

AC 134
Box 71 Folder 6

Intercollegiate Conference - Urban Challenge
4/13-16/66

OK

*Intercollegiate Conference
Urban Challenge 4/13-16/66*

April 22, 1966

Mr. David S. Mundel
34 The Fenway
Boston, Massachusetts

Dear Dave:

M.I.T. is a place of many conferences. Although I often have the privilege of welcoming our visitors on these occasions, seldom is it possible for me to attend all of their sessions. Yet I can't tell you how much I regretted my inability to take an active part in your discussions last week on the urban challenge. The problem is supremely important. The speakers were well chosen, and the planning and organization were outstanding. The whole affair was a credit to M.I.T. and particularly to our undergraduates.

I should like to extend my warmest congratulations to you and to all those who worked with you.

Sincerely yours,

J. A. Stratton
President

JAS:dlr

cc: Dean Wadleigh

bc: Mr. Colcord

URBAN CHALLENGE CONFERENCE

(Roster of "Resource People")*

Resource People - as of 4/8/66

William O. Adams - Massachusetts Bay Transportation Authority
Mark Aikens - Boston Regional Planning Project
MacDonald Barr - Joint Center for Urban Studies
Alexander J. Bone - M.I.T. Department of Civil Engineering
Daniel Brand - Traffic Research Corporation
H. E. Craddock - Western Electric Company
Charles R. Cherington - Harvard Department of Government
Robert S. Davidson - Metropolitan Area Planning Council
H. Grant Dehart - H. Stubbins & Associates
Henry L. Duncombe - General Motors Corporation
Herbert M. Franklin - Urban America Inc.
Mrs. Karen Gerard - The Chase Manhattan Bank
Jean-Maurice Granger - University of Montreal, Institute of Urbanism
Sanford Greenfield - Carroll & Greenfield
Alberto Harth - Deneke - M.I.T. Department of City Planning
Antony Herrey - M.I.T. Real Estate Officer
Charles S. Hilgenhurst - Boston Redevelopment Authority
William L. Hooper - Executive Office of the President, Office of Science &
Technology
Dexter Kamilewicz - M.I.T.
Norman Kennedy - Berkeley Institute of Transportation and Traffic Engineering
Clyde R. Millie - National Bureau of Standards
J. Robert Myers - Pennsylvania Power & Light Co.
Fukuo Ochi - Joint Center for Urban Studies
Erika J. Pierce - Automobile Manufacturers Association
Peter A. Pekkala - Automobile Manufacturers Association
Marshall Parker - First National Bank of Memphis
Walther Prokosch - Tippetts - Abbett - Mc Carthy - Stratton
Cranston R. Rodgers - Charles A. Maguire & Associates
Murray D. Segal - Transportation Consultant
Stanley T. Siegel - Boston Redevelopment Authority
Charles H. Spaulding - Cabot, Cabot, & Forbes
Max L. Stackhouse - Harvard Divinity School
Wayne E. Thompson - Dayton's
George L. Wey - Massachusetts Department of Public Works
Edwin L. Wiederrecht - Filene's
James T. Wilcox - State Mutual Life Assurance Company
Carl Zellner - Joint Center for Urban Studies

*Note for JAS: The "Resource People" will be scattered among the student seminars, not as principal participants but to serve as sources of data and expertise as needed.

URBAN CHALLENGE CONFERENCE

Roster of Student Delegates by Field

Aeronautics and Astronautics	1
Architecture	22
Art	1
Chemistry	1
Civil Engineering	14
City Planning	14
Economics	25
Electrical Engineering	1
Government	21
History	19
Humanities	12
Management	4
Mathematics	1
Mechanical Engineering	7
Operations Research	4
Physics	2
Political Science	15
Sociology	<u>23</u>
	187

URBAN CHALLENGE CONFERENCE

Home Institutions of Student Delegates

1. American University
2. Amherst
3. Antioch
4. Barnard
5. Bennington
6. Boston College
7. Boston University
8. Bowdoin
9. Brandeis
10. Brigham Young
11. Bucknell
12. California Institute of Technology
13. Carnegie Institute of Technology
14. Columbia
15. Cornell
16. Connecticut College for Women
17. Cooper Union
18. Dartmouth
19. Douglass
20. Duke
21. Georgetown
22. Georgia Institute of Technology
23. Grinnel
24. Harvard
25. Johns Hopkins
26. Kenyon
27. Lafayette
28. Lehigh
29. Massachusetts Institute of Technology
30. Mount Holyoke
31. Northwestern
32. New York University
33. Oberlin
34. Pembroke
35. Pomona
36. Purdue
37. Radcliffe
38. Reed
39. Rensselaer Polytechnic Institute
40. Rhode Island School of Design
41. Rutgers
42. Simmons
43. Skidmore
44. Smith
45. Stanford
46. Swarthmore
47. Syracuse
48. Temple
49. Trinity
50. Tulane
51. Union
52. U.S. Air Force Academy
53. University of Buffalo
54. University of California at Berkeley
55. University of Illinois
56. University of Michigan
57. University of Minnesota
58. University of Rochester
59. University of Southern California
60. University of Texas
61. University of Vermont
62. University of Virginia
63. University of Washington
64. University of Wisconsin
65. Vassar
66. Wellesley
67. Wheaton
68. Yale

*Intercollegiate Conference - Urban
Challenge 4/13-16/66*

The Urban Challenge

MEMO TO: All resource people
FROM: Terry Vander Werff, Secretary
SUBJECT: Meals, transportation, duties, speakers, arrangements

SPEAKERS:

Wednesday, April 13

- 1:30 Welcome - Dr. Julius A. Stratton, MIT
2:00 Opening Address - Dr. Robert C. Wood, Under Secretary
of Department of Housing & Urban Affairs
3:30 Panel Discussion on Urban Renewal:
John T. Howard, MIT - moderator
Edward J. Logue, BRA
James Q. Wilson, Joint Center for Urban Studies
Louis Sauer, Philadelphia, architect

3 or 3:15 break.

Thursday, April 14

- 1:00 Panel Discussion of Transportation
General Rush B. Lincoln, MBTA - moderator
Joseph Leiper, New York City Department of City Planning
Robert A. Nelson, Office of High Speed Ground Transportation
John C. Kohl, American Transit Association
John F. Kain, Harvard University
7:30 Two speakers on the Future Metropolis:
Leonard J. Fein, MIT
Wolf von Eckhardt, Washington Post

Friday, April 15

- 8:30 Keynoter: The Honorable F. Bradford Morse,
The House of Representatives

Saturday, April 16

- 9:00 am: Wrap up speaker

DELEGATES:

There will be approximately 200 delegates from all parts of the country and representing as many disciplines as possible.

TRANSPORTATION, MEALS, AND HOUSING:

As the conference has a limited budget and is primarily undergraduate student oriented, the committee is financially unable to bear the burden of the resource people's transportation, meals and housing. We will have to ask you to make your own travel plans to and from the conference. Housing plans also should be initiated by you, although we will help you if you wish in making reservations. Most of the delegates and speakers will be staying at the Hotel Somerset here in Boston. You are invited to all of the planned meals of the conference, but due to the overwhelming response of resource people, we will have to ask for a donation of \$4.00 per meal to cover our expenses. This will be the only expense which we will require of you. There is no registration fee.

ARRIVING HERE AT M.I.T.:

The enclosed map of the M.I.T. campus shows you how to get to the Student Center, which is the Conference headquarters. There you will obtain the final details, including rooms of your discussion groups, meals, identification tags, and you will meet with your student discussion group leader. We request that you be at the conference office at least thirty minutes before your discussion group's time, unless you have made previous arrangements with your discussion group leader.

BIOGRAPHY:

We would greatly appreciate your sending us a one paragraph biography and a picture of yourself so that the delegates may know who is helping out at the conference. We hope to print these up in a booklet form if the response is early enough.

DELEGATE READING LIST:

Early next week you will receive the conference brochure which is being sent to all the delegates. This contains a few articles relevant to the conference and contains a reading list of a few paperbacks which they can use for background reading. In addition, the brochure will contain a list of questions which are meant to be general guidelines for thought, preparation and discussion by the delegates. The topics will be considered in the discussion groups.

ROLE OF RESOURCE PERSON:

We intend for you to sit in on the discussion groups which will be lead by an M.I.T. student, consistent with our aim to make this an undergraduate conference in its entirety. However, situations will inevitably arise in which the student discussion group leader will not have sufficient knowledge to straighten out. This is where your professional knowledge and experience can be introduced to put the discussion back on a firm, smooth footing. We would appreciate your being "in the background" of the discussion group, and not actively participate except to add pertinent information which will aid the flow of the discussion. Previous experience with this idea at a conference here three years ago produced very good results. Above all, we want the student delegates to feel completely free to express opinions of their own and to interact among themselves in the issues before them.

CONFIRMATION OF TIME:

Please return the enclosed self-addressed envelope by March 28 so that we can make definite plans for each discussion group and for the meals. We would greatly appreciate your inclosing a donation of \$4.00 per meal for those you have checked. Please indicate, also, if and when you would like us to reserve you a hotel room.



JOHN F. COLLINS
MAYOR

*Intercollegiate Conference
Urban Challenge 4/13-14/66*
CITY OF BOSTON
OFFICE OF THE MAYOR
CITY HALL, BOSTON
[Signature]

*1 Copy
to Vander Meer
for record.*

March 23, 1966

Mr. J. A. Stratton
Office of the President
Mass. Int. of Technology

Dear Mr. Stratton:

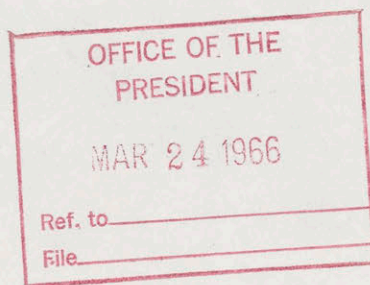
Thank you for your kind invitation to participate in the Intercollegiate Conference on "The Urban Challenge" on April 16. I regret very much that I will be unable to attend due to a very heavy schedule.

With kindest personal regards.

Sincerely,

John F. Collins
Mayor

JFC:mvc



THE NEW
BOSTON 

4/13

March 13, 1966

The Honorable John F. Collins
Mayor of Boston
Boston, Massachusetts

Dear Mayor Collins:

It is a privilege to transmit to you on behalf of our undergraduate students their invitation to participate in an Intercollegiate Conference on "The Urban Challenge" to be held on this campus from April 13 through April 16. Their letter to you is enclosed, along with a small folder, which describes the conference and its aims in a little greater detail.

By way of background, may I add that the idea for a meeting of this kind originated with the students themselves about three years ago. At that time they organized a gathering centered on the theme of the proper balance of power between federal, state, and local centers of action. From the very beginning the initiative and the planning have come entirely from our undergraduates, and their success with the first conference has encouraged them to plan another.

I know full well how busy you are and of the many demands upon your time and energy. If you find it possible to accept, however, I can assure you that the committee will indeed be honored. For my own part, it would give me much pleasure to have you with us for this program at M. I. T.

Yours respectfully,

J. A. Stratton
President

Enclosures

bc: Mr. Vander Werff
bbc: Mr. Colcord
LHM

March 10, 1966

The Honorable John Collins
Mayor of Boston
City Hall
Boston, Massachusetts

Sir:

We, the Intercollegiate Conference Committee, are sponsoring The Urban Challenge, based upon an attempt to discuss the dilemmas of the urban environment from social, economic, political, and technical standpoints, and based upon the need to involve undergraduates in the effort to understand and solve metropolitan problems.

We would like to invite you to speak at the conference on the morning of Saturday, April 16, at 9:00. We hoped that you might speak on the problems of running a big city and thus help to wrap up the conference by tying together the various topics considered throughout the conference by the delegates. This, however, is largely up to your own preference.

All major sessions are open to the general public in addition to the delegates. A transcript of the conference will be published in book form after the conference. Other participants include Edward J. Logue, Robert C. Wood, John C. Kohl, and General Rush B. Lincoln.

Thank you for your consideration.

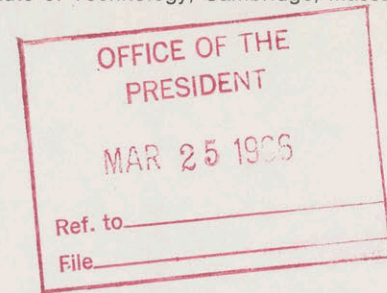
Very truly yours,

David S. Mundel

David S. Mundel
Chairman, Conference Committee

DSM/ba

4/13



March 21, 1966

Dear Faculty Member:

I would like to invite you to attend The Urban Challenge, an intercollegiate conference at M.I.T. on April 13-16, 1966.

The M.I.T. Conference Committee is sponsoring the Conference to introduce a fresh approach to the problems of urban affairs and to promote nation-wide and especially M.I.T. interest in urban problems. The dilemmas of the urban environment have been discussed traditionally in the academic world from the social, economic, political, or technical standpoint. The Urban Challenge is an attempt to change this "or" to "and".

The Conference will be attended by nearly 200 delegates representing 96 colleges and universities across the nation. These students are drawn from the fields of architecture, city planning, economics, engineering, political science, and sociology.

The Urban Challenge has been divided for the purpose of discussion into three broad areas: transportation, urban renewal, and the future metropolis. Discussion will take place in two forms. There will be plenary sessions open to the general public where experts will deliver speeches and take part in panel discussions. After each of the plenary sessions, delegates will gather in small seminar groups to discuss the issues raised by the panelists.

The speakers are all eminent in the field of urban problems. A list of the speakers is given in the enclosed Interim Program. The latest additions to the program are F. Bradford Morse, member of the House of Representatives of the United States, Wolf von Eckhardt, Architecture Editor of the Washington Post, and Joseph Leiper, Chief Transportation Planner of the New York City Department of City Planning. Joseph Leiper will replace Lyle Fitch on the program.

If you have any questions about the Conference please call our office, 868-0044.

Sincerely yours,

A handwritten signature in dark ink that reads "David S. Mundel".

David S. Mundel
Chairman, Conference Committee

ba/DSM

Enclosure

THE URBAN CHALLENGE

M.I.T. Intercollegiate Conference

April ~~6-9~~, 1966

13-16

Chairman: Dave Mundel

4/13

THE URBAN CHALLENGE

Wednesday, April 13

9:00 - 2:15 Registration and Housing
→ 2:30 - 2:50 Welcome and Introductory Remarks
3:00 - 5:30 First Plenary Session: Panel Discussion
6:30 - 7:15 Dinner
7:30 - 10:00 Discussion Groups: Urban Renewal
10:15 - 11:30 Informal Reception

Thursday, April 14

9:00 - 11:45 Discussion Groups: Urban Renewal
12:00 - 12:45 Luncheon
1:00 - 2:15 Second Plenary Session: Address
2:30 - 5:30 Discussion Groups: Transportation
6:30 - 7:15 Dinner
7:30 - 9:30 Third Plenary Session: Panel Discussion
9:45 - 11:00 Informal Reception

Friday, April 15

9:00 - 11:45 Discussion Groups: Megalopolis
12:00 - 12:45 Luncheon
1:00 - 6:00 Discussion Groups: General
Institute Tours
Tours of BRA Projects
→ 7:30 - 9:30 Fourth Plenary Session: ~~Banquet~~ Address in Kresge
10:00 - 12:00 Reception

Saturday, April 16

9:00 - 12:00 Fifth Plenary Session: Panel Discussion
12:15 - 1:00 Luncheon
1:30 Departure

Plen sess - 13 hrs

Disc. groups - 10 hrs

THE URBAN CHALLENGE

- A. Urban Renewal
 - 1. Causes and Needs
 - a. Poverty
 - b. Segregation
 - c. Physical Deterioration
 - d. Long and Short Term Goals (functions)
 - 2. Planning and Implimentation
 - a. Social Effects
 - b. Politics and Laws
 - c. Aesthetics
 - d. Economics
 - 3. Results and Effects
 - a. Intended
 - b. Non-intended

- B. Transportation
 - 1. Long Distance, High Speed Ground Transportaion
 - a. Desirability
 - b. Population Influence
 - c. Social Implications
 - d. Authority and Responsibility for Operation
 - 2. Intracity Transportation
 - a. Need for Mass Transportation Systems
 - b. Present Systems
 - 1) Highways
 - 2) Trains and Subways
 - c. Addition to and Replacement of Older Systems

- C. Megalopolis
 - 1. Urbanization Process
 - a. Geography
 - b. Economic History
 - c. Metropolitan Growth and Suburban Sprawl
 - 2. Land Revolution
 - a. Urban and Rural Division
 - b. Agricultural Use
 - c. Wilderness and Wildlife
 - 3. Occupations
 - a. Manufacturing
 - b. Commerce
 - c. Division of Labor
 - 4. Politics and Economics
 - a. Population Diversity
 - b. Economic Responsibility
 - c. Neighborhood Government vs. Megalopolis Rule

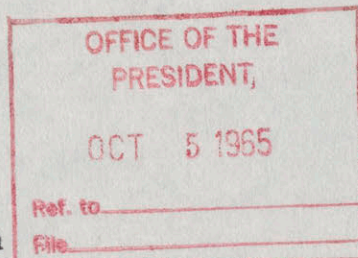
April 13

The intercollegiate conference on "The Urban Challenge" will provide an opportunity for students representing many disciplines and schools and all sections of the country to focus on what many men have called the greatest domestic problem of our day. Great changes are occurring in our cities, and vast problems are confronting our present and future leaders.

We at M.I.T. believe that it is within the ability of modern technology to meet "the urban challenge." The question is can we find the enlightened leadership to direct and to utilize our technological prowess to humanize, to beautify, and to make economically viable our great urban centers? This conference can help to point the way.

J. A. Stratton
President

FCC:dlr
cc: Mr. Colcord
Mr. Tomanek



119 Bay State Rd.
Boston, Mass.
October 4, .965

Dr. J.A. Stratton
President, Massachusetts Institute of Technology
Cambridge, Mass.

Dear sir:

The Undergraduate Association is planning and sponsoring an Intercollegiate Conference on urban problems to be held in the Spring. This conference is to differ from most in that the mere enlightenment of the delegates is not the primary goal; rather, the delegates will represent a broad range of professions, and we hope by the conference to inspire an interdisciplinary attack on the problems of the urban culture. For this purpose a distinguished list of speakers is being secured, but it is also necessary to secure capable delegates from the schools of the nation. I am preparing an appeal brochure for these schools, and would like to request you to write an important passage for it. We feel that comment from a man of your calibre and distinction on the intellectual concepts, necessity, etc. of the conference would insure a high level program.

If you would consent to write the passage, I would be happy to meet with your secretary or assistant to establish the particulars. We hope to have the brochures printed Oct. 20, and therefore have a time limit which I hope would not hinder you.

Sincerely yours,

Gerald Tomanek, Jr.
Gerald Tomanek, Jr.

X3204

4/13
The Urban
Challenge



The intercollegiate conference on "The Urban Challenge" will provide an opportunity for students representing many disciplines and schools and all sections of the country to focus on what many men have called the greatest domestic problem of our day. Great changes are occurring in our cities, and vast problems are confronting our present and future leaders.

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J. A. Stratton
President
Massachusetts Institute of Technology

The Urban Challenge

An intercollegiate conference emphasizing interdisciplinary approaches to urban problems: social, political, economic, and technical.

April 13, 14, 15, 16, 1966
Massachusetts Institute of Technology
Cambridge, Massachusetts



The Challenge

The problems of urban and metropolitan areas are probably the greatest challenges that face American society in the second half of the twentieth century. Eighty per cent of the American people will live in urban environments by the end of this century, and this population expansion comes at a time when most American cities are reaching middle — if not old — age. This aging is physical, but it is also social, accompanied by economic and political obsolescence. The solution of urban problems is thus critical, and it will require a broad, interdisciplinary effort.

The dilemmas of the urban environment have traditionally been discussed in the academic world from the social, economic, political, or technical standpoint. "The Urban Challenge" is an intercollegiate conference based upon an attempt to change this "or" to "and" and upon the need to involve undergraduates in the effort to understand and solve metropolitan problems.

The conference will be attended by students from all the disciplines which interact in the field of urban affairs. These include architecture, city planning, economics, many fields of engineering, political science, and sociology. The conference will also be attended by professionals in each of the fields who will work with the students in their joint attempt to understand the urban challenge.

The Response

The conference will focus around three of the most pressing issues in the field of urban affairs: urban renewal, transportation, and the future of the metropolitan environment. Each of these foci will be discussed by a panel of experts, each of whom is working on the specific problem from a different point of view, coming from federal and municipal governments and from the academic and professional communities. Following these plenary sessions the delegates will meet in smaller seminar groups to discuss issues presented by the panel. These seminars will be arranged so that delegates from each of the represented disciplines will be at each seminar. In addition to these program highlights, there will be tours to many parts of the Boston metropolitan area, including many renewal projects. These tours will include presentations by members of the project staffs of the Boston Redevelopment Authority.

Registration

The registration deadline for delegates is March 1, 1966. Please complete the enclosed registration form as early as possible and mail it to:

The Urban Challenge
Room W20-401
Massachusetts Institute of Technology
Cambridge, Massachusetts, 02139



Program

Wednesday, 13 April

- 9 a.m.-2:15 p.m. Registration and housing
2:30 p.m. Opening of the conference
3:00 p.m. First Plenary Session: panel on Urban Renewal*
6:30 p.m. Dinner
7:30 p.m. Discussion groups on Urban Renewal
10:15 p.m. Informal reception for delegates to the conference

Thursday, 14 April

- 9 a.m. Discussion groups on Urban Renewal (continued)
12 noon Luncheon
1 p.m. Second Plenary Session: panel on Transportation*
3:15 p.m. Discussion groups on Transportation
6:30 p.m. Dinner
7:30 p.m. Third Plenary Session: panel on The Future Metropolis*
9:45 p.m. Informal reception for delegates to the conference

Friday, 15 April

- 9 a.m. Discussion groups on The Future Metropolis
12 noon Luncheon
1:15 p.m. General discussion groups and tours of the Boston area
6:30 p.m. Conference Banquet
8:30 p.m. Fourth Plenary Session: Keynote Address*
9:30 p.m. Informal reception for delegates to the conference

Saturday, 16 April

- 9 a.m. Fifth Plenary Session: Conference Summary*
12:15 p.m. Luncheon
1:30 p.m. Adjournment of the conference

*Sessions are open to the general public





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2024-2025

Inschlicht
Challenges



The Urban Challenge



The intercollegiate conference on "The Urban Challenge" will provide an opportunity for students representing many disciplines and schools and all sections of the country to focus on what many men have called the greatest domestic problem of our day. Great changes are occurring in our cities, and vast problems are confronting our present and future leaders.

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J. A. Stratton
President
Massachusetts Institute of Technology

The Urban Challenge

An intercollegiate conference emphasizing interdisciplinary approaches to urban problems: social, political, economic, and technical.

April 13, 14, 15, 16, 1966
Massachusetts Institute of Technology
Cambridge, Massachusetts



Interim Program

Wednesday, April 13

- 1:30 p.m. Opening of the conference
Julius A. Stratton, President of M.I.T.
Robert C. Wood, U.S. Department of
Housing and Urban Development
- 3:30 p.m. First Plenary Session: panel on Urban
Renewal
John T. Howard, M.I.T., moderator
Edward J. Logue, Boston Redevelopment
Authority
Louis Sauer, architect
James Q. Wilson, Joint Center for Urban
Studies, Harvard University and M.I.T.

Thursday, April 14

- 1:00 p.m. Second Plenary Session: panel on
Transportation
Rush B. Lincoln, Jr., Massachusetts Bay
Transportation Authority, moderator
Lyle C. Fitch, Institute of Public
Administration
John F. Kain, Harvard University
John C. Kohl, American Transit
Association
Robert A. Nelson, Office of High-Speed
Ground Transportation, Department of
Commerce
- 7:30 p.m. Third Plenary Session: The Future
Metropolis
Leonard J. Fein, M.I.T.

Friday, April 15

- 8:30 p.m. Fourth Plenary Session: Keynote Address

Saturday, April 16

- 9:00 a.m. Fifth Plenary Session: Summary of the
conference

All sessions will be held in Kresge
Auditorium, Massachusetts Institute
of Technology.

The Urban Challenge

An interdisciplinary approach to the study of urban development and the challenges it poses for the future. This book examines the social, economic, and political forces that shape the urban environment and the ways in which these forces interact to create the complex and dynamic urban landscape of the twenty-first century.

The book is divided into three main sections: the first section explores the historical context of urban development; the second section examines the social and economic forces that drive urban growth; and the third section discusses the political and policy challenges of managing urban development in the future.

The book is written in a clear and accessible style, making it an ideal text for students and scholars alike. It is also a valuable resource for anyone interested in the challenges of urban development in the twenty-first century.

The book is a comprehensive and up-to-date survey of the urban environment and the challenges it poses for the future. It is a must-read for anyone interested in the future of our cities.

The book is a valuable resource for anyone interested in the challenges of urban development in the future. It is a must-read for anyone interested in the future of our cities.

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The Urban Challenge

AN INTERNATIONAL JOURNAL OF URBAN AND REGIONAL PLANNING

Volume 12, Number 1, 1980

Editor: J. R. HARRIS, University of California, Berkeley

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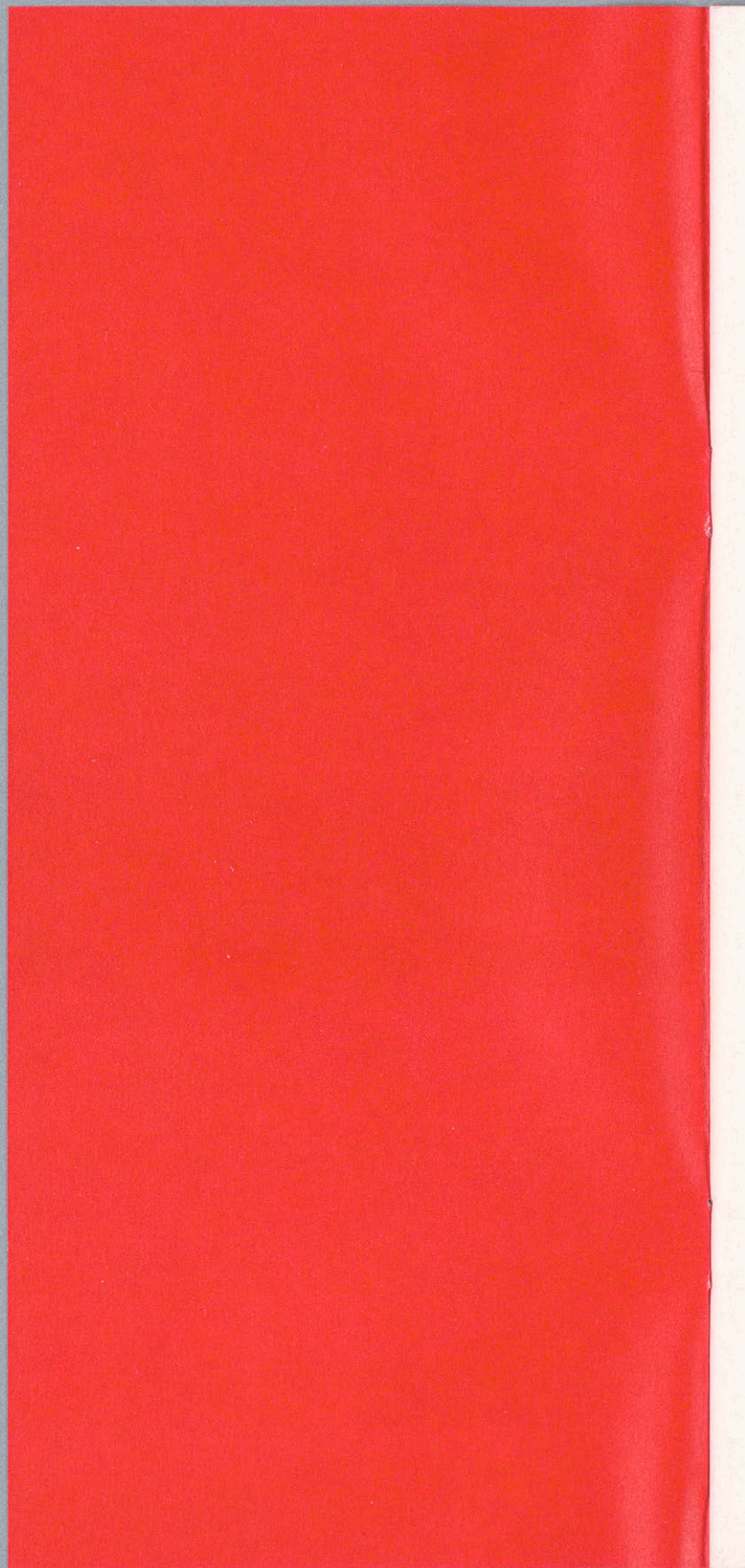
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The Urban Challenge





The Urban Challenge

An intercollegiate conference emphasizing interdisciplinary approaches to urban problems: social, political, economic, and technical

April 13 through 16, 1966
Massachusetts Institute of Technology
Cambridge, Massachusetts

Wednesday, April 13

1:30 p.m. Opening Session
Kresge Auditorium

Welcome
Dr. Julius A. Stratton,
President of M.I.T.

Address
Dr. Robert C. Wood,
Under Secretary of the U.S. Department of
Housing and Urban Development (Head of
the Department of Political Science,
M.I.T., on leave).

3:30 p.m. First Plenary Session
Kresge Auditorium

Urban Renewal

Moderator
John T. Howard,
Head of the Department of City and
Regional Planning, M.I.T.

