Conference Summary

D. GRANT MICKLE Executive Vice President Automotive Safety Foundation

WHEN the Steering Committee for this conference first began work on the program, our intent was to examine the possible applications and limitations of the multiple use of highway corridors. As the matter was discussed further it became clearly evident that when we talk of multiple use we must not only consider the immediate right-of-way but also the people and environment bordering and affected by the transportation corridor. The more we considered the problem the broader the approach we had to take to get the proper grasp on the topic. In the presentation of this conference, it has been our aim to point out the necessity of viewing roads and rails as part of a total transportation system, and that the transportation system exists not only for its users but is part of the total economic and social environment in which community and non-user interests must be given equal consideration with user needs.

The resistance of local communities to further construction of urban freeways can be seen in many of our cities. Recently a citizens' planning group held a conference at which one of the groups presented some resolutions relating to urban highways. I might give you a few excerpts:

We recognize that the present course of federally-funded interstate highway building through our urban areas is a policy of present and potential disaster which can no longer be tolerated. In accordance with this view we propose: (1) a moratorium be placed on all federallyfunded freeway building through urban areas until studies, local, regional and national in scope, can determine the ecological and sociological damage of roadbuilding; (2) that true "citizen participation" in the planning as well as the governmental process be instituted; and (3) an immediate stop to the misuses of the right of eminent domain in the confiscation of homes and property for urban freeway and other such projects which serve only the interests of the few.

I cite these resolutions not to attack or defend them but to indicate what those of us involved in transportation planning are up against. During the past two days we have heard how it has become increasingly necessary to include nonengineering disciplines in the urban transportation planning process and how the community to be affected by the corridor must be brought into the deliberations at the very early stages of the planning process.

The ground rules for the location of highways and rails have been changed. The mandate to the planner and engineer has been to create the most economically safe and efficient system within the available resources. We are now in the midst of a substantial redefinition of what and to whom economic benefits should accrue and what are the true costs; what is the acceptable level of safety and at what price; and what are the trade-offs between efficiency and other social and environmental considerations.

This would be most difficult by itself but we must now in addition consider the needs, desires, and interrelationships of the total social and physical environment. I have no doubt that in the future we must also take into account not only the social changes but changes in life style and its effect on the urban environment and transportation systems.

We already have many instances of multiple uses of rights-of-way. There are several hundred proposals that encompass the concepts of joint development and multiple use awaiting approval and funding. We saw how joint development, multiple use, and direct community involvement offer hope for finding means of conciliating user and non-user transportation interests.

But while they offer hope they are not a panacea. They are not without their limitations and liabilities. There are engineering and design, economic and political constraints. Because of their greater cost and impact, once constructed, there is a greater commitment to such projects and there is less flexibility for change.

The Bureau of Public Roads and HUD programs relating to multiple use and joint development have been presented. Perhaps the real value of this conference is that it has pointed to the fact that transportation planning, whether highway, rail, water, or air, cannot be done in isolation from the rest of the environment with concern only for the users. The participation of additional interests and groups in the planning and deliberation processes will cause a substantial increase in the time required for planning preliminary engineering, and design of projects. It will require patience on the part of planners and engineers to educate the public about technical problems. Many of us remember

highway programs over the past forty years that were run very much like military operations where the program was pushed ahead, and we got the nation "out of the mud" by responsible, decisive administrators.

The world and the transportation problems have changed. Management is now changing through broad participation — and decision-making is increasingly by consensus of those affected. The primary transportation problem is no longer to provide access and to design all-weather roads but how to move people by all modes through and within densely populated areas with as little degradation of the environment and dislocation of the population as possible. On the other hand, we can never lose sight of the dollar cost of any public facility. I hope that the concepts of joint development and multiple use will help us toward rational solutions to the urban transportation problem.

Conference Summary by Panel Members

MR. PIGNATARO: I would like to make a few observations. First, it was stated directly or indirectly by many of our speakers that there is a need to modify the traditional benefit-cost analysis to include the consideration of community values. We have talked of this necessity for a long time, and a current NCHRP study may provide some insights on how this may be accomplished in a systematic manner.

