Information Technology (HPCCIT) Subcommittee of the Federal Coordinating Council for Science, Engineering, and Technology (FCCSET), which is chaired by the White House Office of Science and Technology Policy. The HPCCIT Subcommittee provides technical advice to the IITF and coordinates Federal research activities that support development of the National Information Infrastructure.

MEMBERSHIP

All the key agencies involved in telecommunications and information policy are represented on the task force. The task force operates under the aegis of the White House Office of Science and Technology Policy and the National Economic Council. Ron Brown, the Secretary of Commerce, chairs the IITF, and much of the staff work for the task force will be done by the National Telecommunications and Information Administration (NTIA) of the Department of Commerce.

STRUCTURE

To date, three committees of the IITF have been established:

(1) **Telecommunications Policy Committee**, which will formulate a consistent Administration position on key telecommunications issues, is chaired by Larry Irving, head of the National Telecommunications and Information Administration of the Department of Commerce. Recently, the Committee created:

> **The Working Group on Universal Service**, which will work to ensure that all Americans have access to and can enjoy the benefits of the National Information Infrastructure.

(2) **Information Policy Committee**, which is addressing critical information policy issues that must be addressed if the National Information Infrastructure is to be fully deployed and utilized. Sally Katzen, head of the Office of Information and Regulatory Affairs at the Office of Management and Budget (OMB), chairs the Committee. The Committee has created three working groups:

> **The Working Group on Intellectual Property Rights**, to develop proposals for protecting copyrights and other IPR in an electronic world. Bruce Lehman, head of the Patent and Trademark Office of the Department of Commerce, chairs this group.
>
> **The Working Group on Privacy**, to design Administration policies to protect individual privacy despite the rapid increase in the collection, storage, and dissemination of personal data in electronic form. It is chaired by Pat Faley, Acting Director of the Office of Consumer Affairs, Department of Health and Human Services.
>
> **The Working Group on Government Information** focuses on ways to promote dissemination of government data in electronic form. Bruce McConnell, of the OMB's Information Policy Branch, Office of Information and Regulatory Affairs, chairs this group.

(3) **Applications Committee**, which coordinates Administration efforts to develop, demonstrate, and promote applications of information technology in manufacturing, education, health care, government services, libraries, and other areas. This group works

closely with the High-Performance Computing and Communications Program, which is funding development of new applications technologies, to determine how Administration policies can best promote the deployment of such technologies. Arati Prabhakar, Director of the National Institute of Standards and Technology, chairs the committee. This committee is responsible for implementing many of the recommendations of the Vice President's National Performance Review that pertain to information technology. So far, the Committee has created one working group:

> **The Working Group on Government Information Technology Services (GITS)** will coordinate efforts to improve the application of information technology by Federal agencies.

SUMMARY OF ACTIVITIES

COMMITTEE ON TELECOMMUNICATIONS POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

MEETINGS

Telecommunications Policy Committee Meetings have been held on August 6, September 8, and October 6.

ACTIVITIES UNDERTAKEN

The Telecommunications Policy Committee activities to date have included:

- Participating in the drafting, development and review of the National Information Infrastructure Agenda for Action

- Distributing the Agenda for Action, including electronically through the Internet, the NTIA Bulletin Board, the Department of Commerce Economic Bulletin Board and Fedworld.

- Establishing Subcommittees on:
  - Universal Service
  - International Policy

- Contacting State and Local Government:
  - Annenberg Conference
  - Universal Service Regional Hearings

COMMITTEE PAPERS/REPORTS

The Telecommunications Policy Committee is in the process of drafting issue papers addressing S. 1086 legislation, universal service and network reliability.

CHARTER

COMMITTEE ON TELECOMMUNICATIONS POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

ESTABLISHMENT

The Secretary of Commerce, as Chairperson of the Information Infrastructure Task Force (Task Force), hereby establishes the Telecommunications Policy Committee (TPC) of the Task Force.

OBJECTIVES AND DUTIES

The TPC will consider, on behalf of the Task Force, telecommunications policy matters related to the development of the National Information Infrastructure (NII), including, but not limited to:

- A vision for the evolution of the NII;
- The impact of current and proposed regulatory and legislative regimes on the evolution of the NII;
- National strategies for maximizing the benefits of the NII, as measured by economic growth, increased productivity, job creation, improved government and social services, and enhanced quality of life;
- National strategies for promoting interconnection and interoperability of communications networks;
- Universal service and universal access;
- Network reliability;
- International issues associated with the NII;
- Coordination with state and local governments; and
- Spectrum policy issues.

The TPC will draw on the expertise of its members and other sources in order to provide advice and make recommendations to the Task Force. In this role, it is anticipated that the TPC will take into account the current technological, marketplace, and regulatory developments in assessing government telecommunications policies, proposals for changes to such policies, and other factors within its jurisdiction.

The TPC Chairperson may, from time to time, invite experts to submit information to the TPC and may form subcommittees or working groups of the TPC to review specific issues.

MEMBERS AND CHAIRPERSON

The TPC will consist of representatives of federal departments and agencies with an interest in its objectives.

The Chairperson of the TPC will be the Assistant Secretary of Commerce for Communications and Information, who is statutorily responsible for the formulation of telecommunications policy within the Executive Branch.

Members will serve at the discretion of the heads of their respective departments or agencies.

ADMINISTRATIVE PROVISIONS

The TPC Chairperson will report periodically to the Task Force on the activities of the TPC, its subcommittees, and working groups (if any).

The TPC will meet no fewer than four times a year, except that additional meetings may be called as deemed desirable by the Chairperson.

The Office of the Assistant Secretary of Commerce for Communications and Information will provide staff support for the TPC.

Committee on Telecommunications Policy Information Infrastructure Task Force Participants As of July 23, 1993			
Name	**Agency**	**Telecommunications Issues**	**Voice/Fax/E-mail** (202) unless noted otherwise
Larry Irving	NTIA		v-482-1840 f-482-1635
Michael Nelson	OSTP		v-395-6175 f-395-4155
Tom Kalil	NEC		v-456-2801 f-456-2223
Keith Hahn	NSC		v-395-6923 f-395-1185
Robert Pepper	FCC	all issues	v-653-5940 f-632-1587
Carol Darr	Commerce		v-482-4772 f-482-0042
John Gilsenan	State		v-647-2592 f-647-7407
Norman Glick	NSA		v-301/975-2822 f-301/948-1784 nsglick@afterlife.ncsc.mil
Jim Burrows	NIST		v-301/975-2822 f-301/948-1784
Tom Pykes	DOC/NOAA	Most interested: Standards to ensure interconnection/ interoperability Reliability Security Universal Service	v-606-4207 f-234-4672
Melvyn Ciment	NSF		v-357-7936 f-357-0320

Committee on Telecommunications Policy Information Infrastructure Task Force Participants As of July 23, 1993			
Name	**Agency**	**Telecommunications Issues**	**Voice/Fax/E-mail** (202) unless noted otherwise
Rich Rosen	DOJ-Antitrust	Most Interested: MFJ Reform Cable/telco crossownership Local exchange competition Long distance competition/deregulation Global market access Spectrum management/competitive bidding	v-514-5621 f-514-6381
Curt Jernigan	DOJ		v-514-5621 f-514-6381
David Lytel	OSTP		v-395-6175 f-395-4155 dlytel@ostp.eop.gov
Dan Grulke	DOD/OASD(C 3I)		v-703/695-7181 f-703/693-7146 grulkedw@mailhost.acq.osd.mil
Renita Lawrence	NASA HQ	Most interested: Universal Service Long distance competition/deregulation MFJ reform Reliability Security Somewhat interested: Cable/telco crossownership Local exchange competition Global market access	v-358-4785 f-358-3520
Sandra Bates	NASA HQ		v-358-4782 f-358-3520
Don Hardesty	GSA/IRM S		v-606-9000 f-208-5555
Larry Williams	NTIA		v-482-1551 f-482-1635