Panel
Edward J. Logue,
Administrator, Boston Redevelopment
Authority.

Louis Sauer,
Architect (Philadelphia); Associate Pro-
fessor of Architecture, University of Penn-
sylvania.

Dr. James Q. Wilson,
Director of the Joint Center for Urban
Studies of Harvard University and M.I.T.;
Associate Professor of Government, Har-
vard University.

6:30 p.m. Dinner for Conference delegates
Sala de Puerto Rico, M.I.T. Student
Center.

7:30 p.m. Discussion groups on urban renewal.

10:15 p.m. Informal reception for Conference
delegates.

Thursday, April 14

9 a.m. Discussion groups on urban renewal (continued).

12 noon Luncheon for Conference delegates, Sala de Puerto Rico.

1 p.m. **Second Plenary Session**
Kresge Auditorium

Transportation

Moderator
Rush B. Lincoln,
General Manager of the Massachusetts
Bay Transportation Authority.

Panel
Dr. John F. Kain,
Assistant Professor of Economics, Har-
vard University.

John C. Kohl,
Executive Vice President of the American
Transit Association.

Joseph McC. Leiper,
Director of Transportation Planning, De-
partment of City Planning, City of New
York.

Robert A. Nelson,
Director of the U.S. Office of High Speed
Ground Transportation.

3:15 p.m. Discussion groups on transportation.

6:30 p.m. Dinner for Conference delegates,
Sala de Puerto Rico.

7:30 p.m. **Third Plenary Session**
Kresge Auditorium

The Future Metropolis

Addresses

Dr. Leonard J. Fein,
Assistant Professor of Political Science,
M.I.T.

Wolf Von Eckardt,
Critic; Architecture Editor, *The Wash-
ington Post*.

9:45 p.m. Informal reception for Conference dele-
gates.

Friday, April 15

- 9 a.m.** Discussion groups on the future metropolis.
- 12 noon** Luncheon for Conference delegates, Sala de Puerto Rico.
- 1:15 p.m.** Tours of the Greater Boston area for Conference delegates.
- 6:30 p.m.** Conference Banquet for delegates, Sala de Puerto Rico.
- 8:30 p.m.** **Fourth Plenary Session**
Kresge Auditorium
- Keynote Address**
- The Honorable F. Bradford Morse,
U.S. House of Representatives.
- 10 p.m.** Informal reception for Conference delegates.

9 a.m. **Fifth Plenary Session**
Kresge Auditorium

**Cambridge Neighborhood IV: A Case
Study of The Urban Challenge**

Moderator
Dr. Frank C. Colcord, Jr.,
Special Assistant to the Chairman of the
Corporation, M.I.T.

Panel
Mrs. Elsa Baldwin,
Director of the Cambridge Neighborhood
House.

Mrs. Ruth Fahy,
Editor of the Towne-Elms Echo.

John M. Gairachty,
Vice President of the Roberts School
Parent-Teacher Association.

Dr. Constance Williams,
Associate Planner, Cambridge Planning
Board.

12:15 p.m. Luncheon for Conference delegates,
Sala de Puerto Rico.

Summary and Conference adjournment.

Speakers



Mrs. Elsa Baldwin is a Cambridge sociologist who has applied her professional knowledge to help her own city improve the lot of its underprivileged children. She studied psychology at Wellesley, did research in social work at Columbia, and studied for a Master's degree in sociology at Clark University before making her home in Cambridge, where she is Director of the Cambridge Neighborhood House and a member of the Massachusetts Committee on Children and Youth. She describes her professional interests as community planning and applied social science.



Dr. Frank C. Colcord is Special Assistant to the Chairman of the Corporation, instructor in political science, and Senior Tutor at Senior House, an undergraduate dormitory at M.I.T. His work with the Chairman of the Corporation concerns M.I.T.'s relationships with Cambridge and related state and metropolitan activities. Dr. Colcord came to M.I.T. for graduate study in 1959 and earned his doctorate in 1964 in M.I.T.'s Department of Economics and Social Science; he had previously been associated for several years with federal international programs and the Bureau of the Budget.



Mrs. Ruth Fahy has lived in Neighborhood IV for 14 years, and she has been active in many community projects: editor of the Towne-Elms Echo, housing project bulletin; volunteer at the Cambridge Neighborhood House (11 years' service); Girl Scout committee member; and tutoring and planning board activities. She is the mother of three children.



A specialist in political theory, comparative political behavior, and minority discrimination, **Dr. Leonard J. Fein** is the editor of *American Democracy: Essays on Image and Realities* and the author of *Politics in Israel*. He is Chairman of the Research Advisory Council of the Massachusetts Commission Against Discrimination, Vice President of the Brookline (Massachusetts) Civil Rights Committee, and a member of the National Commission on Jewish Affairs of the American Jewish Congress; and he served on Governor Peabody's Special Commission to Examine the Operations of the Massachusetts Commission Against Discrimination. Dr. Fein studied at the University of Chicago and, under fellowships and grants of the Social Science Research Council, at Michigan State University.



John M. Gairachty, the father of six children, is a life-long resident of Neighborhood IV; he is employed as a laborer in the Cambridge Public Works Department. His interests are education, housing, and social action. In the past year he has been appointed to the Board of the Cambridge Neighborhood House, the Cambridge Economics Opportunity Committee, the Cambridge Community Services, and the Advisory Council of the Cambridge Civic Association; he is Vice President of the Roberts School P.T.A.



Professor John T. Howard has been Head of the M.I.T. Department of City and Regional Planning since 1957, and he has been a member of the M.I.T. faculty since 1949. Previously, following study at Antioch College, Yale University, and M.I.T., Professor Howard served as Research Assistant for the New England Regional Planning Commission, City Planner for the Regional Association of Cleveland, and Planning Director of the Cleveland City Planning Commission. His association with Professor Frederick J. Adams began during Professor Howard's student days, when Professor Adams was Head of the Department at M.I.T., and culminated in the formation in 1949 of the firm of Adams, Howard and Greeley (since 1964, Adams, Howard, and Oppermann). As a consultant, Professor Howard has worked with planning activities in Baltimore, Boston, Hartford, Providence, Washington, Los Angeles, Cleveland, Los Alamos, Portland (Maine), the San Francisco Bay area, and many smaller cities and towns. He was President of the American Institute of Planners from 1952 to 1954 and holds the Yale Medal for Distinction in the Arts (1959).



As a consultant to the White House Panel on Civilian Technology, Professor **John F. Kain** was co-author of the report, *Technology and Urban Transportation*; and he is co-author with two Harvard University colleagues of *The Urban Transportation Problem*; and he has written other papers on the influence of the automobile on employment patterns and urban development, the distribution of urban employment, and the economics of metropolitan development. Before coming to Harvard, Professor Kain studied at Bowling Green State University and the University of California (Berkeley) and worked on research at the RAND Corporation and the London School of Economics. He is a member of the Joint Center for Urban Studies of Harvard and M.I.T.



John C. Kohl joined the American Transit Association early this year after five years' service as Assistant Administrator for Transportation of the Housing and Home Finance Agency. Previously he had been a member of the University of Michigan faculty for 15 years, where he had been Director of the University's Transportation Institute and a member of the Department of Civil Engineering engaged in teaching, research, and consulting assignments in the transportation field; the latter included service on various national, state, and local transportation and regulatory committees. Mr. Kohl studied at Oberlin College and the University of Michigan; he is a registered professional engineer, and his previous experience includes service in engineering design and construction for several midwestern industrial firms and on the faculty of Carnegie Institute of Technology.

Joseph McC. Leiper was Project Coordinator of the New York City Metropolitan Rapid Transit Survey before assuming his present post in the New York Department of City Planning. His other professional experience includes work with the City of Philadelphia's Urban Traffic and Transportation Board, the Hudson and Manhattan Railroad, and the Port of New York Authority. Mr. Leiper has served as consultant to the Regional Plan Association and the New York State — New York City Fiscal Relations Committee; he was graduated from the Yale University School of Engineering in 1949.



Rush B. Lincoln, General Manager of the Massachusetts Bay Transportation Authority, was one of the first military officers assigned to the Transportation Corps when it was created by the U.S. Army in 1942; previously he had served in various assignments for the Corps of Engineers following graduation from West Point and M.I.T. General Lincoln's assignments in the Transportation Corps included Deputy Chief of the Planning Division, Senior Transportation Planner and staff officer at SHAPE, Commandant of the Transportation School, head of the Transportation Training Command, and Deputy Chief and Chief of the Corps. From 1963 until his retirement from active military service (with the rank of Major General) when he assumed his present post in Boston, General Lincoln was Commander of the Defense Traffic Management Services.



As Administrator of the Boston Redevelopment Authority, **Edward J. Logue** is responsible for Boston's broad urban renewal program which involves one-third of the land area and one-half of the population of the city. The program includes the planning and execution of three large residential rehabilitation projects, three major downtown projects involving commercial and government areas, and a downtown neighborhood rehabilitation project. Mr. Logue came to Boston after six years as head of the Development Program for New Haven, Connecticut, which has been described by Robert C. Weaver as the city "coming closest to our dream of a slumless city." Previously Mr. Logue had served on the staff of Chester Bowles when the latter was Governor of Connecticut and then Ambassador to India and to Nepal; he is a native of Philadelphia and a graduate of Yale and the Yale Law School.



F. Bradford Morse, who represents Massachusetts' Fifth District in the House of Representatives, first went to Washington as an attorney for the Senate Committee on the Armed Services in 1953 and one year later became Executive Secretary to Senator Leverett Saltonstall. Congressman Morse was Deputy Administrator of Veterans Affairs when he was first elected to the House of Representatives in 1960 on the Republican ticket; his district includes Lawrence, Andover, Lowell, and a number of smaller Middlesex County suburban towns. A graduate of Boston University Law School, he holds an honorary degree from Lowell Technological Institute and is a member of the American Bar Association.



Dr. Robert A. Nelson's specialty is rail transportation; before assuming his present position he served as Director of Transportation Research and Manager of the Northeast Corridor Transportation Project of the U.S. Department of Commerce (1964-65), Professor of Transportation at the University of Washington (1955-65), and Assistant Professor of Economics at Boston University (1947-55). He is a member of the White House Task Force on Transportation Policy, has been consultant to a number of transportation companies and government bodies, and has written monographs and articles on common carrier transportation. Dr. Nelson holds degrees from Clark University (1941 and 1954) and Boston University (1946).



Louis Sauer has professional experience ranging from urban planning to the design of multiple and single housing units. He has been a design consultant to the Redevelopment Authority of the City of Philadelphia, for whom his Morton Urban Renewal Project was exhibited in the United States Pavilion of the New York World's Fair; is currently architectural and planning consultant to the Department of Planning and Renewal in Camden, New Jersey; for the Montgomery County Planning Commission he is designing the Conshohocken, Pennsylvania, Central Business District Plan; he has completed the master plan for eighty acres of residential development in the new town of Reston, Virginia; and he is presently designing 320 town houses and apartments for the Reston site. Mr. Sauer studied at the Institute of Design of Illinois Institute of Technology and the University of Pennsylvania. He has been a visiting lecturer at M.I.T., visiting critic at Yale University, and a member of the faculty at Drexel Institute of Technology.



Dr. Julius A. Stratton is to retire from M.I.T.'s presidency in June, 1966, after seven years of distinguished service during which the Institute has grown in breadth and stature. Before becoming Chancellor in 1956, Dr. Stratton served on the M.I.T. faculty in electrical engineering and physics, and he was the first Director of the Research Laboratory of Electronics, M.I.T.'s first interdepartmental laboratory. At the request of the student body, the building housing the Institute's new Student Center was named in Dr. Stratton's honor this fall in tribute to his continuing concern for improving the environment for student life and activities at M.I.T.



Wolf Von Eckardt is the author of *The Washington Post's* regular weekly column, "Cityscape." He is an honorary member of the American Institute of Architects, on whose staff he has previously served, and he has recently held a Ford Foundation grant to visit new towns and city planning developments in Europe. Mr. Von Eckardt's publications include *The Challenge of Megalopolis*, a popular presentation of the original study by Jean Gottmann, and *Eric Mendelsohn* in the *Masters of World Architecture* series. He is currently working on a book which he describes as "an appraisal of architecture and city planning today," to be published under the title, *A Place to Live*.



Before joining the Cambridge Planning Board in 1964, **Dr. Constance Williams** was Director of the Special Services Department of the Women's Educational and Industrial Union in Boston, where her special interest was the development of housing for the elderly. She had previously been associated with the U.S. Department of Labor in the fields of industrial relations, employment, and prices. She holds degrees from Vassar, the University of Chicago (Ph.D., economics), and M.I.T., where she studied in the Department of City and Regional Planning.



Professor James Q. Wilson has written extensively on planning and urban problems, especially in relation to political activity in large American cities. His thesis for the Ph.D. degree from the University of Chicago (1959) was on the Negro leadership in the city of Chicago, and he has since written widely respected studies of politics and minority groups in relation to city planning and urban affairs. Professor Wilson came to Harvard University in 1961 following service on the political science faculty of the University of Chicago; since 1963 he has been Associate Professor of Government in the Graduate School of Public Administration at Harvard and Director of the Joint Center for Urban Studies of Harvard and M.I.T.



Dr. Robert C. Wood, an articulate authority on urban affairs, is on leave as Professor and Head of the Department of Political Science at M.I.T. while serving as Under Secretary of the U.S. Department of Housing and Urban Development. Dr. Wood came to M.I.T. from Harvard in 1957; one year later, when a Political Science Section was established within the Department of Economics and Social Science, Dr. Wood was one of the leaders in forming an active and innovative graduate program; eight years later he became the first Head of the Department of Political Science. His research and writings have concentrated on social, economic, and political aspects of urban organization and development.

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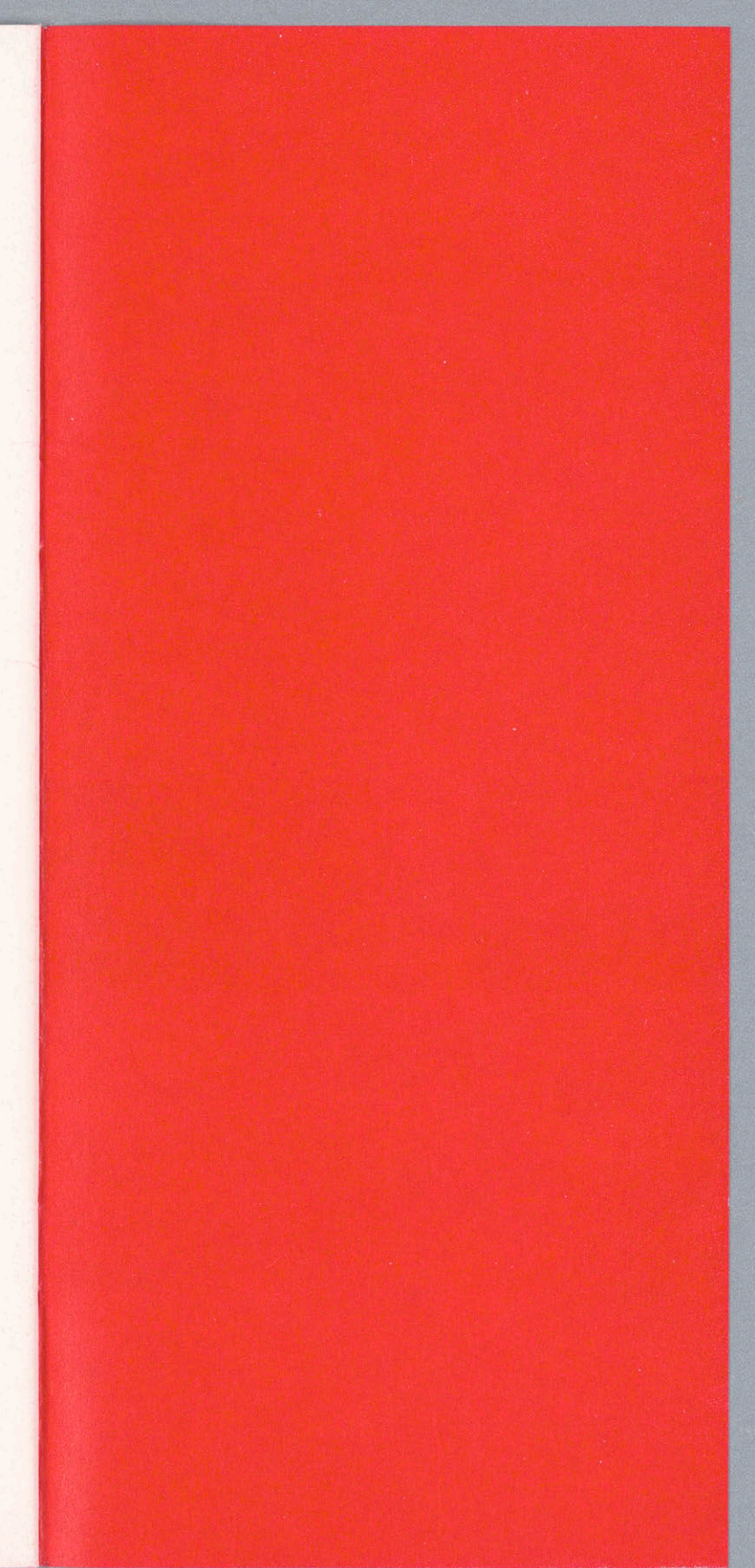
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4/13



THE URBAN CHALLENGE

APRIL 13, 14, 15, 16

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE, MASSACHUSETTS

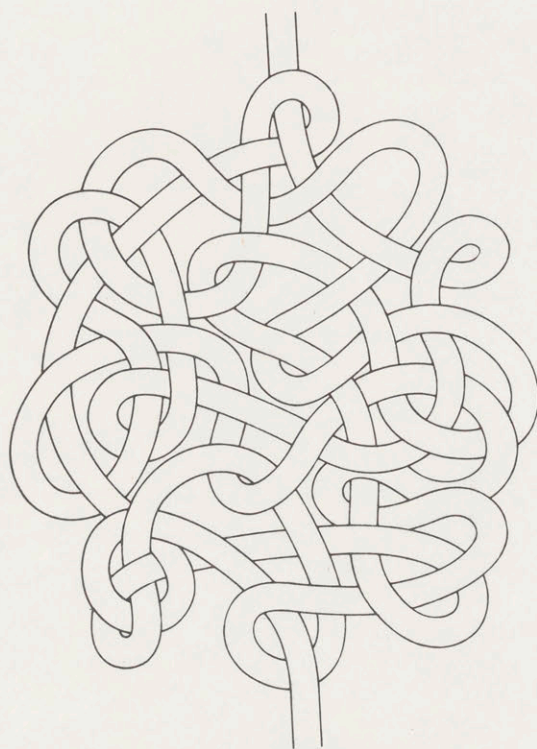


TABLE OF CONTENTS

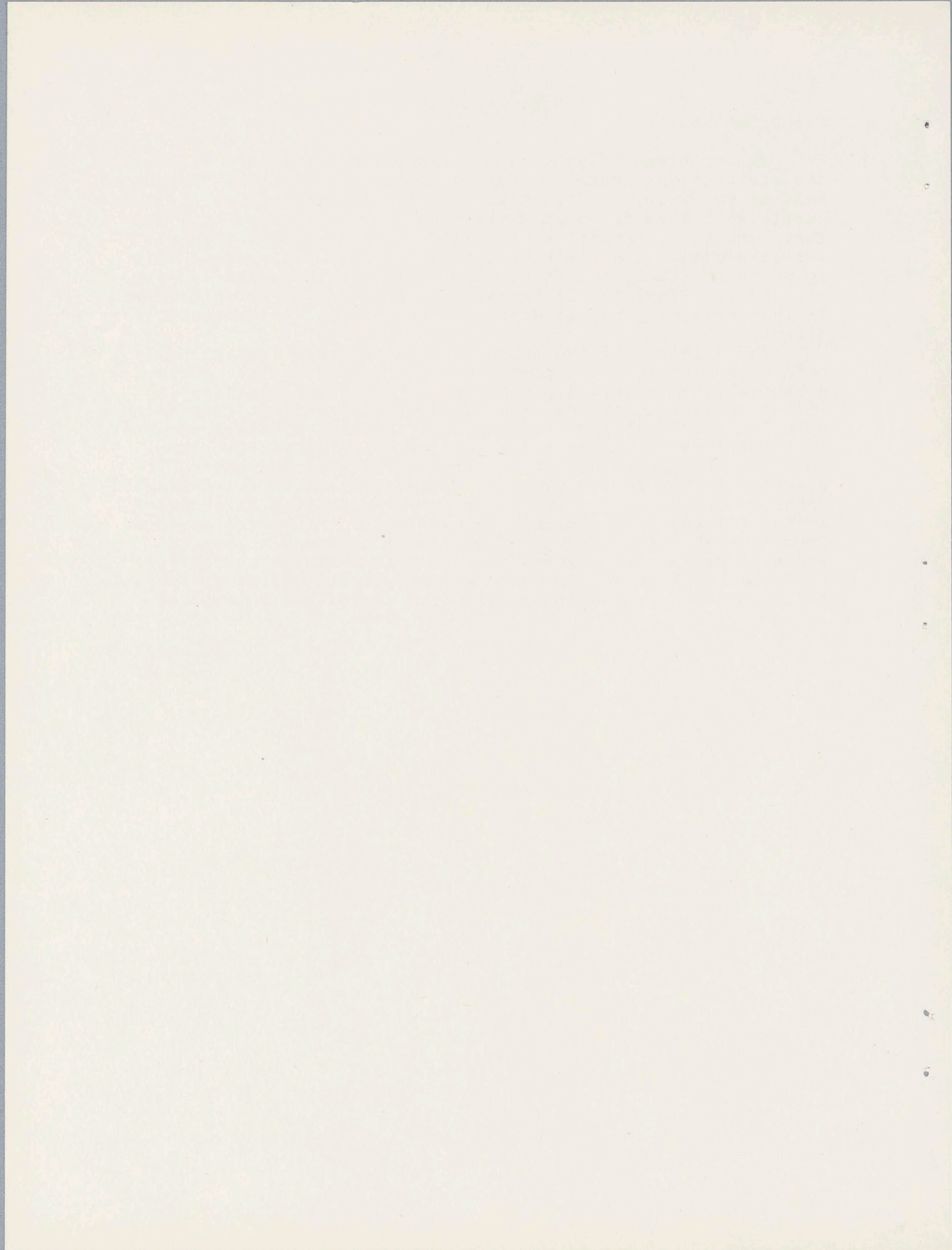
THE URBAN CHALLENGE	1
URBAN RENEWAL	
INTRODUCTION	3
THE ENDURING SLUMS	5
THE RENEWAL OF CITIES	19
QUESTIONS	31
TRANSPORTATION	
INTRODUCTION	33
ASPECTS OF TRANSPORTATION IMPROVEMENT	35
QUESTIONS	59
FUTURE METROPOLIS	
INTRODUCTION	61
RETROSPECT AND PROSPECT	65
URBAN TRADITIONS AND THE PLANNING OF CITIES	73
QUESTIONS	85
SUGGESTED READING	87

The Urban Challenge

The problems of urban and metropolitan areas are probably the greatest challenges that face American society in the second half of the twentieth century. Eighty per cent of the American people will live in urban environments by the end of this century, and this population expansion comes at a time when most American cities are reaching middle - if not old - age. This aging is physical, but it is also social, accompanied by economic and political obsolescence. The solution of urban problems is thus critical, and it will require a broad, interdisciplinary effort.

The dilemmas of the urban environment have traditionally been discussed in the academic world from the social, economic, political, or technical standpoint. "The Urban Challenge" is an intercollegiate conference based upon an attempt to change this "or" to "and" and upon the need to involve undergraduates in the effort to understand and solve metropolitan problems.

The conference will focus around three of the most pressing issues in the field of urban affairs: Urban Renewal, Transportation and the Future of the Metropolitan Environment. In the following selections, each of these issues are explored from several different points of view. However, no single group of essays can pretend to have exhausted the subject of the urban challenge. In these essays stimulate further investigation of the problem, they will have served their purpose.



Urban Renewal

On January 13th of this year, President Johnson officially announced the appointment of Robert C. Weaver and Robert C. Wood (Head of M.I.T.'s Department of Political Science) as the Secretary and Under Secretary, respectively, of a new Cabinet post, thus setting in motion the Department of Housing and Urban Development that was approved by Congress last November 9th. The Federal government thereby admitted the magnitude of problems peculiar to the functioning of the urban areas of our country and the importance to the entire nation of the solution to these problems. Washington had many programs to deal with problems of the cities, but they were uncoordinated, some overlapping, some inadequate. It remains to be seen whether or not the new department can take the authority out of the hands of solidly entrenched bureaucracies and develop a comprehensive program with which to attack our urban problems.

The importance of the city's problems can be seen in the flight to the suburbs. Many residents of the city have joined this flight and the number of such people appears to be growing. An equally alarming flight to the suburbs is that of business. More and more, companies are looking to the suburbs for new locations.

This exodus of people and commerce leaves the central city much the poorer. For those who remain, there are only old residences and old office districts. For some, these older structures are advantages; they mean cheaper residential units and cheaper floor space for commercial operations.

For those who have remained and kept up their homes and run their businesses, the situation is bleak. No matter how well cared for, the price of a home declines as the neighborhood declines. Business which thrives on the proximity to customers in a big city weakens as customers move to the suburbs and take their accounts with them.

What is needed for those who wish to remain is an arresting of this process; to keep the neighborhoods pleasant, and to keep downtown a good place to do business.

Urban renewal was initiated by the Federal government shortly after World War II to alleviate the worst aspect of urban life, the spreading slum. The early attempts at renewal were clumsy and their success was limited. Programs are now flexible: they can deal with small to large districts in a number of ways. Programs are now more comprehensive in scope-renewal efforts which revitalize entire downtown or neighborhood districts. Good examples of this are Boston's Government Center and Charlestown areas, Cleveland's Erievue, and Hartford's Constitution Plazz.

One of the current problems of urban renewal programs is the concentration on the short-term instead of the long-term future. We find many project areas "looking better" than before while actually solving few of the difficulties that originally caused the neighborhood to decline. A little face-

lifting and cosmetics may help the property tax base of the city but often doesn't help the citizens personally, especially the lower class: they get pushed from decayed areas to decaying areas, creating the phenomenon of the "wandering slum." Added to the relocation problem is the fact that one-half of the people who have been displaced by the renewal are Negroes. The poorer classes may eventually be pushed out of the central city by upgrading facilities (thus raising rents), but suburban communities are much less able than the central city to bear the welfare expenses of the poorer classes.

Given intelligent direction, the future of urban renewal holds much promise. Some of these problems can be solved by more attention placed on the mechanics of the program. A major, and justified, criticism of present renewal efforts is the very inadequate compensation given to individuals and firms forced to relocate because of a renewal program. Also, the use of the right tool at the right time makes a renewal program much more effective. Some areas need only funds for financing repairs to a few dwellings to keep the neighborhood reasonably well kept up. In the past, wholesale clearance and rebuilding has been attempted for areas like these only to meet the righteous (but usually ineffective) wrath of a community desiring to protect its homes. Such issues must be resolved in our urban renewal program is to live up to its potential.

With this introduction to renewal efforts and problems, we may consider several problems more thoroughly. Nathan Glazer takes us into greater detail on the spectrum of renewal policies and problems. He analyzes the stated and implicit goals of renewal, the gains and shortcomings of the programs to date, and the points from which to attack these failures. Daniel Seligman's eight-year old article is still relevant today: its message is that efforts to eliminate slums are still as far from their goal as ever. These articles indicate physical renewal measures are inadequate to solve the problems of our decaying central cities.

Daniel Seligman - The Enduring Slums

In this second decade of postwar prosperity, in a time of steadily advancing living standards, the slum problem of our great cities is worsening. Today some 17 million Americans live in dwellings that are beyond rehabilitation - decayed, dirty, rat infested, without decent heat or light or plumbing. The problem afflicts all our metropolitan cities (i.e., those in the Census Bureau's 168 standard metropolitan areas), but it is most severe in the biggest, richest, most industrialized cities. In Houston, one of the newest and wealthiest of U.S. cities; in San Francisco, widely acclaimed as the best place in the country to live; in Pittsburgh, seat of a spectacular "renaissance"; in Cincinnati, perhaps the best-governed city in the U.S.; in delightful New Orleans - in all these cities and a great many more the number of people crowded into slums is growing faster than the population of the city as a whole. Block by block the slums are spilling out into once respectable neighborhoods as the middle class leaves for suburbia.

Only a few years ago there were high hopes that the problem was about to be licked once and for all. Under the Title I program of the 1949 Housing Act, the cities were going to demolish large tracts of decayed housing and, in a massive redevelopment program, private capital would put up vast new housing estates. That program is now stuck on dead center. A number of projects have been built, but only a small number, and for a variety of reasons private capital has not been attracted. The \$ 250 million a year allotted by the federal government for writing down the cost of the land is considered a paltry sum by city planners, but even this they have not been able to expend; in 1956 only \$ 13,500,000 was drawn upon for projects.

Disillusioned, cities have been turning more and more to the idea of rehabilitating neighborhoods instead of replacing them. Some federal money is now available for local rehabilitation projects and there have been some local successes, notably in Philadelphia and Baltimore. But in rehabilitation, too, large-scale private investment is a necessity and it has not been forthcoming. Slum property, unfortunately, is quite expensive to remodel and while remodeling can pay, real-estate investors can usually get a better return on their capital in other ways. Efforts by home-owners themselves - what the planners call "spontaneous rehabilitation" - have worked here and there, but they have not, as so many hoped they would, proved contagious.

