

List of Published OTA Reports

Annual Report to the *Congress*, March 15, 1974, OTA-A-1

Technology Assessment Activities of the National Science Foundation, June 12 and 13, 1974, OTA-A-2 (Hearings before the OTA Congressional Board)

Drug Bioequivalence, July 1974. OTA- H-3 Examines the relationships between the chemical and therapeutic equivalence of drug products

Requirements for Fulfilling a National Materials Policy, August 1974, OTA-M-4 Consists of the proceedings of a conference on a national materials policy sponsored by the Federation of Materials Societies from August 11-16, 1974, at Henniker, N.H.

Automobile Collision Date An Assessment Of Needs and Methods of Acquisition, OTA-T-5 Analyzes the nationwide data base on automobile accidents in light of proposals by the National Highway Traffic Safety Administration to use crash recorders to relate crash forces to injuries

"An Analysis Of the Department Of the Interior's Proposed Acceleration of Development of Oil and Gas on the Outer Continental Shelf, March 1975, (1) "

An Analysis Identifying issues in the Fiscal Year 1976 ERDA Budget, March 1975, (2) "

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An Analysis of the Feasibility of Separating Exploration From Production of Oil and Gas on the Outer Continental Shelf, May 1975, OTA-O 7 Analyzes the potential for and the alternative methods by which exploration for and production of oil and gas resources on the Outer Continental Shelf could be separated into two distinct operations

Automated Guideway Transit: An Assessment of PRT and Other New Systems, June 1975, OTA-T-8 Examines the social and economic implications of introducing new mass transit technologies in U S cities

Oil Transportation by Tankers An Analysis of Marine Pollution and Safety Measures, July 1975, OTA- O-9 Examines safety problems of oil tankers and their potential effect on the ecology and quality of the oceans and coastal areas

Analyses of Effects of Limited Nuclear War/are, September 1975. (3) Examines the social, economic, political, and health effects of various levels of nuclear attacks on the United States and the Soviet Union

The Financial Viability of Conrail. September 1975, OTA-T-10 Analyzes the ability of the Consolidated Rail Corp. to pay its own way in light of proposed new rates

A Review of Alternative Approaches to Federal Funding of Rail Rehabilitation, September 1975, OTA-T-11 Examines alternative approaches which the Federal Government might adopt to solve the financial and other problems of railroads located in the Northeast and Midwest, but whose difficulties are national in scope.

An Analysis of the ERDA Plan and Program, October 1975, OTA-E- 12 Analyzes 99 issues, ranging from nuclear safety to the research outlook for solar and other alternative energy systems, raised by the long-range plan and program developed by ERDA in 1975

An Analysis of the Impacts of the Projected Natural Gas Curtailments for the Winter 1975-76, November 1975, OTA-E- 13. Assesses the impact on residential and business consumers of the 18 percent shortfall in natural gas supplies below contract requirements that was projected by the Federal Power Commission

A Review of National Railroad Issues, December 1975, OTA-T- 14 Reviews a series of issues ranging from rate structure to public subsidies for the railroad industry in the United States.

Energy, the Economy, and Mass Transit, December 1975, OTA-T-15 Examines the relationship of mass transit ridership to the energy shortages and economic recession experienced following the 1973 oil embargo.

An Assessment of Community Planning for Mass Transit. February 1976. Assesses the ways cities plan for mass transit as well as the problems and possible solutions to mass transit needs in the context of changing relationships between the Federal Government and the transit industry

Volume 1: Summary, February 1976, OTA-T-16

Volume 2: Atlanta Case Study, March 1976, OTA-T-17

Volume 3: Boston Case Study, March 1976, OTA-T-18

Volume 4: Chicago Case Study, March 1976, OTA-T-19

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Volume 8: San Francisco Case Study, March 1976, OTA-T- 23

Volume 9: Seattle Case Study, March 1976, OTA-T-24

Volume 10: Washington, D C Case Study. March 1976, OTA-T-25

Volume 11: Technical Report, February 1976, OTA-T-26

Volume 12: Bibliography, February 1976, OTA-T-27

Comparative Analysis of the 1976 ERDA Plan and Program, May 1976, OTA-E-28 Compares the revised ERDA plan and program put forth in 1976 with the earlier 1975 document

OTA Board Hearings Food In/ormation Hearings, OTA-F-29 (See OTA- F-35.)