Second, it would have been most constructive if more attention had been given to various procedures to minimize the undesirable effects of all types of pollution on many of the land uses that have been suggested for joint development and multiple use. Different forms of pollution are certainly incompatible with community values.

Third, a thread of commonality that has woven through many of the presentations was the essential need for appropriate planning and community participation in any joint development project.

Fourth, most of the projects discussed in the second session were associated to a greater or lesser degree with problems in ghetto areas. However, one notable exception was the many excellent examples in the Twin Cities that were presented by Mr. Jorvig. Mr. Levin also presented many examples of projects that were not intimately associated with social ills.

Fifth, the need for advance planning is mandatory when consideration is given to the number of agencies involved and the diversity of their interests. Since there could be duplication and possibly conflict of legal, appraisal, design, administration, taxation, and other components of joint development and multiple use between the local, state, and Federal agencies, a statewide centralized authority with appropriate decision-making powers might accelerate the implementation of projects. This was a recommendation in the report prepared for the State of California by the Real Estate Research Corporation, and I think it should receive serious consideration.

Sixth, it is unfortunate that time did not permit a further exploration of how to involve the private investor and/or developer in early stages of the development, particularly with respect to air right projects.

MR. HOLMES: I think we ought to remember that despite the dramatic problems and the critical nature of the problems in Watts and Brownsville, there is still opportunity for joint development in areas like the Twin Cities, and in this country there are still a lot more St. Pauls than there are Brownsvilles, so don't let's get totally pointed in thinking of our opportunities for joint development and multiple use of rights-of-way into these areas of critical social impact on the country right now. Opportunities ahead are certainly much broader than those. We tend to concentrate on those, certainly, but let's not forget the others.

MR, RUBIN: There are several points I would like to make.

One, I think we should recall the caveat in Mr. Bridwell's statement that to assure that multiple development plans become multiple development projects, there must be legislation at the Federal and state levels that will provide the kind of assurances of long-range stable funding for education, renewal, housing, health, library, and other programs that have made it possible for the highway program to do long-range advance planning to get things done.

Second, the interdisciplinary approach to the design of multiple development projects has to become normal routine procedure for highway departments, not just an ad hoc response to an occasional

project that promises to cause trouble.

Third, we need adequately staffed and funded local and regional comprehensive planning — social and economic, as well as land use and facility planning. This has to be encouraged in order to provide the framework of community goals within which multiple development transportation corridor planning can proceed.

Fourth, citizen participation and community involvement are required if plans are to be responsive to the needs of the people affected and if they are to be politically possible to implement. But the professional cannot abdicate his role. He must somehow walk the razor's edge between planning by fiat and the complete abdication of responsibility.

We cannot have romantic notions about citizen involvement and throw our own professional responsibilities out the window. People are much alike in many respects. Most respond to plans in terms of relatively parochial, narrowly perceived views of their own best interests. Highway planners have been forced for years to deal with, and often make compromises with, affluent white suburbanites; but they haven't turned over their professional responsibilities to those protagonists. There is no more reason to abdicate this responsibility because we are now dealing, as we should have been all along, with people who are poor and/or black.

So far as multiple use is concerned, we must recognize that it has been occurring over the years, where existing and future uses and demands were very intensive, creating unusual and dramatic competition for particular spaces. Since most, if not all, of the population increases in the future will be in suburban areas, multiple-use opportunities will continue to be limited. There are many more than we have taken advantage of in the past, but where they exist they will be costly and dramatic. Most importantly, they are going to require degrees of integration and cooperation among governmental agencies and private individuals and institutions far beyond anything we have achieved in the past.

MR. TABOR: I think one of the most exciting ideas I have heard in this conference is Lowell Bridwell's revival of what evidently was an old idea about acquiring more land for highway rights-of-way than you need for that particular project. I think this proposal has tremendous potential, and I hope that there is going to be a lot more discussion of it. I hope we don't have to wait another 25 years before it actually receives public acceptance.