Committee on Telecommunications Policy Information Infrastructure Task Force Participants As of July 23, 1993			
Name	**Agency**	**Telecommunications Issues**	**Voice/Fax/E-mail** (202) unless noted otherwise
Bill Maher	NTIA		v-482-1880 f-482-6173
Tony Mocenigo	DOC/ITA		v-482-4466 f-482-5834
April Kamey	FTS2000/GSA		v-208-7493 f-501-2772
Bob Miller	DOE	Most interested: Cable/telco crossownership Universal service Local exchange competition MFJ reform Long distance competition/deregulation Somewhat interested/keep informed: Joint network planning Standards to ensure interconnection/ interoperation	v-301/903-4298 f-301/903-4101
Diane Fountaine	DOD		v-703/695-7181 f-703/693-7146
Carl W. Smith	DISA		v-703/692-8457 f-703/746-7258
Kenneth Flamm	DOD		v-703/697-4172
Joe Stiglitz	CEA		v-395-5036 f-395-6947
Jonas Neihardt	OMB		v-395-4814 f-395-7285
Jonathan Baker	CEA		v-395-5614 f-395-6947
Alfred Lee	NTIA		v-482-1880 f-482-6173

Committee on Telecommunications Policy Information Infrastructure Task Force Participants As of July 23, 1993			
Name	**Agency**	**Telecommunications Issues**	**Voice/Fax/E-mail** (202) unless noted otherwise
William Horne	State (NASA/___)		v-647-5820 f-647-7407
Marc Austin	State/CIP		v-647-5205 f-647-5957
Tom Bunt	NSA		v-301/688-7819
Mike Corrigan	GSA-IRMS	Most Interested: Local Exchange Competition Cable/telco crossownership Universal Service MFJ Reform	v-(202) 501-0308 f-(202) 208-5555
Roger Callahan	NSA		v-410-684-7079 f-410-684-7340
Donald Scott	GSA	Most interested: Long distance competition/deregulation Network reliability Security	

WORK PLAN

COMMITTEE ON TELECOMMUNICATIONS POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

- Develop an ongoing dialogue with the private sector through public hearings on universal service and international policy issues
- Establish NII electronic information services to enable the rapid dissemination of information concerning NII policy issues, status and progress. These services will be accessable through the Internet and by dial-up lines.
- Publish the NII Grant Program Rules and Regulations
- Undertake private sector outreach and develop a small business outreach program
- Participate in the Annenberg Forum Conference of Federal, State and Local Regulators
- Assist in the development of Congressional testimony on NII issues
  - S. 1086
- Develop a Six Month Progress Report

PRIVATE SECTOR OUTREACH PLAN

COMMITTEE ON TELECOMMUNICATIONS POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

The following activities have been undertaken or are planned with regard to the National Information Infrastructure initiative:

U.S. ADVISORY COUNCIL ON THE NATIONAL INFORMATION INFRASTRUCTURE

Activities Undertaken

- Nominations from nearly 200 associations and organizations were solicited for the twenty-five member private sector advisory council. Over 400 nominations have been received to date and submitted to Secretary Brown for consideration.

Activities Planned

- Send letter of acknowledgement to nominating organizations confirming receipt of their nominations.
- Assist in processing the Advisory Council members.
- Upon selection of the Advisory Council, send letter to nominating organizations notifying them of the selection.
- Schedule and plan the first meeting of the Advisory Council.
- Establish subcommittees and working groups of the Advisory Council in order to broaden private and public input on specific issues such as universal service, international, etc.

DISSEMINATION OF INFORMATION

Activities Undertaken

- On September 15, mailed the "National Information Infrastructure: Agenda for Action" to nearly 300 associations and interested individuals. Also, responded to an additional 700 immediate requests for the report following its release.
- Distributed the "Agenda for Action" via the Federal Register [Vol. 58, Sept. 21, 1993, p. 49025], and created a mechanism for receiving requests for the report and public comments.
- Distributed the "Agenda for Action" electronically via the Internet, NTIA Bulletin Board and the Department of Commerce Economic Bulletin Board.
- Created a database of nearly 800 associations and interested individuals for future NII mailings.
- Created NII Grant Program information mailing list.

Activities Planned

- Establish a Public Reference Room on the NII to be housed within NTIA.
- Publish the rules and regulations governing the NII Grant Program in the Federal Register in order to solicit public comment.
- Continue to respond to daily requests for the "Agenda for Action" and update NII mailing lists.
- Distribute future NII reports and general information electronically and via the Federal Register.

PUBLIC MEETINGS AND HEARINGS

Activities Undertaken

- On September 24, the Department of Commerce held a private sector briefing and discussion on the "Agenda for Action." Nearly 400 people attended representing a wide range of private and public sector interests.

- On September 28, NTIA co-sponsored an Internet demonstration with Sun Microsystems at the National Press Building. The demonstration included basic and advanced Internet applications, and a live teleconference over workstations in three remote locations. The demonstration was available to the public via satellite in the U.S., Europe, Canada and Latin America.

- Meetings have been held (by NTIA) with the following private sector groups to discuss telecommunications policy issues: National Cable Television Association; Unity Coalition (representing AT&T, MCI, Independent Data Communications Manufacturers Association, Newspaper Association of America, National Association of State Utility Consumer Advocates, Consumer Federation of America, Electronic Publishing Group, National Newspaper Association, and the National Burglar and Fire Alarm Association).

Activities Planned

- Continue meetings with private sector and public interest groups to discuss telecommunications policy issues, including the National Association of Telecommunications Officers and Administrators, and the Alliance for Public Technology.

- NTIA will plan a series of public hearings on universal service issues relating to the NII. The hearings will be held around the country with the first hearing taking place in December. Outreach will involve multiple sectors, including local government, business, public interest, academia, and minority communities.

- On November 19, NTIA will co-sponsor a summit meeting with state and local officials relating to information infrastructure issues. The meeting is being co-sponsored with The Annenberg Washington Program and will be held in Washington, D.C.

- Identify appropriate forums for presentation of the Administration's goals and principles for an advanced national information infrastructure. To date, Assistant Secretary Larry Irving is confirmed to address, or participate in, the following forums:

    - Fifth Annual Telecommunications Policy Lecture Series, New York Law School (Oct. 27)
    - Los Angeles Telecommunications Officers meeting (Oct. 29)

- Berkeley Roundtable on the International Economy "Conference on the Administration Technology Policy" (Nov. 4-5)
- Broadcasting/Cable Interface (Nov. 9)
- Columbia Business School (Nov. 15)
- BYTE's COMDEX/Fall Executive Breakfast (Nov. 16)
- Annenberg Regulators Conference (Nov. 19)
- Western Cable Show (Dec. 2)
- ComNet '94, "Washington Scene: The Year Ahead in Telecommunications" (Jan. 26)
- MIT Seminar Series (March 8)

In addition, NTIA will be represented at the following forums:

- California Foundation on the Environment and Economy Telecommunications Roundtable Conference (Oct. 25-26)
- Communications Managers Association Telecom '93 (Nov. 2)
- Alliance for Public Technology "Public Policy of the Electronic Highway" (Nov. 4-5)
- Association for Local Telecommunications Services (Nov. 5)
- Annenberg Washington Program "The NII: Communications and Computing Converging or Colliding?"
- TEL-ED '93 Gobal Connections 2nd International Symposium on Telecommunications In Education (Nov. 13)
- IEEE Telcom Conference on the NII Initiative (Nov. 17)
- National Association of Regulatory Utility Commissioners' "Panel on the NII: Building for the Next Century" (Nov. 17)

"20/20 VISION" PROJECT

Activities Undertaken

- Thirty-two distinguished experts were invited to submit written comments on the "Agenda for Action" and the whole NII initiative in order to expand the policy debate and generate further ideas for the successful development of the NII. Experts invited to participate include: Lewis Branscomb; Vincent Cerf; Jeffrey Chester; Michael Dertouzos; Craig Fields; Charles M. Firestone; Francis D. Fisher; Henry Geller; William Gibson; George Gilder; Allen Hammond, IV; Peter Huber; Heather E.