Automat/c 7-rain Control in Rail Rapid Transit, May 1976, OTA-T-30. Evaluates the safety, maintenance, and cost of different levels of automation of mass transit trains

Annual Report to the *Congress*, March 15, 1976, OTA-A-31

A Review of the U S Environmental Protection Agency Environmental Research Outlook FY 1976 Through 1980, August 1976, OTA E-32 Reviews the ability of EPA to anticipate environmental problems, given the day-to-day demands of its regulatory responsibilities, as evidenced in the research plans submitted by EPA to Congress in February 1976

The Feasibility and Value of Broadband Communications in Rural Areas. A Preliminary Evaluation. April 1976, OTA-T-33. Examines the issues involved in using communication technologies—

such as cable television, ground or satellite based microwave links, and automatic broadcast repeater stations—to provide community services in rural areas

Development of Medical Technology Opportunities for Assessment, August 1976, OTA-H-34 Examines the need for assessing the potential social impacts of emerging medical technologies while they are being developed

Food Information Systems Summary and Analysis, August 1976, OTA-F-35 Summarizes and Integrates Information generated on information systems designed to collect data on world food supply and demand

An Assessment of Alternative Stockpiling Policies, August 1976, OTA-M-36 Assesses the social, political, and economic impacts of six alternative policies for stockpiling materials for purposes other than national security

Coastal Effects of Offshore Energy Systems, November 1976, OTA-O-37 Assesses social, economic, and environmental impacts of three proposed offshore energy systems

Volume II— Work/rig Papers, November 1976, OTA O-38

Coastal Effects of Offshore *Energy Systems* (Pamphlet). December 1976, OTA O-39 Summarizes certain findings and public policy alternatives of OTA's assessment report

An Assessment of information *Systems* Capabilities Required to Support U S Materials Policy *decisions*, January 1977, OTA-M-40 Analyzes the ability of existing information systems, relied on by Government and business policy makers for data on the supply and demand for materials, to help avert future shortages and solve other materials-related problems

Technology Assessment Activities In the Industrial, Academic, and Governmental Communities (hearings before the OTA Congressional Board). December 1976, OTA-X 41

Technology Assessment *in* Business and Government Summary and Analysis, January 1977, OTA-X 42 Summarizes and analyzes the evolution and Influence of technology assessment as a tool for policymaking In Government, business and industry, and the academic research communities

A Preliminary Analysis of the IRS *Tax* Administration System, March 1977, OTA TCI-43 Raises questions about the civil liberties, privacy, and due process of millions of Americans that could arise from a new computer system

Engineering Implications of Chronic Materials Scarcity, April 1977, OTA M-44 Consists of the proceedings of a conference on national materials policy conducted by the Federation of Materials Societies from August 8-13, 1976, at Henniker, N H

General Issues In *Elementary and Secondary Education* (hearings before the Subcommittee on Elementary, Secondary, and Vocational Education), May 10, 11, 1977 (4)

Establishing a 200-Mile Fisheries Zone, June 1977, OTA-O-45 Evaluates the problems and opportunities presented by the new 200-mile U S fishery zone

Volume II— Working Papers, June 1977, OTA-O-46.

Perspectives on Federal *Retail* Food Grading, June 1977, OTA-F-47 Assesses the capability of the current food grading system used by the Federal Government, as well as that of alternative systems that could be adopted

Nuclear Proliferation and Safeguards, June 1977, OTA-E-48 Examines several nuclear power fuel cycles and ancillary enrichment and reprocessing technologies for their impact on the risks of the proliferation of nuclear weapons to nations or other groups that do not now possess them

Organizing and Financing Basic Research to Increase Food Production. June 1977, OTA-F-49 Evaluates alternative methods for organizing and funding basic research in the biological sciences which is designed to increase food production

Nuclear Proliferation and Safeguards – Appendixes. June 1977, OTA-E 50 Two-part volume containing background data for OTA's assessment report

