

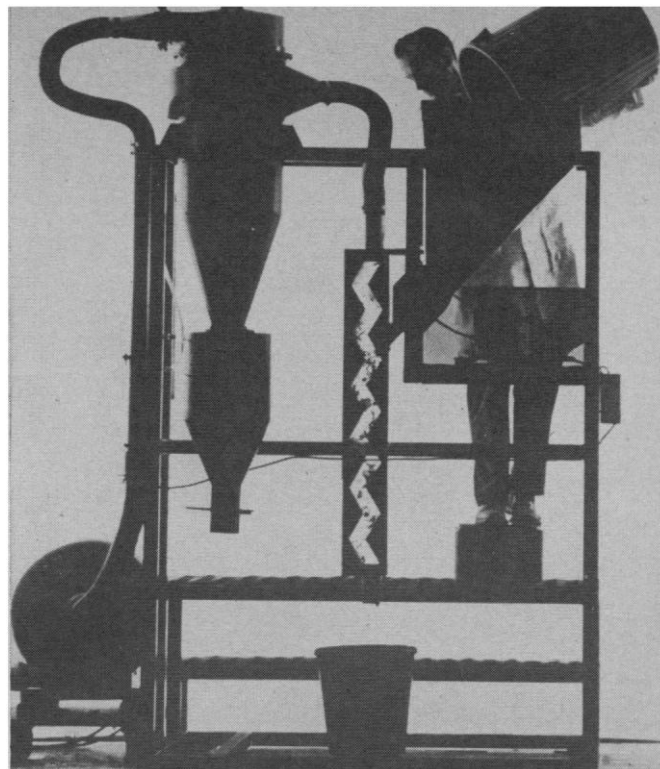


Industrial Approaches to Urban Problems

AAAS Symposium

28 December 1970

Chicago



Stanford Research Institute

The evolution of urban society has been motivated by the forces of a free economy and supported by growth-oriented public policies that traditionally overlook the collective consequences of unfettered growth. When cities were small and social change proceeded slowly, problems fostered by growth were infrequent and often ignorable. But with most Americans now living and working in urban areas and with accelerating social change, issues bypassed in earlier times have become acute stresses threatening the very life of cities.

In a society that has prospered with technology it is easy to expect that solutions to problems involving technology may be found in technology alone. This simplistic attitude ignores the human factors which may have created the problems or which inhibit solutions, technical or otherwise.

Indeed, the recognition of opportunities for new techniques and technology traditionally has provided sufficient incentive for industry to pursue these opportunities on its own. And where industry has not taken the initiative, government has usually been able to provide it through economic incentives. Yet while industry as producer and supplier of hardware and government as consumer will participate in the solution of such urban problems as housing, solid waste management, education, and transportation, they have

approached these problems with measured restraint. This attitude stems from the realization that urban problems are dominated by economic, labor, political, and social troubles and that to succeed new urban technologies must be accompanied by and responsive to solutions to these human problems. Industry and government must therefore take a new initiative in surmounting the urban crisis.

An examination of the key issues is clearly an important step along the route to building a more viable urban society. The symposium "Industrial Approaches to Urban Problems" (28 December 1970) will explore, during the AAAS Annual Meeting, the human and technical problems a city faces in the pursuit of improved urban housing, solid waste management, education, and transportation.

The housing panel will be concerned with both hardware technology and the institutional and regulatory structure under which housing is produced, financed, marketed, managed, and maintained. It will consider the limitations imposed by regulations at various levels of government, by industry, by labor, and by the effect of human behavioral patterns. The panel will consider the actions necessary to encourage a more effective private enterprise approach to the development and maintenance of the housing stock required to satisfy the needs of our growing population.

This requires an identification of those factors that have kept us from reaching the goals set by the Housing Acts and to define means of modifying or overcoming those factors.

The panel on solid waste management will examine innovations in materials handling, processing, recycling, and disposal aspects of solid waste management and will highlight areas of high potential for contribution by industry. The latter will include the design, construction, and operation of solid waste facilities under performance specifications; the functional design of consumer goods, including both products and their packages, to minimize their impact on the environment; the careful evaluation of long-term environmental costs and public reaction to new products before making large capital expenditures; the adoption of improved manufacturing methods which maximize the utilization of secondary materials; and the strict application of good housekeeping leading to the elimination of both chronic and acute pollution.

The education panel will cover three important aspects of educational evolution: school accountability, instructional innovations and materials, and labor relations. School accountability will include performance contracting, assessing student achievements, institutional productivity, and voucher systems. The discussion of instructional innovations

and materials will treat individually prescribed instructional materials and procedures, monitoring student progress, guidance systems, and instruction materials designed to meet the special educational needs of specific student populations. As teacher unions become more zealous in their representation of the needs of their constituents, industry's experience in the development of labor and human relations programs may be of assistance to school administrators. The panel will consider opportunities for industry to assist schools in the areas of wage and salary guidelines, joint union-management decision-making procedures, and grievance-handling procedures.