Most disillusioning of all to planners has been the fate of public housing. Back in the Thirties, proponents of public housing were possessed of a missionary fervor. New housing, they believed, would by itself exorcise crime and vice and disease. But public housing didn't do what its proponents expected. Today, public-housing people are searching for a new rationale and their fervor is gone; the movement today is so weak that most real-estate groups hardly bother to attack it any more.

Why have all these efforts come to so little? Ironically, Reprint by permission of Fortune Magazine and Daniel Seligman from the book, "The Exploding Metropolis" published in 1958 by Doubleday and Co., Inc. and copyrighted in 1958 by Time, Inc.

prosperity itself is the major reason. The problems of big cities are appallingly difficult, not because the cities are "obsolete" but because they have vitality, and nowhere is this so evident as in the slums. The slums are crowded because there are jobs to be had; the news was spread to small towns and farms, the South, and to Puerto Rico, and in the wake of the postwar industrial expansion there has been a great migration of rural laborers and semi-skilled craftsmen to the big city. They work as sweepers at General Motors; they are scrap throwers at Inland Steel; they push hand trucks around New York's garment center.

Without this labor pool, the city - and its suburbs - could not grow, yet the immigrant laborers have done a great deal to dirty and despoil the city, and to debase its financial position. The migrants pay less taxes than other citizens, and they require a great many more municipal services. And in their search for jobs, the migrants have compounded the shortage of housing that already afflicted almost every metropolitan city. They have made it increasingly difficult to clear the slums that now exist. They have made the strict enforcement of housing codes a practical impossibility. They have made slum speculation an appealing business - at least economically. And they have hastened the exodus from the metropolitan city of those highly valuable citizens, the members of the older middle class. Looking at the resulting mess, a few planners have wondered whether the rapid industrial expansion has been worth it. Frederick Aschman, one of Chicago's leading planners, recently expressed the opinion that the slums may have been too high a price to pay for his city's mighty boom.

This is a gloomy assessment of the slum problem, but it is not a counsel of despair. Though the failure of recent anti-slum programs has been discouraging, it has also been instructive, and it may have cleared the way for some more realistic, if less exuberant, assaults on the problem. City planners today have at least a greater awareness of the complexity of the slum problem, of its intimate connection with business cycles, with labor migration, with the changing racial patterns of our cities. The economics of slum landlordism are in reasonably clear focus. And there is widespread agreement on one large point: that no anti-slum program will ever succeed unless it is backed heavily by private capital.

The Ever Replenished Slum

The migrants drawn to the slums tend to be semi-literate, low-income, of rural origin, and members of racial minorities. They aggravate racial tensions in many cities, but slum formation is not primarily a matter of race; it is the impoverished rural background of the immigrants that counts. "The Negroes who come here from Birmingham and Atlanta don't create slums especially," says one Chicago official. "I'd take them any day over the white hillbillies we get from the Ozarks." The trouble with the latter, as with the rural Negroes, Puerto Ricans, and Mexicans who invade

Chicago, is that they simply don't know how to live in cities. Their standards of sanitation are wretchedly low; they are largely ignorant of the routines involved in building maintenance; their ignorance and poverty (and the racial hostility they encounter) lead them to overcrowd any quarters they find. In brief, they create slums wherever they go.

There is nothing new, of course, about the slums being crowded with minorities. The slums, by definition the worst housing a city has, will always be inhabited by the groups at the bottom of the economic order. A half-century ago, when Jacob Riis was telling the world about the horrors of the downtown New York slums, he commented, "One may find for the asking an Italian, a German, a French, African, Spanish, Bohemian, Russian, Scandinavian, Jewish, and Chinese colony. Even the Arab, who peddles 'holy earth' from the Battery as a direct importation from Jerusalem, has his exclusive preserves at the lower end of Washington Street. The one thing you shall vainly ask for in the chief city of America is a distinctively American community. There is none; certainly not among the tenements."

The minorities have changed since Riis's day, but the observation is still valid. Negroes, of course, are the minority principally concerned today. Where the slum population is not Negro, it ordinarily consists of a distinctive nationality group bound to its slum neighborhood, sometimes after three generations, by special ties of language or religion. Identifiable communities of eastern or southern European origin are usually slum or borderline communities. Virtually all the "Chinatowns" in U.S. cities are in blighted areas. With the accelerated exodus of American Indians from their reservations (some 10,000 a year are now leaving), several cities have become uncomfortably aware of an Indian slum problem: there is a Navajo slum in St. Louis, a Chippewa slum in Minneapolis. The so-called hillbillies, who now constitute a major slum problem in several midwestern cities - there are 5,000 of them jammed into a few blocks in Chicago, in the Kenmore area on the North Side - are at least unique in one respect. They are about the only sizable group of white, Protestant, old-line Americans who are now living in city slums.

The Negro City

To some extent, all these new migrants to the cities can be counted on to assimilate into urban American culture, just as migrants from abroad have in the past. However, the problem will prove especially difficult for the newcomers, and not only because so many of them have dark skins. The difficulty is that in many cities, and especially some of the biggest ones - New York and Chicago are the extreme examples - the white urban culture they might assimilate into is receding before them; it is drifting off into the suburbs. Consider some figures:

New York City today has a net in-migration of 30,000 Puerto Ricans and 10,000 Negroes annually. Something like 50,000 whites appear to be leaving the city every year. Projecting immigration

and birth-rate data to 1970, city officials have come up with an estimate that New York will then be 28 per cent Negro and Puerto Rican. Manhattan alone will have a million Negroes and Puerto Ricans - 50 per cent of its population.

Chicago's Negro population is increasing by 35,000 a year. By 1970 there should be about a million Negroes in Chicago, comprising perhaps a quarter of the population. Best guess on the annual movement of Chicagoans to suburban areas: about 15,000.

Cleveland has had an annual loss of some 3,000 whites, and a gain of some 6,500 Negroes, over the past fifteen years or so. The city today is 26 per cent Negro; by 1970 that figure should be over 40 per cent.

St. Louis's population has remained fairly stable, at around 875,000 since 1940. But during those years the Negro population has increased from 12 to 30 per cent of the total; by 1970, it should be around 45 per cent. As the figures suggest, there has been a continuous exodus of whites from the city, mostly into suburban areas of St. Louis County, whose population has trebled since 1940. Only 39 per cent of the city's present adult population was born there.

In a curious way, the very depth of the prejudice against Negroes is what makes Negro slums expand so rapidly. The racial reordering of the cities creates its own dynamic after a while and becomes almost impossible to halt. Rural Negroes crowding into marginal areas create new slums, which induce whites to give up on the city and flee, which brings about new vacancies that are filled by rural Negroes - and so on. The process is deliberately encouraged in many cities by speculators in the slums, who induce the white tenants in borderline neighborhoods to sell out to them, and then proceed to "slum up" the vacated buildings.

Negro neighborhoods are not necessarily slum neighborhoods, of course. With the nationwide flowering of the Negro middle class, that fact is now manifest somewhere in almost every metropolitan city. The Deanwood section of Washington, D.C., the Wade Park section of Cleveland, and for that matter, the Granite Heights section of Little Rock, are all attractive middle-class communities and visible evidence that the slum problem is basically not racial. In fact, the Negro urban middle class has been one of the principal victims of the slums created by the rural Negro migrants. The homes of these middle-class Negroes - often obtained only by paying more than a comparable house would cost in a solidly white neighborhood - are likely to be in borderline areas, and are among the first to be threatened when Negro slum areas begin to expand. And many members of the Negro middle class never do get a chance to escape the slums: where housing is rigidly segregated, there is often an absolute shortage of decent homes for Negroes - even if they have money.

In addition to creating a slum threat to the homes of middle class Negroes, the migrants endanger the social advance of the whole Negro community. "Look what happens," a Negro leader in Chicago complained. "Some colored fellow at Inland Steel hears

there will be some new jobs for maintenance men there. So he calls his cousin Willie down on the farm in Mississippi and tells him to hurry up to Chicago. Well, cousin Willie hurries up here and pretty soon he's making \$ 75 a week. But he can't read or write much, and he's got no morals at all. He probably ends up hanging around South Side bars half the time, and he's a good bet to get himself in trouble. In fact, he gets us all in trouble."

With so many cousin Willies arriving, middle-class Negroes feel a strong urge to move to the suburbs; with every trend outward, however, the whites recede farther and integration seems as far away. The city itself, many Negro leaders feel, is where they must seek integration and privately they are coming to favor a quota system limiting Negro tenants in new interracial housing projects as the best guarantee that whites will not flee.

"You Paid Just the Same"

The feeling of the white-collar Negro about the slums was expressed dramatically by the tenants of the Lake Meadows community, a pleasant middle-income development in Chicago sponsored by the New York Life Insurance Co. Only a minority of the Lake Meadows tenants are white - a fact that the Negroes regret somewhat, but that has not left them any less grateful to have escaped the squalor of the South Side slums. "Where we used to live we had no heat. We lived like rats. We had to buy \$ 136 worth of storm windows and still we would wake up and the bed would be floating in water." Another theme repeated frequently was the escape, at last, from the hoodlums who infested the slum neighborhoods, the new sense of safety at night in Lake Meadows. And many tenants were delighted not to have to worry about rats any more. "It was necessary to exterminate constantly," a tenant recalled of his previous home. "And there were never any permanent results. But you paid just the same - and you paid plenty."

The quality of slums, of course, varies. There are slums and there are slums; by comparison with Chicago's black belt, or New York's East Harlem, some slum areas in other cities appear almost congenial. Consider Washington, D.C., for example. The slums in the southwest part of the district, which are about the worst the city has to offer, are terribly old - pre-revolutionary in some cases - and sadly dilapidated. But they are on wide, tree-lined streets, and most of them are not seriously overcrowded. (The rat-infested hovels in the immediate shadow of the nation's Capitol, which were made famous by a generation of angry photographers, have been cleared in the past decade, largely, it appears, because of the world-wide attention those photographs got).

While there is great variety in our city slums, most of them have one thing in common: they are eating away at the heart of the cities, especially their down-town areas. The slums would, in fact, be much easier for the cities to endure if

they were off in fringe areas. But in Chicago, Cleveland, St. Louis, Detroit - indeed, in almost every major metropolitan city - the slums envelop and squeeze the core of the city like a Spanish boot. If you start in the middle of almost any big city's main center of municipal government, or its main shopping district, and walk about ten blocks, you will be in a slum. The reason is that these core areas are the oldest areas; the housing around them is likely to be fifty or even a hundred years old and therefore especially prone to slum formation. The same may be said of the housing around the cities' great railroad terminals or port areas, which were also located and built up in other centuries. A visitor getting off a train, or debarking from a ship, almost always sees the seamy side of the city first.

In recent years the aggregate population of U.S. metropolitan cities has been increasing by about 400,000 annually. Meanwhile something like 250,000 new units a year, public and private have been built within metropolitan city limits. But the latter figure is scarcely higher than the number of units taken out of the urban housing market every year (by demolition, condemnation, or conversion to industrial use). This means that the pressure on city housing is getting worse by almost 400,000 persons a year.

This pressure helps make slum property immensely profitable for unscrupulous operators. Most profitable of all is the conversion of large old apartments into one-room units that are let out at stiff prices. One-room units in the West Eighties in New York are going today to Puerto Ricans for as much as \$ 28 a week; occupancy of a single room by five or six people is not uncommon. A recent slum fire in Cleveland, in which an infant was killed, resulted in a municipal investigation that uncovered these interesting investment details: the burned-out tenement, a dilapidated frame structure erected in 1885, had been converted in 1954 from single family to five family occupancy. This brought in rents totaling \$ 270.83 a month and the landlord's total investment in the building was \$ 5,000. By keeping his operating expenses at an absolute minimum, he got a pre-tax return on his investment of more than 50 per cent, or roughly three times the average return on city apartments. Landlords who specialize in illegal conversions always face the danger, of course, that someday the city will hit them with a big repair order and fine them for delinquencies. However, the risk is usually not very great; and in most cases, the worst that can happen to a slum landlord is that his profits will be decreased by his repair bill until they are in the normal range for city rentals.

Thinking Small

Given the character and dimensions of the problem, it is natural to ask whether the cities have any real chance of arresting the growth of slums. They do, but only if they can generate new housing on a large scale. Let us first consider what is now

being built and what difficulties beset the present programs.

Two activities of the federal government are principally involved: its urban-renewal program and its public-housing program.

The most striking fact about this federal effort is that it is quite limited. At the moment, the combined budgets of the Urban Renewal Administration and the Public Housing Administration come to less than \$ 360 million a year, and no one seriously expects to get much more money from Washington. Of course, the exigencies of national defense make a big federal anti-slum program unlikely today. But, even when more money was available, Congressmen tended to think small about city housing, though multibillion-dollar highway and school proposals have been a commonplace in the capital. It may well be that this low priority for the slum problem reflects the temper of the American people; many city planners would testify that Americans are exasperatingly indifferent to the problem. "I learned a long time ago," says Ernest J. Bohn, head of the Cleveland City Planning Commission, "that it's always much easier to get support for a demolition program when you're trying to build highways. When you're trying to build new housing, hardly anyone wants to bother."

The most important feature of the federal urban-renewal program is the provision made in Title I of the 1949 Housing Act for capital grants to cities with plans for redevelopment projects. The cities are expected to buy land in blighted areas and to resell it at a loss, to private developers. Two-thirds of the loss is borne by the federal government, the rest by the cities.

At the time the act was passed, there was a widespread expectation that a great redevelopment blitzkrieg was going to hit the country, that the recent of federal money would nerve local planners and builders to undertake great things. Instead of a blitzkrieg, there has been a long and tedious parade of all the legal problems involved in redevelopment.

"The process cannot really be hurried very much," says Richard Steiner, the Urban Renewal commissioner. "First, there have to be long hearings in each city before they can agree on a proposal to submit to us. All sorts of local pressures are involved. Any single small store-owner in an area that's marked for redevelopment can hold up the works by himself for a year or two." Then, Steiner adds, it takes the localities about eighteen months to get a redevelopment plan ready for the URA. It takes the administration perhaps six months to approve the plans. A further two years are required to condemn and buy up properties in the project area, and to relocate families living on the site. A final year or two will be spent on the construction.

This timetable, which is now more or less in effect, actually represents a considerable improvement over the record attained by URA in the past. At the end of 1957 some 460 projects were in various stages of planning and execution. But in only six cities had any projects been brought to the point at which families were actually living in them.

One obvious drawback to Title I's operation is that the long interval between conception and execution is intensely demoralizing to the occupants of an area marked for redevelopment. The loss of morale leads to noticeable deterioration: tenants and landlords, each suspecting they are not long for the neighborhood, stop making improvements. A good example can be seen in the thirteen blocks around New York's Lincoln Square. It may someday be transformed into a world-renowned Center for the Performing Arts. But right now it is hard to persuade anyone in the area to repair a broken stoop.

Another widespread complaint against Title I is that its redevelopment projects, especially the biggest ones, create relocation problems that are too big for the cities to handle. Slum buildings that are demolished to make way for redevelopment are usually incredibly overcrowded (which is one reason, of course, why they are slums). The new buildings are likely to be much less densely occupied. The net effect of redevelopment, then, is almost always a big reduction in the neighborhood's total population and a consequent increase in the population pressure on nearby neighborhoods. Thus, with a city-wide housing shortage, slum clearance and redevelopment can become self-defeating after a while.

The Lincoln Square project is again a case in point. Six thousand families, mostly low-income Negroes and Puerto Ricans, will be displaced by the project. When the area is redeveloped, it will have 4,400 housing units. Scarcely any will be occupied by the neighborhood's old residents - the monthly rent of \$ 45 to \$ 50 a room will be too high for them - so they will inevitably pile into other areas of West Manhattan and create new slums.

There is yet another criticism of the Title I program to be noted. It has been argued that it pays an unwarranted subsidy, or tribute, to slum landlords. The "market value" paid by the city to secure slum properties for redevelopment is highest where the landlords have had the greatest success in exploiting their properties (and their tenants) by violating housing codes. The Government, in effect, ends up paying landlords for their violations. "Title I rewards the worst slum owners in the city," complains Milwaukee's Mayor Frank Zeidler.

Public Housing

The public-housing program of the government has not fared much better than Title I. Public-housing advocates registered intense dismay when Congress in 1956 limited the federal program to 35,000 units a year for the next two years. But it is now apparent that even this small quota was not taken up. The cities, increasingly dismayed by the red tape involved, are just not putting in enough bids to the Public Housing Administration, and so between 5,000 and 10,000 units "washed away". This washaway is a measure of the low estate to which public housing has fallen.

From its inception in 1937, the federal program was sub-

jected to a fusillade of abuse from real-estate groups: public housing was "socialistic"; it was unfair competition to private enterprise; it was an unwarranted subsidy to families who "have no more right to a free new home than to a free new car."

This kind of attack against public housing in principle is now pretty well muted in most big metropolitan cities. In its place has come criticism from a new and unexpected source. The present critics are all for public housing in principle. In fact, they include some of the distinguished old-timers of the public-housing movement - e.g., Catherine Bauer and Warren Jay Vinton, both of whom had a hand in drafting the Housing Act of 1937. These critics are saying that the program is just now working out as expected, and some major revisions are needed.

"They're the Same Bunch"

The new criticism reflects in part the disillusionment of liberals who expected too much of public housing. "Once upon a time," says a close student of New York's slums, "we thought that if we could only get our problem families out of those dreadful slums, then papa would stop taking dope, mama would stop chasing around, and Junior would stop carrying a knife. Well, we've got them in a nice new apartment with modern kitchens and a recreation center. And they're the same bunch of bastards they always were."

It is now recognized that housing is far from decisive in the making of good citizens. Very few students of the subject now believe that the slums create crime and vice and disease; it is now considered more likely that the slums simply attract problem families. And their problems will not be erased by putting these families in a public-housing project. Admission of this sad fact still leaves room for plenty of arguments for public housing, of course, but it has drained the movement of much of the moral fervor it once possessed.

Indictments of public housing today usually center on these points:

The vast, high-rise public-housing project is a cold, impersonal, cheerless place to live in. The physical look of the project and the constant repetition of the word itself constitute a continuing, humiliating reminder that occupants are wards of the state. There are too many rules for tenant behavior, and too much discipline is exercised by the project manager. The project is run like an institution, nor a residence.

The income limits imposed on public-housing occupants are unrealistic. The theory of public housing has always been that you take a family out of the slums, give them decent quarters and a chance to get on their feet, and then, when they increase their income to a certain level, let them move to private housing.

However, the present income limits are so low in most cases - they vary from state to state, and also according to size of family - that most families just have to go back to the slums when they bump the limit. This discourages any tendency to self-

improvement the tenant may have. Many project managers complain that the income limits operate to deprive the projects of the "leadership" they need - of tenants who would set higher standards of social behavior.

Another unfortunate aspect of the income limit systems is that it leads to snooping by the authorities and duplicity by the tenants. Bank books are checked periodically; and extraordinary expenditures are examined closely. (Recently an investigator from the General Accounting Office thought he had run into a scandal-in-the-making when he saw a Cadillac in the parking lot of a New York project. Careful investigation revealed that the tenant had won it in a raffle.)

Public housing is inordinately expensive. The tenants usually pay only enough to cover maintenance costs. Capital charges in big projects run to more than \$ 13,000 per unit and are sometimes as high as \$ 20,000. For that kind of money, the government could buy the tenants houses of their own in nice suburban communities.

There is no question that giving families \$ 10,000 or \$ 12,000 houses outright would be a lot cheaper for the city and federal government than the project system. Some city housing men are beginning to think it's not a bad idea. Some of them are even willing to consider turning the newly housed family "free" - ending all the supervision, and simply taking the chance that the family will behave responsibly.

What is most likely to emerge from the criticism of the public-housing program is not an abolition of the project, and certainly not of the public-housing idea, but some sensible modifications of both. The high-rise monstrosity is clearly on the wane; row houses or semi-detached units are likely to replace it more and more in future developments. Income limits are likely to be raised and made more flexible. And perhaps some way will even be found to repeal about half of the rules in the tenant rule books.

The Fix-up Idea

The widespread discouragement about the federal anti-slum effort has led in many cities to an increased preoccupation with more modest local programs. In some places the emphasis is on rehabilitation of deteriorated buildings, in others on conservation of decent neighborhoods threatened by blight. And in virtually all cities there is an intense new interest in the prospects for tightening up the enforcement of existing building codes as a way of preventing new slum growth.

There have been a few spectacular successes in rehabilitation. The comeback of the Georgetown area in the District of Columbia, of Beacon Hill in Boston, and, more recently, of the section west of Rittenhouse Square in Philadelphia, have all attracted nationwide attention. However, these have all been rehabilitated for high-income use. In other ways, too, they are special cases: the buildings were structurally sound to begin

with, they were mostly located on the edge of "prestige" areas, and first-rate community services were available before the rehabilitation began.

Improving blighted structures of low and middle-income tenants is a much more difficult proposition. Banks naturally hesitate to finance rehabilitation in borderline neighborhoods. The danger that a new wave of blight will roll over the redone structures is too great. Besides, investment opportunities have recently been larger and safer in the new housing field than they have been in rehabilitation.

The Urban Renewal Administration in Washington now has some funds available for rehabilitation, but these have not been used much. An ACTION study notes that builders and investors are considering some new ways to finance a rehabilitation program. They include:

Development of large-scale rehabilitation enterprises, to be financed by private renewal corporations with funds raised primarily by subscription.

Encouragement of financial institutions to establish loan pools for rehabilitation. These would be something like the method used by insurance companies in New York State to split the risk on compulsory automobile insurance.

Encouragement of union welfare funds and insurance companies to invest in rehabilitation.

The conservation idea has also had limited success in some cities. Conservation, as the term is generally used, involves a mixture of rehabilitation (e.g., paint-up campaigns in fringe areas), limited redevelopment (wiping out pockets of blight before they spread), and a steady pressure on the city to keep up the quality of municipal services.

Chicago has laid great stress on conservation in recent years. The city has an Urban Community Conservation Act under which neighborhood organizations get considerable assistance from the city, including, in some cases, the power of eminent domain. It is hard to make an over-all estimate of the Chicago conservation effort as yet. Some of the neighborhood committees are heavily backed by local stores, churches, and universities genuinely determined to resist the spread of blight, and they have had important successes. Other committees are not much more than local anti-Negro organizations.

The success of both rehabilitation and conservation depends in part on the ability of a city to enforce its building codes. The most common violation, of course, is overcrowding. In New York and several other big cities, where overcrowding is worst, the difficulties of code enforcement are aggravated by deep-rooted systems of graft in local building departments. Milwaukee and Baltimore have made special efforts to enforce their codes. Baltimore, for example, has set up a local housing court, which meets three times a week. Its sole purpose is to investigate complaints about violations of municipal ordinances. But even in Baltimore violations persist. It would be hard to name any city where code enforcement is as rigorous

as local planners think it should be.

"Trickle-Down" in Housing

Strict code enforcement will never be possible until a great deal more housing is available to low- and middle-income tenants. New housing is the sine qua non of any successful slum program. For no matter what the cities do to reform their building departments, no matter what they do about race relations, or conservation, or any other municipal programs - they cannot lick the slums without new housing.

The battle against the slums will be decided by the simple arithmetic of new building vs. the in-migration to the cities. Approximately 250,000 new housing units are built in our metropolitan cities every year. Many, perhaps most, of the new units consist of single-family homes in outlying areas of the city, i.e., homes that are essentially suburban in character, even if they happen to be within the city limits. The remainder consists largely of luxury apartment houses and of public-housing developments. What is lacking is a significant supply of new middle-income housing - housing that would, over a period of time, "trickle down" to lower-income groups and help to pull them out of the slums. As the pressure of population on the city's housing eased, code enforcement could be made stricter.

What chance is there of getting this middle-income housing?

The last great wave of city residential building has a rather special history. Some 465,000 apartment units were built under Section 608 of the Housing Act - most of them in the years just after the war. As the Senate's Capehart Committee subsequently showed in considerable detail, a great deal of this building was attracted by the prospect of "windfall profits" (as the committee called them), or "mortgaging out" (a term preferred by the industry). What happened was that many builders overstated their expected costs to the FHA so that their 90 per cent mortgages, insured by the government, were greater than the outlays they actually made in the end. What made the program scandalous was evidence that the FHA had done nothing to investigate the builders' estimates; in some cases there had even been collusion between builders and agency officials.

Are Windfalls Necessary?

Nevertheless, Section 608 at least got the housing built. And many students of the housing market are convinced that the housing could have been produced without the abuses. Under Section 608, builders could put up apartments without having to invest large amounts of equity capital. Under present FHA programs, the builder must provide at least 10 per cent of the capital, and for large apartment houses the sums required tend to discourage the investment, especially in a tight-money market.

One possible solution, then, would be a properly administered program on the order of Section 608. And perhaps other sour-

ces of equity capital might be tapped. Life-insurance companies and other financial institutions might be encouraged to put up equity capital as well as mortgage money. Businessmen might form local investment trusts to stimulate residential building. In Cleveland, for example, a group of industrialists have organized a Cleveland Development Foundation to help finance builders unable to find the equity money ordinarily required.

There are still other ways to make investment in city building more attractive. Investors might be given the right to lease cleared land, perhaps with an option to buy later. Metropolitan building codes, which are now generally stricter in the central cities than in outlying areas, could be equalized and modernized. Outlying areas might somehow be made to take on some of the tax burdens now carried by city real estate (though there is certainly no immediate prospect of the cities' winning out on this old argument). It would also be desirable to put land-use planning on a metropolitan-area basis, and to give investors better information as to the opportunities available in the area.

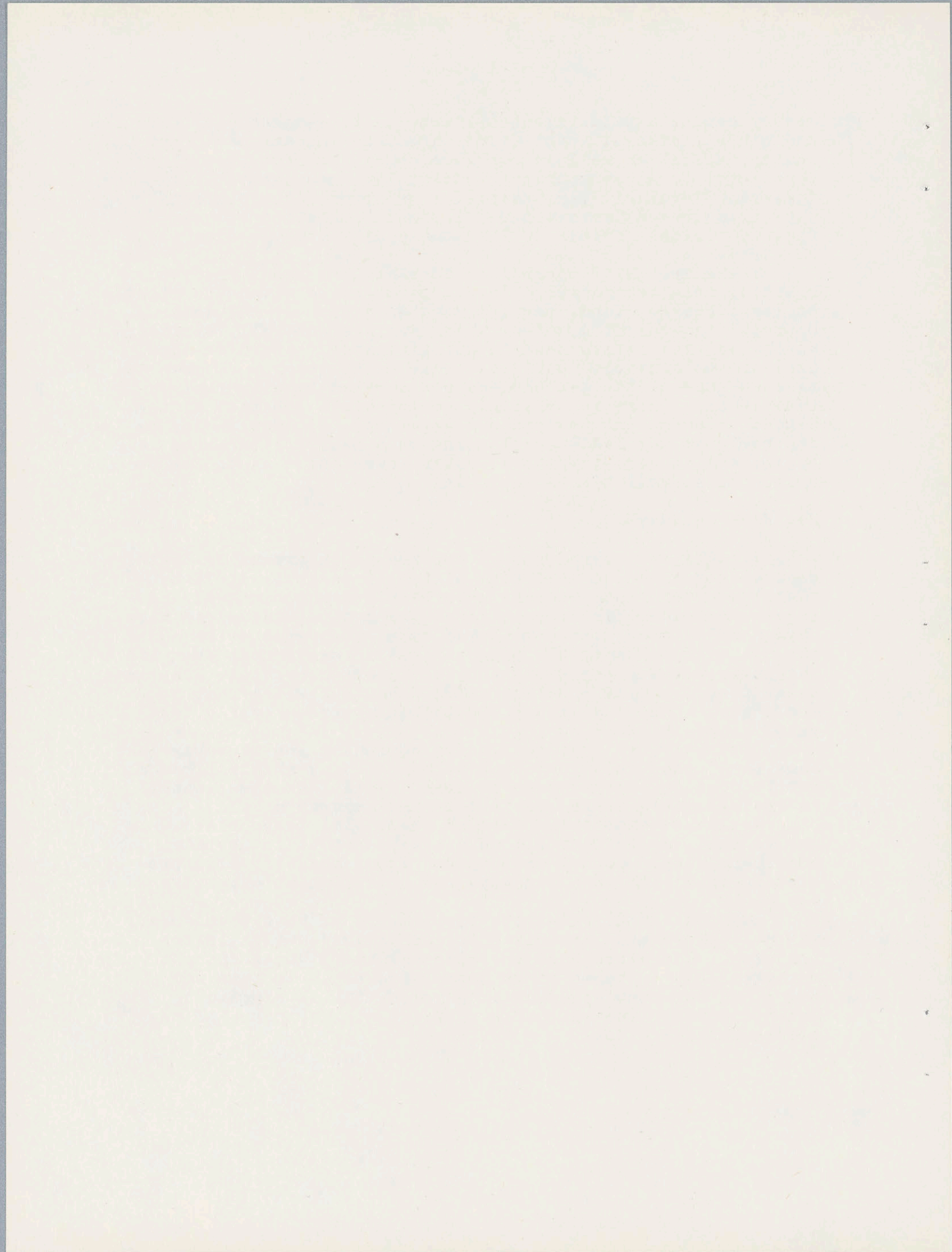
How Much Headway?

Finally, and perhaps most important, an expansion of the federal government's anti-slum effort is needed. It is true that the government programs have been a disappointment and require considerable overhauling; the delays, the administrative complexities, the endless red tape, must somehow be cut through. At present, the programs are so small that even if they were working perfectly they would not constitute a serious assault on the slum problem. ACTION has estimated that it would cost something like \$ 100 billion, spread over a ten-year period, to wipe out slums.