Hudson; Brian Kahin; Alfred Kahn; Robert Kahn; Mitchell Kapor; C. Everett Koop; Charles McClure; Arthur Miller; David Myers; Nicholas Negroponte; W. Russell Neuman; Eli. M. Noam; Barbara O'Conner; Henry H. Perritt; Michael E. Porter; Wilhelmina M. Reuben-Cooke; Andrew Schwartzman; J. Clay Smith; Lester Thurow; Harvey Zuckman.

Activities Planned

- Publish the "20/20 Vision" volume of compiled papers by February 1, 1994

CHARTER

COMMITTEE ON APPLICATIONS
INFORMATION INFRASTRUCTURE TASK FORCE

The Committee on Applications coordinates Administration efforts to develop, demonstrate, and promote applications of information technology in manufacturing, education, health care, government services, libraries, and other areas. This committee works closely with the High-Performance Computing and Communications Program, which is coordinating development of new applications technologies, to determine how Administration policies can best promote the deployment of such technologies. This committee is responsible for implementing many of the recommendations of the Vice President's National Performance Review that pertain to information technology.

Committee on Applications
Information Infrastructure Task Force
Participants As of 10/25/93

Name	Title	Organization Name
Duane Adams	Deputy Director	ARPA
Gary Bachula	Deputy Under Secretary for Technology Admin	DOC/TA
Joseph Baldino	Chief of the Integration Analysis Office	DOD/DIA
Lida Barrett	Sen. Staff Assoc for Plan Coord & Ext Aff	NSF
Herb Becker	Director, Information Technology Services	Library of Congress
James Burrows	Director, Computer Systems Laboratory	NIST
Roger Callahan	Chief, Office of Key Management	NSA/ISSO
John Cavallini	Act. Assoc Director, Ofc of Scientific Computing	DOE
Chuck Chamberlain	Information Technology Planner	USPS
Eliot Christian	Computer Specialist, Ofc of Management Services	U.S. Geological Survey
Ernest Daddio	Physical Scientist	NOAA
Bruce Don	Senior Analyst	CTI/RAND
Steve Drezner	Director	CTI/RAND
J. Michael Fitzmaurice	Director, Ofc of Science & Data Development	HHS/AHCPR
Jim Flyzik	Director, Ofc of Public Communications Management	Treasury
Howard Frank		ARPA
Cita Furlani	Senior Program Analyst	NIST
Tom Giammo	Asst. Commissioner for Information Systems	DOC/PTO
Norman Glick	Senior Computer Scientist	NSA/Ofc of Chief Scientist
Jim Gray	Washington Representative	Tenn Valley Authority
Mary Clare Gumbleton	Confidential Assistant	ED/IIA

Committee on Applications Information Infrastructure Task Force Participants As of 10/25/93		
Name	**Title**	**Organization Name**
Lee Hammarstrom	Manager for Joint Space Systems Tech Program	DOD/DPR&E/AT
Steve Heller	Research Scientist	USDA/ARS
Lee Holcomb	Dir, High Perf Computing & Communications Ofc	NASA
Jonathan Hoyt	Spec Asst to Spec Advisor for Educational Tech	ED
Paul Hunter	Program Manager, Basic Research & Education	NASA/HPCC
Steve Isakowitz	OMB HPCC Coordinator	DOE
Charles Kalina	Executive Secretary for HPCCIT	HPCC/NCO
Don Lindberg	Director, Nat'l Coordination Ofc for HPCC	HPCC/NCO
Len Long	Principal Investigator	USDOT/RSPA/Volpe
David Lytel	Consultant	OSTP
John Mack	Dir, Africa Latin-Amer & Mid East Tele & Trade Dev	Dept. of State
Denise Michel	Senior Policy Advisor to the Secretary	DOC/OSEC
Dave Nelson	Acting Deputy Director	DOE
Michael Nelson	Special Assistant, Information Technology	OSTP
Cherie Nichols	Chief, Planning, Evaluation & Analysis Branch	NIH/Nat'l Cancer Inst
Joan Novak	Branch Chief of Modelling Systems Analysis Branch	EPA
Gregory Parham	Head, Distance Information Technology	USDA/Extension
Merrell Patrick	HPCC Coordinator	NSF
Eugene Phillip	Chief of Development & Applications	NCS-NP
Arati Prabhakar	Director	NIST

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DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
001. list	re: Committee on Applications Information Infrastructure Task Force [partial] (1 page)	10/25/1993	P3/b(3)

COLLECTION:
Clinton Presidential Records
National Economic Council
Thomas Kalil
OA/Box Number: 24530

FOLDER TITLE:
National Information Infrastructure [Folder 2] [2]

2019-0203-F
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RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

P1 National Security Classified Information [(a)(1) of the PRA]
P2 Relating to the appointment to Federal office [(a)(2) of the PRA]
P3 Release would violate a Federal statute [(a)(3) of the PRA]
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P5 Release would disclose confidential advice between the President and his advisors, or between such advisors [a)(5) of the PRA]
P6 Release would constitute a clearly unwarranted invasion of personal privacy [(a)(6) of the PRA]

C. Closed in accordance with restrictions contained in donor's deed of gift.
PRM. Personal record misfile defined in accordance with 44 U.S.C. 2201(3).
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Committee on Applications Information Infrastructure Task Force Participants As of 10/25/93		
Name	**Title**	**Organization Name**
Thomas Pyke	Dir for High Performance Computing & Communications	NOAA/HPCC
Bill Richardson	Dep Dir for Joint Space Systems Technology Program	DOD
Linda Roberts	Special Advisor for Education Technology	ED
Ken Rogers	Director, Information Product Development	DOC/ESA
Charles Rush	Chief Scientist	DOC/NTIA
Nora Sabelli		NSF
Jasmeet Seehra	Management Analyst	OMB/OIRA
(b)(3)		
Gerry Trull		DOD/NCS
G. Martin Wagner	Deputy Commissioner, Info Resources Mgt Service	GSA
Janet Wright	Head, DC Reference Center	USDA
Sherri de Coronado	Prog Anal, Planning, Evaluation & Analysis Branch	NIH/Nat'l Cancer Inst.

[001]

WORK PLAN

COMMITTEE ON APPLICATIONS
INFORMATION INFRASTRUCTURE TASK FORCE
October 1993

BACKGROUND

Why Are Applications Important?

Without compelling, useful, reliable applications, there will be no reason to use the NII -- indeed, no reason to build it. As a major user and beneficiary of the NII, government can help provide the applications "pull" that will make the NII worthwhile. Issues such as government regulations, advanced technologies, and universal access are brought into focus by the actual use of the NII through applications. The government is looking at strategic NII applications in such broad areas as health care, education, manufacturing, libraries, telecommuting, electronic commerce, environmental monitoring, and government services.