In transportation, as in most other functional needs of our society, urban needs are served with increasing difficulty and with declining effectiveness. Most American cities now lack the financial and organizational resources to undertake major public transportation improvements. Advanced technology is needed for public transportation but cannot be brought into full use until new financial mechanisms and institutional reforms are brought about in the cities and in the federal government.

The most pressing institutional problems relate to the laggard pace of public investment decisions in transportation as compared to private investment in cities and associated urban economic growth. The number of public agencies with overlapping jurisdiction compounds this problem. In view of this situation an evolutionary process for planning and implementing transportation improvements seems to be a viable course of action. Such a process would build incrementally toward long-range goals. It would be time-sensitive and flexible, capable of being adjusted both to changing opportunities and new problems. It could avoid the pitfalls of "total systems"—high fixed cost and inflexibility—and it could provide stimulus for the introduction of new technology.

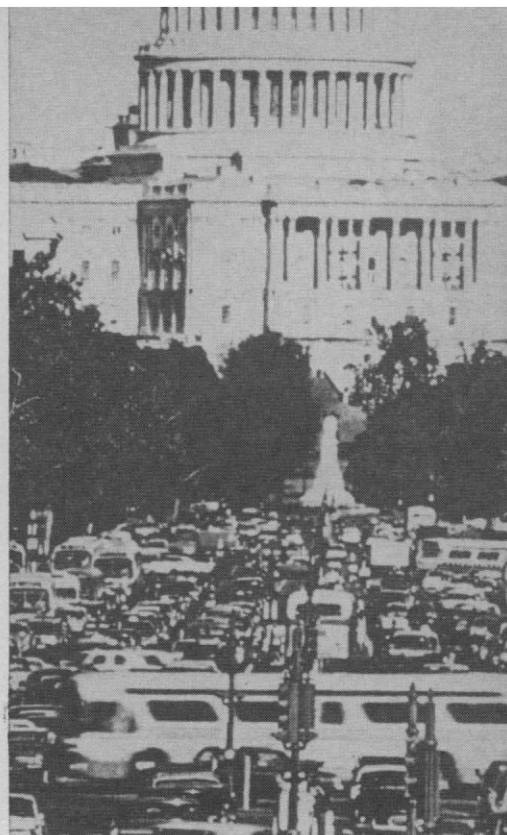
This symposium, "Industrial Approaches to Urban Problems," is being sponsored by the AAAS Section on Industrial Science and co-sponsored by the AAAS Section on Engineering, the AAAS Section on Education, the Operations Research Society of America, and the Institute of Management Sciences.

JORDAN LEWIS

Battelle Development Corporation,
Columbus, Ohio 43201



Skidmore Owings and
Merrill →



Housing Panel

Moderator: Harold B. Finger, Assistant Secretary for Research and Development, U.S. Department of Housing and Urban Development.

Government: Lewis B. Hill, Commissioner, Department of Urban Renewal, Chicago.

William G. Rosenberg, Executive Director, Michigan State Housing Development Authority.

Industry: Norman Wakefield, President, Rouse-Wates, Inc.

Labor: William Sidell, First General Vice President, United Brotherhood of Carpenters.

Solid Waste Management Panel

Moderator: Charles G. Gunnerson, Stanford Research Institute (former Deputy Director, Research and Development, Bureau of Solid Waste Management, U.S. Department of Health, Education, and Welfare).

Government: Myron D. Calkins, Director of Public Works, Kansas City, Missouri (also President, American Public Works Association).

Industry: Frank R. Bowerman,

Director of Environmental Engineering, University of Southern California, School of Engineering (former Group Vice President, Land Pollution Control Group, Zurn Industries, Inc.).

Education Panel

Moderator: David Bushnell, Director of Research, American Association of Research Junior Colleges Study of Alternative Futures.

Government: Paul Briggs, Superintendent of Schools, Cleveland, Ohio.

Industry: Verne Atwater, President, Westinghouse Learning Corporation.

Transportation Panel

Moderator: Michael Michaelis, Vice President, Arthur D. Little, Inc.

Government: James D. Braman, Jr., Director of Community Planning, Seattle.

Industry: Howard Ross, Vice President for Marketing and Analysis, Transportation Technology, Inc.

C. Harry Broley, Arthur D. Little, Inc.

AAAS ANNUAL MEETING

26–31 December 1970, Chicago

Registration badges will be required for admission to all sessions, except for a few special programs to which the public will be invited.

ADVANCE REGISTRATION FORM

**Mail to: American Association for the Advancement of Science, Dept. R,
1515 Massachusetts Ave., NW, Washington, D.C. 20005**

- ☐ Enclosed is \$10 Registration Fee (*Program* and Convention Badge)
- ☐ Enclosed is \$15 Registration Fee (including spouse) (*Program* and Convention Badges)
- ☐ Enclosed is \$5 Student Registration Fee (16 years and older) (*Program* and Convention Badge)
- ☐ Enclosed is \$5 for the *Program* only AAAS Member ☐ Nonmember ☐

(Mailing date of Program and Badge—1 December)

NAME: _____
 (Last) (First) (Middle Initial)

MULTIPLE REGISTRATION: _____
(List full name for spouse and each student.)