Obviously, we must settle for something considerably less than the "total solution" that such an outlay should produce. But federal intervention on a larger scale than the present is indispensable if we are to make any headway at all.

It may be that these "needs" never will be supplied. It may be that, as so many planners have observed in despair, Americans simply do not care enough about the city slum problem to tackle it in a big way, which is also an expensive way.

But just nibbling at the problem, as we have been doing, may well prove more expensive to the cities' health in the long run. The expense of the slums would be great enough measured only in terms of municipal finance. To this we might add the vast, immeasurable price that is exacted in human dignity. One way or another, we will continue to pay plenty for our slums.



Nathan Glazer - The Renewal of Cities

Many U.S. cities, with the aid of the Federal Government, are engaged in ambitious efforts to renew themselves. It is not certain, however, that the overall gains of these programs have outweighed the losses.

When we speak of the renewal of cities, we mean all the processes whereby cities are maintained or rebuilt: the replacement of old houses by new houses, of older streets by newer streets, the transformation of commercial areas, the relocation of industrial facilities, the rebuilding of public utilities; we refer to rehabilitation as well as demolition and rebuilding; we mean too the laws and administrative and financial mechanisms by which this rebuilding and rehabilitation are accomplished. The only way to discuss such an enormous subject is to consider all the elements of change in a city: its changing economic role, its changing population, decisions to buy or sell, stay or move, rehabilitate or demolish, and the larger market and political forces that affect all this.

Fortunately we can narrow our subject considerably. There exists, in this nation and others, specific public policies designed to plan and control at least some part of these vast processes. In the U.S. such policies are expressed in the urban renewal program administered by the Urban Renewal Administration (a part of the Federal Housing and Home Finance Agency), which guides hundreds of local city agencies in the effort to transform urban renewal from a process dominated by the requirements and opportunities of the market to one guided by social intelligence - reflection on how the process might best create a better city.

The specific program that is the focus of this article began with the passage of the Housing Act in 1949 and has been expanded and modified continually since then. Before that time, of course, there were many mechanisms by which cities and states and the Federal Government attempted to affect the rebuilding of cities. The most significant Federal predecessor of urban renewal was public housing, that is, slum clearance and the building of subsidized Government housing for the poor. There remains a good deal of confusion between public housing and urban renewal. Indeed, the agency that is responsible for New York City's huge program of urban renewal, the largest in the nation, was until a few years ago called the Slum Clearance Commission. A similar agency in Chicago was called the Land Clearance Commission. And under the original Housing Act the effort to guide urban renewal was administered by a Division of Slums and Urban Redevelopment. All these agencies now have different names that foretell the sparkling new structures that will go on cleared land rather than the grimy ones that are to be cleared. Therein lies one of the great dilemmas of our approach to urban renewal: the fact

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that our program provides great powers and resources for clearing the way to get new areas built but few resources for dealing with the people who live in the older areas that are to be cleared.

Federally supported public housing was only one of the ways in which government had tried to deal with urban problems before the development of a comprehensive renewal program. There were also Federally sponsored mortgage-insurance programs that helped to make possible the widespread construction of private, single-family houses in the suburbs of U.S. cities after World War II. In addition there were numerous efforts on the part of cities to control development and redevelopment with zoning regulations, health and building regulations concerning housing, and the establishment of local planning agencies. The urban renewal program made use of these local powers of planning and zoning, Federal credit mechanisms and the existing power to clear slums and build public housing; it added to these older approaches a powerful legal mechanism and a powerful financial mechanism, both designed to win the cooperation of private developers in the pursuit of public goals. The legal mechanism stipulated that a local renewal agency was empowered to condemn private property not only for public uses (which had long been permitted) and publicly owned housing but also for resale to private developers who agreed to fulfill the plan for the area that the local agency had drawn up. The financial mechanism, known as a write-down, committed the Federal Government to paying from two-thirds to three-quarters of the difference between, on the one hand, the cost of buying the land, clearing it and preparing it for the new development and, on the other, the price that private re-developers would pay for it. The designers of the urban renewal legislation were proposing a compromise: public intelligence was to guide the rebuilding of cities, but the rebuilding would be carried out in such a way as to ensure significant private profits and ultimate private ownership of land the public had spent a great deal of money and effort to acquire.

The power of condemnation assured private developers that they could acquire large tracts. These were sought because they prevent the remaining slums from pressing too close on the renewed area, diminishing its desirability, value and profit for the owner. One social critic, Jane Jacobs, has dramatically questioned the need for such large tracts in her book *The Death and Life of Great American Cities*. Most modern planners, however, tend to endorse the developers' demand for large areas, citing the need for more parking and park space. As for the financial write-down, private developers sought it because the price of central-city slum areas was high, even if one took away from the property owners the right to raise their prices excessively. The slums were densely occupied and lucrative for the landlords, favorably located and well served by public transportation and city facilities. In certain areas the financial power to write down the cost of land became far more important than the power to condemn. In Manhattan, for example, the redevelopment of urban renewal proper-

ty has cost the public \$ 1 million an acre - the difference between what was paid the owners of the land in order to clear it and what the developers paid to have the opportunity to redevelop it. In other areas developers were quite willing to pay the condemnation cost of the land, and it was the power to condemn and assemble that made redevelopment possible.

We have described the mechanisms of urban renewal; what were the objectives of the program? These can be ascertained if we examine the disparate elements in the alliance that forged it. There were first of all people committed to public planning and public housing. In 1949 these were the men and women who had participated in the great experiments of the New Deal, in which a modicum of European social imagination and concern in the area of housing had been introduced into the U.S. They saw urban renewal - even if they had qualms about the compromise embodied in the legislation - as a means of extending the power of the people to affect through politics the growth of their cities and the quality of their housing and environment, thus reducing the power of the market to shape this for them. Tied to the original urban renewal legislation was provision for a good deal of public housing that would foreseeably accommodate those who had to be relocated from the demolished slums. It was unpleasant from the point of view of the reformers to have to pay the owners of slum property so much money for the privilege of replanning and rebuilding the areas, but the alternatives had been vetoed. One such alternative, put forward by Charles Abrams and Catherine Bauer Wurster, called for building more public housing on open and cheap land on the outskirts of a city and allowing the price of central slum properties to fall as they emptied. Such a solution was opposed by the big-city mayors and the commercial and financial interests dependent on maintaining business and property values in the centers of the big cities - in particular, department store owners and banks with mortgages on central-city property.

Urban renewal was created by an alliance of those seeking reform and those seeking profit. The planners and advocates of public housing were trying to improve the environment of slum dwellers and the overall pattern of the city in terms of amenity and efficiency. The commercial and financial interests were trying to maintain the level of business and property values in downtown areas, jeopardized somewhat by an increasingly poor (and, incidentally nonwhite) central-city populace. Both groups wanted to stem the rapid flow of the more prosperous citizens to the suburbs and hoped this could be done by remodeling the cities physically. The mayors, confronted with the increasing costs of urban government and threatened by the decline of property values and tax revenues, shared this hope. They saw in urban renewal the solution to the economic decline of central-city areas and an opportunity to build monuments and generally beautify the cities.

The alliance is no longer intact. The downtown commercial

interests still support the program. The mayors still support it, seeing no alternative. The planners are split. Those who emphasize the social aims of planning, the problems of the poor and the slum dwellers, oppose the program on the grounds that it has done little for the poor and nothing to reverse the pattern of increased urban segregation. These planners are torn between their commitment to the ideal of the people shaping their own environment and their dismay at the actual environment that, under political and economic pressure, has been shaped. Most planners, however, support urban renewal; for one thing, the planners of today are not the planners of the 1940's who participated in the New Deal or whose ideas were molded by it. They are now in large professionals trained to fill needs created by the urban renewal program itself.

Let us review the present state of the program, taking our information from the report of the Housing and Home Finance Agency for 1964. By the end of that year local renewal agencies had acquired about 27,000 acres of urban land. "Redevelopers had been selected for 16,318 acres"; the rest was being cleared or was unsold. "Redevelopment had been completed or was actually under construction on more than 55 percent of that land," or about one-third of all the land that had been acquired. "By mid-1964, more than 72 percent of all land disposed of, exclusive of streets and alleys, had been purchased by private persons or organizations. More than half was intended for residential purposes. By mid-1964, 61,770 dwelling units of all kinds were completed and 18,300 more were under construction" - some 80,000 in all. The sum of Federal money involved in this effort - the capital grants that would eventually be required to complete this volume of urban renewal - was \$4.3 billion. Midway through 1964 some 176,000 families and 74,000 individuals had been relocated from sites scheduled for urban renewal.

The scale of this undertaking seems different from various perspectives. Bernard Frieden, professor of city planning at the Massachusetts Institute of Technology and former editor of the Journal of the American Institute of Planners, estimates that deteriorated housing in New York City in 1960 covered 1,145 acres. The number of units of deteriorated housing recorded by the census of 1960 was 147,000. This suggests that the urban renewal program was of a sufficient order of magnitude to clear away all the slums of New York - if all of the program had been devoted to that city (and if it had been used to clear away slums, and if there had been policies to prevent new slums from forming). On the other hand, the 80,000 units of housing built or under construction since the beginning of urban renewal in 1949 is not an impressive total compared with the 7.3 million housing units built between 1960 and 1964, nor does the relocation of some 750,000 people seem highly significant in view of the fact that 40 million people move every year in the U.S.

Obviously one can say that renewal has just begun to scratch

the surface of the need; there were, after all, 2.3 million sub-standard dwellings in our cities in 1960. It is also being said, however, that renewal has already gone too far, or at least too far in the wrong direction. Social critics allege that although the volume of building under the urban renewal program has been slight, its impact on certain parts of the population has been devastating. In some cities the designation for urban renewal of any area, no matter how decrepit the housing, arouses a desperate resistance among the people living there. Indeed, television dramas of daily life sometimes cast the local urban renewal agency in the role once played by the hardhearted banker. This adverse reputation, a powerful comment on urban renewal, seems to arise from the real experience of the poor; it was not created by the social critics who now amplify it. The urban renewal agency does in fact represent a current threat to many: destroying small businessmen, evicting older people from their homes, forcing families from their tenements and then failing to relocate them in decent, safe, sanitary and reasonably priced housing as required by law, threatening buildings of historic or architectural value, and even attacking Bohemians and artists in their contemporary garrets. (These are the most dangerous opponents, because they know how to get publicity.) It is apparent that the urban renewal agency is a more vivid threat to security than the banker in these days of amortized mortgages.

Still, if the scale of urban renewal has been as small as I have indicated in terms of figures for voluntary movement of population, new dwellings built and people directly affected, how is it possible to argue that its effects on the city have been so damaging? Primarily because its impact has been on one segment of the urban population: the poor - those least able, materially or psychologically, to adapt to upheaval. The people who live in old neighborhoods are, compared with the rest of the U.S. population, poor, old and more likely to be Negroes or members of other minority groups. They are often people with special ties to the neighborhood and special problems that keep them there. For many reasons, of which money is only one, they find it extremely difficult to find other housing in the city. Two-thirds of those relocated from urban renewal sites have been non-whites (the program has sometimes been derisively termed "Negro removal"), whose problem of finding housing is compounded by the fact that few parts of the city will accept them. Many of the businesses on urban renewal sites were small and marginal; indeed, some provided for an aged couple a living no better than what they would get on welfare. Such people were nonetheless kept occupied, and they provided some of the social benefits of an old neighborhood that Jane Jacobs has described: places to leave messages, conversation to break the monotony and anonymity of city living, eyes to watch the street. Some 39,000 business properties had been acquired by urban renewal agencies as of September 30, 1963; studies have shown that a third do not survive relocation. Some of them would have succumbed to the high death rate of small businesses in any case. Many that do

relocate successfully move outside the city; thus ironically the city loses the taxes from business that urban renewal is meant to increase.

The urban renewal agency is required to demonstrate that enough housing is available for those whose homes are to be demolished, it is required to help them move and it has Federal resources to pay moving expenses for families and businesses. These requirements were much looser at the beginning of the urban renewal program than they are today, and the resources available were much scantier. Among the first large urban renewal projects in Manhattan were those undertaken by the energetic Robert Moses at a time when New York had a great shortage of housing, particularly low-cost housing. Relocation was unquestionably carried out in a business like and ruthless fashion (that is, rapidly on those sites where the developers were eager to move out the people and put up the new buildings, slowly on sites where they preferred to collect rents from the slum dwellers they were supposed to evict). Available aid, in the form of money or advice or social service, was slight. The image of renewal, as of many things in this country, is largely set by what happens in New York, where most of the writers, publishers and television producers live; urban renewal began with a very poor image. It is uncertain whether enough has been done to correct the practices that created the nightmare one critic calls "the Federal bulldozer."

According to reports sent to Washington from local authorities, the dwellings of 87 percent of the families relocated from urban renewal sites are known and were inspected and 92 percent of these are decent, safe and sanitary as required by law. These figures have been disputed by Chester Hartman, a city planner who worked on a major study of the impact of urban renewal conducted by the Center for Community Studies in Boston. Hartman argues that local authorities have loose standards in judging the quality of the housing into which people move from urban renewal sites. Thus the local agency reported that less than 2 percent of the families relocated from Boston's West End had moved into structurally substandard housing, whereas the Center for Community Studies placed the figure at 25 percent. Conversely, the local authorities tend to apply strict standards in judging the housing of an area they plan to demolish, because they have to satisfy Washington that the area is a genuine slum. Herbert Gans (in the Urban Villagers, a detailed description of the West End as an old, inner-city working-class district) has pointed out that what was a slum to the planners was good housing to those who lived there - housing they preferred to any other in the city, and in a neighborhood that contained the people and places they knew.

The West End study demonstrated that there was an improvement in the quality of the housing into which most families were relocated and an increase in the proportion of home owners. There was also an increase in rents: the median rent of West Enders rose

from \$ 41 to \$ 71 a month, and rent as a proportion of income rose from 14 to 19 percent. Similar studies have been completed in recent years, some of which indicate that before renewal the West End was a real bargain. Although the figures vary from survey to survey, the results of relocation form a pattern: housing is somewhat improved, rents go up, the proportion of rent to income goes up, home ownership increases.

How are we to evaluate such a pattern? There is currently great interest among city planners and urban economists in developing a technique for quantitative comparison of costs and benefits, a technique that could in every case given an objective answer to the question: Is this urban renewal project worth it? Attempts at cost-benefit analysis have in the past been crude. For example, planners have compared the costs of police, welfare and other social services of an area to be leveled with the reduced costs after rebuilding, neglecting to take into account the fact that the costs are incurred not by neighborhoods or buildings but by people. The departure of the people does not, of course, reduce the costs; it merely changes the place where the costs are incurred. As Martin Anderson has shown in his critique of urban renewal, *The Federal Bulldozer*, even the simple analysis of tax returns from the property before and after redevelopment is often inadequate, since it may fail to take into account such elements as the loss of taxes during the long period of redevelopment and the possibility that the same new structures might have been built elsewhere in the city without redevelopment.

If the tangible aspects of renewal are difficult to evaluate in the balance sheet of a cost-benefit analysis, how can one assess such intangibles as the cost of relocating an old woman whose only remaining satisfactions in life are taking care of the apartment in which she has lived for many years, going to the church around the corner and exchanging a few words with the neighborhood merchants? Admittedly one can even work in these costs by reckoning the chance that she will require a nursing home when she moves, or some additional city service. Such tabulations may at times seem akin to dissecting a rainbow, but they are being made nonetheless. The major purpose of the West End study has been to determine the impact of relocation on the mental health of the participants. Reports by Marc Fried of the Harvard Medical School indicate that serious reactions of grief have exceeded, in depth and duration, most expectations.

Even if we can find a way of quantifying the intangible aspects of relocation, how are we to take them into account in making social policy? The decisions to renew or not to renew must be made by local governments responsive to the pressures of the different parts of the community. If the political costs of a certain course of action are great, they will certainly outweigh the results of any subtle analysis of psychological, social and economic costs or benefits. Experience so far shows that almost invariably the despair in areas slated for demolition

is not channeled into meaningful political opposition; it is outweighed by the arguments for renewal presented by planners to the city fathers and the prejudice among middle-class citizens against allowing what they consider slums to remain standing near them. The proponents of renewal have not, however, been oblivious to its reputation among the poor; with each subsequent housing act they have expanded the resources for relocating families and have heightened the obligation of local authorities to do the same. Let us review briefly the resources now available to the local urban renewal agency for dealing with this problem.

Families on sites scheduled for demolition have always had priority in moving into public housing. The amount of public housing built has approximated the amount demolished. In general, however, only half the families on a site are eligible for public housing, and all told only 20 percent of the relocated families have moved into it. Often there is not enough public housing available at the precise time it is needed. The local public housing authority and the local renewal authority are two separate bodies; they deal with two separate agencies in Washington; they operate under separate laws, and although specific public housing projects theoretically could be built in anticipation of an old neighborhood being cleared, this has not often been done. In any case, many of those eligible for public housing will not accept it; this is particularly true of white families, who often refuse to move into projects in which they feel the proportion of Negroes is too high. Negroes and whites alike object to the institutional atmosphere of projects, with their regulations and requirements, and all share the apprehension that public housing attracts a concentration of problem families.

Since 1954 one of the major objectives of urban renewal has been the rehabilitation of old houses - a process that makes relocation unnecessary. Unfortunately rehabilitation, even with Federal loan programs to promote it, has rarely been successful. Renovating a house to meet the standards imposed by the program requires much more money than the occupants can raise; the property is then sold to a new owner. The general result is that poor people are moved out of houses that upper-income people can afford to renovate.

The sums available for relocating families and businesses were originally small, and they were provided only when they were needed to expedite development. These sums have been increased sharply and are now given more readily. The 1964 Housing Act for the first time recognizes and authorizes payment (of up to \$ 500) to families, elderly individuals and small businessmen for the dislocations attendant on moving. It has taken 15 years for this principle, which is taken for granted in other countries, to be recognized by our government. Late but useful aid has also been extended by the Small Business Administration, which was authorized in 1961 to help businessmen reestablish themselves with loans, assistance and information.

Still other efforts have been made to ease the burdens of relocation. In the early 1950's special loans were designed to provide housing for those from urban renewal sites who were too poor to get regular housing but not poor enough to be eligible for public housing. The most successful type of loan was instituted in 1961; it permits nonprofit sponsors as well as limited-divident corporations to get mortgages below the going rate to put up cooperative or rental housing for moderate-income families. There has also been a strengthening of Federal regulations requiring detailed reports from local agencies on the availability of housing (in different price ranges and for nonwhites as well as whites), on relocation plans and on current progress. Finally, the explosion of new social welfare programs for the poor provides additional resources. On the West Side of Manhattan, where extensive relocation is under way, a substantial number of social workers are engaged in various programs to help families find housing and settle in a new environment.

Gradually, after 15 years of putting so much energy into getting buildings down and so little into helping people up, we are beginning to develop the kind of program that should have existed from the beginning and that exists in the advanced European welfare state - a program whose emphasis is on providing housing. We are still faced by immense problems of segregation, institutionalism in public housing and human uprooting, but as of 1965 it should be possible for most local urban renewal authorities to carry out an effective relocation plan and even provide some of those benefits from relocation that the advocates of urban renewal maintain the process makes possible.

The question now becomes: What positive goals are we attempting to attain through renewal? How well does the renewal program make it possible to achieve them? Urban economists argue that in any event buildings will go up in response to market demands; urban renewal has merely shifted the location of new buildings rather than increased their actual number. Unquestionably renewal has done a good deal to bring investment into downtown areas, but what has the public gained by investing hundreds of millions of dollars for new street layouts, parking, open space and land write-downs for private developers - all for shoring up the center of the city? The answer is usually stated in terms of tradition or economics: The center must remain strong if a metropolitan area is to thrive. It must have good commercial and cultural facilities, and a significant proportion of middle- and upper-income residents. If private, unguided investment insists on going to the outlying suburbs (a tendency encouraged by the automobile, freeways and cheap suburban land), then public investment must redress the balance. Only in this way can the central city retain the middle- and upper-income people whose tax revenues enable it to provide services.

Both aspects of the defense of the central city have been challenged. Scott Greer of Northwestern University of California at Berkeley observe that the form of the city is changing in such

a way that Los Angeles will be the most likely model of the city form is the fact that free citizens in an affluent society - particularly those with children - prefer to live in detached houses with some land. This seems to be true the world over; it is only where costs make such an arrangement impossible that people settle for apartment houses. To rebuild expensive inner-city land for residential purposes means building apartments, attractive only to such special elements as those without children - the young or the old. Certainly these groups represent an important market, but it does not follow that government should provide them with a subsidy. As for the economic argument - the need to attract the wealthy - it has been attacked as a form of discrimination against the poor. After all, the poor have come to the city's center because housing there is cheapest and most convenient for them. They are near their jobs, their friends and, in the case of immigrants, their families or countrymen. If the cities need subsidies to counter the increase in low-income residents, why must the subsidy take the form of urban renewal? Why not redistribute Federal taxes to cities on the basis of need and let the city choose how to spend it? If we do this, a city made up largely of low-income people need not be a disaster.

A more basic challenge can be made to the argument that we need inner-city renewal to save the traditional centers. Why must we accept the present boundaries of cities as being permanent? These boundaries have been set by a variety of political accidents; as a result where one city (Boston, for example) may be a small part of a metropolitan area, another (Dallas) may embrace almost an entire metropolitan region. If the boundaries of each city could be redrawn to include most of the metropolitan area, the wealthy, who had abandoned the center for the outskirts, would again pay taxes to the city and the need for public investment in the center would be reduced. There are still other reasons why there should be some form of metropolitan government. Many problems in the provision of services could be solved more easily and effectively if they were examined from a metropolitan point of view rather than from the point of view of separate political entities within the metropolitan area (see "New York: A Metropolitan Region," by Benjamin Chinitz, page 134). This is preeminently true of transportation, water supply, open space for recreation and air pollution. It seems inordinately difficult to reorganize metropolitan governments in this country rationally; we can only envy the relative ease with which the government of London has been reorganized by an act of Parliament. The U.S. Government encourages metropolitan planning, but it can do little to create metropolitan governments to supplant the disparate governments within a metropolitan region.

One of the real virtues of urban renewal is that it has induced local communities to consider their needs and plan to meet them. In 1954 the Federal Government required that each city entering into an urban renewal program develop all the major operations of city government necessary to guide the rebuilding of

the city and to submit a "workable program" - proper building codes and zoning ordinances, a comprehensive city plan, an administrative organization that could fulfill it, proof of interested citizens and the like. By 1959 the U.S. had instituted the Community Renewal Program, which provides substantial sums of money to cities to project their future development needs and policies. This program has supported much sophisticated work involving simulation on computers of future urban development under alternative policies. Unfortunately too much of the current research and projection, no matter how imaginative, is oriented to the wrong scale: the city rather than the metropolitan area. Moreover, the major tool of the urban renewal program remains the specific project. It is still hoped that a better city can be achieved by supporting, by means of advantageous condemnation and land write-downs, specific projects based on the capacity to attract specific investment. This gives urban renewal an inherently spotty character.

Suppose it is - as I believe - essential that cities radically improve their function in inspecting buildings, requiring repairs and supporting them where necessary. Suppose a major way to improve a city is to root out substandard buildings wherever they are rather than demolish a huge area that is decrepit in spots. What Federal aid would be available for that? Much less than is available for the specific-project approach. Let me give an example.

A proposal project in San Francisco was going to cost \$ 40 million. For this amount some 15,000 people would be relocated, their homes demolished and the land turned over, somewhat improved by new streets, to builders. This is an enormous expense for a city the size of San Francisco, the total annual budget of which is only about \$ 350 million. The money, however, was to come from the Federal Government and from the point of view of the city the undertaking was free. This would not be the case if San Francisco chose an alternative project, such as a major program of code enforcement, demolition of substandard housing or loans for rehabilitation. Urban renewal law and practice indicate that only a small fraction of \$ 40 million would be extended for such efforts.

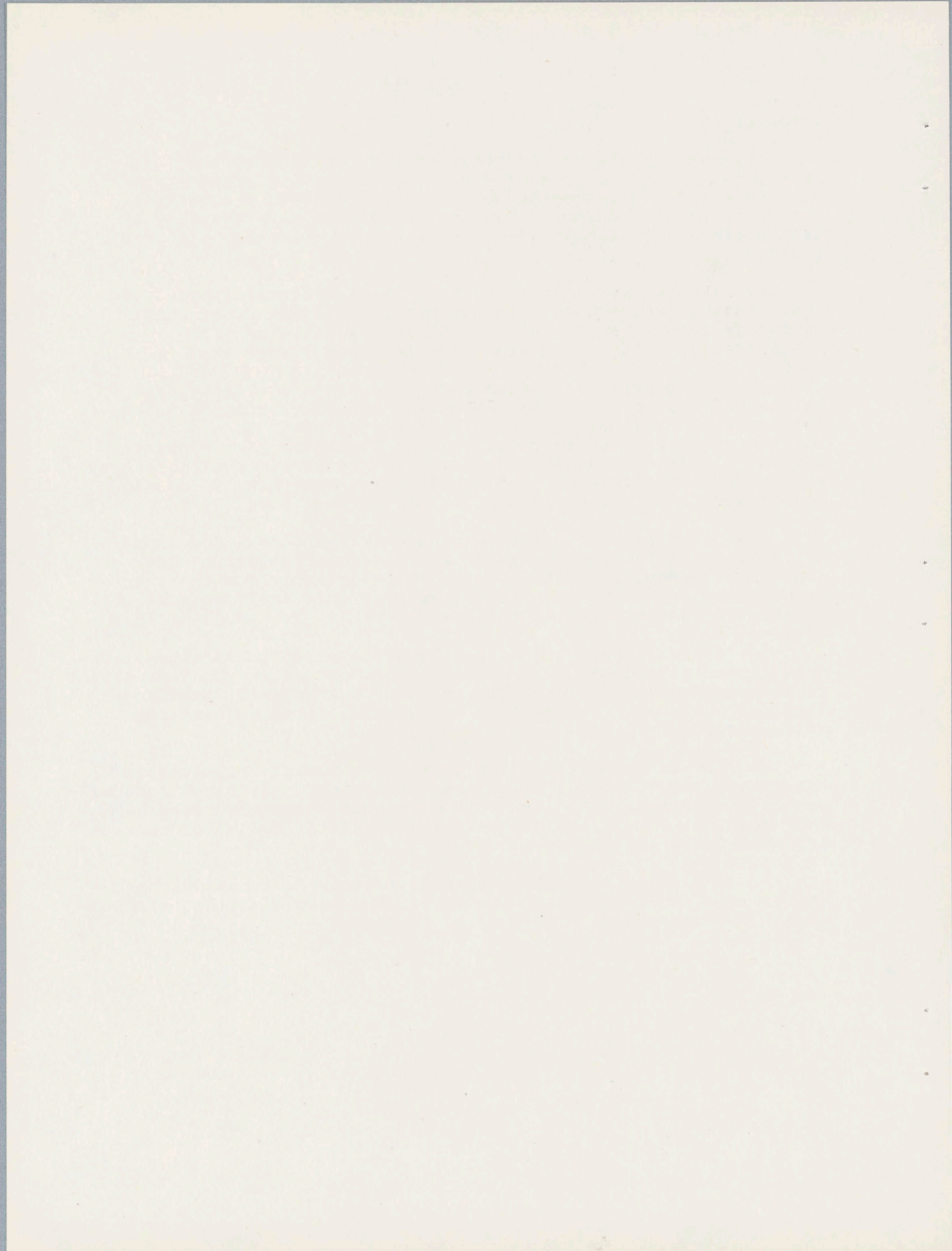
All the criticisms of urban renewal point to the fact that, whereas the program speaks of the whole city and all the ways in which it must be improved, provisions are made to influence only one aspect of the city - the physical nature of a given locale. The program as constituted and as practiced makes too little use of the traditional agencies of city government that must be depended on to improve cities. It also relates poorly to other large programs and expenditures in the city, such as the freeway program. When we consider the imaginative urban renewal that has been carried out in some European and Japanese cities by closely linking transportation arteries, housing, commercial and office facilities, we wonder why our projects are so often massive concentrations of a single function: all housing

here, all concert halls there, all shopping there - and all poorly linked by transportation. This is the logical result, I would argue, of the fact that our urban renewal authority in Washington and the local agencies are oriented toward single missions - and the mission in every case is the individual project rather than the whole city.

After some 16 years of urban renewal we are still struggling with the problem of slums and still trying to formulate some alternative to the naive image of the city beautiful in its middle-class version, an image that has increasingly lost its power to move people and solve problems. Under the pressure of a number of gifted critics, urban renewal has become an instrument that any city can use to develop policies well suited to its needs, and to carry out some of them. It is by no means a perfect instrument, but the source of its failings generally seems to be in the politics, the imagination and the structure of local government. It is there, I think, that we now need the chief efforts of our critics.