What are the Government's Roles?

If most applications will be developed by the private sector, what roles should the government play? Basically there are two:

- Using NII to provide government information and services in new and better ways.
- Accelerating national use of NII by helping to demonstrate the power of new applications through pilot projects.

In carrying out these two roles, the government will need to coordinate its efforts across its various agencies and remove obstacles that stand in the way of NII applications development. In addition, it must conduct a lively and in depth discussion (within the government and with the private sector) on key issues such as the development of standards to permit seamless operation, providing universal access at affordable cost, and ensuring the security and integrity of information.

Why A Committee on Applications?

To carry out this coordination, and to enable a meaningful discussion of the issues, the Administration has created a Committee on Applications as part of the Information Infrastructure Task Force. It brings together people from every corner of the government (technical specialists, educators, budget experts) and invites strong participation from private individuals and businesses. Too often, government information technology is developed like stovepipes -- narrow, focussed on one particular task or mission without regard to similar tasks and applications. The government can set an example in providing seamless, integrated applications. The committee's work will help ensure that applications and applications enablers are developed in such a way that both government and private applications can rely on the NII and will work in an orchestrated manner.

COMMITTEE CHARTER

The Committee on Applications coordinates Administration efforts to develop, demonstrate, and promote applications of information technology in manufacturing, education, health care, government services, libraries, and other areas. This committee works closely with the High-Performance Computing and Communications Program, which is coordinating development of new applications technologies, to determine how Administration policies can best promote the deployment of such technologies. This committee is responsible for implementing many of the recommendations of the Vice President's National Performance Review that pertain to information technology.

STRATEGY

- Identify the various federal NII application projects as well as the inter-agency groups managing and coordinating these projects.
- Develop a vision of what national aspirations for NII applications can be achieved in the long term.
- Identify critical issues as well as gaps or overlaps so that operational agencies and inter-agency groups can propose implementing legislation, funding, or other enablers.
- Develop a picture of what compelling NII applications can be demonstrated by 1994.

- Identify private sector groups of NII stakeholders to provide guidance on pilot (demonstration) projects. Identify inter-agency groups to provide leadership in implementing application projects for the government.
- Convey a clear picture to the nation of federal NII applications through public education and outreach.

MILESTONES

- Identify and collect descriptions of federal projects (both those for public demonstration and those for government deployment). Make the results available on-line for wide availability by October 30, 1993. Develop a report that summarizes the descriptions collected in this inventory by January 31, 1994.
- Identify the inter-agency groups managing and coordinating federal applications projects. Report on the role of these groups by January 31, 1994.
- Develop a report that highlights the most important issues to be addressed in the deployment of applications which will rely on the NII. Deliver this report to the Telecommunications Policy Committee and the Information Policy Committee by November 30, 1993 and use to facilitate a public dialog on the issues.
- Establish the Working Group on Governmental Information Technology Services (GITS) by January 1, 1994. This Working Group is responsible for:
    - Developing a strategic vision for using information resources within the federal government and an implementation plan for the recommendations of the National Performance Review (NPR).
    - Developing strategies to improve leadership and planning on information resource matters within federal agencies, and for sharing information with state and local governments as well as the private sector.
    - Setting priorities for federal information resources management and assessing adequacy of results.
- Develop an action plan to engage the private sector groups as advisors, coordinators, and implementors.
    - Identify private sector groups with interests in each application area by December 15, 1994.

- Develop an ongoing dialogue with private sector groups through public workshops, symposiums, or hearings.
- Establish an electronic forum to encourage government and private sector contributions and comments about applications projects by January 31, 1994.

PRIVATE SECTOR OUTREACH PLAN

COMMITTEE ON APPLICATIONS
INFORMATION INFRASTRUCTURE TASK FORCE
October 1993

Outreach is a high priority to the Committee on Applications. Open communication about what we are doing is inherent in the Committee's Work Plan. This includes private sector input, from industry and the public, from developers and users of the NII. Specifically, the Committee's thinking includes the following key approaches:

- providing open access to the inventory of government NII applications projects and the inventory of related inter-agency groups
- developing workshops and symposia to discuss specific issues
- facilitating public education, i.e., structured information to help the public understand how to utilize NII applications
- identifying key private sector actors for each application area
- collecting and cataloging private sector input
- regarding and allowing for private sector input in the deployment of NII applications
- sharing information about Committee on Applications activities, e.g., newsgroups, bulletin boards, gopher service access
- inviting papers on selected topics
- publicizing committee reports and encourage comments from the private sector

Several of these have already begun:

- initial identification of key private sector actors/stakeholders as part of the inventory process
- development of a prototype electronic system to be used to share results with the public
- begun process of speaking in public forums to describe committee activities as the initial steps in a concerted and focused program of presentations to inform the public

SUMMARY OF ACTIVITIES

COMMITTEE ON APPLICATIONS
INFORMATION INFRASTRUCTURE TASK FORCE
October 1993

MEETINGS

Meetings were held on July 21, August 20, and September 27. The next meeting of the full committee will be on November 19, 1993.

INVENTORY

The committee is currently carrying out its initial task as defined in the work plan: to identify federal projects that apply the technologies of the NII. The projects fall into two categories: 1) government services and information and 2) pilot projects designed to trigger full scale implementation by others (state/local governments or industry), such as demo projects in health care, education, manufacturing, libraries, environmental monitoring, telecommuting, electronic commerce or government services.

The initial collection of over 90 projects from 12 government agencies has been summarized and distributed to committee members to assist in identifying synergistic efforts. Project information is still being contributed by additional agencies. The summary will be updated and distributed at the November meeting.

Included in the inventory are key private sector actors for each project. In addition the committee has initiated the development of a similar inventory of other inter-agency groups coordinating NII-type projects.

An e-mail "exploder" has been deployed for testing by committee members. In addition, the inventory information is available in electronic form via the Internet. A public electronic forum will be established to enable private sector contributions and comments about government applications projects.

ISSUES REPORT

The committee is developing a report that highlights the most important issues that must be addressed in order to promote the deployment of applications utilizing the National Information Infrastructure. The five most important issues for each application area -- Health Care, Manufacturing, Education, Libraries, Environmental Monitoring, Telecommuting, Electronic Commerce, and Government Services -- were collected from committee members and summarized. A final draft will be reviewed by the committee at its November meeting. Although this report is to be initially directed at the two policy committees of the IITF, it will also be made available to the public.

ESTABLISH GITS WORKING GROUP

Steps have been taken to establish a Working Group on Governmental Information Technology Services as called for in the "Agenda for Action" and the National Performance Review.

CHARTER

COMMITTEE ON INFORMATION POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

The task of the Information Policy Committee is to identify and suggest the resolution of issues central to the success of the National Information Infrastructure, particularly those issues which may serve as barriers to the utilization of the infrastructure as the Nation's primary communications channel.

The Committee has identified three key areas requiring work: protecting intellectual property in an electronic communications environment; ensuring the privacy of personal information stored and transmitted electronically; and maximizing the dissemination of government information to the public. The respective charters of the three groups working on these issues follows.

In addition the Committee has identified two cross-cutting areas that require coordination across the IITF's Committee's and Working Groups. These areas, security and government applications, are discussed in the Committee's Work Plan.

WORKING GROUP ON INTELLECTUAL PROPERTY

The Working Group on Intellectual Property will develop an appropriate balance among the rights of copyright owners users in the development of the Information Infrastructure. It consider the impact of technical matters and standards to ensure that these systems will be able to intercommunicate. Additionally, it will consider how traditional concepts such as fair use permitted by the copyright law will apply in this environment.