HOME ADDRESS: _____
[For receipt of *Program* and Badge(s)] (Street) (City/State) (Zip Code)

INSTITUTION OR
COMPANY AFFILIATION: _____

(City) (State) (Zip Code)

CONVENTION ADDRESS: _____

Office and Session Locations

Conrad Hilton: AAAS Headquarters Office; AAAS Registration Desk; AAAS Lecture Aides; AAAS Television Room; AAAS Press Headquarters; AAAS Council Meeting; AAAS Exposition of Science and Industry; AAAS Commission and Committee Symposia (Commission on Science Education); AAAS General Science Symposia (“Mood, Behavior and Drugs”; “Man’s Impact on the Global Environment”; The Teaching of Science”; “Techniques and Status of Modern Parapsychology”; “Is there a Generation Gap in Science?”); AAAS Sections—A-Mathematics; C-Chemistry; FG-Biological Sciences; H-Anthropology; I-Psychology; N-Medical Sciences; Nd-Dentistry; Q-Education; American Society of Zoologists Office; Sigma Delta Epsilon Office.

Sheraton-Blackstone: AAAS Invited Lectures (RESA Annual Address and Panel Discussion); AAAS Committee on Council Affairs (Open Hearing); AAAS General Science Symposia ("Science and the Federal Government—1970"; "Science and Man: Values and Expectations"; "Crime, Violence, and Social Control"; "Contributions of U.S. Minority Groups to the Development of Science"; "Women in Science"); AAAS Sections—H-Anthropology; K-Social and Economic Sciences; L-History and Philosophy of Science; P-Industrial Sciences; T-Information and Communication; U-Statistics.

Pick-Congress: AAAS Invited Lectures (Special Lecture; Distinguished Lecture; Sigma Xi-Phi Beta Kappa Lecture); AAAS Science Film Theatre; AAAS Film Lectures; AAAS Commission and Committee Symposia (Commission on Population and Reproduction Control; Committee on Arid Lands; Committee on Environmental Alteration); AAAS General Science Symposia ("Public Policy for the Environment"; "Large-Scale Use of Defoliants"; "Scientific Organizations, War-Peace Issues, and the Public Policy Process"); AAAS Sections—B-Physics; D-Astronomy; E-Geology and Geography; FG-Biological Sciences; K-Social and Economic Sciences; M-Engineering; Np-Pharmaceutical Sciences; O-Agriculture; Q-Education; W-Atmospheric and Hydrospheric Sciences; Society for General Systems Research Office.

Field Museum of Natural History: AAAS Invited Lectures (Address of the Retiring AAAS President and following Reception; Frontiers of Science Lecture).

Adler Planetarium: AAAS Section D-Astronomy (“On Teaching Astronomy”).

University of Illinois Medical Center: Alpha Epsilon Delta.

Essex Inn: Beta Beta Beta—Biennial National Meeting; Association of Academies of Science; American Junior Academy.

Ascot House: Beta Beta Beta—Biennial National Meeting.

HOTEL RATES*
(Per Day)

The American Association for the Advancement of Science will hold its 1970 Annual Meeting in Chicago, Illinois, 26-31 December. The AAAS registration desk will be located at the Conrad Hilton Hotel. The following hotels will be used for housing.

HOTEL	SINGLE	DOUBLE	TWIN	SUITES
1) Conrad Hilton 720 South Michigan	\$15 17 19	\$21 23 25	\$21 23 25	\$55 and up
2) Pick-Congress 520 South Michigan	15 17 19	21 23 25	21 23 25	45 and up
3) Sheraton-Blackstone 636 South Michigan	15 17 19	21 23 25	21 23 25	40 and up
4) Essex Inn 800 South Michigan	15 17 19	21 23 25	21 23 25	45 and up

*Illinois Room Tax, 6%; rates for suites: parlor plus one-, two-, three-bedrooms; \$5.00-\$8.00 additional charge for cots.

HOTEL RESERVATIONS FORM

Mail To: AAAS Housing Bureau, Chicago Convention Bureau, 332 South Michigan Ave., Chicago, Illinois 60601

(Reservations received after 13 December cannot be assured.)

CHOICE OF HOTEL: First _____ Second _____ Third _____

ROOM: ☐ Single ☐ Double ☐ Twin ☐ Suite Preferred rate \$ _____

NAME: _____

(Individual requesting reservation)

ADDRESS: _____

(Street)

(City and State)

(Zip Code)

ARRIVAL: Date _____; _____ a.m. _____ p.m.

DEPARTURE: Date _____; _____ a.m. _____ p.m.

Be sure to list definite arrival and departure date and time. Hotel reservations will be held *only* until 6 p.m. unless otherwise specified.

Number in party _____ sharing this room will be (list name and address of each person, including your own):