Urban Renewal

1. What should be the goals of the renewal program? to remake the central city as the heightened focus of the metropolitan area? to remove low-income families from the central city? to strengthen the city's tax base? to make the city a better place in which to live? (for whom?) an easier place to park?
2. If the city decides that it needs a certain parcel of land, what is to be done with the previous occupants of that land? relocate them on that parcel in new buildings? in another area of the city? let them relocate themselves?
3. The people moved from renewal areas are often those who cannot afford to buy new homes and stores at today's prices. What provisions should be made for these people? Should all their moving expenses be paid? half? Should some government pay the difference between their present rents and the rents they will have to pay in a new location? Which government? Should new housing be provided before the old is torn down?
4. Urban renewal often attacks only symptoms - the slums - while ignoring the real cause of the disease: poverty. How could the renewal program be expanded or integrated with other programs to get at the source of the problem? Would we want to expand the renewal program this way?
5. Renewal areas are currently selected on their attractiveness for private developers; because of this large areas of blight remain untouched. How can this problem be attacked? Must some level of government become involved with building and renting homes, stores, etc.?
6. How is renewal helping to relieve racial frictions in the city? How is it worsening these frictions? Is urban renewal really "Negro removal"? Is there a connection between renewal and race that should concern us? What kinds of racial or race-oriented goals could renewal serve?
7. Who is to benefit by renewal programs? Society as a whole? the general area of the city? the people of the neighborhood to be renewed?



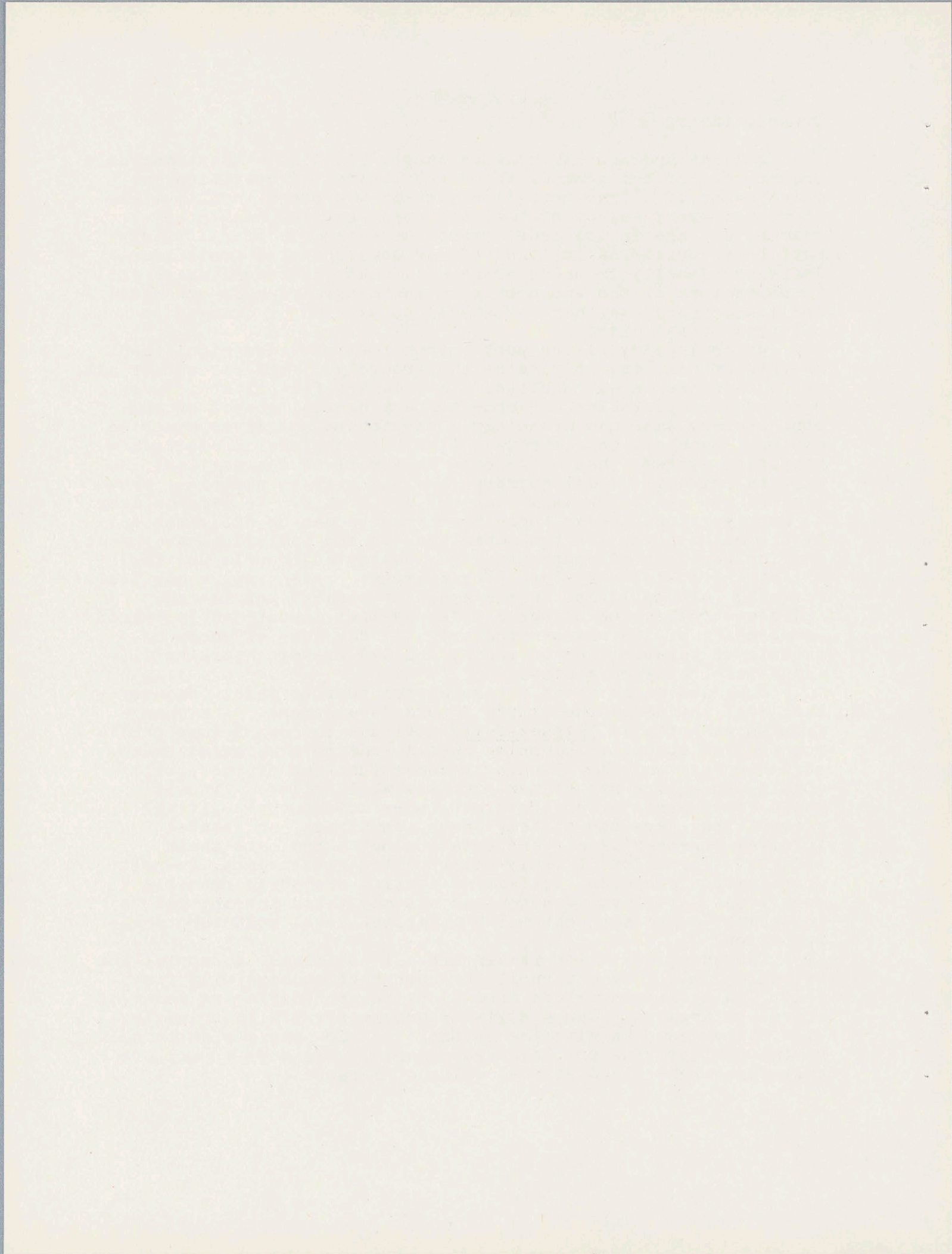
Transportation

A large and complex society cannot function without adequate transportation and communication facilities. Preparation and maintenance of a transportation system, therefore, has implications for every aspect of that society. America has lately reached a stage in its development where the old transit tasks must be reconsidered in light of new environmental conditions. Increased density in urban areas and, thus, increased usage in these regions of the automobile, a vehicle originally conceived for low density use, has threatened to make major changes in the form of the city.

While in many places public transport provides significant amounts of service, it remains that roughly ninety percent of all trips made are in automobiles. This desire for private, independent transportation has come to be a central aspect of the contemporary American mythology. We picture ourselves a mobile nation. Each citizen expects a flexible schedule in his transportation system, thus he rejects mass rail or bus service. He expects privacy; local surveys show the average number of passengers per car to be less than one and a half. He demands door to door service. Today these requirements can be fully met only by the automobile. If the advantages to the individual are great, the implications of continued high density automobile use for the city are also striking. For example, present usage has led to: (1) air pollution in the areas of highest population, (2) decentralization of the city's physical layout and increased homogeneity of its class structure, (3) the loss of enormous amounts of taxable land to roads, and (4) pressing parking difficulties in the core city.

Some decisions about future action must be made. Each of them will influence the city's future development. The change from an essentially laissez-faire attitude to one of more public concern and conscious planning should lead to a balanced transportation system. As planning becomes function of the public domain, an entire set of new problems will follow. Transit needs cover areas often containing many autonomous political communities. How can cities, towns, countries, and states involved together in a transportation net coordinate their efforts? Formation of truly metropolitan governments, transit coordination agencies, or federal control are three possible solutions. President Johnson has already taken the initiative in asking Congress to establish a Cabinet level post for transportation.

The questions which remain are all political, economic, and technological. How can public transport be successfully financed? Can better interface conditions between differing modes of travel be created? Can a semi- or completely public transportation system compete with the automobile? How can a plan be sold to the public? The problems are numerous. We hope to explore them further here and at the coming conference.



Aspects of Transportation Improvement

Provision of adequate urban area and inter urban transportation is one of the great challenges of the next two decades. How should we arrive at the decision as to what sort of transportation system we want in the future?

We wish to stimulate thought on three important areas involved with our choice of transportation systems. These are the role of government in transportation, the technological possibilities for improvement, and the issues involved in the decision making process.

The automobile, as its name implies, was conceived as the vehicle of great mobility. The growth of the industries around it and the position of central importance it has come to occupy in the American family have made it a vital part of contemporary life. The automobile has largely enabled us to become such a transportation oriented society. But its mass distribution and use, which have produced the choking traffic jams, crowded city streets, filled auto junkyards, congested parking facilities, polluted city air, and high operating costs for individual users have made it in some places a modern symbol of immobility.

This situation is a matter of growing concern. Economic development needs adequate transportation facilities, and thus produces a constant pressure for expanding transport capability.

What is the role of the government in urban area transportation? Historically and constitutionally, American federal government has been largely passive in transportation affairs as with other matters considered parts of the private domain. Although local governments responded somewhat to the demands of the public in the early days by sponsoring roads and donating land for railroads, the national government did little to either plan or pay for internal improvements. When Congress passed legislation in 1817 designed to facilitate road improvement on a national scale, the bill was vetoed on the grounds that the Constitution gave no such authority to the federal government. In the late eighteenth and early nineteenth centuries the improvement of transport was thus left principally to private investors aided in part by state and local governments. The initiative was given to the private individual.

In the 1850's, prompted by commercial interests, the government became an active participant in transportation activities. Extensive funds were made available, the War Department made careful land surveys, and the railroads were built. But by the end of the nineteenth century, it was apparent that the enthusiasm for railroads had left the turnpikes of the nation in desperate condition. There was no transcontinental road. In fact, the first automobile journey from the Atlantic to the Pacific was not completed until 1916. One part of this trip, from Denver to Los Angeles, took 66 days. Some of the problem, of course, was the lack of technical sophistication of the automobile at the time.

Progress in the building of roads, as with the railroad, has come only through the constant activity of special interest groups. And this is the critical point; in America the government has customarily responded to the pressure of an existing situation. In other developing countries there were few pressures of the kinds mentioned, and development followed a course which is the reverse of the American experience. The emphasis was on the building first, in the hope that usage would follow.

There is evidence today that American policy is beginning to change. Not only is government assuming the role of the initiator in dealing with many problems in the "private" realms but there is public demand for such action. In the field of transportation this is producing new results and a new way of viewing the transportation system and its relations to social and economic factors. The transportation planners are becoming more and more vocal.

There are several reasons for the new trend of transportation planning. The situation needs to be examined in a comprehensive manner. As private industry's actions are governed more by personal than by public interests, it will usually seek to exploit a certain market to the extreme. This has led to a series of one shot solutions to particular problems. The system as it stood in the period just before World War II was a large collection of separate, independently functioning sub-systems connected in purpose only by the kinds of economic and social ties outlined by Adam Smith or the social Darwinists. Increasing demand on the system, a simple change in scale of requirements, has caused it to choke itself in some places. Normally it does not seem that a change in scale should produce a failure. The difficulty arises because in order to accommodate the magnitude of projected traffic on the road, facilities must be expanded to prohibitive size.

Because it is a problem so dependent on scale, urban area transportation must be examined for each area. It is mostly in the larger urban areas that demands are most pressing. Los Angeles, as the fastest growing urban area, badly requires an analysis of its transportation needs which will lead to the best policy.

The government is the one organization most likely to assume the task of looking comprehensively and more or less impartially at the total problem in a way that industry cannot. Agencies established for this purpose are just beginning their activities on a large scale. These are the metropolitan planning groups such as the Bay Area Rapid Transit District in San Francisco - Oakland, the Penn-Jersey Transportation Study Commission, and the Boston Regional Planning Project. In order to succeed with their projects, they must win support for the plans they propose. The Rapid Transit Planners greatest electoral success was in the San Francisco region, where despite probable increased taxation, the voters gave enthusiastic support to a Bay Area Rapid Transit District plan. It will be the first new rail rapid transit system in this country in 50 years. The Boston Area's

new Massachusetts Bay Transportation Authority has strong powers to expand and to finance their operations. On the most part however, the auto industry is in a much more influential position than the rapid transit planners.

There are three factors which the new planning authorities have had to grapple with in formulating their systems. First, transportation must be part of a master plan which includes economic and social effects as well. The geographic boundaries with which this deals no longer conform to political boundaries. The Metropolitan area has become the area of interest, and it is almost defined as a region bound together by a network of transportation linkages. Second is the matter of land use and its interaction with a transportation system. Both of these factors outline a most interesting aspect of this subject; that a transportation system is not something overlaid on an existing social and economic structure. Not only does present land use suggest the sort of transportation system that should be provided, but in an essentially unplanned society such as ours, a well organized transportation system can exert influence on the type of community which develops around it. An example of this effect is the results of the underground subways in New York and Boston. The opening of a line to the Bronx in 1905 made that area into a thriving suburb. The third factor is the complementary nature of the diversified system. The task of an urban transportation system is to move people or goods from place to place. Not all journeys require the same type of performance in terms of speed, comfort, cost and capacity.

When these considerations are applied to the specific conditions of a particular area, some ideas about what policy should be become apparent. The situation in some core cities appears to demand drastic steps, and in some cases improvement or initiation of a common carrier system would appear best. But how this method can satisfy the demands of versatility and yet maintain enough efficiency to make it a worthwhile venture is not yet settled. It must have frequent enough collections and deliveries to be convenient and still efficient and inexpensive. A great problem for this and all systems is that it must be able to absorb huge peak hour loads without being wasteful in off-peak times. These difficulties and many others need to be examined from a comprehensive point of view, and transportation planning seems to offer a needed and powerful technique for regional development.

Another area we must explore is what research can be done to improve our future possibilities for transportation systems? Transportation systems both within and between urban areas are subject to careful re-evaluation. The question that is being widely debated is; "What system can best be developed to meet the transportation needs of the future?"

There are several efficiency criteria which can be used to evaluate transportation systems. Factors such as schedule and route flexibility, travel time, and cost are pertinent to the discussion of all transportation systems. No one mode is out-

standing from all points of view. If it were, it would quickly replace all the others.

As mentioned, geographic mobility is increasingly highly valued in modern society. In the developing urban complexes, transportation should provide easy movement between any two points. This is distinctly different from older concepts of transportation in which the primary concern was movement between two particular points, such as railway terminals or airports. An outstanding feature of developing urban areas is their extensive dispersal of population. Ideally a future transportation system should provide comfortable, quick door to door transportation.

A highly valued aspect of transportation is high speed. It is interesting that with the increase in speed that technology has brought, it seems that people have increased the distance they travel rather than decreased the time spent in travel. This is the means by which the great urban complexes have become possible. A consideration of speed should take into account the time taken in transfers and in the slower parts of the journey as well as the highest speeds of the different modes of transportation. The transportation system of the future should ideally minimize elapsed time door to door. Minimum cost is not the objective. What is important is that the cost be acceptable in light of the services rendered.

There are proposals in various stages of development for improving each of our major transportation systems. These ideas involve either small or large changes in our existing system. Let us look briefly at some improvements which might be made in the modes we have today.

The highway system presently meets and will continue to meet a significant fraction of the transportation needs of the country. This is particularly true on the local low density level because the automobile is so suited to door to door travel. In some areas though, high speed becomes impossible because of congestion and parking problems at either end of the trip.

A great deal of research is being done to find ways to speed traffic flow. One way is by controlling each vehicle externally. There is no reason why bumper to bumper traffic could not move safely at the cruising speed of a single car if they were linked together by a common control on a limited access highway. This is quite analogous to a railroad train except there would be electronic control of vehicle speeds and position instead of mechanical coupling between cars. Present day digital computers are capable of controlling hundreds or thousands of cars on an automated highway if suitable controlling equipment were on all cars. The automobile manufacturers are presently testing several systems of this nature, but they are only research projects and may never be produced. More immediate results in speeding up traffic flow are being obtained by analyzing traffic patterns to identify the causes of traffic jams and prevent them before they occur. For example, studies have shown that in dense traffic, one car slowing down will cause the car behind it to slow down

even more as a result of the driver's reaction time. This can snowball until cars several miles behind are forced to a complete stop. In the Holland and Lincoln Tunnels to New York City, traffic has been tremendously increased by sending cars through in groups with substantial gaps between groups. The effect of these gaps is to arrest the snowballing slowdown before actual stoppages occur. A similar project has been undertaken in Detroit where television cameras have been used to monitor a busy section of highway. Research such as this may tremendously increase the capacity of highway systems.

Railroads once carried virtually all intercity passenger traffic but now they account for only about 3%. Traffic has been lost to modes with higher speeds, such as air, or to those with better access, such as automobile and bus. Only if railroads can compete in speed and accessibility will they regain a sizable portion of intercity traffic. Train speeds on the order of 200 miles an hour would be required in order to compete with airlines on medium length trips (around 200 miles). Japan has recently inaugurated a 130 mile an hour train line, but a great deal of research and development would be required to reach 200 miles per hour averages, which may not even be safely attainable with wheels on rails.

The current method of getting passengers off a train by bringing the train to a complete stop means that accessibility to many of the centers along the right of way is precluded by the requirement for high average speed. Even if systems were developed which allowed boarding of a train moving at high speed, accessibility would still be limited to a ribbon of area, along the right of way. Feeder lines such as bus connections would allow railroads to serve more area, but they are prevented from controlling such lines by government regulations. This again suggests an area in which comprehensive government planning might yield better systems than at present. It is unreasonable to expect railroads to invest heavily in improving passenger facilities if no provision is made that adequate feeder lines would be available.

Present day air travel presents the best available speed between distant points, but the door to door time is not as low as might be hoped for. The time between airport and door is often greater than the actual flight time, which again illustrates the need for a better integrated transportation system.

The air system is not widely accessible because there are not enough airports. Present plans to increase the number of airports may help, but there is a limit as to how close airports can be spaced. With the present takeoff and landing space, airports take up so much room that a densely populated area cannot spare the land for several. One possibility receiving attention is the verticle or short take off and landing aircraft. Research is primarily directed at aircraft which would have the forward speed of jets yet require very small takeoff and landing area. Another vehicle that merits attention is the helicopter. Its maximum speed is less than that of air-

craft, but it would be suitable for short and medium length trips. The main problem with helicopters today is the high maintenance costs, but with increased experience and improved design this might be solved.

There is a great deal of uncertainty about the possibility of expanding the capabilities of present day systems, so it would also be reasonable to consider a new system. High speed ground transportation could be a possibility.

Many imaginative ideas for high speed ground transport have been advanced. Among these is a vehicle traveling in a closed tube. The right of way would be protected. It could be on the surface, elevated, or in a tunnel. The cost of tunneling would be high, but it is important to understand that the costs of all transportation systems we will consider are not trivial. High speed ground transport seems to be most applicable to transportation between cities rather than within urban areas.

Now we should ask some very simple questions about the transportation system decision which should somehow be made. What are the criteria we should consider in choosing a transportation system? Should we judge only by which system uses the least land and other resources? How much are we willing to pay for a transportation system and how should its cost be apportioned between users and society at large? Should we choose some system because it provides for private ownership, or alternatively, if it is publicly owned? Should we choose a system because it is technologically advanced? Should we choose the transportation system which we feel would make our city "beautiful"?

From the beginning, let us realize that whatever decision is to be made about a transportation system is a political and social decision. It is not in the tradition of this country to choose a "most efficient" system and force people to use it no matter what their preferences might be. We are operating within a consumer oriented economy and must enter to people's tastes and preferences. As mobility becomes more and more important in our lives, we can expect that the concern of the consumer about his transportation system is going to increase.

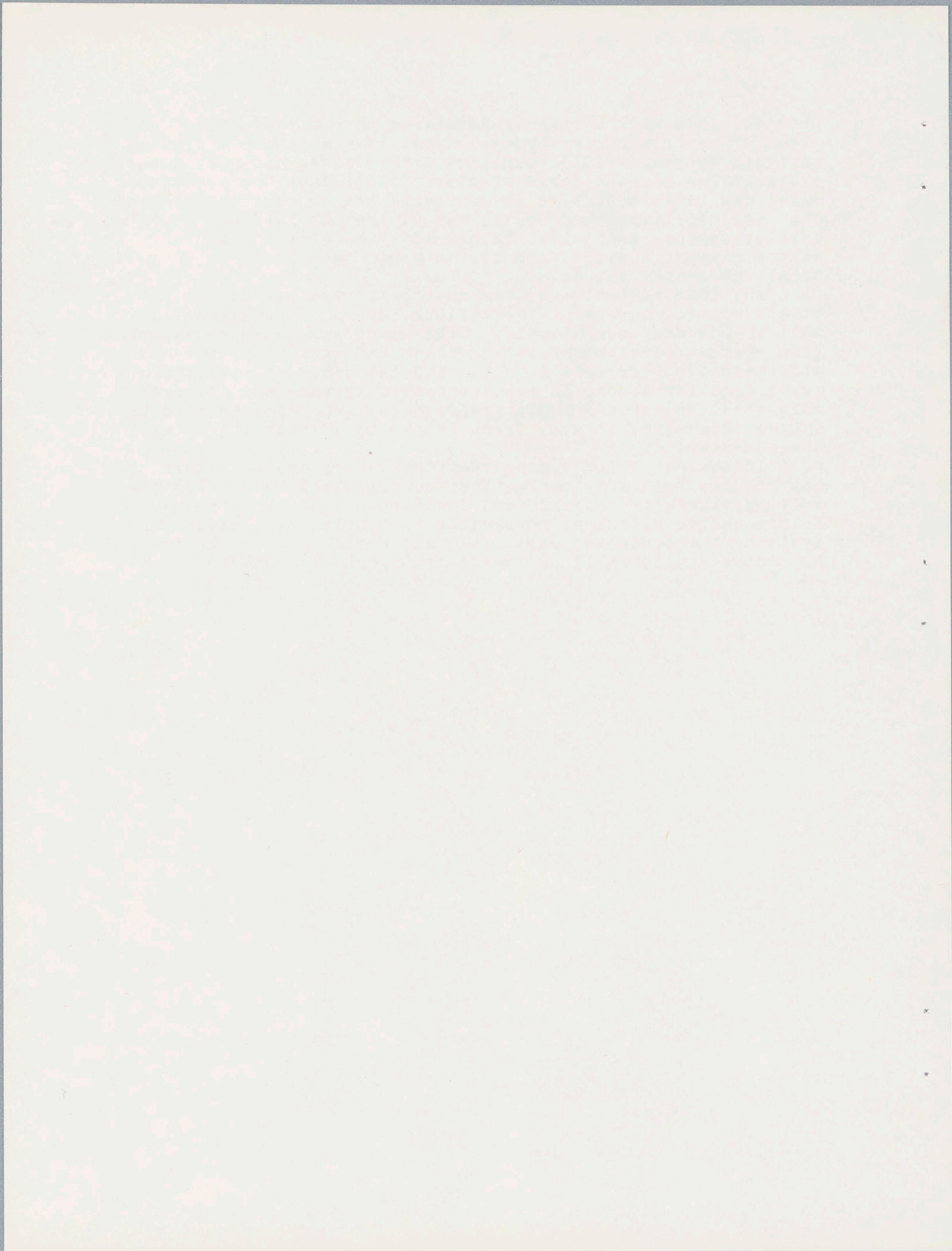
There are many issues involved in this choice of a transportation system and there are also many political actors who wish to have a voice in the decision making process. To arrive at a decision will require a tradeoff of various criteria. It is naive to talk of optimizing or maximizing all criteria simultaneously. Likewise it is naive to believe that all the political actors involved will be satisfied by any transportation system decision. What possible approaches are there to resolving these issues and the different interested parties?

We might try a system analysis approach to the issues in the decision making process. Systems analysis is a method of arriving at the costs and effectivenesses of two systems intended to do the same task. But here our 'costs' would not all be expressed in terms of dollars, and certainly few people would agree on measures of 'effectiveness.' If people do not agree on just what the transportation system should do or what service it should

provide, they will certainly not agree on how 'effective' a given transportation system would be. But at least a systems analysis approach would point out alternatives and what these alternatives mean in terms of objectives. Then the decision maker can be sure that he is achieving the objectives which he chooses. Political and social values are not left out of this sort of systems analysis. Rather it is made explicit just what a given transportation system would mean in terms of political and social values.

Any transportation system must be attractive to the political decision makers at the various levels of government as well as the consumer himself. Government's role in transportation systems development is important and expanding, but not all inclusive. Private industry and the consumer still have a very large investment in transportation systems and are extremely vocal in voicing their preferences. Whatever transportation system is chosen, it must first of all be an attractive one to the consumer.

If the needs for transportation systems are to be met, it may require bold and imaginative technological innovation involving extensive research and development. It will require comprehensive planning, government initiative, and close analysis of the economic, political, and social factors in order to choose an 'optimal' or 'best' transportation system.



John W. Dyckman - Transportation in Cities

Urban transportation has to do not only with moving people and goods into, out of and through the city but also with the spatial organization of all human activities within it.

Problems of urban transportation are not new in the world. In the first century A.D. the municipal government of Rome was obliged to relieve congestion in its streets by restricting vehicular traffic (with the exception of chariots and state vehicles) to the night hours. Rome was then the only truly "big" city in the Western world, however, and for many centuries thereafter its transportation problem remained the exception rather than the rule. It was not until the process of industrialization was well under way in the 19th century that vehicular traffic began to present serious problems in cities. Today descriptions of the conditions of movement in cities express the alarm of the observer with words such as "choke" and "strangle". Not only are there now more big cities; some of them are tending to consolidate into huge megalopolitan networks, further compounding the comparatively elementary difficulties that faced the Romans.

Among the complaints commonly heard about modern systems of urban transportation are congestion, the overloading of routes and facilities, the overlong trips, the irregularity and inconvenience of those services that are publicly provided and the difficulty of parking private vehicles at desired destinations. These are problems that arise not only out of the sheer size of modern cities but also out of the organization of their land uses, the rhythm of their activities, the balancing of their public services with private rights of access and movement, and the tastes and preferences of their citizens with respect to mode of travel, route, comfort and cost. There is in fact no isolated "transportation problem" in the modern metropolis; there are problems of the spatial organization of human activities, the adaptability of existing facilities and investments, and the needs and aspirations of the people in moving themselves and their goods. For the individual city dweller, nonetheless, the contemporary transportation problem remains in large measure a "traffic" problem.

The origins of the modern traffic problem are rooted in the very nature of industrialization in an open society. For example, the modern journey to work, which accounts for a large part of the urban traffic problem, is the product of a comparatively free choice of residence and place of work, made freer in industrialized societies by the greater number and variety of both. In the early industrial centers of the Western countries workers were grouped in dwellings close to

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their respective places of work. In the U.S. even employers did not commute long distances but typically drove to work in carriages from houses within convenient reach of their factories.

Improvements in living standards have contributed almost as much as the growth of cities to contemporary urban traffic conditions. Expectations of greater comfort and convenience, as well as the ability to sustain higher costs, have affected the choice of both residence and mode of travel. The transportation plight of cities - at least in the prosperous, developed countries of the world - is a condition people have themselves brought about by taking advantage of individual opportunities. Accordingly if major changes are to be achieved in the present condition of transportation, deliberate individual and collective decisions on the whole question of the quality of urban life must first be made.

The task of an urban transportation system is to move people and goods from place to place. This elementary statement of purpose is useful because it reminds one that the task is defined by the location of the terminal points as well as by the channels of movement. For this reason the problem of urban transportation is one of city layout and planning as well as one of transportation technology.

The city planner's approach to the transportation problem can be viewed as having two aspects: (1) the definition of the tasks and requirements of the system and (2) the devising of socially acceptable and economically feasible means of achieving those objectives. This approach depends on the existence of basic studies of the use of land in cities in order to relate these uses to transportation needs. Fortunately such basic data on land uses have been available in several U.S. cities, notably Philadelphia, Robert Mitchell and Chester Rapkin of the University of Pennsylvania drew on the Philadelphia data for a prototype "city planning" study of urban transportation in 1954. Their thesis was that different types of land use generate different or variable traffic flows. Such work shifted the emphasis from the study of the flows themselves to the study of the land uses that give rise to the flows. It underlined the basic city-planning proposition that traffic can be manipulated by controlling and rearranging the land uses that represent the destinations and purposes of transportation.

This approach - sometimes called the functional approach because it emphasizes the relation between city functions and transportation - has come to dominate large urban transportation studies supported by the U.S. Bureau of Public Roads and other public agencies. The approach has been applied in the Detroit Area Transportation Study, the Chicago Area Transportation Study, the Penn-Jersey Transportation Study and the Tri-State New York Metropolitan Transportation Study. These elaborate investigations (costing approximately \$ 1 per capita in the regions mentioned) have done much to organize existing information about urban transportation, in spite of a heavy preoccupation with automobile traffic and road networks. Surveys of travel behavior

are usually made at the homes and places of work of commuters. In addition, the Bureau of Public Roads has long conducted surveys to sample the purposes of householders' trips as well as their actual travel behavior; these data are integrated in the large transportation studies with such information as the addresses of workers by place of work, and sample origins and destinations of travelers en route.

The customary unit of travel - the "trip" - takes many forms, and in these studies the purposes of various kinds of trip must be differentiated. Shopping trips and recreational trips, for example, have many characteristics that distinguish them from trips to and from work. From an analysis of such characteristics the possibility of replacing one mode of travel (perhaps the automobile) by another (perhaps mass transit) can be considered.

The outstanding contributions of the major transportation studies, apart from the accumulation and organization of data, have been (1) the approach to transportation as a comprehensive system of interrelated activities; (2) the recognition of the importance of land uses, demographic and social characteristics and consumer choices in determining transportation requirements; (3) an appreciation of the role of transportation itself in shaping the development of cities and metropolitan areas, and (4) the acceptance of the inevitably metropolitan scale of transportation planning in a society in which daily activities that generate travel move freely across the borders of local government and form the functionally interdependent fabric of the metropolitan region.

In focusing on the whole system of relations between users and facilities these elaborate studies should furnish the material for the solution to the two major problems of urban transportation: how to obtain efficient movement and how to promote new activities. The promotion of new urban activities is the province of city planning, but the city-planning results of the major transportation studies have not yet clearly emerged. The studies reflect the current condition of the planning profession, which is ambivalent toward the automobile and split on the issue of centralization v. dispersal.

The city-forming role of transportation facilities is well known to city planners. The New York subway of 1905 opened up the Bronx; the radiating street-railway systems of the late 19th and early 20th centuries created the working-class suburbs of Boston, Chicago and Philadelphia. Today, of course, expressways are opening up a far greater number of new suburban housing developments and shopping centers than the subway and street railways did.