It will develop a system that provides appropriate economic incentives for the inclusion of the full range of entertainment and information products in the National Information Infrastructure. This will include developing standards for identification of copyright ownership of information products in an electronic system; and the efficient licensing and identification of and, where appropriate, the payment of royalties for copyrighted information products delivered over an electronic information system. It may also require strengthening of the copyright laws to prevent the proliferation of piracy and protect the integrity of intellectual property, while ensuring broad access to information. A program to increase awareness of intellectual property will also be developed.

WORKING GROUP ON PRIVACY

Opinion surveys show a high level of public concern about a lack of control over personal information. In an electronic environment, routine activities such as working, learning, shopping and playing can leave an electronic record. In order to build confidence in the use of the information superhighway, it is necessary to examine whether existing laws, practices and policies will adequately protect individual privacy.

The Working Group on Privacy's charter, therefore, is to determine the likely effect of the implementation of a national information infrastructure on individual privacy and to recommend actions, including the possibility of specific legislation in this area to ensure public trust in the use of the system.

GOVERNMENT INFORMATION WORKING GROUP

The basic policy framework governing the dissemination of government information is the recently revised OMB Circular No. A-130. It commits the government to use information technology to make government information available to the public in a timely and equitable manner, via a diverse array of sources, both public and private.

The Government Information Working Group will promote the dissemination of government information, particularly through the use of electronic media. The Working Group will facilitate, coordinate, and improve communications among the multiple working groups that are already working in this area. It will establish programs to improve the public's ability to find and access public information, particularly in electronic formats. It will also identify and recommend action on such information policy issues as the copyright of government information, the pricing of government information, and policies to maintain a diversity of information sources.

Committee on Information Policy
Information Infrastructure Task Force
Participants To-Date

Sally Katzen
Chair, Information Policy Committee
Administrator
Office of Information and Regulatory Affairs

Bruce Lehman
Chair, Intellectual Property Committee
Commissioner
U.S. Patent and Trademark Office

Patricia Faley
Chair, Privacy Working Group
Acting Director
U.S. Office of Consumer Affairs

Bruce McConnell
Chair, Government Information Working Group
Chief, Information Policy Branch
Office of Information and Regulatory Affairs

Michael Nelson
Senior Policy Analyst
Office of Science and Technology Policy

David Lytel
Office of Science and Technology Policy

Trudy Peterson
Acting Archivist
National Archives and Records Administration

Wayne Kelly
Superintendent of Documents
Government Printing Office

Chuck Chamberlain
Information Technology Planner
U.S. Postal Service

Roger Callahan
Chief, Office of Key Management
National Security Agency/ISSO

Carol Mattey
Telecommunications Specialist
Department of Commerce/NTIA

Dennis D. Steinauer
Supervisory Computer Scientist
National Institute of Standards and Technology

Joan Turek-Brezina
Director
Division of Technical & Computer Support
Department of Health & Human Services

John Fanning
Senior Health Policy Advisor
Office of Health Planning & Education
U.S. Public Health Service

Scott Charney
Chief of Computer Crimes Unit
Criminal Division
Department of Justice

Jerry Gates
Administrative Records
Program Officer
Bureau of the Census

Mathew Powell
Assistant General Counsel
National Science Foundation

Sharon Bywater
Telecommunications Policy Analyst
Office of International Affairs
Department of Commerce/NTIA

Peggy O'Rourke
Acting Privacy Advocate
Internal Revenue Service

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DOCUMENT NO. AND TYPE	SUBJECT/TITLE	DATE	RESTRICTION
002. list	re: Committee on Information Policy Information Infrastructure Task Force Participants To-Date [partial] (1 page)	00/00/0000	P3/b(3)

COLLECTION:
Clinton Presidential Records
National Economic Council
Thomas Kalil
OA/Box Number: 24530

FOLDER TITLE:
National Information Infrastructure [Folder 2] [2]

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RESTRICTION CODES

Presidential Records Act - [44 U.S.C. 2204(a)]

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Wendell Albright
International Economist
Department of State

Robert Moore
Office Director
Statistics and Data Management
Health Care Financing Administration

Mary Ronan
Chief of the Access Staff
National Archives and Records Administration

Cindy Elliot
Federal Highway Administration
Department of Transportation

James H. Burrows
Director, National Computer
Systems Laboratory
National Institute of Standards
and Technology

William Maher
Department of Commerce/NTIA

Doyle G. Federick
Department of Interior

Lee Holcomb
National Aeronautics and
Space Administration

(b)(3)

[002]

Richard Holt
Department of Energy

Ken Rogers
Office of Business Analysis
Department of Commerce

Larry L. Jackson
Information Management Resources Service
General Services Administration

William Anderson
National Institute of Standards
and Technology

Mel Ciment
National Science Foundation

Cindy Kendall
Deputy Assistant Secretary
of Defense (C3I)

Dan Grulke
Office of Assistant Secretary of Defense (C3I)
Department of Defense

Everett Ehrlich
Assistant Secretary
Department of Commercwe

Jerry McFaul
SIGCAT
US Geological Survey

Eliot Christian
SIGWAIS
US Geological Survey

Dr. Neil Stillman
Deputy Assistant Secretary
HHS

Kurt N. Mulholm
CENDI/Defense Technical
Information Center

Dan Metcalf
Department of Justice
Office of Information and
Privacy

Ron Lawson
National Technical Information Service

Janet Poley
Extension Service, USDA

Gregory Parham
Extension Service, USDA

Jock Gill
Office of Media Affairs
Executive Office of the President

Roxanne Williams
Office of Information Resources Management
Department of Argiculture

Teresa Nasif
Consumer Information Center
General Services Information

Jane Bortnick Griffith
Library of Congress

Walter MacDermid
General Services Administration

Norbert Schroeder
Radio Frequency Spectrum Management
Department of Commerce

Edward Kazenske
Special Assistant to Commissioner
Patent and Trademark Office

Michael Keplinger
Patent and Trademark Office

Kieth M. Kupferschmid
Patent and Trademark Office

Terri Southwick
Patent and Trademark Office

Don Abelson
Assistant U.S. Trade Representative

Gil Donahue
Assistant U.S. Trade Representative

Robert Drake
National Security Agency

Jane Caviness
National Science Foundation

Steven Wolf
National Science Foundation

Dr. Don Lindberg
Director
National Library of Medicine

Jerry Linn
National Institute of Standards and Technology

Allen Abbot
Chief Counsel
NTIA

Phyllis Hartsock
NTIA

Karen Mathiasen
Office of International Trade
Treasury

Stephen Mournighan
Office of Management Review and Analysis
Department of Energy

Robert M. Webb
Procurement Policy
Department of Energy

Michael Hoffman
Intellectual Property Attorney
Department of Energy

Howard Lange
Director, Office of Intellectual
Property Competition

Peter Weiss
Senior Policy Analyst
Office of information and Regulatory Affairs

Rob Veeder
Senior Policy Analyst
Office of Information and Regulatory Affairs

Maya Bernstein
Policy Analyst
Office of Information and Regulatory Affairs

WORK PLAN

COMMITTEE ON INFORMATION POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

Under the overall guidance of the Information Policy Committee, the three constituent working groups plan to accomplish the following.

