


*OTA Priorities 1979, With Brief  
Descriptions of Priorities and of  
Assessments in Progress*

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**OTA  
PRIORITIES  
1979**

**With  
Brief Descriptions  
of Priorities  
and of Assessments  
in Progress**

 CONGRESS OF  
THE UNITED STATES  
Office of Technology Assessment  
WASHINGTON, D. C. 20545

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# Foreword

This report describes the first priorities list developed by the Office of Technology Assessment (OTA) as a result of a new and ongoing process for selecting possible projects for study.

OTA was created in 1972 to provide Congress with early indications of the broad range of impacts of technological applications on our society. Those impacts include the beneficial and the adverse, the physical, biological, economic, social, and political. OTA is required to bring a long-term global and comprehensive perspective to bear and to provide Congress with independent, authoritative, evenhanded assessments.

This approach provides Members of Congress with one means of stepping back from the near-term and more narrow issues which crowd their busy calendars to focus on longer term and more comprehensive issues which often crosscut the jurisdictions of several congressional committees.

OTA's projects are initiated on approval by its Technology Assessment Board of six Senators and six Congressmen. Requests for studies may be made to the Board from three different perspectives: by chairmen of congressional committees, by members of the Board, and by the Director of OTA upon consultation with the Board.

Until this year nearly all requests have come from congressional committees with a few from Board members. This report describes the first effort to complement the committee and Board perspectives with priorities suggested by the Director.

This new OTA priority-setting process has been open and broadly participatory. Between February and May 1978, over 5,000 people were asked to consider the critical technological issues that they thought were of especial importance to the United States and the world and to submit their top choices to us. People solicited included approximately 1,000 who have been advisors to OTA—consultants, contractors, and panel members. The staffs of OTA, the General Accounting Office, and the Congressional Research Service were deeply involved.

From these efforts to reach as broad and informed a public as possible, OTA received 1,530 suggested topics for study. Another 2,875 items were extracted from the published literature. To cope with this large list, OTA mobilized its staff to organize, combine, winnow, and rank the candidates into a manageable list of 30 items.

In this process the Technology Assessment Advisory Council played a major role devoting nearly all its efforts for 9 months to proposing, critiquing, and ranking items for the list. The Council members' expertise and broad experience made their contribution especially valuable to the process.

To facilitate the sorting and ranking process, OTA's senior staff developed criteria of what constitutes a preferred OTA project. The five most important criteria are as follows:

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- Does the assessment involve the impact of technology?
  - Is there congressional interest?
  - Does the technology impact significantly on human needs and quality of life?
  - Would the assessment provide foresight?
  - Can OTA do the assessment?

All members of the Board as well as their staff liaison with OTA were involved in the priority-setting process. In addition, the staffs of nearly all congressional committees were consulted. At a joint meeting of the Board and the Advisory Council called to consider the priority list, unanimous support was received for the process.

During the year-long consideration of priorities, seven were selected for activation in 1978 and approved by the Board. They are as follows:

- Alternative National Energy Futures
- Regulations and Technological Innovation
- Effects of Nuclear War
- Impacts of Telecommunications Technology
- Impacts of Applied Genetics
- Cost Effectiveness of Medical Technologies
- Potential for Advanced Air Transport

Three additional topics suggested by the priorities-determining process have been started as internal methodological studies. These are topics of broad interest to all OTA projects, and should influence the style and scope of our work as well as be of substantial interest to our congressional clients:

- Effects of Technology on Risks to Humankind
- Technology and Centralization /Decentralization
- Measures of Quality of Life as a Basis for Assessing Technological Choices.

This booklet is divided into two parts. The first part covers the OTA Priorities, 1979, and includes a one-page description of each of the 30 priority projects arranged in descending order of priority. The second provides a list and brief descriptions of the active projects as of January 1, 1979.

The OTA Priorities will be used as a guide during 1979 in selecting projects for submittal by the Director to the Board for approval.

The priority-setting process will be ongoing. In the latter part of 1979 a new list will be developed for use in 1980. Your suggestions will be welcome.

*Russell W. Peterson*

RUSSELL W. PETERSON  
Director