To many city planners the central contemporary problem is one of conserving cities "as we have known them." These planners believe the issue is between centrality and spread, between efficient downtowns and disorganized ones. They see the present use of the automobile for the bulk of urban trips as destroying the amenities of the established downtown by contributing to congestion, eating up real estate for parking and storage, inter-

fering with pedestrian flow and poisoning the air of the central city. Almost equally bad from their standpoint, the automobile makes possible the scattering of residences, of auxiliary commercial facilities and ultimately even of the downtown headquarters function. The planners' views are shared by many realtors holding downtown property, by some established merchants and by civic leaders who see the new emphasis on highway building as inevitably creating competing centers in outlying areas. If we are to have compact cities with centrally located places of work relatively high-density residential zones, concentration of shopping and public facilities as well as employment, the currently dispersive effects of the automobile will have to be checked.

Other planners, not opposed to dispersal on these grounds, believe the growth of urban population itself is likely to produce a situation in which scale effects rule out present modes of transportation. These observers believe the congestion that will be faced by cities containing upward of 15 million people will be such as to require greatly enlarged capacity for traffic channels, the restriction of vehicles to specialized lanes, controlled timing and phasing of movement and many other adaptations more drastic than those proposed in present transportation plans.

In spite of the fact that every major transportation study has projected and increase in the ownership of automobiles, in the volume of automobile traffic to be accommodated in central cities, in the construction of new expressways and in the spread of metropolitan population, a number of the larger cities in the U.S. are taking steps in the direction of reinvestment or new investment in public mass transportation. In many cases this takes the form of building or expanding subways and related rail systems; in every case a major portion of the system is characterized by fixed routes and separate rights-of-way.

Public transportation systems are frequently a combination of "rapid transit," which uses for high-speed service rights-of-way that are separated by grade crossings, and "local transit", which uses public streets (with or without rail lines) and makes local stops. A truly effective transportation system must offer a full range of service, from the rapid-express system to the local-distribution system. Cities as far apart as San Francisco and Washington intend to build new subways; New York, Chicago and other cities propose to extend their existing systems; in the Northeast particular attention is being given to the problem of resuscitating privately owned commuter railroads and reviving the relation between these roads and the city transit systems. The Federal Government has shown interest in supporting these efforts, but as yet it has mounted no program comparable in scope to its highway-building effort.

City planners and transportation experts have turned to mass-transportation systems at a moment of grave difficulty for the established transportation companies. Transit franchises, which at the turn of the century were prized plums for entrepreneurs and investors, have long since ceased to be notably profitable.

In most cases the companies have either been taken over by the cities or have gone out of business. Although the very large cities could scarcely function without transit systems, the systems in these cities too have over the past decade suffered a decline in riders. The share of total commutation accountable to the automobile has risen at the expense of the transit systems.

The difficulties of urban transit companies have been the subject of many studies and need not be recapitulated here. Some of these are difficulties of the systems themselves; Others are problems of urban growth and development only slightly related to the systems. The three major difficulties posed for transit by the pattern of growth of our cities are (1) the collection problem, (2) the delivery problem and (3) the "peak" problem.

The collection problem arises largely from the diffuse pattern of urban "sprawl" made possible by widespread ownership of automobiles and ready access to highways. Density of settlement is one of the most important variables in accounting for urban transit use, and for the performance and profitability of the systems. The New York subways are made possible by the heavy concentration of riders in areas served by the system, just as the system itself makes possible the aggregation of population at these densities. It is obviously difficult for a fixed-route system to collect efficiently in a highly dispersed settlement pattern. Not only is a commuter train unable to collect people door-to-door; the number of stops required to accumulate a payload is increased by a dispersed residential pattern. More stops in turn slow down the performance of the system and hurt it in terms of both operating costs and attractiveness to the rider. The operating disadvantages of the fixed-rail transportation system - relatively low efficiency at low operating speed, the high cost of braking and acceleration, the problems of scheduling, the minimum profitable payload required by fixed costs, all create conflicts between efficient service and low collection densities.

The problem of delivery has been exacerbated by changes in the scale and distribution of activities within the downtown areas as well as the general dispersal of places of work. Within metropolitan areas industries have moved increasingly toward the outskirts in search of larger sites; this movement has tended to disperse places of work and so reduce the usefulness of the highly centered, radial transit systems. Circumferential systems moving through predominantly low-density areas have been less attractive to the transit companies. Within the downtown areas dispersal of places of work and of central points of attraction (brought about by changes such as the shift of a department store to the fashionable fringe of the area) has greatly lengthened that portion of the trip between arrival at the terminal and arrival at the final destination. The lengthening of the walk or taxi ride from station to destination has made the whole transit ride less attractive. These developments can be summed up in the observation that the general dispersal of activities and functions within metropolitan areas has made the fixed-rail

system less efficient in point-to-point delivery of passengers.

The "peak" problem arises almost entirely from the organization of journeys in time. For many transit companies 80 per cent of the volume of travel is concentrated in 20 hours of the week. This results in the underutilization of rolling stock and other equipment necessary for meeting peak loads. The source of this difficulty is the fact that mass transit is increasingly confined to serving commuter journeys. The concentration of journeys in narrower bands of time has been a steadily evolving phenomenon, accompanying the movement toward fewer workdays in the week and less work in shifts.

It is axiomatic to the performance of any system - transportation or otherwise - that sharp peaks lead to high operating costs. The capacity needed for meeting peak loads without breakdown of the system is far in excess of the average capacity required by the system. The need for excess capacity is aggravated by the fact that in transportation accounting the obsolescence cycle and the amortization cycle are out of phase: mass-transportation systems in cities are rarely able to amortize investments in rolling stock and equipment before they are obsolete as a result of technical competition, of shifts in land use or of changes in employment patterns.

Finally, a whole set of factors arising from changes in consumer tastes and expectations have worked to the disadvantage of the fixed-rail system. Comfort, convenience, privacy, storage capacity, guaranteed seating, freedom from dependence on scheduled departure times and a number of intangible satisfactions all favor the use of private automobiles.

In view of the marked advantages of the automobile over other types of carrier, what can the public-transit system be expected to do to alter the present drift in commuter habits? Under what conditions would the transit system be able to compete with the automobile? The engineering efficiency of trains, which can move many times more people and much more cargo for a given road space and energy output than automobiles can, has persistently held out the promise that mass transportation would lower costs. One may ask, however: Costs for whom? Real costs, out-of-pocket costs to users and public costs have all been cited from time to time to make points for and against mass transit. It is particularly important to distinguish the public costs of the respective operations from the private costs and the average costs from the so-called marginal costs.

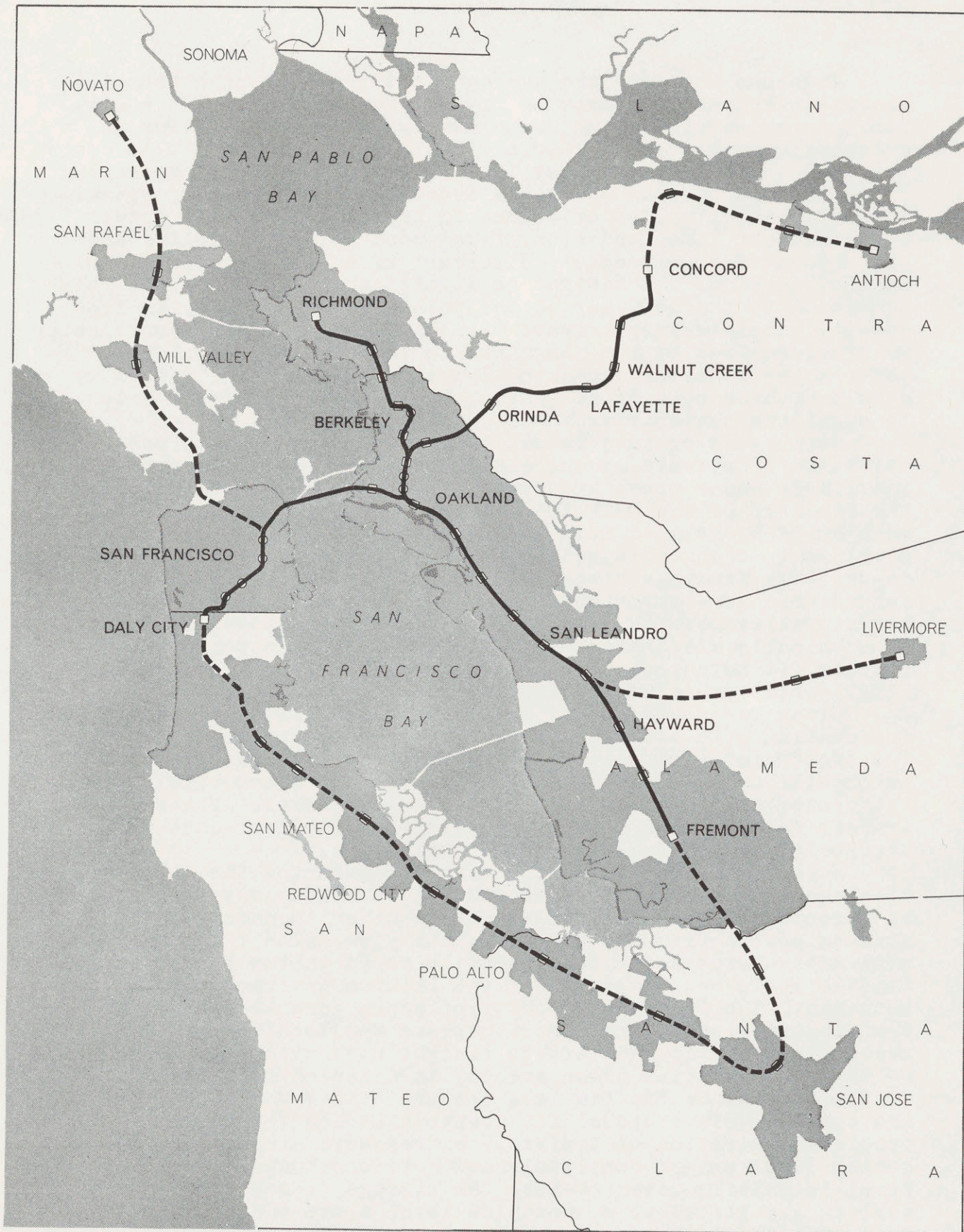
A recent study by economists at the RAND Corporation concluded that the automobile with other available models of travel to work in large American cities. Under the assumptions made by these economists - including a relatively high rate for the driver's or passenger's time - it appears that the one-way hourly cost is lower for the automobile than for most competing modes of travel up to about 15 miles of commuting distance from door to door. In the framework of this analysis the behavior of commuters who choose to commute by automobile is rational.

When one compares the average cost per mile of automobile operation against the cost of transit fares per ride, the comparison may be misleading. The average cost of operating an automobile driven about 10,000 miles a year is close to 10 cents per mile. The marginal cost (the daily out-of-pocket operating cost) is much lower. A sizable fraction of the cost of operating an automobile lies of course in depreciation, insurance, registration, taxes and other fixed-cost items. Gasoline and oil account for only about 15 percent of the total cost. The cost of parking, which might be significant if it were entirely passed on to the consumer at the point of destination, is frequently subsidized by private merchants and public authorities or is provided free by the community on the street. Similarly, the rights-of-way provided in highway programs are financed by gasoline taxes paid by all users, so that long journeys help to subsidize the shorter in-city trips.

As long as private incomes continue to rise, some substitution of private automobile travel for transit is probably inevitable under present competitive conditions. In analyzing the findings of the Detroit Area Transportation Study, John Kain, then at RAND, related much of the change in transit use in Michigan to changes in median family incomes of Michigan residents. His findings disposed him to the view that changes in income were more important in the decline in transit use than deteriorating service. In sum, although the automobile is not a technically elegant solution to the urban transportation problem, it is a socially engaging one because of its adaptability, social prestige and acceptability.

Given these realities, what strategies are being developed for dealing with the overall problem of urban transportation? The two "pure" strategies are (1) all-out accommodation of the automobile and (2) a strategy of banning the automobile from the center city and replacing it on a large scale with rail transit as a mode of journey-to-work travel. Between these two positions are numerous mixed strategies.

Europeans, who are on the verge of entering the automobile age that has enveloped the U.S., have not as yet reacted as strongly to the automobile and are given to accommodative strategies. A firm statement of this view, albeit one tinged with ambivalence and irony, is to be found in the report entitled *Traffic in Towns*, prepared for the British government by Colin Buchanan. The Buchanan report proposes a general theory of traffic based on separation of express and local motor traffic, pedestrian traffic and certain freight movements. Buchanan holds that potential urban amenity is measured by the volume of traffic, since traffic is a measure of the use of buildings and spaces. His proposal for downtown London is based on a vertical separation of traffic: expressways are sunk below street level or are completely automobile subways, the street level is chiefly given over to the storage of vehicles, and pedestrians are lifted to a mezzanine level above the storage level. The principle is the same as the old architectural notion of arcaded shops above the major service lanes.



BAY AREA RAPID TRANSIT DISTRICT (BARTD) currently embraces three metropolitan Bay Area counties: San Francisco, Alameda and Contra Costa. Although early studies envisioned five inner Bay counties in the system, San Mateo County withdrew from the plan by 1962 and Marin County, joined to San Francisco by the thin thread of the Golden Gate Bridge, was judged too diffi-

cult to serve under present conditions. The 75 miles of track expected to be in operation by 1971 are indicated by the solid colored line; surface or elevated sections are in light color, underground sections in dark color. Possible future extensions of the system are indicated by the broken colored line. Squares denote stations with parking facilities; circles denote stations without parking.

Although the presuppositions of the Buchanan report, as much as its analyses, lead to a drastic reshaping of cities to accommodate the automobile, similar efforts on a more modest scale are already to be seen in many of the large cities of the world. The downtowns of major U.S. cities have been attempting to adjust to the increasing number of automobiles by various internal adaptations. The process of adaptation has been going on for many years, with the widening of streets, the construction of garage spaces, the building of expressways to speed the exit and entry of cabs, and alternating permission to park with restrictions on parking. Large investments in underpasses, bridges, tunnels and ramps have been made in order to integrate the local street systems with the high-speed expressways and to reduce local bottlenecks in the increasing flow of cars.

Calculations made by Ira Lowry of RAND and the University of California at Los Angeles on the basis of the Pittsburgh Transportation Study suggest that gains in transportation efficiency resulting from improved routes and automobile-storage capacity are almost immediately absorbed by the further dispersal of places of work and particularly of residences. This dispersal enables the consumer to indulge his preference for more living space; it also increases the advantage of the automobile over the fixed-route system, and it does not significantly relieve the center-city traffic problem. To borrow a concept from economics, in motorine facilities there is a "Say's law" of actional accommodation of use to supply: Additional accommodation creates additional traffic. The opening of a freeway designed to meet existing demand may eventually increase that demand until congestion on the freeway increases the travel time to what it was before the freeway existed.

The case for supplementary transportation systems, such as mass transit, arises from the conviction that measures to accommodate the demands of the automobile are approaching the limit of their effectiveness. The primary aim of improved transit systems is to relieve the conditions brought about by the success of the automobile. The issue for many years to come will not be trains v. automobiles but how to balance the two systems, and it may lead to new designs in which both systems complement each other.

The very scale of the effort to transform our cities to accommodate the automobile has, in view of the problems created by such investment, raised serious doubts in the minds of public officials and transportation experts about the efficacy of making further investments of this kind. The cost of building urban freeways in the interstate system has averaged \$ 3.7 million per mile. This is not the entire real cost, however. Freeways are prodigal space-users that remove sizable tracts of land from city tax rolls. Among other costly consequences are the need for storage space for vehicles brought by freeways to the center city, for elaborate traffic-control systems and for the policing of vehicles. Freeway construction frequently displaces large numbers of urban residents; the

freeway program accounts for the biggest single share of the residential relocation load resulting from public construction in the U.S. Moreover, automobiles are a prime contributor to air pollution, which can be viewed as the result of private use of a public air sewer over a central city by motorists from the entire metropolitan area (see "The Metabolism of Cities", by Abel Wolman, page 178).

These aspects of automobile transport in our cities have intensified public interest in alternative schemes and have expanded the political appeal of such schemes. At government levels a great deal of support has been mustered for the strengthening of rail systems, both local transit systems and the suburban lines of interstate railroads. Privately, however, consumers continue to vote for the use of the automobile. In view of this tension between public objectives and private choices, the San Francisco Bay Area Rapid Transit District (BARTD) commands special attention.

At roughly the same time that the Buchanan report in Britain found no reasonable competitive alternative to the automobile, the voters of three counties of the San Francisco Bay Area committed themselves to support the largest bond issue ever undertaken for an urban transportation system. The San Francisco Bay Area Rapid Transit experiment has aroused international interest on a number of counts. Most important perhaps is the fact that this is the first wholly new public-transit system to be built in the U.S. in 50 years and the first openly to challenge the automobile-transportation system in the era marked by the ascendancy of the automobile and the freeway. Almost equally important is the fact that this project is being undertaken as the result of the decision of citizens of a metropolitan area - for the most part automobile owners - to tax themselves to bring an attractive transit alternative into existence. For various reasons one cannot assume an overwhelming consumer mandate, but the actions of the electorate of the three metropolitan Bay Area counties that finally formed the district is remarkable on the American local-government scene, where the assumptions of responsibility for transit by voters is, to say the least, unusual.

The Bay Area mass-transit undertaking is the outcome of more than 10 years of major public planning and study of the transportation needs in the region. The earlier studies envisioned participation of at least the seven inner Bay counties in the system; the Bay Area Rapid Transit District created by the California legislature in 1957 would have allowed the participation of five counties. By the time the proposed district was brought before the voters in November, 1962, however, it had been reduced to three counties: San Francisco, Alameda and Contra Costa. San Mateo County, whose Southern Pacific commuter trains serve the older suburbs that generated the bulk of commuting to San Francisco's financial district in an earlier era, withdrew from the plan. Marin County, joined to the city by the thin thread of the Golden Gate Bridge, was judged too difficult to

serve under present conditions. The district comprising the three counties was authorized by the voters of those counties to issue \$ 792 million in bonds.

The BARTD system, which is expected to be in operation by 1971, is to be an electric rail system with elevated tracks over some of its routes and subways over others. It is hoped that it will provide technically advanced, comfortable, high-speed commuting that will divert peak-hour travel from automobiles to its trains. To do this it will stress comfort and speed (notably speed; unless the commuter can save appreciable amounts of time he will not easily be diverted). Existing mass-transit systems find it hard to achieve average speeds exceeding 20 miles per hour over the whole of their run; the Bay Area trains will aim at average speeds of 40 to 50 miles per hour and maximum speeds of 80 miles per hour. To attain such average speeds BARTD will operate what is primarily an express system with widely spaced stations fed by buses and automobiles.

In order to be convenient, the express service must be frequent. At present a maximum interval between trains of 15 to 20 minutes at any time of day is contemplated. The proposed interval between trains during hours of peak traffic is 90 seconds. Although slightly less frequent than some rail lines (for example parts of the London subway system at peak), this is very frequent service by American standards; it will be aided by fully automatic controls. A critical factor in the interval between trains is the length of station platforms; this length limits the speed of loading. The BARTD planners hope to have platforms 700 feet long, the longest in the world with the exception of the continuous platforms in the Chicago subway. The maximum interval of 15 to 20 minutes, maintained by varying the number of cars to match anticipated loads, will reduce the number of trains less markedly than would be the case in other transit operations. The BARTD planners believe that in rapid-transit equipment the process of technical obsolescence may be so rapid as to outweigh the fixed costs of wear; thus it will pay, in terms of overall performance, to use the equipment more frequently. If waiting times ranging from 15 to 20 minutes can be maintained around the clock, the BARTD operation will in fact be a suburban rail system with some of the characteristics of local transit. This performance would enable BARTD to avoid the inconvenient schedules that plague the traditional commuter lines, while still offering the high speed and comfort needed to serve effectively the greater distances of commutation characteristic of the present pattern of metropolitan settlement.

The BARTD system will necessarily be expensive. The basic rider's fare has been set in advance planning at 25 cents, with increments based on distance and an average commuter cost of \$1 per trip. Fares are expected to cover the operating costs, although the district has some flexibility in case of shortfall. The cost of tunnelling under San Francisco Bay will be met by funds diverted from the automobile tolls of the Bay Bridge Authority, under the reasonable expectations that (1) the transit

system will help to relieve the overload on the bridges at peak hours and (2) the transit system will not result in a diversion of automobiles so great as to impair revenues from the bridge tolls. With the exception of certain improvements that will be paid for by the cities affected, and some Federal grants for planning and testing new equipment, the remainder of the capital cost will be met from the bond issues. With the bond vote the property owners of the participating counties made themselves available for such additional taxes as would be necessary for building the system. Over a period of time, as costs rise and the system encounters unforeseen difficulties, taxpayers in the member counties could conceivably be saddled with high annual costs. In spite of the fact that at least some property owners will benefit greatly from the existence of the system and that all commuters, drivers as well as riders, will share in a more efficient transportation operation, the real estate taxation base is likely to provoke future political reaction. In this event the more equitable Federal tax base may offer the most promising relief.

BARTD is staking much on the enthusiasm of its future riders. Its case for that support rests on speed, frequency of service, comfort and convenience resulting from attractive cars, easy ticket handling and other "human engineering" factors. It hopes to make commuting by train as pleasurable for some riders as surveys of commuters tell us driving is for others. As an answer to the general problem of urban transportation, however, it has grave shortcomings to match its great promise.

Perhaps the most significant feature of the BARTD approach is its concentration on the portion of the problem it considers to be crucial: the diversion of some of the peak-hour, longer-range commuters. This is certainly an important part of the urban transportation problem in many large cities, particularly in California. It is not the whole problem, however, and some features of the Bay Area system raise doubts about its impact on the total transportation problem of the area.

BARTD must improve its prospects for solving the distribution and collection problems that are the persistent vexations of fixed-rail systems. For its door-to-door service the system depends on connections with the private automobile. A "car park" system, which is proposed to encourage park-and-ride trips, is BARTD's answer, but as it is presently planned this system may not be adequate. Unless the commuter is certain of a parking place at the station, he must either depend on "kiss and ride" assistance - a ride with his wife - or make an earlier decision to park downtown if the station car park is full. Delivery of passengers in San Francisco, Oakland and other business and industrial districts is a similarly serious problem. San Francisco has traditionally been favored by the limited physical scale of its downtown area: the area is compact and densely populated, and it has high intensity of urban activities within a short walk of central points. Oakland, however, is less concentrated. In general two factors work against an easy solution of the delivery problem. One is that downtown areas are spreading; the other is that, as industries seek lower-

density sites away from the downtown area, there is a sizable volume of reverse commuting.

The local-transit portions of the BARTD system and its subsidiary feeder-distributor arrangements have thus far received the least consideration. The majority of the downtown workers live in the cities, on the local-transit part of the system, and a sizable number of middle-income and lower-income factory workers commute from moderately priced rental areas in the center city to jobs in suburban areas. The latter are likely to find the trip from the downtown end of the BARTD line to their jobs a difficult one, and the former are likely to find the spacing of the stations inconvenient for the length of trip required. Within the downtown areas there is as yet too little attention to the devices needed to get passengers from the debarkation platform to their destination. Moving sidewalks, local bus connections, jitneys, and other devices may have to be carefully integrated into a planned distribution systems. At present the most effective distribution systems at downtown terminals are vertical ones making use of high-speed elevators, as in the Pan Am Building above Grand Central Station in New York. The fast, free elevator ride, however, is made possible by the real estate values of the location; as far as the rail system is concerned it is simply a device for capitalizing on the "point to point" features of the fixed-rail line.

If it is not necessary to move passengers too great a distance to and from the station, the passenger conveyor belt - an elevator turned on its side - may prove to be an important adjunct to the rail system. The continuous conveyor belt is a most efficient transportation device (whose possibilities for the movement of freight have not yet been fully tapped in the U.S.). In passenger use its efficiency depends on the length of the trip and, to a lesser degree, on the route and on the means of getting on and off the belt. Belts currently in operation carry as many as 7,000 persons per hour in a 42-inch lane. When one considers that a contemporary expressway lane carries only a third of that number, the performance of the belt is promising. Present conveyor belts, however, go only one and a half to two miles per hour. At this low speed it is necessary to keep the ride short in order to hold down total travel time.

The transit-system terminal runs into trouble when the distance the passenger must walk exceeds 1,500 feet. If the passenger is not to spend more than 10 minutes on a belt (an excessive time with respect to the shorter overall journey), the speed must be pushed above 150 feet per minute, or close to two miles per hour; speeds over three miles per hour make it difficult for some passengers to step on and off the belt. With increased use of conveyor belts in airports and parking areas, however, advances in loading and unloading them can be expected.

The fact remains that the moving walkway is a point-to-point device and inherently inflexible. Given the high cost of its installation and the risk of shifting demand in the downtown

area, it may be less attractive than the more flexible small bus or car. Failure to develop effective devices at the ends of the trip could jeopardize the success of the BARTD operation; a greater emphasis on securing a cheap, flexible system for quick delivery of discharged passengers at their destination will be needed as the rapid-transit portion of the system moves closer to operation.

If the problem of matching the service to points of origin and destination cannot be solved, the BARTD system may turn out to be an interim rather than a long-range solution to the Bay Area transportation problem. The BARTD lines will form a double-track system relying on third-rail power and using relatively conventional railroad cars. BARTD's principal departure from standardization - a wider rail gauge - promises a somewhat smoother ride than the conventional gauge but has the serious drawback of impeding integration with the Southern Pacific Railroad system in the event that San Mateo County is brought into the district. The BARTD decision to use wide-gauge tracks is at variance with plans in Philadelphia, Chicago and New York to push for the integration of portions of the traditional railroad commuter lines with local transit operations.

Experts who are not sanguine about the role of rail systems in moving people from door to door are advocating more drastically altered systems. Any mass-transit system depends on the principle of specialized vehicles and routes. Automobile expressways can be designed to offer specialized routes, such as separate rights-of-way and separate levels. Rail transit offers the same in addition to a specialized vehicle: the train. A Cornell Aeronautical Laboratory report for the Department of Commerce urged consideration of a system that would combine the automobile's vehicular versatility with some of rail transit's advantages for part of a typical trip. Such a system would be an automatically controlled automobile freeway; it might be able to push the capacity of the freeway close to that of the rail system without sacrificing the collection-and-distribution advantages of the individually operated vehicle.

Some of the engineers who have considered the design of an automatic freeway favor the use of small, electrically powered cars that can be automatically controlled in certain zones, coupled and uncoupled without danger or discomfort and conveniently stored at their destination. The case for electric power is made on the grounds of reducing the air pollution associated with emission of hydrocarbons by internal-combustion engines and on the grounds of the improving economy of battery-powered vehicles in stop-and-go driving. The case for a coupling device is based on the desire to secure automatic control on expressways and storage in central business districts. Since electric cars designed for intrametropolitan use would be smaller than conventional cars, less space would be needed in which to park them.

Such systems were of course not available to BARTD, although they may be useful in future planning of transportation. The BARTD system is potentially the most advanced mass-transit system

in the U.S. and at the same time, in the words of the planning critic Allan Temko, "something which is patently less than the best that 20th-century technology makes possible." Perhaps the transit of the future will be automatic, coupled private vehicles; perhaps it will take the form of improvements in present train technology, with air-cushioned trains riding above the roadbed, sped by linear-induction motors; perhaps it will appear as a system of passenger or automobile carriers traveling at high speed in pneumatic tunnels (see "High-Speed Tube Transportation," by L.K. Edwards; SCIENTIFIC AMERICAN, August).

Whatever the vehicular technology, it will be well to recall Wilfred Owen's caution in 1957 that "the so-called transportation problem is only half a transportation problem. Half the problem is to supply the facilities for moving. The other half is creating an environment in which the transportation system has a chance to work." In this respect it is unfortunate that the BARTD transportation plan has, for a variety of historical reasons, preceded an effective plan of metropolitan land use. The success of BARTD will depend partly on shifts in population density and land use in the region, and the operations of BARTD (along with other elements of the regional transportation system, such as the expressways) will help to shape the development of the region.

As presently constituted, the system is highly "centered" on San Francisco with Oakland as a subcenter. Although San Francisco is the historic center of the area, it was genuinely central for transportation only in the period in which the Bay Area depended on seaborne traffic. In the rail era Oakland was more central for transportation lines, and today the Bay Area has the form of a linear city broadly looping south down the San Francisco Peninsula, through San Jose and northward around through Fremont, Oakland and Berkeley. In the expressway system San Jose is more central, but San Jose is now not even in the BARTD system. The region-forming role of BARTD is essentially conservative and is aimed at the preservation of an erstwhile centrality of San Francisco. To succeed in this effort it must overcome strong centrifugal tendencies in the growth of the region. In an era in which technology is continually providing opportunities for decentralization (by allowing the substitution of communication for transportation, of message flows for person flows) and is reducing the relative cost of transportation, thereby diminishing the importance of the central place, this task may be increasingly difficult.

The real test of BARTD and its successors in other regions will be whether or not they can adapt effectively to the megalopolitan pattern of settlement. The problem of intramegalopolitan transport will increasingly be one of effective intercity, as well as intracity, links. If, for example, intercity rail transit can achieve maximum speeds of more than 100 miles per hour and average speeds of more than 70 miles per hour, it can be as effective as other modes of transportation, including air travel, for distances up to about 300 miles. Within megalopolitan areas, as their extent increases, we may find that it is desirable to

re-create a modern version of the old interurban electric system than once tied Middle Western cities together. One advantage of such system is that it would call for the regional planning of routes, stations and schedules; if transportation can create development values, it can also withhold them and mold the development of the region.

As cities evolve into supercities, transportation planners must reckon with future urban form and scale as well as with future technology. The change is not occurring overnight. Even now, however, we have clear evidence of population overspill into the interstices between cities, of the growth of industry in outlying, low-density portions of the linear connections between cities, of the stabilization of employment in the central business districts, of the growth of circumferential and loop connections between employment centers and of the growing share of metropolitan employment and business outside the central city.