WORKING GROUP ON INTELLECTUAL PROPERTY

The Working Group on Intellectual Property will develop a system that provides appropriate economic incentives for the inclusion of the full range of entertainment and information products in the National Information Infrastructure by:

- Developing standards for identification of copyright ownership of information products(i.e. electronic headers, labels or signature techniques); including consideration of the Government's role in ensuring appropriate standards in the design of the Infrastructure.
- Ensuring licensing and the identification of and, where appropriate, the payment of royalties for copyrighted information products delivered over an electronic information system. This includes an appropriate balance between the rights of copyright owners and users as well as how traditional concepts such as fair use will apply in a digital environment.
- Strengthening of the copyright laws to prevent the proliferation of piracy and protect the integrity of intellectual property, while ensuring broad access to information.
- Developing, in cooperation with the Department of Education, a National educational curriculum on the role of intellectual property rights in electronic information systems for schools.

WORKING GROUP ON PRIVACY

- Identify the scope and nature of individual privacy concerns and key issues that are likely to arise, nationally and internationally, as the Administration moves toward a national information infrastructure.
- Identify the need for changing current U.S. law to protect individual privacy, from the national and international perspective.
- Identify the need for new control mechanisms and practices such as technology, oversight boards, training, public education, industry voluntary programs, executive orders, new legislation.
- Develop a statement of fair information principles and practices within the context of the national information infrastructure in a global environment, and determine who should have the responsibility for implementation of the principles and practices.

- Preparation of a paper outlining recommended proposals for actions, policies, and legislation to protect the privacy of individuals while allowing for the reasonable flow of information.

GOVERNMENT INFORMATION WORKING GROUP

- Conduct a workshop on November 8th ("Electronic Media - '93") for agencies, with public involvement, on how to accomplish electronic dissemination. The purpose is to begin an education and outreach effort to promote electronic information dissemination.
- Develop technical specifications for a distributed, agency-based Government Information Locator Service (GILS) which will be the initial reference source for government information dissemination products.
- Coordinate the efforts of various groups, both formal and ad hoc, which are already working to promote dissemination of government information.
- Conduct a study of issues in government information dissemination, including the role of copyright of government information and its pricing, and policies to promote a diversity of information sources.

CROSS-CUTTING AREAS

The Committee has identified two cross-cutting areas, Security and Government Applications, that require coordination across the IITF's Committee's and Working Groups.

Information security and system reliability is an issue that cuts across the entire IITF. The Information Policy Committee is addressing this issue by ensuring that each of its working groups has a person responsible for keeping security concerns on the agenda, that security policy issues are raised to the Committee chair for resolution, and that security is included in the coordination among working groups and with the Telecommunications Policy and Applications Committees.

The Government Information Technology Services (GITS) Working Group is part of the Applications Committee. Its focus on government applications will include the promotion of the electronic dissemination of government information, and the development of appropriate electronic information security technology and policy. The Information Policy Committee will work closely with the GITS Working Group to ensure its efforts are consistent with overall IITF priorities.

PRIVATE SECTOR OUTREACH PLAN

COMMITTEE ON INFORMATION POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

Each component of the Information Policy Committee is integrating private sector involvement into their work plans. These include both formal and informal opportunities for interaction and information sharing with members of the Committee.

WORKING GROUP ON INTELLECTUAL PROPERTY

The Working Group on Intellectual Property will gather information and views from the private sector through a number of briefings supplemented by a formal public hearing. Briefings to date include a presentation on "digital libraries" from the Corporation for National Research Initiatives, a discussion of the "I-95 Initiative" proposed by a consortium of leading universities and technology firms, as well as briefings on information systems and electronic publishing.

An open public hearing on intellectual property issues as they affect the National Information Infrastructure will be held on November 18, 1993.

WORKING GROUP ON PRIVACY

The Working Group on Privacy is making a concerted effort to gain input from all interested parties. It has already held weekly meetings, inviting experts in privacy and technology policy for in depth discussions on its work plan. Those invited include representatives from business, government, academia and advocacy groups. If those invited are unable to attend, written submissions are requested.

Working Group members will seek opportunities to explain their work at public forums, domestically and internationally. The Working Group will explore opportunities for public comment through electronic means, and will widely advertise and hold public hearings.

GOVERNMENT INFORMATION WORKING GROUP

The Working Group's educational forum "Electronic Media - '93" will include an opportunity for selected private sector representatives to present their views on issues associated with dissemination of government information to interested officials.

The development of the Government Information Locator Service will involve opportunities for the public to review and comment on the design of the system. In addition, the process of promulgating technical standards will involve a more formal public notice and comment period to be conducted by the National Institute of Standards and Technology.

The study being conducted on issues of government information dissemination includes interviews and meetings with various private sector representatives, whose views will be analyzed and evaluated.

SUMMARY OF ACTIVITIES

COMMITTEE ON INFORMATION POLICY
INFORMATION INFRASTRUCTURE TASK FORCE

Following a kick-off meeting of the full Information Policy Committee, each Working Group began holding regular meetings in August. Initial tasks included developing work plans, considering opportunities for public input, and developing specific milestones. Significant early progress, summarized below, has been made.

WORKING GROUP ON INTELLECTUAL PROPERTY

The Working Group on Intellectual Property has been meeting regularly. In addition to a number of briefings from private sector interests, it had been developing mechanisms, including plans for a public hearing, to coordinate its efforts with private sector initiatives. It has also been developing strategies for protecting intellectual property and examining recent developments in intellectual property law.

WORKING GROUP ON PRIVACY

The Working Group on Privacy began weekly meetings starting in August, and has heard from such experts as Vinton Cerf, President of the Internet Society; Dr. Alan Westin and Dr. Eli Noam, of Columbia University; with a number of other briefings scheduled for the near future. The primary purpose of these meetings is to gain an understanding of the electronic environment of the future and to solicit reaction to its draft work plan and priority issues.

Working groups members have made presentations at the October meetings of the Information Industry Association's Privacy Committee, the TRW Consumer Advisory Council and the U.S. Privacy Council. They have also attended the International Data Protection Commissioners meeting in Manchester, England in September, 1993, where the creation of the Working Group on Privacy was well received.

The Working Group is exploring the possibility of public hearings to be held in Washington, D.C. and California, to be held in December, 1993 and January, 1994. Research into the sufficiency of current privacy laws has begun.

GOVERNMENT INFORMATION WORKING GROUP

The Working Group's educational forum "Electronic Media - '93" is being held at the U.S. Geological Survey Auditorium, Reston, Virginia, on November 9, 1993. Attendance of approximately 300 is expected.

The Government Information Locator Service (GILS) draft specification statement and technical standards are being informally circulated for comment among interested government and private sector representatives, a more formal comment process will follow.

A request for plans on improving electronic dissemination of government information to the public was sent on October 21st to over eighty groups which may have ongoing initiatives relevant to the work of the IITF.

A detailed outline of the information dissemination study has been drafted, and interviews and information gathering has begun.

UNITED STATES ADVISORY COUNCIL ON THE NATIONAL INFORMATION INFRASTRUCTURE

Mission

Last month, the President signed an Executive Order creating the "United States Advisory Council on the National Information Infrastructure" to facilitate private sector input to the Information Infrastructure Task Force (IITF). The IITF, which is chaired by the Secretary of Commerce, will work with Congress and the private sector to propose the policies and initiatives needed to accelerate deployment of the NII.

Membership

The Council will consist of 25 senior-level individuals to be named by the Secretary of Commerce this year. A chair and vice chair (or co-chairs) will be appointed by the Secretary from among the Council members. The Council will be broadly representative of the key constituencies impacted by the NII, including business, labor, academia, public interest groups, and state and local governments. Nominations have been solicited from a variety of NII constituencies and interest groups. The IITF and its committees also will use other mechanisms to solicit public input to ensure that it hears the views of all interested parties.