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Analysis of the Proposed National Energy Plan. August 1977, OTA-E 51 Provides an evaluation of the administration's energy plan and its impact on energy supply, energy demand, and society

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Transportation of Liquefied Natural Gas, September 1977, OTA-O-53 Evaluates the status and trends of ongoing and proposed projects involving the transportation and handling of liquefied natural gas

Brochure. Oil Shale Technology, October 1977, OTA-M-54

Cancer Testing Technology and Saccharin, October 1977, OTA-H-55 Assesses the capacity of current testing methodology to predict the carcinogenic potential of chemicals consumed by humans

Policy Implications of Medical Information Systems, November 1977, OTA-H-56 Examines the potential of computer-based medical information systems

Gas Potential *From Devonian Shales of the Appalachian Basin*, November 1977, OTA-E 57 Analyzes the potential for producing gas from Devonian shales using existing technologies under a variety of economic assumptions

OTA Publications Listing, October 1980, OTA P 58

Enhanced Oil Recovery Potential in the United States. January 1978, OTA-E-59 Assesses the potential for increasing domestic production of oil by applying developing technologies to known reservoirs

A Technology Assessment on Coal Slurry Pipelines. March 1978, OTA E-60 Compares the cost of transporting coal by slurry pipelines to rail for certain routes

An Evaluation of Railroad Safety, May 1978, OTA-T 61 Evaluates trends in railroad-related accidents

Renewable Ocean Energy Sources Part 1, *Ocean Thermal Energy Conversion*, May 1978, OTA-O-62 Examines the renewable ocean energy sources that are being considered as possible contributors to our future energy supply, and evaluates the technological problems and policy that will affect further development of these sources

Working Papers Renewable Ocean Energy Sources Part 1, Ocean Thermal Energy Conversion, May 1978, OTA-O-63. (See OTA-O-62.)

Working Papers An Evaluation of Railroad Safety, May 1978, OTA-T-64 (See OTA-T-61)

Application of R&D in the Civil Sector, June 1978, OTA-R-65 Examines the management policies of the Federal Government for research and development aimed at the civil sector in light of the Federal Grant and Cooperative Agreement Act of 1977

Volume 1 *Application of Solar Technology to Today's Energy Needs*. June 1978, OTA-E-66. Evaluates the economic, technical, and environmental impacts of solar energy systems located at the point of use

Brochure – The Automobile: It's Driving Us To Think, August 1978, OTA-T-67 *

Annual Report to the Congress, August 1978, OTA-A-68

Working Papers Volume II, Materials and Energy From Municipal Waste, July 1978, OTA-M-69 (See OTA-M-93.)

The Role of *Demonstrations In Federal R&D Policy*, July 1978, OTA-R-70 Analyzes the role of demonstrations In Federal R&D policy and gives criteria for evaluating their success or lack thereof

Impact of a Department of Education on Federal Science and Technology Activities, August 1978, OTA-R-71 Suggests criteria for evaluating the Impacts of a new Department of Education on education programs in science and technology run by the National Science Foundation, as well as on other Federal science and technology activities

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Assess/rig the Efficacy and Safety of Medical Technologies, September 1978, OTA-H-75. Evaluates the need for assessments of the efficacy and safety of medical technologies before they go into widespread use

Volume 11. Working Papers, Analysis of Laws Governing Access Across Federal Lands Options for Access in Alaska, September 1978, OTA-M-76 Analyzes laws, regulations, and policies affecting access across federally owned lands to minerals on non-Federal lands

Volume II: Application of Solar Technology to Today's Energy Needs, September 1978, OTA-E-77 (See OTA-E-66)

The Health of the Scientific and Technical *Enterprise*, October 1978, OTA-R-78 Suggests criteria for examining the state or health of the scientific and technical enterprise in the United States

Emerging Food Marketing Technologies, October 1978, OTA-F-79 Examines new and emerging technologies for marketing food

A Preliminary Assessment of *the National Crime Information Center and the Computerized Criminal History System*, December 1978, OTA-I-80 Identifies issues emanating from use of the FBI's National Crime Information Center and Computerized Criminal History system