If the transportation systems serving these new agglomerations are to grow out of the present systems, the emphasis will have to be placed on the consolidation and rationalization of present operations, on the building of links now missing in the networks and on the development of new systems that will complement existing ones. To provide one example, in the BARTD region the Golden Gate crossing is vital to the integration of Marin County into the district and could become the focus for technical work on lightweight cars that could be suspended from monorails on the existing bridge. An important step in the recognition of the modern urban transportation problem is represented by recent proposals in Boston, New York, Philadelphia and Chicago to integrate various transit companies, railroad operations, bridge and tunnel authorities and other elements in local transport. Coordinated development of highways and rail transit, of local and express service, of private automobiles, trucks and buses will be the hallmark of any forward-looking transportation plan. In this article there has been little mention of freight; the facilities for handling freight have in many instances far outstripped the performance of those for handling passengers.

Finally, of course, transportation planning will proceed in the context of social choice and individual values, which in the U.S. set the priorities for planning and also the limits on it. Government officials have decided to push the development of supersonic aircraft well in advance of decisions to develop the high-speed surface facilities that will be needed to connect the increasingly remote airports with the destinations of passengers and cargo - even though 2,000-mile-per-hour aircraft will need 300-mile-per-hour ground connections to make any economic sense. Yet we may have both before we have effective integration of the Long Island Railroad, the New York City subway system and the Triborough Bridge Authority.

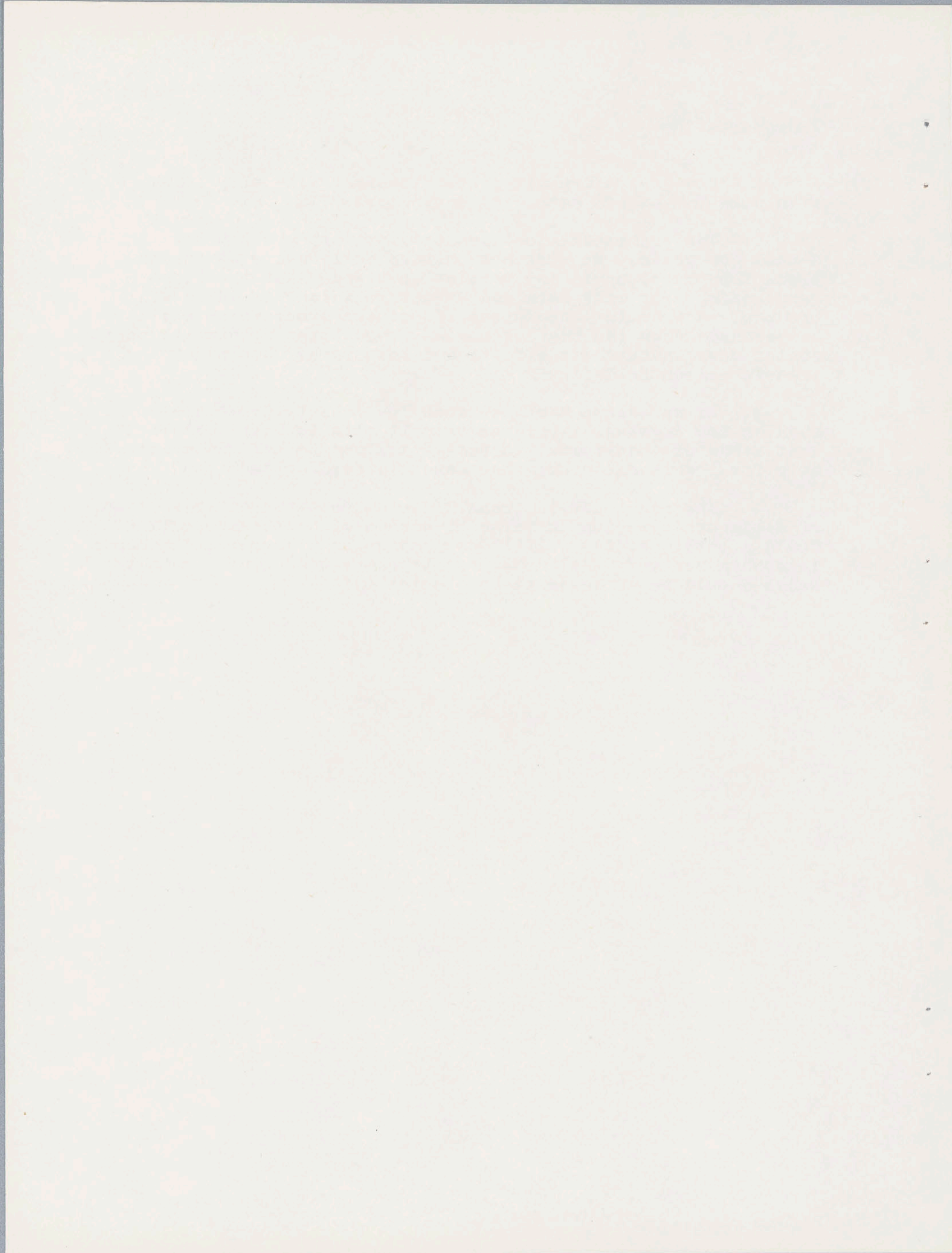
Transportation

1. How does a transit system interact with city form? With city politics? With city economics?

2. The transportation planner's primary problem lies in a need for goals. He must not only be fully aware of the implications to economic and population trends, but the long-range effects to city form and structure which his ideas will produce. How could a consensus of opinion about these goals be reached? How can the autonomous communities within a transit region coordinate their efforts and resources? How might a transit region be defined?

3. If we assume that for some low-density urban areas, such as Los Angeles, a private transit plan is most suitable, what kinds of transportation facilities are to be made available for low income groups who cannot afford automobiles?

4. How can a public transit system meet the diverse demands of a big urban region in terms of schedule, cost, and routing? Could a public system fulfill all passenger transportation needs in such a region? What sort of interfaces with other transit modes should be arranged at the perimeter?



Future Metropolis

For those of us residing in the grey industrial wasteland that is South Cambridge, the urban experience is an integral part of our everyday lives. We all struggle to cross Mass. Ave., brush the cinders off our shoulders, jostle through the rush hour crowds. Some of us look at the city, walk along the Charles and watch the sailboats cut across the choppy waters, see the sunset glisten golden off the State House dome. Some of us listen to the city, wait at Park St. for the Harvard train and hear the accents of the Brattle St. crowd mix with those of the Ashmont passengers heading for another part of the metropolis and in so many ways, another world. A few of us think about the city, about why Cambridge can't afford traffic lights, about Louise Day Hicks and what it means to bus Negro kids to Brookline and Lexington, perhaps even think about what a city could or should be like.

Daniel Boorstin talks about the "givenness" of American society, about how we, as a nation, failed to articulate a social or political ideology simply because values were self-evident in the very lay of the land, because we were God's chosen people and had no time to ponder philosophical niceties while a continent awaited our conquest. In an analogous manner, we have accepted our cities as "given", and left their development to private enterprise and the market economy. (And taking pot luck, we "left our hearts in San Francisco," or rejoiced at the 60% of Los Angeles devoted to the automobile; made our homes in Levittown, Nassau County, New York, or in Louisberg Square, Suffolk County, Mass.) But just as we've reached the end of the frontier in our Westward expansion, so have we finally come to the point where we as a nation must seriously think about our cities. We must stop marveling in childlike wonder at the potentials of present and future technology and come face to face with human values. We must put first things first and ask "What kind of a society do we want?" and then "What kind of a technology do we need?" To seriously think about the future metropolis, we have to look carefully and analytically at the urban environment we take for granted, decide what we wish to preserve, what we can well afford to discard, and what we should create as we strive to reach the "Great Society" as a contemporary leader calls it, or the "Good Life" as philosophers have long called it.

It seems self-evident that before serious consideration can be given to the future metropolis, utopia or otherwise, we must have a pretty firm conception of just what constitutes the city. Immediately we run into difficulty, for there are as many different kinds of cities as there are views of the Good Life. It would be completely dishonest to claim that there is any one ideal city to be studied, or even that we can objectively arrive at some ideal type. No! Rather than assume a guise of "scientific" impartiality, we will begin by saying that

our ideas of "what a city is" reflects our feeling for what it should be. Thus we will choose Louisberg Square as being more urban than Levittown. The description of The City which follows reflects both our prejudices as to the meaning or "urbanness," and our reading of history. It is also, in no small part, attributable to our acquaintance with one particular city: Boston.

The City is people, different kinds of people. Its people represent different ethnic groups, different social classes; live diverse kinds of lives reflecting diverse systems of values. They are divided into groupings and possess institutions which are often antagonistic to the prevailing mores of the society and to the institutions of other groupings in the city. So our city is heterogeneous and, as we have implied, pluralistic. It is forever the scene upon which groups interact, often with much heat and hostility, upon which consensus is ephemeral and politics is genuinely the resolution of conflict. The City is cosmopolitan and gains strength from the varied pattern of its social fabric.

The City is more than a conglomeration of human beings. First and foremost it is a physical structure. At its best it offers the link between Gemeinschaft and Gesellschaft: the urban neighborhood. The urbanite can leave the cosmopolitan and impersonal world of Federal Street or the Government Center or Beacon Hill and enter the community where he makes his home, the brick tenements of the North End, the low fronts of Fields Corner. The City is in some way a cellular organism possessing structural integrity and a functional division of labor.

But part of the meaning of the city is lost if it is seen out of its context, the rest of American civilization. Formerly, the distinction between the city and rural America has always been sharp. As one drove out of town, at the city limits the roads would narrow and the quality of the pavement would decline. Today the differences between city and non-city are more subtle, for between city and country has come the suburban halfbreed, claimed by neither but looking suspiciously like both. And while rural America may deny its paternity, it is clear that the city is the mother. The city, thus surrounded by her brood, can no longer be studied alone, her problems are no longer solely urban problems, they are metropolitan problems. It is the metropolis on which we must focus our attention today.

Population trends suggest that by 1975, 63.6% of the people in the United States will be living in Standard Metropolitan Areas. Of these, however, only 42.9% will be living in the central city. In 1960 51.1% were living in the core; in 1950, 58.7%.* Thus the suburbs grow. Potato farms give way to Levittowns and the prairie around Houston gives way to rows of London-style "town" houses. The suburbs grow up unquestioned and unplanned. They are obviously here to stay. But we must

* The Committee for Economic Development, Guiding Metropolitan Growth, pp. 46-47.

ask ourselves if they can continue to grow haphazardly. Is Los Angeles or New York City - Nassau County to be the prototype of the Future Metropolis? Can the suburbs provide part of the answer to our metropolitan problems, or will they only be a metropolitan cancer, a penalty to the ultimate form of human civilization?

Traditionally, the suburbs have been the refuge of the middle class. Suburbia was the place to move if one wanted to partake of the American frontier, to be one of the pseudo-agrarian yeomen on which American Democracy "should" be based. The ranch home with blunderbuss above the hearth, with a well manicured lawn, and an apple tree in the back yard offered to those who could afford it (or who could just about afford it) status, fresh air, and freedom. One was not cramped and confined in suburbia. This was heaven compared to life in the sinful city. Not only was the air cleaner, the taxes lower, the schools better, but the people were so much nicer. In the suburbs one didn't have to see, or have one's children see, the poor, the down-and-out, the Puerto Ricans, or the Negroes (except when one came to clean the house). Here at last was something the city could not offer: a wholesome physical and social environment in which to live and bring up children.

As the bourgeoisie flooded the suburbs, however, the urban ills of which they complained were only exacerbated. When the middle class moved out, leaving behind the lower class and the impoverished, they took with them much of the financial and leadership resources of the cities. Solving urban problems has become more difficult because of the decline in numbers of high quality leaders and an analogous attention in the middle class vote. Moreover, suburbanites take full advantage of city facilities, use public transportation, and yet do not pay city taxes to support them.

Aside from adversely affecting the city, large population shifts are also creating suburban problems. A suburbia grows in its chicken-without-a-head way, the suburbanite begins to find that it now takes him an hour or two to get to work because the six-lane super highways are too narrow. The quiet "country" road along which the family used to like to drive is now congested with shopping centers, gas stations, and 15 cent hamburger stands. Furthermore, the suburbanite's fresh air has been polluted by his best friend, the auto. One needs only look at Los Angeles or Nassau County in order to see suburbia brought to its logical conclusion, suburbia ad nauseum.

In the future we must try to achieve some sort of balance between city, suburb, and country, not only physically but socially. This does not mean that we are advocating segregation, far from it. What we mean is that the city is more or less characterized by impersonality in social relations. There exists all too few urban communities. In the suburbs, however, a community is possible. In the cities of the future we should consider how the urban form relates to urban society. For example, as many apartment houses are now constructed, they af-

ford little opportunity of even random social interaction. Many apartment dwellers know few if any of the other residents of their buildings. If high rise buildings were built with social areas every few floors, or around a park instead of in a row, it is more likely that social interaction would be increased and perhaps even a community would develop.

Furthermore, aside from new urban forms it seems that perhaps government reorganization is needed. City problems are no longer just city problems, they affect suburbs too. Moreover, the cities and suburbs are socially and economically integrated, while government is just as it was a few hundred years ago. Such political integration might facilitate handling of many urban problems caused by the flight of the middle class. The tax burden could be equalized and new sources of "urban," now to be metropolitan leaders tapped.

The following two articles deal with the Future Metropolis. They treat not physical city plans but things more abstract - a philosophy of planning and a set of values to be preserved in urban civilization. We might consider such abstractions, especially values, the soul of the Metropolis. Physically the city presents itself to us as a fact; values provide its raison d'etre. Values determine the "morality" of urban civilization. They are the answers to the questions: Why cities? What kind of cities? How should we plan?

The first article is by Lewis Mumford, noted historian and urbanophile. It is his belief that the city brings out the creativity in man; that it offers the best opportunities for human self-discovery and a meaningful human experience. How is this reconcilable with the claim that the city is the source of alienation and anomie?

The article by Martin Meyerson, a leading Political Scientist, deals with utopias and planning in their historical perspectives. He believes that technology has now reached a state "in which material abundance is no longer in doubt (so that now) we can delineate pluralistic urban utopias." How much do you think poor technology contributes to the rigidity of most utopian plans?

Just remember that these articles represent the opinion of only two men, there are still three billion other people in the world.

Lewis Mumford - Retrospect and Prospect

In taking form, the ancient city brought together many scattered organs of the common life, and within its walls promoted their interaction and fusion. The common functions that the city served were important; but the common purposes that emerged through quickened methods of communication and co-operation were even more significant. The city mediated between the cosmic order, revealed by the astronomer priests, and the unifying enterprises of kingship. The first took form within the temple and its sacred compound, the second within the citadel and the bounding city wall. By polarizing hitherto untapped human aspirations and drawing them together in a central political and religious nucleus, the city was able to cope with the immense generative abundance of neolithic culture.

By means of the order so established, large bodies of men were for the first time brought into effective co-operation. Organized in disciplined work groups, deployed by central command, the original urban populations in Mesopotamia, Egypt, and the Indus Valley controlled flood, repaired storm damage, stored water, remodelled the landscape, built up a great water network for communication and transportation, and filled the urban reservoirs with human energy available for other collective enterprises. In time, the rulers of the city created an internal fabric of order and justice that gave to the mixed populations of cities, by conscious effort, some of the moral stability and mutual aid of the village. Within the theater of the city new dramas of life were enacted.

But against these improvements we must set the darker contributions of urban civilization: war, slavery, vocational overspecialization, and in many places, a persistent orientation toward death. These institutions and activities, forming a 'negative symbiosis,' have accompanied the city through most of its history, and remain today in markedly brutal form, without their original religious sanctions, as the greatest threat to further human development. Both the positive and the negative aspects of the ancient city have been handed on, in some degree, to every later urban structure.

Through its concentration of physical and cultural power, the city heightened the tempo of human intercourse and translated its products into forms that could be stored and reproduced. Through its monuments, written records, and orderly habits of association, the city enlarged the scope of all human activities, extending them backwards and forwards in time. By means of its storage facilities (buildings, vaults, archives, monuments, tablets, books), the city became capable of transmitting a complex culture from generation to generation, for it marshalled together not only the physical means but the human agents needed

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to pass on and enlarge this heritage. That remains the greatest of the city's gifts. As compared with the complex human order of the city, our present ingenious electronic mechanisms for storing and transmitting information are crude and limited.

From the original urban integration of shrine, citadel, village, workshop, and market, all later forms of the city have, in some measure, taken their physical structure and their institutional patterns. Many parts of this fabric are still essential to effective human association, not least those that sprang originally from the shrine and the village. Without the active participation of the primary group, in family and neighborhood, it is doubtful if the elementary moral loyalties - respect for the neighbor and reverence for life - can be handed on, without savage lapses, from the old to the young.

At the other extreme, it is doubtful, too, whether those multifarious co-operations that do not lend themselves to abstraction and symbolization can continue to flourish without the city, for only a small part of the contents of life can be put on the record. Without the superposition of many different human activities, many levels of experience, within a limited urban area, where they are constantly on tap, too large a portion of life would be restricted to record-keeping. The wider the area of communication and the greater the number of participants, the more need there is for providing numerous accessible permanent centers for face-to-face intercourse and frequent meetings at every human level.

The recovery of the essential activities and values that first were incorporated in the ancient cities, above all those of Greece, is accordingly a primary condition for the further development of the city in our time. Our elaborate rituals of mechanization cannot take the place of the human dialogue, the drama, the living circle of mates and associates, the society of friends. These sustain the growth and reproduction of human culture, and without them the whole elaborate structure becomes meaningless - indeed actively hostile to the purposes of life.

Today the physical dimensions and the human scope of the city have changed; and most of the city's internal functions and structures must be recast to promote effectively the larger purposes that shall be served: the unification of man's inner and outer life, and the progressive unification of mankind itself. The city's active role in future is to bring to the highest pitch of development the variety and individuality of regions, cultures, personalities. These are complementary purposes: their alternative is the current mechanical grinding down of both the landscape and the human personality. Without the city modern man would have no effective defenses against those mechanical collectives that, even now, are ready to make all veritably human life superfluous, except to perform a few subservient functions that the machine has not yet mastered.

Ours is an age in which the increasingly automatic processes of production and urban expansion have displaced the human goals they are supposed to serve. Quantitative production has

become, for our mass-minded contemporaries, the only imperative goal: they value quantification without qualification. In physical energy, in industrial productivity, in invention, in knowledge, in population the same vacuous expansions and explosions prevail. As these activities increase in volume and in tempo, they move further away from any humanly desirable objectives. As a result, mankind is threatened with far more formidable inundations than ancient man learned to cope with. To save himself he must turn his attention to the means of controlling, directing, organizing, and subordinating to his own biological functions and cultural purposes the insensate forces that would, by their very superabundance, undermine his life. He must curb them and even eliminate them completely when, as in the case of nuclear and bacterial weapons, they threaten his very existence.

Now it is not a river valley, but the whole planet, that must be brought under human control: not an unmanageable flood of water, but even more alarming the malign explosions of energy that might disrupt the entire ecological system on which man's own life and welfare depends. The prime need of our age is to contrive channels for excessive energies and impetuous vitalities that have departed from organic norms and limits: cultural flood control in every field calls for the erection of embankments, dams, reservoirs, to even out the flow and spread it into the final receptacles, the cities and regions, the groups, families, and personalities, who will be able to utilize this energy for their own growth and development. If we were prepared to restore the habitability of the earth and cultivate the empty spaces in the human soul, we should not be so preoccupied with sterile escapist projects for exploring inter-planetary space, or with even more rigorously dehumanized policies based on the strategy of wholesale collective extermination. It is time to come back to earth and confront life in all its organic fecundity, diversity, and creativity, instead of taking refuge in the under-dimensioned world of Post-historic Man.

Modern man, unfortunately, has still to conquer the dangerous aberrations that took institutional form in the cities of the Bronze Age and gave a destructive destination to our highest achievements. Like the rulers of the Bronze Age, we still regard power as the chief manifestation of divinity, or if not that, the main agent of human development. But 'absolute power' like 'absolute weapons,' belongs to the same magicobiotic cooperation of man with all other aspects of nature, and of men with other men. Living organisms can use only limited amounts of energy. 'Too much' or 'too little' is equally fatal to organic existence. Organisms, societies, human persons, not least, cities, are delicate devices for regulating energy and putting it to the service of life.

The chief function of the city is to convert power into form, energy into culture, dead matter into the living symbols of art, biological reproduction into social creativity. The positive functions of the city cannot be performed without creating new institutional arrangements, capable of coping with

the vast energies modern man now commands: arrangements just as bold as those that originally transformed the overgrown village and its stronghold into the nucleated, highly organized city.

These necessary changes could hardly be envisaged, were it not for the fact that the negative institutions that accompanied the rise of the city have for the last four centuries been falling into decay, and seemed until recently to be ready to drop into limbo. Kingship by divine right has all but disappeared, even as a moribund idea; and the political functions that were once exercised solely by the palace and the temple, with the coercive aid of the bureaucracy and the army, were during the nineteenth century assumed by a multitude of organizations, corporations, parties, associations, and committees. So, too, the conditions laid down by Aristotle for the abolition of slave labor have now been largely met, through the harnessing of inorganic sources of energy and the invention of automatic machines and utilities. Thus, slavery, forced labor, legalized expropriation, class monopoly of knowledge, have been giving way to free labor, social security, universal literacy, free education, open access to knowledge, and the beginnings of universal leisure, such as is necessary for wide participation in political duties. If vast masses of people in Asia, Africa and South America still live under primitive conditions and depressing poverty, even the ruthless colonialism of the nineteenth century brought to these peoples the ideas that would release them. 'The heart of darkness,' from Livingstone on to Schweitzer, was pierced by a shaft of light.

In short, the oppressive conditions that limited the development of cities throughout history have begun to disappear. Property, caste, even vocational specialization have - through the graded income tax and the 'managerial revolution' - lost most of their hereditary fixations. What Alexis de Tocqueville observed a century ago is now more true than ever: the history of the last eight hundred years is the history of the progressive equalization of classes. This change holds equally of capitalist and communist systems, in a fashion that might have shocked Karl Marx, but would not have surprised John Stuart Mill. For the latter foresaw the conditions of dynamic equilibrium under which the advances of the machine economy might at last be turned to positive human advantage. Until but yesterday, then, it seemed that the negative symbiosis that accompanied the rise of the city was doomed. The task of the emerging city was to give an ideal form to these radically superior conditions of life.

Unfortunately, the evil institutions that accompanied the rise of the ancient city have been resurrected and magnified in our own time: so the ultimate issue is in doubt. Totalitarian rulers have reappeared, sometimes elevated, like Hitler, into deities, or mummified in Pharaoh-fashion after death, for worship, like Stalin and Lenin. Their methods of coercion and terrorism surpass the vilest records of ancient rulers, and the hoary practice of exterminating whole urban populations has even been exercised by the elected leaders of democratic states, wield-

ing powers of instantaneous destruction once reserved to the gods. Everywhere secret knowledge has put an end to effective criticism and democratic control; and the emancipation from manual labor has brought about a new kind of enslavement: abject dependence upon the machine. The monstrous gods of the ancient world have all reappeared, hugely magnified, demanding total human sacrifice. To appease their super-Moloch in the Nuclear Temples, whole nations stand ready, supinely, to throw their children into his fiery furnace.

If these demoralizing tendencies continue, the forces that are now at work will prove uncontrollable and deadly; for the powers man now commands must, unless they are detached from their ancient ties to the citadel, and devoted to human ends, lead from their present state of paranoid suspicion and hatred to a final frenzy of destruction. On the other hand, if the main negative institutions of civilization continue to crumble - that is, if the passing convulsions of totalitarianism mark in fact the death-throes of the old order - is it likely that war will escape the same fate? War was one of the 'lethal genes' transmitted by the city from century to century, always doing damage but never yet widely enough to bring civilization itself to an end. That period of tolerance is now over. If civilization does not eliminate war as an open possibility, our nuclear agents will destroy civilization - and possibly exterminate mankind. The vast village populations that were once reservoirs of life will eventually perish with those of the cities.

Should the forces of life, on the other hand, rally together, we shall stand on the verge of a new urban implosion. When cities were first founded an old Egyptian scribe tells us, the mission of the founder was to "put the gods in their shrines." The task of the coming city is not essentially different: its mission is to put the highest concerns of man at the center of all his activities: to unite the scattered fragments of the human personality, turning artificially dismembered men - bureaucrats, specialists, 'experts,' depersonalized agents - into complete human beings, repairing the damage that has been done by vocational separation, by social segregation, by the over-cultivation of a favored function, by tribalisms and nationalisms, by the absence of organic partnerships and ideal purposes.

Before modern man can gain control over the forces that now threaten his very existence, he must resume possession of himself. This sets the chief mission for the city of the future: that of creating a visible regional and civic structure, designed to make man at home with his deeper self and his larger world, attached to images of human nurture and love.

We must now conceive the city, accordingly, not primarily as a place of business or government, but as an essential organ for expressing and actualizing the new human personality - that of 'One World Man.' The old separation of man and nature, of townsman and countryman, of Greek and barbarian, of citizen and foreigner, can no longer be maintained: for communication, the entire planet is becoming a village; and as a result, the

smallest neighborhood or precinct must be planned as a working model of the larger world. Now it is not the will of a single deified ruler, but the individual and corporate will of its citizens, aiming at self-knowledge, self-government, and self-actualization, that must be embodied in the city. Not industry but education will be the center of their activities; and every process and function will be evaluated and approved just to the extent that it furthers human development, whilst the city itself provides a vivid theater for the spontaneous encounters and challenges and embraces of daily life.

Apparently, the inertia of current civilization still moves toward a worldwide nuclear catastrophe; and even if that fatal event is postponed, it may be a century or more before the possibility can be written off. But happily life has one predictable attribute: it is full of surprises. At the last moment - and our generation may in fact be close to the last moment - the purposes and projects that will redeem our present aimless dynamism may gain the upper hand. When that happens, obstacles that now seem insuperable will melt away; and the vast sums of money and energy, the massive efforts of science and technics, which now go into the building of nuclear bombs, space rockets, and a hundred other cunning devices directly or indirectly attached to dehumanized and de-moralized goals, will be released for the recultivation of the earth and the rebuilding of cities: above all, for the replenishment of the human personality. If once the sterile dreams and sadistic nightmares that obsess the rulling elite are banished, there will be such a release of human vitality as will make the renaissance seem almost a still-birth.

It would be foolish to predict when or how such a change may come about; and yet it would be even more unrealistic to dismiss it as a possibility, perhaps even an imminent possibility, despite the grip that the myth of the machine still holds on the Western World. Fortunately, the preparations for the change from a power economy to a life economy have been long in the making; and once the reorientation of basic ideas and purposes takes place, the necessary political and physical transformations may swiftly follow. Many of the same forces that are now oriented toward death will then be polarized toward life.

In discussing the apparent stabilization of the birthrate, as manifested throughout Western civilization before 1940, the writer of "The Culture of Cities" then observed: "One can easily imagine a new cult of family life, growing up in the face of some decimating catastrophe, which would necessitate a swift revision in plans for housing and city development: a generous urge toward procreation might clash in policy with the views of the prudent, bent on preserving a barely achieved equilibrium."

To many professional sociologists, captivated by the smooth curves of their population graphs, that seemed a far-fetched, indeed quite unimaginable possibility before the Second World War. But such a spontaneous reaction actually took place shortly after

the war broke out, and has continued, despite various 'expert' predictions to the contrary, for the last twenty years. Many people who should be vigilantly concerned over the annihilation of mankind through nuclear explosions have concealed that dire possibility from themselves by excessive anxiety over the 'population explosion' - without the faintest suspicion, apparently, that the threat of de-population and that of over-population might in fact be connected.

As of today, this resurgence of reproductive activity might be partly explained as a deep instinctual answer to the premature death of scores of millions of people throughout the planet. But even more possibly, it may be the unconscious reaction to the likelihood of an annihilating outburst of nuclear genocide on a planetary scale. As such, every new baby is a blind desperate vote for survival: people who find themselves unable to register an effective political protest against extermination do so by a biological act. In countries where state aid is lacking, young parents often accept a severe privation of goods and an absence of leisure, rather than accept privation of life by foregoing children. The automatic response of every species threatened with extirpation takes the form of excessive reproduction. This is a fundamental observation of ecology.

No profit-oriented, pleasure-dominated economy can cope with such demands: no power-dominated economy can permanently suppress them. Should the same attitude spread toward the organs of education, art, and culture, man's super-biological means of reproduction, it would alter the entire human prospect: for public service would take precedence over private profit, and public funds would be available for the building and rebuilding of villages, neighborhoods, cities, and regions, on more generous lines than the aristocracies of the past were ever able to afford for themselves. Such a change would restore the discipline and the delight of the garden to every aspect of life; and it might do more to balance the birth-rate by its concern with the quality of life, than any other collective measure.

As we have seen, the city has undergone many changes during the last five thousand years; and further changes are doubtless in store. But the innovations that beckon urgently are not in the extension and perfection of physical equipment: still less in multiplying automatic electronic devices for dispersing into formless sub-urban dust the remaining organs of culture. Just the contrary: significant improvements will come only through applying art and thought to the city's central human concerns, with a fresh dedication to the cosmic and ecological processes that enfold all being. We must restore to the city the maternal, life-nurturing functions, the autonomous activities, the symbiotic associations that have long been neglected or suppressed. For the city should be an organ of love; and the best economy of cities is the care and culture of men.