The Department of Commerce will act as secretariat for the Council, providing administrative services, facilities, staff and other support services. The Council will exist for two years unless its charter is extended.

Responsibilities

The Council shall advise the IITF on matters related to the development of the NII, such as: the appropriate roles of the private and public sectors in NII development; a vision for the evolution of the NII and its public and commercial applications; the impact of current and proposed regulatory regimes on the evolution of the NII; privacy, security, and copyright issues; national strategies for maximizing interconnection and interoperability of communications networks; and universal access.

The Council is expected to invite experts to submit information to the Council and form subcommittees of the Council to review specific issues.

The Council will be separate from, and complementary to, the High Performance Computing Advisory Committee, which will be established to provide private sector input on the High Performance Computing and Communications Initiative.

Presidential Documents

Executive Order 12864 of September 15, 1993

United States Advisory Council on the National Information Infrastructure

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the Federal Advisory Committee Act, as amended (5 U.S.C. App. 2) ("Act"), and section 301 of title 3, United States Code, it is hereby ordered as follows:

Section 1. *Establishment.* (a) There is established in the Commerce Department the "United States Advisory Council on the National Information Infrastructure" ("Council"). The Council shall consist of not more than 25 members to be appointed by the Secretary of Commerce ("Secretary").

(b) The Secretary shall appoint from among the members of the Council officials to serve as chairperson(s) or vice-chairperson(s) of the Council as he shall deem appropriate.

Sec. 2. *Functions.* (a) The Council shall advise the Secretary on matters related to the development of the National Information Infrastructure. The National Information Infrastructure shall be the integration of hardware, software, and skills that will make it easy and affordable to connect people with each other, with computers, and with a vast array of services and information resources.

(b) The Council shall advise the Secretary on a national strategy for promoting the development of a National Information Infrastructure. Issues that the Council may address include, but are not limited to:

(1) the appropriate roles of the private and public sectors in developing the National Information Infrastructure;

(2) a vision for the evolution of the National Information Infrastructure and its public and commercial applications;

(3) the impact of current and proposed regulatory regimes on the evolution of the National Information Infrastructure;

(4) national strategies for maximizing the benefits of the National Information Infrastructure, as measured by job creation, economic growth, increased productivity, and enhanced quality of life;

(5) national strategies for developing and demonstrating applications in areas such as electronic commerce, agile manufacturing, lifelong learning, health care, government services, and civic networking;

(6) national security, emergency preparedness, system security, and network protection implications;

(7) national strategies for maximizing interconnection and interoperability of communications networks;

(8) international issues associated with the National Information Infrastructure;

(9) universal access; and

(10) privacy, security, and copyright issues.

(c) The chairperson(s) may, from time to time, invite experts to submit information to the Council and may form subcommittees of the Council to review specific issues.

Sec. 3. *Administration.* (a) The heads of executive agencies shall, to the extent permitted by law, provide to the Council such information as it may require for the purpose of carrying out its functions.

(b) Members of the Council shall serve without compensation but shall be allowed travel expenses, including per diem in lieu of subsistence, as authorized by law, including 5 U.S.C. 5701–5707 and section 7(d) of the Act, for persons serving intermittently in government service.

(c) The Department of Commerce shall provide the Council with administrative services, facilities, staff, and other support services necessary for the performance of its functions.

Sec. 4. *General.* (a) Notwithstanding any other Executive order, the functions of the President under the Act that are applicable to the Council, except that of reporting to Congress, shall be performed by the Secretary in accordance with guidelines that have been issued by the Administrator of General Services.

(b) The Council shall exist for a period of two years from the date of this order, unless the Council's charter is subsequently extended prior to the aforementioned date.

(c) Members of the Council and its subcommittee shall not be considered special government employees for any purpose or for purposes of 18 U.S.C. 201–203, 205, 207–209, and 218–219.

William J. Clinton

THE WHITE HOUSE,
September 15, 1993.

[FR Doc. 93–23039
Filed 9–16–93: 10:59 am]
Billing code 3195–01–P

Computer Systems Policy Project

John Sculley Apple

Robert E. Allen AT&T

Eckhard Pfeiffer Compaq

James E. Ousley Control Data Systems

John A. Rollwagen Cray Research

Ronald L. Skates Data General

Robert B. Palmer Digital Equipment

Lewis E. Platt Hewlett-Packard

John F. Akers IBM

Edward R. McCracken Silicon Graphics

Scott G. McNealy Sun Microsystems

James G. Treybig Tandem

James A. Unruh Unisys

KENNETH R. KAY, Executive Director
1735 New York Avenue, NW Suite 500
Washington, DC 20006
202 628-1700 (Fax) 202 331-1024

February 10, 1993

BY HAND

The Honorable Robert Rubin
Chairman
National Economic Council
Old Executive Office Building
17th & Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear Chairman Rubin:

As you work with President Clinton to develop the Administration's economic stimulus package, the Computer Systems Policy Project (CSPP) urges you to include the National Information Infrastructure (NII) as an integral part of the package. The NII is a 21st century communications, information, and computing infrastructure that will link individual Americans to one another and to information resources and services we cannot even begin to imagine today. The NII is an essential step to rekindle our economic growth, remain competitive abroad, and create the kinds of jobs that will enable Americans to raise their standard of living.

President Clinton has stated that he wants to create public-private partnerships to stimulate economic growth. The NII is exactly the kind of growth initiative that will benefit from a government-industry partnership. To stimulate private sector investment in the NII, CSPP recommends including the following points in the economic plan:

1. Declare the NII a National Technology Challenge -- The President should declare the NII a national technology challenge, which the Administration, Congress, industry, academia, and potential users can work toward together.

2. Establish a High-level Public-Private Forum -- The President should establish a high-level public-private sector body to develop a national vision of the NII and a strategy for achieving it. CSPP recently recommended establishing a National Information Infrastructure Council to perform this role. While CSPP does not feel strongly about where such a body should be located within the government or whether a commission on the NII would be a better mechanism than a council, it is essential that the body has both public and private sector members, including representatives of industry,

academia, and user groups. The NII will only succeed if the public and private sectors work together in developing the vision of an NII, setting the research priorities, and addressing the policy issues. A government-only forum will not meet this objective and will not support the Administration's goals to increase private sector participation in these types of efforts.

3. Support Legislation to Fund Research and Demonstration Projects -- The President should declare support for legislation authorizing funds for NII research and demonstration projects.

Including these points in the economic stimulus plan will send a clear signal to U.S. industry that the information infrastructure, that will ensure our economic strength in the next century, is an integral part of the Administration's investment strategy, thus accelerating private sector efforts to develop and implement the NII.

Please feel free to call me if you have any questions or would like to discuss these recommendations further. We at CSPP stand ready to work with you in any way we can to help make the NII a reality.

Sincerely,

John Sculley
CEO, Apple Computer, Inc.
and Chair, Computer Systems
Policy Project

bcc: Tom Kalil

Clinton Presidential Records
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Computer Systems Policy Project

John Sculley **Apple**

Robert E. Allen **AT&T**

Perspectives on the National Information Infrastructure:

Eckhard Pfeiffer **Compaq**

CSPP's Vision and Recommendations for Action

James E. Ousley **Control Data**

John A. Rollwagen **Cray Research**

Ronald L. Skates **Data General**

Robert B. Palmer **Digital Equipment**

Lewis E. Platt **Hewlett-Packard**

John F. Akers **IBM**

Edward R. McCracken **Silicon Graphics**

Scott G. McNealy **Sun Microsystems**

James G. Treybig **Tandem**

James A. Unruh **Unisys**

TAK See Notes Thanks. bs 10/31/98

Draft October 28, 1998
Tom Kalil:
Comments welcome, send to kalil_t@a1.eop.gov or fax 456-2223

I. Summary:

One possible cross-cutting theme for the Administration's FY2000 budget and its 1999 agenda is "Making the Information Revolution Work For Everyone." This is, after all, the first budget of the new millennium. The goal would be to identify specific ways in which information technology can contribute to our most important national goals. Note that in all of these areas, there is already some level of activity. The challenge would be to (a) identify new ideas; (b) raise the level of attention that IT issues are receiving within departments and agencies; and (c) identify specific projects that could achieve real results with additional resources.