OTA Priorities 1979, January 1979. OTA-P-81 *

Volume I Analysis of Laws Governing Access Across Federal Lands Options for Access in Alaska, February 1979. OTA-M-82 Analyzes laws, regulations, and policies affecting access across federally owned lands to minerals on non-Federal lands

Volume I: Summary and Findings, Technology Assessment of Changes in the Future Use and Characteristics of the Automobile Transportation System, February 1979, OTA-T-83 Describes energy, environmental, safety, and cost impacts of technological changes

Volume II: Technical Report, Technology Assessment of Changes in the Future Use and Characteristics of the Automobile Transportation System, February 1979, OTA-T-84

Annual Report to the Congress for 1978, March 1979, 01-A-A-85

The Direct Use of Coal– Prospects and Problems of Product/on and Combustion, April 1979. OTA- E-86 Assesses the prospects as well as the environmental, health, safety, and other problems of mining and burning significantly more coal than at present

Volume II: Working Papers, *Residential Energy Conservation*, April 1979, OTA-E-87 (See OTA-E-92)

Management of Fuel and Nonfuel *Minerals in Federal Land*, April 1979, OTA-M-88 Analyzes Federal laws and practices that govern the exploration, development, and production of fuel and nonfuel minerals in onshore Federal lands

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Open Shelf-Life Dating of Food, August 1979, OTA-F-94 Addresses the practicality, benefits, and costs of open shelf-life dating of food products

Railroad Safety U S -Canadian Comparison, August 1979. OTA-T-95 Compares U S and Canadian rail systems and railroad safety programs

A Review of Selected Federal Vaccine and Immunization Policies: Based on Case Studies of Pneumococcal Vaccine, September 1979. OTA-H-96 Analyzes Federal policies related to four areas of vaccine and immunization activities

Computer Technology in Medical Education and Assessment, September 1979, OTA-BR-H-1 *

Technical Options for Conservation of Metals: Case Studies of Selected *Metals and Products*, September 1979, OTA-M-97 Explores the kinds and amounts of waste that occur in our use of eight critical metals and the technical options for reducing that waste

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Volume I/– Working Papers, Pest Management Strategies. September 1979, OTA-F-99

Gasohol A *Technical Memorandum*, September 1979, OTA-TM-E-1 *Discusses the technology and economics of gasohol production.

Volume [I] Public Participation, Technology Assessment of

Changes in the Future Use and Characteristics of the Automobile Transportation System, September 1979, OTA-T-100 (See OTA-T-83)

Benefits of Increased Use of Continuous Casting by the U.S. Steel Industry A Technical Memorandum October 1979, OTA TM-ISC-2 "Describes the continuous casting process and the rate of its adoption by U.S. and foreign steel industries

Technology and *East-West Trade*, November 1979, OTA ISC 101 Examines the economic, military, and political implications of technology transfer to the Communist world

Environmental Contaminants in Food – Summary December 1979, OTA-F-102⁶

Environmental Contaminants in Food December 1979, OTA F 103 Discusses the different types and sources of chemical and radioactive contaminants in food

OTA – What It Is, What it Does, *How* it Works, March 1981, OTA PC-104⁶

Current Assessment Activities, March 1981, OTA PC-105⁶

Impact of Advanced Group Rapid Transit Technology, January 1980, OTA-T-106 Examines second-generation automated guideway transit systems as part of a solution to the need for improved urban mass transit

Impact of Advanced Group Rapid Transit Technology – *Summary* January 1980, OTA-T-107

U.S. Disaster Assistance to Developing Countries *Lessons Applicable to U.S. Domestic Disaster Programs – Background Paper*, January 1980, OTA-BP-X-1 Evaluates trends in disaster assistance and preparedness

Criteria for Evaluating the Implementation Plan Required by the Earthquake Hazards Reduction Act of 1977, January 1980, OTA BP X-2

Issues and Options in Flood Hazards Management, February 1980, OTA-BP-X-3⁷

Annual Report to the Congress, March 1980, OTA-A-108

Alternative Energy Futures, Part 1: The Future of Liquefied Natural Gas Imports – *Summary*, March 1980, OTA-E-109⁶