The city first took form as the home of a god: a place where eternal values were represented and divine possibilities revealed. Though the symbols have changed the realities behind

them remain. We know now, as never before, that the undisclosed potentialities of life reach far beyond the proud algebraics of contemporary science; and their promises for the further transformations of man are as enchanting as they are inexhaustible. Without the religious perspectives fostered by the city, it is doubtful if more than a small part of man's capacities for living and learning could have developed. Man grows in the image of his gods, and up to the measure they have set. The mixture of divinity, power, and personality that brought the ancient city into existence must be weighed out anew in terms of the ideology and the culture of our own time, and poured into fresh civic, regional, and planetary molds. In order to defeat the insensate forces that now threaten civilization from within, we must transcend the original frustrations and negations that have dogged the city throughout its history. Otherwise the sterile gods of power, unrestrained by organic limits or human goals, will remake man in their own faceless image and bring human history to an end.

The final mission of the city is to further man's conscious participation in the cosmic and the historic process. Through its own complex and enduring structure, the city vastly augments man's ability to interpret these processes and take an active, formative part in them, so that every phase of the drama it stages shall have, to the highest degree possible, the illumination of consciousness, the stamp of purpose, the color of love. That magnification of all the dimensions of life, through emotional communion, rational communication, technological mastery, and above all, dramatic representation, has been the supreme office of the city in history. And it remains the chief reason for the city's continued existence.

Martin Meyerson - Utopian Traditions and the Planning of Cities

In 1516 Sir THOMAS MORE published Utopia, thus kindling for the Renaissance as well as for our own times a literary tradition describing an ideal future society and by implication criticising the society already in existence. A half-century earlier, two Italian architects, Leone Battista Alberti and Filareti (the pseudonym of Antonio Averlino), kindled a parallel utopian tradition of designing the ideal city. Alberti's proposals and Filareti's Sforzinda (a scheme for such a city, dedicated to Francesco Sforza), like More's Utopia, initiated other efforts to depict a desirable pattern for future living - but without saying how to achieve it. Curiously, these two traditions did not influence each other but developed apart. The literary utopians constructed a desirable future in terms of altered social organizations and institutions. The design utopias portrayed a desirable future in terms of altered artifacts and the organization of space.

C.P. Snow has censured the division of contemporary intellectual life into two separate cultures, that of the humanists and that of the natural scientists. Yet that division is no more marked than is the intellectual division between verbal and visual culture. The verbal or social utopias, if they have dealt at all with elements of physical environment, have done so but superficially: The forms and interrelations of housing, workshops, facilities for education and recreation, and the distribution of open land, have followed, as afterthoughts, alterations in property, in family, in political and other institutions. Conversely, the utopias of visual design have ignored class structure, the economic base, and the process of government in the desirable future they present.

Despite their mutual isolation, these two traditions have some remarkable similarities. Most of the creators of social utopias believe that man will be happier, more productive, or more religious - or "better," according to some moral criterion, if the institutions of society are altered. Most of the creators of the physical utopias imply that men will be healthier, more orderly, more satisfied, more inspired by beauty - better in some other way, if the physical environment is appropriately arranged. In both cases, utopia has a strong environmental and moralistic cast: if men are only placed within a proper setting (whether social or physical), they will behave as the creators of utopia believe they should behave.

More importantly, the two traditions have another trait in common - caricature. Man has neither the wisdom, nor the knowledge, nor the skills in communication to present a cosmic portrayal of a total future, let alone a total desirable future, even though some utopias, both social and cultural, presume to such a totality. Not only do the social utopias evade the physical environment, just as the physical kind of utopia evades social organization, but even in their own spheres the limitations

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of human understanding result in simplifications and therefore in exaggerations which often have a ludicrous aspect. The creator of utopia selects a few principles on which his desirable future society pivots; these may refer to certain social institutions or to certain conditions in the physical environment. Indeed, utopia can do no more than this. The anthropologist who tries to study a whole culture achieves insights only into segments of that culture; the psychologist does not comprehend the whole personality, but only facets of it. The utopian creator can only be selective and arbitrary in his constructs. While the analysis of the social scientist is also a partial one, his product, if he is capable, is not a caricature; he deals with the present, not the imagined future, and he describes rather than prescribes. The arbitrary, simplified view (or caricature) that has dominated utopias, on the other hand, has often left critics unsure as to whether their creators intended a parody or not.

Since utopias usually result in caricature, intellectuals have rarely been drawn to producing them. The large-scale internally consistent panoramas of a desirable future often seem too constrained to attract them; or if they are activists, they dismiss utopias as impractical - the absence of any suggested means of achieving the ends makes the effort ridiculous. Moreover, since the Enlightenment, the intellectual's belief in rational progress has gradually eroded: the sophisticate is cynical rather than hopeful for man's prospects. Very rarely has a first-rate mind invented a utopia. When intellectuals, particularly those of the twentieth century, have chosen to caricature the world, they have constructed anti-utopias, panoramas, their creators consider as undesirable and therefore as warnings. Perhaps the nature of caricature is best exploited when it is satiric rather than benign. As Margaret Mead says, Hell is always more vivid - and convincing - than Heaven.

Certainly, the sharpest intellectual contributions have been critical even when recommendatory, nor have they been attempts to portray the proposed future. Karl Marx tried systematically to demolish bourgeois society and to demonstrate the inevitable downfall of capitalism, but he said almost nothing about the future conditions of society under his brand of socialism. He (and Engels), scorning other socialists as "utopian," dismissed their proposals for the good society as unrealistic but he offered no substitute. Socialism, it was thought, would develop its own logic, its own rules and dialectic of change. Apart from some vague predictions that the potentialities of man's creativity would be freed when socialism is achieved, Marx did not indicate what pattern of life would emerge. In a like sense, Freud systematically attacked the prevailing views of human personality and detailed a process by which man might rid himself of his psychic impediments, but he did not indicate what the successfully analyzed personality would be like, or what the form of a society of such personalities.

The greatest contributions of such minds came through their analyses rather than through the development of normative imagery. They were committed to change; their subtle and complicated minds rebutted the static in the human condition. They were not inclined (or were unable) to detail the end products of the changes they desired. Yet the power of their critical and analytical systems revolutionized men's ways of thinking and behaving.

David Riesman in his brilliant essay on utopias calls for a revival of utopian thinking as an intellectual challenge, precisely because it takes more courage to deal with what might be than with what is, and because it is more difficult to pose great alternatives than to choose among lesser evils. Without genuinely revolutionary changes in society, changes that demand substantial sacrifice, substantial gains in human well-being will not be made; to aim at lesser goals, he believes, may make for a real waste of human talents, since the goal least likely to be achieved is the maintenance of the status quo.

It is not the motivational value of utopia, however, that I am affirming so much as its potential contribution to planning—specifically, to the planning of cities. The attributes of the utopian caricature, if they are recognized as caricature, can be extremely useful in posing potentially desirable ends and then in testing these ends with a logical model. Would such ends, if carried out consistently, result in a desirable state of affairs or not? Utopia specifies a desirable future state without detailing the means of achieving it. City planning is charged with specifying a desirable future state and also the means of attaining it.

City planning as a vocation has become widely accepted in the last few decades, particularly in English-speaking countries. The literature of city planning claims as one of its purposes and competencies the preparation of long-range, comprehensive plans for communities. In practice, however, city planning has either ignored the means (while still not proposing fundamental changes) or it has concentrated on the efficacy of means to the exclusion of ends.

As city planning clarifies its theory and sharpens its methodology, it will be faced with the choice of relinquishing the utopian elements now residual in its ideology or of capitalizing on them. I suggest that city planners ought to recognize the value of utopian formulations in the depicting of the community as it might be seen through alternative normative lenses.

City planning, in portraying a future state of affairs, tries to link economic and social policy with physical design to solve such urban problems as housing and transportation. The two separate traditions of utopia, that of artifact and that of institutions, can simultaneously be drawn upon for this objective. By developing alternative utopias of the community, both in physical or material terms and in social and economic

terms, city planning would not remove the element of caricature. Instead, it would give that element meaning, since caricature would sharpen the scrutiny of the consequences of following alternative sets of ends and means.

It is the utopian process - the sketching out of the implications of altering certain fundamental features of society and environment - that should be emulated, rather than the utopian product. Indeed, since utopias are so diverse in their portrayals of the good life (or, in the case of the anti-utopia, the evil life), as Raymond Ruyer observes, the process of formulation is the main feature they have in common.

The social utopias of the past have sought many goals - political, social religious freedom, sexual freedom, economic freedom, freedom of movement, and freedom from industrialization. They have suggested some fundamental changes in society to obtain these various goals. Freedom from want is a recurrent theme, especially in the utopias of early capitalism and industrialism. While the prototype utopias, such as Plato's Republic, were most of all concerned with moral values, the later ones often combined these with economic welfare. The utopias of the last few hundred years have often postulated material abundance as a major theme.

Each of the classic literary utopias became a caricature when it dealt with moral values and material abundance together. Almost all these caricatures were based on rationality, on the rational control of men's actions, on the participation of all in the work of the society, and on the manipulation of institutions.

Sir Thomas More, who coined the word "utopia," postulated an ascetic abundance, that is, an abundance of basic goods without luxury or ornament. Despite his Catholicism, his good society anticipated some of the features of the Protestant ethic, which later provided an ideology to reinforce the development of the civilization of industrial capitalism. This ideology emphasized work, thrift, self-restraint, and the voluntary fulfillment of one's duty. In More's Utopia the theme of material abundance was linked to the themes of work and participation. Each individual in Utopia had to participate actively in the affairs of the society and do his part of the work to achieve the benefits of the society. This triple achievement of abundance, participation, and work was to be brought about by elaborate sets of rigid social controls, social rewards, and punishments.

By rotating city and country living, men would acquire knowledge and working skills in both areas. Syphogrants, or magistrates, each elected to supervise thirty families, were responsible for seeing that all worked at their tasks. Deviations from work or from other requirements of the community were punished by sanctions, such as slavery.

Even in their leisure time, "all men live in full view, so that all are obliged ... to employ themselves well in their spare hours." More's society simplified this obligation by forbidding all alehouses, taverns, gambling, and other vices, and by frowning on such activities as hunting. Intellectual pleasures were encouraged by the example of Utopia's selected group of scholars

and by the whole educational system, which taught that spare hours should be spent in reading or attending lectures. Thus the society achieved a level of abundance for which all worked and in which all participated. The level of abundance was maintained in part because the population was to be stationary. More, like Malthus after him, had but limited faith in the potentialities of increasing labor productivity and he feared overpopulation. If there should be an excess of people in Utopia, room for expansion would be found on an adjacent continent.

America, which became the outlet for Europe's expanding population, came to be regarded as a utopian setting. In a Rousseau-like fashion, some utopian thinkers subsequent to More conceived of colonial American society as resembling the simple, ascetic and "happy" life of the Indians rather than the corrupt and sophisticated life of the Europeans. Books such as *The Kingdom of Paradise* assumed that the settlers in America became Indianized, and some writers even described the American Indian as the successor of the Greeks and portrayed him wearing Greek dress.

Furthermore, there were two hundred or more utopias put into actual practice in America, but these communities (such as Owen's New Harmony, Oneida, the so-called Love Colony, and Brook Farm, the colony of the intellectuals) failed. Most of them failed, not through economic disaster, but through economic abundance. Almost all stressed group solidarity, rigidly defined social roles, hard work, participation - attitudes and functions which were indispensable to the battle against adversity but which dissipated when economic prosperity arrived.

New Harmony, Indiana, founded in 1824 by Robert Owen, the English industrialist, represented an applied effort to achieve a set of goals, some of which he described in his book, *A New View of Society*. In its rather cryptic last paragraph, he indicated that his scheme as written was only a compromise within the existing system of industrialization, against whose brutality he revolted. Owen believed that industry, if it were properly organized, would require but little labor and that it would at the same time provide abundance. He proposed, as did More, a simple physical structure of the community: most of its features would be collective - community dining halls, lecture halls, work places and even sleeping quarters for the children. Owen, like More, stressed work, education, and participation. He expected that at New Harmony the ideals expressed in its constitution would be self-evident and therefore enforced by individuals and the group alike. These ideals included an equality of duties, community of property, and "cooperative union in the business and amusements of life."

These ideals were not realized at New Harmony. Within three years the community failed, but without having achieved the economic abundance that proved to be the nemesis of the other applied American utopias. There were ample facilities for employment for its eight hundred recruits, but there were no effective social controls to ensure conformity among the various

kinds of personalities the community attracted. Owen had believed that the necessary behavioral responses would come spontaneously. He imported a "Boat-load of Knowledge", a group of scholars to lead the intellectual life of the community. He proclaimed equality, with an attack on private property, in "A Declaration of Mental Independence," which he believed would become as significant as the Declaration of Independence. Nevertheless, without built-in sanctions and rewards, the colonists lacked motives for performing as he anticipated. Lewis Mumford declares that a contributing cause of failure was the character of Owen himself, "whose bumptiousness, arrogance, and conceit were bound to provoke reactions in other people which would have defeated the plans of Omnipotence itself".

More wrote at a time when capitalism was emerging, Owen, at a time when the early industrial revolution was showing both some of its promise and some of its brutalizing effects. In America, some of these effects became most apparent near the end of the nineteenth century, and probably as a result, in the 1890's more utopian books were published in America than at any other time anywhere. Edward Bellamy's novel, *Looking Backward* (1888) heralded this outburst. It sold over a million copies in America alone - the largest seller, and to John Dewey the most influential, since *Uncle Tom's Cabin*. It inspired many similar works and prompted the formation of a group of nationalist clubs organized to carry out Bellamy's vision.

Almost all the American literary utopias of the 'nineties conceived of the problems of society as economic. Almost all assumed that technicians could provide for society. Almost all assumed that human want could be eradicated through technological innovation and economic organization. The idea of conformity to the group pattern dominated this literature. One of Bellamy's protagonists described the compulsory labor service as being so natural and reasonable that it was no longer considered compulsory and commented, "Our entire social order is so wholly based upon and deduced from it that if it were conceivable that a man could escape from it, he would be left with no possible way to provide for his existence. He would have excluded himself from the world, cut himself off from his kind, in a word, committed suicide."

Bellamy's world was rational, orderly, friendly, technologically advanced (he foresaw the radio and other inventions), and offered material abundance not only to provide for basic needs but also for leisure. His world, too, was a static and rigid one. Bellamy, like Owen and More, saw in the utopian ideal a possibility for abundance that could be achieved only through a participation in the society and through work. To ensure participation in work, and thus abundance, strong social sanctions had to be established and conforming types of personality projected as suitable for the members of utopia. Only Charles Fourier, who recognized that work could be disagreeable and rewarded disagreeable work with the highest pay, conceived of a utopia in which

minority tastes and behavior could be satisfied and a diversity of interests encouraged. Yet Fourier failed to envisage the potentialities of industrialization.

Utopias founded on a faith in mechanization and constructed at a time when the possibilities of industrialization were just unfolding did not encompass a pluralistic, permissive society. For achieving abundance through technology, they depended on the solidarity of a kind of folk society, a solidarity that may have been a realistic appraisal of the pressures necessary to shift nonindustrial workers into industrial occupations. The anti-utopians, such as William Graham Sumner in his "Cooperative Commonwealth," Aldous Huxley in *Brave New World*, and George Orwell in *1984*, satirize the rigidity, the totalitarian smugness and joyless security of utopia. Indeed, if utopias can be traced as far back as Plato's conception of the ideal state, then anti-utopias are at least as old as Aristophanes' *The Birds*, and their central theme is man's lack of freedom within a supposedly good society.

Certainly, the classical social utopias justify the charge that they present end products, not processes. They envisage no future change, they do not provide for it, they give no indication that society does evolve. Although in utopian literature man is supposed to choose the good life willingly when he is exposed to its advantages, his natural bent is not trusted, and therefore his behavior is proscribed. A person in More's *Utopia*, for example, was under constant observation by his neighbors and the magistrates, not only during his work hours but also in his leisure time, so that he should spend it correctly. Slavery was the punishment for two unauthorized journeys from one's city, and death, for any private political discussion. In Bellamy's new society, the inspectorate was alert in checking aberrations from the standards. In these utopias there is security - mainly the security of material well-being. What is sacrificed is the development of a wide spectrum of diversified personalities and the opportunity to express them. The complacency, the denial of change, and the imposition of a set of rigid sanctions and ideals cannot help but produce stereotyped personalities. The stereotyped citizen of utopia is as smug and complacent as the society that produces him.

W.S. Gilbert and Arthur Sullivan parody utopian complacency in their comic opera, *Utopia Limited*, or the *Flowers of Progress*, in which Utopia is converted by England, through a Utopian princess who had attended a British finishing school. When a Utopian citizen asks, "Then in a few months, Utopia may ... be completely Anglicized?" the reply is, "Absolutely and without a doubt." At this a Utopian maiden complains, "We are very well as we are. Life without a care - every want supplied... What have we to gain by the great change that is in store for us?" Her friend answers, "What have we to gain? English institutions, English tastes, and oh, English fashions." Near the end of the play, with the conversion accomplished, the chorus sings,

In short, this happy country has been Anglicized completely!
It really is surprising
What a thorough Anglicizing
We have brought about - Utopia's quite another land;
In her enterprising movements,
She is England - with improvements,
Which we dutifully offer to our mother-land.

King: Our city we have beautified - we've done it willy-nilly - And all that isn't Belgrave Square is Strand and Piccadilly.

The complacency, rigidity, and lack of opportunity for deviant behavior that characterized the utopias of the emerging industrial civilization persisted in those of the twentieth century. In its early years the literary and social utopia went into eclipse, but the physical or design utopia of the ideal city, through the work of Frank Lloyd Wright and Le Corbusier, achieved relative prominence. Each of these architects produced a twentieth-century utopia amid flourishing technical advances and an urbanized society. Half a century earlier, James Silk Buckingham, an English manufacturer, had called for a trust-like organization to construct a new town, to be called Victoria, as a physical utopia with the latest technical improvements. Wright and Le Corbusier, alarmed yet fascinated by industrial civilization, concluded that a new physical setting, such as they could create on the drawing board, was the right means of remaking industrial civilization.

One of the principles on which Le Corbusier based his ideal city was, "A city made for speed is made for success." The railroad station stood at the center of the city, like the hub of a wheel, linked to subways, buses, and other transportation facilities, and to the airfield by helicopter. His scheme for Paris (or any large city) was devised shortly after World War I. Near the center stood twenty-four skyscrapers, each sixty stories high; these great complexes served the commercial needs of the community; in the surrounding parks were luxurious restaurants, theatres, and shops. Most people lived in well-spaced, high elevator apartment buildings with private hanging gardens for each unit, although a few lived in colonies of individual houses. The streets were on three levels so as to provide for different types of vehicles traveling at different speeds. The high degree of density concentrated people efficiently into small areas, thus freeing large areas for agriculture, recreation, and the contemplation of nature. Such a geometrically spaced urban development permitted many services, cultural and other, that require a concentrated consumer population and an adequate transportation system. Le Corbusier's conception of the city as a machine, or a complex of machines, for daily living also conferred on all men the right to light, greenery, spaciousness, silence, privacy, and

beauty - rights otherwise enjoyed only by the peasantry and the privileged.

Whereas Le Corbusier postulated a concentrated urban society, Wright's idea was to disperse people and their activities. He built a large-scale model called Broadacre City and wrote several books setting forth his ideal society of Usonia (the term was borrowed from Butler's Erewhon). In Usonia the citizens were to live each on an acre or so of ground on which they would grow vegetables, and for occasional employment they were to commute to a factory some miles away. There were to be small institutions such as universities and museums proportionate in size to the small homesteads, all connected by automobile transportation. Wright believed that the fusion of town and country would be accomplished by the diffusion of city functions throughout the land. Whereas Marx and Engels wanted to eliminate what they called the "idiocy of country life" by reversing the differentiation between town and country, Wright aimed at eliminating what he regarded as the idiocy of city life.

Although neither Wright nor Le Corbusier dealt with the economic, social, or political aspects of their new societies, it is obvious that each made very different use of resources, and each had a different conception of the organization of social institutions, as well as of the behavioral and living patterns best suited to a people. They both assumed that if men are captivated by the prospect of a reorganized physical environment, they will create the institutions to obtain it. Their faith in the possibility of designing an urban utopia of the physical environment has spread to such mass media as the Sunday supplement, science fiction, and advertising copy.

Today any technological innovation appears feasible, even a reorganization of the total environment of the earth, and schemes for diverting the Gulf Stream so as to warm Greenland, melt the polar ice caps, and provide rich fish-farming areas are discussed in the responsible press. Any amount of consumption seems possible: an increase in comfort and esthetic satisfaction, as well as the abolition of drudgery are promised. The folklore of modern utopia provides many a glimpse of effortless abundance and a life of ease. In popular culture confidence in the future as a bigger and better present is perceptible everywhere. In his 1952 campaign, Adlai Stevenson stated, "I do say to you soberly and sincerely that on the evidence of science, of technology, and of our own common sense, the United States at mid-century stands on the threshold of abundance for all, so great as to exceed the happiest dream of the pioneers who opened the vast Western country. Unless we allow ourselves to be held back by fear, we shall in God's good time realize the golden promise of our future."

When the automatic factory and office are commoner, the major problem will perhaps be, not motivation for work, but motivation for leisure pursuits. How are the former workers to be kept innocuously occupied? When productivity continues rising, it is not the satisfaction of wants but the creation of

new wants that is challenging. Obviously, the old Utopias are obsolete; the dream of material abundance is already a popular expectation and a component of the modern utopia.

When the great social utopias were created, at least two attitudes were prevalent: dissatisfaction with present conditions; and hope, even confidence, of change through man's mastery of his environment. If people feel complacent, they will not be motivated to change. If, on the other hand, they feel powerless and estranged, they will lack the courage and energy to venture into the unknown. Many contemporary observers have pointed to a combination of affluence and apathy that induces a complacency both in Americans and Western Europeans. On the one hand, high levels of employment and a rising standard of living inhibit any popular urge toward change. On the other hand, problems that are too complex and too removed from individual competence inhibit a sense of effective action. Thus the contemporary utopian folklore is in a sense reinforced by the complacency resulting from the material affluence that has spread throughout our middle class as well as through many groups of industrial workers and by the feeling of impotence deriving from the alienation of the citizen from the making of important decisions. By reinforcing the theme of automatic abundance, complacency and the sense of impotence sap the sources of motivation that in the past provided a clientele for social and literary utopias such as Bellamy's. Furthermore, when the imagery of the redesigned physical environment is taken over from the sophisticated high culture of a Wright or a Le Corbusier by the popular culture of the mass media, the prophetic element of such a utopia is lessened.

At the same time, a radical faith in man's ability to alter his society and his environment in any significant way by planning has increasingly been replaced by a Burkean belief in man's inability to do so. But even a utopian or radical faith does not produce utopias. Oscar Wilde once wrote, "A map of the world that does not include Utopia is not worth even glancing at..." But he did not create a utopia - nor has David Riesman or Martin Buber or Karl Mannheim, other protagonists of utopia.

Since there appears to be little demand for utopia, since no one for a generation has produced social or physical-design utopias of importance, and since utopias are caricatures anyway, this essay amounts to an epitaph - but an epitaph only for the rigid, social and physical utopias of the past, for utopia as a product, and not for utopia as a process for clarifying policy, particularly in city planning.

Planning, like utopia, depicts a desirable future state of affairs, but unlike utopia, specifies the means of achieving it. In the Western world, planning, like utopia (and for many of the same reasons), has become suspect. Some of the intellectuals have seen society as too complex, and knowledge as too inadequate, to allow men purposefully to plan their world. But the planning

of cities has been exempt from this view. Partly because it does not threaten the equilibrium of economic and political power, partly because cities appear to many to be a glaring failure of decision on the part of the market-place, partly because cities appear to some to be finite enough to comprehend and manage, the planning of cities has become institutionalized as the principal form of public planning in most Western countries.

In so far as city planning deals with the future, it must deal with both innovations in ends or values and innovations in means or courses of action. Utopian formulation is a method for testing innovation in city and other kinds of planning. It is a method that could be used in two ways. First, as I envisaged it, it could enable the city planner to set up a series of utopian models, each organized about a different set of principles. Each utopian model could then be logically examined in terms of both the direct and the indirect or side effects of following these principles. Second, after this kind of screening and modifying, the surviving alternative utopian models could be tested by the reactions of civic leaders and the citizenry at large. In 1949 I recommended to public officials in Chicago that a "museum of the future" might highlight the civic possibilities; both leaders and citizens could be encouraged to participate in utopian thinking and thus help resolve policy as to long-term urban development.

This method would share certain characteristics with model-building in a field such as economics. However, most forms of model-building, if therapeutic at all, are adaptive, that is, they are concerned only with incremental changes, and with these changes only as means. Most changes, of course, can be only incremental and can take place only at that level, rather than as ends. But utopian model-building for city policy and planning may even suggest new incremental measures that otherwise would not have been conceived, as well as more drastic paths of desirable action.

Admittedly, these more drastic choices will be in the form of caricatures, but, unlike most utopias, they would be intended as such for the purpose of testing. Furthermore, I have presented a critical review of the utopian tradition largely in the hope that the course just recommended can transcend some of the limitations of past utopias, in particular, by uniting the verbal and the visual, the socio-economic and the physical-environmental traditions. Even if the good social and economic life can be achieved apart from the good physical setting, the setting has a series of human consequences in benefits and costs which should be comprehended.

Another hope is that these models of utopian planning need not be restricted and rigid, as were those of the past. Having achieved a state of technology in which material abundance is no longer in doubt, we can delineate pluralistic urban utopias. We can be more permissive without leaning on rigid social controls in order to motivate people to work, or on types of

personality standardized so as to behave in a prescribed manner, or on the uniform physical patterns of a Wright or a Le Corbusier. This is the age W.W. Rostow characterizes as one of high mass consumption - admittedly, not available to all. Now we can not only permit deviation, we can also encourage it. Utopians now have the task of devising institutions and the material organization of society to free men from the restrictions under which they have previously operated, instead of curtailing men's choices. This may be the time for the post-technological model, in which it is assumed that technical change and material production are so readily available that they cease to be important limiting conditions. If production and technology do wane, utopian formulations can more readily shift from the authoritarian to the permissive view of the human personality, from a kind of statistical concept of central tendency to one of despersion, satisfying many minority aspirations. But the theme of production and technology itself is one that should undergo exploration in utopian models, for it is a theme that could radically alter the nature of cities, whether emphasized or diminished.

Earlier in this essay I have written that it was the utopian process rather than the utopian specific that should serve as present stimulus and inspiration. If we approach utopias experimentally, tentatively, consciously seeking alternatives, we should be able to avoid the static, complacent rigidity of past social and physical utopias, as the two traditions become blended into a single instrument for the planning of cities.

Future Metropolis

1. To take care of increasing responsibilities and functions, state and local governments have often resorted to creating ad hoc, semi-autonomous and autonomous commissions. What are the administration advantages and disadvantages of such commissions? The political advantages and disadvantages? What will metropolitan politics be like if/when the number of these commissions and their power increased? Do they fit in with the traditional concept of democracy (i.e. town meetings, etc.)?

2. Historically, state governments have been the site of the battle between urban and rural America; between progressive, welfare-state oriented and conservative groups. For the most part, the state governments are oriented politically and administratively toward rural interests, with the noticeable exception of some governors, (e.g. Volpe) who find themselves called upon to provide urban leadership. As metropolitan areas grow and spread across existing political boundaries, local government finds itself poorly constructed to administer, much less finance, their new responsibilities. It would appear that in the future metropolitan-area, or regional, government would be a reasonable alternative to the present situation.

What are the advantages and disadvantages of metropolitan government? Is metropolitan government politically feasible? Or should the states, and especially the state executive, take a much more active part in governing the metropolis? Do we still place high value on local autonomy, or must we turn to a more potent, albeit distant, governmental authority? What effect would metro-government, assuming it were initiated, have on national politics (or is the assumption just stated absurd)?

Can the Republican party play a new, meaningful, issue-oriented role in urban politics?

3. The only people who are deeply concerned about the "plight" of the central city are the economic and intellectual elite. The middle class bulk of the population feels that things have, on the whole, improved continually for them in recent years. Whatever the planner may think about the values of the middle class, should he not make proposals which can attract middle class support, rather than attempting the "hopeless" task of educating the bourgeois masses to an urbanness they have never possessed, and probably never can, in America?

4. What is the proper role for the planner in democratic society? Should he give the people what they want, or what they would want were they "educated"? In general, what is, what can be, and what should be the relationship between elites and masses in the developing and future metropolis? What are the political implications of the "answer"?

5. What balance ought to be established between individual freedom and social responsibility in the future metropolis? For example, does a well-off suburbanite owe something to the core city which he "milks" culturally and economically? Should school districts be drawn on a regional basis? What about bussing Negroes to Newton?

6. What is a city? What has it meant for human civilization? What can it be like in the future? What should it be like? Why? Can we afford to forget about future utopias?

7. How is the physical form of the metropolis related to the social and psychological condition of its inhabitants? Have we not failed miserably in educating people with an interdisciplinary background in urban affairs and problems? Have we not real "planners" in America, only a collection of myopic specialists?

SUGGESTED READINGS

COMMUNITAS by Paul and Percival Goodman
Daedalus, winter 1961
THE URBAN VILLAGERS by Herbert Gans

STUDENT STAFF

URBAN RENEWAL

JON BURKHARDT

MICHAEL OLIVER

TRANSPORTATION

JACK ELDER

ARNOLD KRAMER

ARLEE RENO

FUTURE METROPOLIS

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