II. Policy Tools

1. Remove legal or regulatory barriers (e.g. licensure for telemedicine, HCFA reimbursement)

2. Promote voluntary industry technical standards

3. Leverage government's position as a user (e.g. use procurement power to create market for accessible technology)

4. Set national goals (e.g. connect every classroom to the Internet by the year 2000)

5. Use bully pulpit (e.g. NetDay)

6. Fund research and development that is related to a particular application (e.g. National Library of Medicine support for a secure computer-based patient record)

7. Fund testbeds and pilots to encourage experimentation (trials of Intelligent Transportation Systems, Department of Commerce TIIAP grants)

8. Fund deployment (Technology Literacy Challenge Fund)

9. Training of end-users or application developers (e.g. train teachers to use technology)

10. Create forum for stakeholder discussions

III. IT applications

1. E-commerce, e-business

a. Benefits/Applications

- Growth/job creation/productivity
- Immediate access for global markets for small businesses
- Supply chain management
- Mass customization ("lot size of 1")
- Ability of customers to find the best deals

b. Accomplishments

- WIPO treaties
- Internet Tax Freedom Act
- electronic signatures
- children's privacy
- encouragement of industry self-regulation on privacy
- duty-free cyberspace

c. Possible next steps (from draft e-commerce report)

- Broadband deployment
- Increased small business involvement in e-commerce
- Better understanding & statistics on impact of information technology on the economy
- Promotion of Internet and e-commerce in developing countries

2. Health care

a. Benefits/Applications

- Consumer health information
- Tools for shared decision-making between doctors and patients
- Telemedicine, remote consultation
- Computer-aided surgery
- Public health information systems
- Electronic claims filing to reduce administrative costs
- Secure computer-based patient records

b. Accomplishments

- E-rate discounts for rural health care clinics
- HHS HealthFinder
- Free access to MedLine
- Pilots for HCFA reimbursement for telemedicine
- Passage of HIPAA

c. Possible next steps

- Medical privacy
- Progress on legal/regulatory barriers to telemedicine (licensure, reimbursement)
- Secure computer-based patient records that allow only authorized access
- Development of "guardian angel" technology for home health care (real-time monitoring of health status)
- Use of public health information systems to achieve goals (e.g. increase childhood immunization rates)

3. **Education and life-long learning**

a. Benefits/Applications

- Increased parent-teacher interaction
- More active, student-centered learning environment
- Project-based learning (e.g. GLOBE)
- Access to primary research material
- Preparation for workplace of 21st century
- Anytime, anywhere instruction

b. Accomplishments

- $700 million in funding for educational technology, including $75 million E-rate
- Focused effort in Empowerment Zones/Enterprise Communities
- Catalyst for private sector efforts such as NetDay, Tech Corps
- Learning Anytime Anywhere, amendments to Higher Education Act on distance learning

Could we aim for 5 model cities of Ed-Tech - solving challenges

- Better labor market information from Labor Department

c. Possible next steps

- Content initiative
- Evaluation & assessment (when does technology improve student performance and life-long learning)
- Private sector involvement in $75 million teacher training
- Universal IT literacy by 8th grade
- "Internet report card" to allow parents to know how their schools are doing
- Use of technology to support adult literacy, adult basic education
- Research to advance the state-of-the-art in learning technology (e.g. intelligent tutoring systems that can respond to needs of individual students)

4. **Economic development**

a. Benefits

- More even distribution of benefits of new economy

b. Accomplishments

- EDA funding of incubators, tech transfer from university to industry, etc.

c. Possible next steps

- Commerce Department technology-based growth initiative
- Initiative to promote access to telecommunications for rural America or rural-specific applications (e.g. precision agriculture)

5. **Delivery of Government Services/Governance**

a. Benefits/Applications

- More efficient and user-friendly government

- 24x7 access to services and information
- More open and transparent government
- "Virtual" government – government organized around function or constituency
- More opportunities for informed participation at all levels of government
- More rapid learning from best practices in "communities of practice"

b. Accomplishments

- Access America recommendations

c. Possible next steps

- All (or most) government information online
- Top 100 transactions with the government online
- One-stop shops for students, senior citizens (in progress from NPR)
- Increase number of "killer apps" per agency (e.g. America's Job Bank at the Department of Labor)
- Expansion of Innovation Fund or some other mechanism for funding cross-agency projects

6. **Environment/Sustainable Development**

a. Benefits/Applications

- Better decision making (use of Geographical Information Systems)
- Community right to know (easy access to SuperFund sites, Toxic Release Inventory)
- Real-time environmental monitoring from inexpensive wireless sensors and satellites

b. Accomplishments

- Envirofacts

- National Spatial Data Infrastructure

- Declassification of intelligence data for environmental purposes

- National Biological Information Infrastructure

c. Possible next steps

- Digital Earth

- Take advantage of DoD-developed technology for real-time environmental monitoring

7. **Crime/Law Enforcement**

a. Benefits/Applications

- Cooperation between federal, state and local law enforcement officials made easy as a result of secure, interoperable wireless networks

- Mobile access to law enforcement data (e.g. NCIC 2000)

b. Accomplishments

- Allocation of spectrum for law enforcement

- Establishment of Public Safety Wireless Networks

c. Next steps

- DOJ/Treasury/Commerce proposal for law enforcement wireless pilots

8. **Improving the quality of life for people with disabilities**

a. Benefits/applications

- Make Americans with disabilities full participants in the Information Society

- Improve ability to participate in workforce

- Increased independence and quality of life

b. Accomplishments

- Provision on accessibility in Telecommunications Act
- Tougher version of Section 508 of the Rehabilitation Act
- Web Accessibility Initiative

c. Possible next steps

- Broader initiative on universal access

9. **Telecommuting**

a. Benefits/applications

- Reduced energy consumption and congestion
- More time with family

b. Accomplishments

c. Possible next steps

- Tax credits?
- Use of NEXTEA $

10. **Crisis management & public safety**

11. **Science and engineering**

a. Benefits/Applications

- Accelerated pace of scientific discovery
- Computational science and engineering as the "third way" of discovering new knowledge (in addition to theory and experimentation)
- Collaboratories (laboratories without walls – scientists, supercomputers, scientific instruments, large databases all connected by high-speed networks)

b. Accomplishments

- High Performance Computing and Communications (Gore author of High

Performance Computing Act)

- Next Generation Internet

c. Possible next steps

- Major increase in information technology research

12. **Intelligent Transportation Systems**

a. Benefits

- Reduced congestion and fatalities

b. Accomplishments

- $250 million proposed in FY99 budget for ITS

c. Next steps

- ??

13. **Digital Libraries**

a. Benefits

- 24x7 access to information, improved ability to search and locate information

b. Accomplishments

- Research project on digital libraries supported by NSF, DARPA, and NASA

c. Next steps

- Creation of digital library for rural America based on research of land grant colleges

- Digitize "cultural heritage" of United States