Alternative Energy *Futures, Part 1: The Future of Liquefied Natural Gas Imports*, March 1980, OTA-E 110 Evaluates projected U S demand, global availability, cost and financing, and security of foreign supplies

Impact of Advanced Air Transport *Technology*, Part 1: *Advanced High Speed Aircraft – Summary*, March 1980, OTA-T-111⁶

Impact of Advanced Air Transport Technology, Part 1: Advanced High Speed Aircraft, April 1980, OTA T 112 Assesses the economics, feasibility, and uncertainties of developing advanced subsonic and/or supersonic passenger aircraft

Forecasts of Physician Supply and Requirements, April 1980, OTA-H-113 Analyzes the assumptions, methods, and conclusions of the technologies for forecasting both the need for and supply of physicians by specialty and geographical distribution

The Effects of Nuclear War – *Summary*, April 1980, OTA-ISC-114⁶ (See OTA- NS-89)

Taggants in Explosives – *Summary*, April 1980, OTA-ISC-115⁶

Taggants In Explosives, April 1980, OTA-ISC-116 Assesses the technical feasibility, safety ramifications, costs, and law enforcement utility of a proposal to require that commercial explosives be manufactured with "identification taggants"

Recent Developments in Ocean Thermal Energy, April 1980, OTA-TM-O-3 Reviews status of ocean thermal energy conversion (OTEC) developments occurring after OTA's 1978 report

Ocean Margin Drilling, May 1980, OTA-TM-O-4⁴ Evaluates the newly proposed public private cooperative research effort in marine geology

An Assessment of Oil Shale Technologies – *Summary* June 1980, OTA M 117⁴

An Assessment of Oil Shale Technologies, June 1980, OTA-M-118 Assesses the status and potential of technologies for the development of oil shale resources

Volume II: *History and Analysis of the Federal Prototype Oil Shale Leasing Program*, July 1980, OTA M-119

Conservation and Solar Energy Programs of the Department of Energy – *A Critique*, June 1980, OTA-E-120 Analyzes the progress and direction of five major conservation and solar energy programs of the Department of Energy

Technology and *Steel Industry Competitiveness – Summary* June 1980, OTA-M-121⁶

Technology and *Steel Industry Competitiveness*, June 1980, OTA-M 122 Assesses how and when new technology can improve the international competitiveness of the U S steel industry

Energy From Biological Processes – *Summary*, July 1980, OTA-E-123⁴

Energy From Biological Processes, July 1980, OTA-E 124 Evaluates the energy potential of plant and animal matter (biomass) concentrating on four biomass fuel cycles — wood, alcohol fuels, grasses and crop residues, and animal wastes.

Proceedings of the OTA Seminar on the *Discrete Address Beacon System (DABS)*, July 1980, OTA BP- T-4 " Summary of findings and proceedings of a seminar held to examine some impacts of the FAA proposal to implement DABS and the Automatic Traffic Advisory and Resolution Service

Volume II: *Technical and Environmental Analyses, Energy From Biological Processes*, September 1980, OTA-E-128 (See OTA-E-124)

The Implications of *Cost-Effectiveness Analysis of Medical Technology* — *Summary*, August 1980, OTA-H-125⁶

The Implications of *Cost-Effectiveness Analysis of Medical Technology*, August 1980, OTA H 126 Analyzes the feasibility, implications, and usefulness of cost-effectiveness analysis (CEA) and cost benefit analysis (CBA) in health care decisionmaking

Background Paper # 1 *Methodological issues and Literature Review*, September 1980, OTA-BP-H 5⁷

Background Paper #3 *The Efficacy and Cost Effectiveness of Psychotherapy*, October 1980, OTA- BP-H-6⁴

Background Paper #4 *The Management of Health Care Technology In Ten Countries*, October 1980, OTA BP H 7⁴

A *Technology Assessment of Coal Slurry Pipelines – Summary*, September 1980, OTA-E-127⁶

World Petroleum Availability 1980-2000, October 1980, OTA-TM- E-5 “ Examines prospects for world supplies and production in coming decades

Compensation for Vaccine-Related Injuries, November 1980, OTA-TM-H-6.⁸ Discusses the questions that Congress must answer in developing a compensation program

¹Included in appendix in publication OTA O-7
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