But if there are real problems in the use of highway user funds for purchase of this additional property maybe we should look to some other public mechanism for land acquisition, and I think Frank Turner touched on this in his remarks earlier this afternoon. Maybe we could set up a state land acquisition agency that could purchase property for state agencies and local governments for certain uses. This agency could resell the land needed for a particular project back to the state agency or local government that needs it for that particular public purpose and then sell the remaining land for private development. This would prevent the charge that highway departments are getting into too many activities and it would keep the highway user funds untainted.

It has been suggested, I think, by the advisory commission on intergovernmental relations that this should be one of the functions of their proposed urban development corporation. But I think we should be thinking more in terms of just a state agency that would have the sole function of land acquisition for public purposes.

One case I have seen of an urban development corporation is in New York City. As it is set up it could go into housing or almost anything it wants to, and it is almost an autonomous-type organization. Once the terms have been set and appointments have been made by the governor there is not really going to be very much public accountability for what that agency does. In fact, they can go into an area and decide they are going to put up a housing project. All they have to do is just go to the local government and hold public hearings. The local government officials come into the public hearing as everyone else, and at the end of that time they can say, "Thank you, gentlemen, for your views," and go ahead and put up the project as they see fit.

Somehow or other that goes against my ideas of what home rule is all about. I think that if we set up an agency with one sole purpose of land acquisition that this could hold a great deal of promise. At the same time we could avoid some of the problems that we anticipate such a program would have with the use of highway user funds and save money.

Conference Steering Committee

D. Grant Mickle, Chairman, Automotive Safety Foundation
Frederick T. Aschman, Barton-Aschman Associates
Bernard F. Hillenbrand, National Association of Counties
E. H. Holmes, Federal Highway Administration
A. E. Johnson, American Association of State Highway Officials
Dick G. Lam, U. S. Department of Transportation
David R. Levin, Bureau of Public Roads
Frederick A. McLaughlin, Jr., U. S. Department of Housing and Urban Development
Roger F. Nusbaum, Illinois Division of Highways
A. E. Pritchard, Jr., National League of Cities

Conference Advisory Committee

T. Layden Cook, Real Estate Research Corporation
Robert E. Dudley, Tracey, Brunstrom and Dudley, Inc.
Frank Herring, Port Washington, New York
W. S. Homburger, Institute of Transportation and Traffic Engineering, University of California
Norman M. Klein, Skidmore, Owings and Merrill
Mason Mahin, Automotive Safety Foundation
L. J. Pignataro, Polytechnic Institute of Brooklyn
Ronald W. Pulling, Federal Aviation Administration
Walter S. Rainville, Jr., American Transit Association
Floyd I. Thiel, Bureau of Public Roads
F. C. Turner, Bureau of Public Roads

Participants

Speakers

D. Grant Mickle, Executive Vice President, Automotive Safety Foundation

John S. Coleman, Executive Officer, National Academy of Sciences

W. N. Carey, Jr., Executive Director, Highway Research Board

Frederick T. Aschman, Barton-Aschman Associates

David R. Levin, Deputy Director, Office of Right of Way and Location, Bureau of Public Roads

Samuel H. Hellenbrand, Vice President, Industrial Development and Real Estate, Penn Central Company

Milton Pikarsky, Commissioner of Public Works, City of Chicago

Norman M. Klein, Skidmore, Owings, and Merrill

Robert T. Jorvig, Executive Director, Metropolitan Council of St. Paul, Minnesota

Stuart L. Hill, Senior Right of Way Agent, California Division of Highways

Archibald Rogers, Rogers, Taliaferro, Kostritsky and Lamb

Lowell K. Bridwell, Federal Highway Administrator, Federal Highway Administration

Charles Blessing, Director, Detroit City Planning Commission

Philip Hammer, Hammer, Greene and Siler Associates

Roger F. Nusbaum, Deputy Chief Highway Engineer, Illinois Division of Highways

Thomas W. Fletcher, Deputy Mayor Commissioner, Washington, D. C. Robert R. Wright, III, Director, Continuing Legal Education Program University of Arkansas Law School

F. C. Turner, Director, Bureau of Public Roads

Don Hummel, Assistant Secretary for Renewal and Housing Assistance, U. S. Department of Housing and Urban Development

Panel Members

W. J. Burmeister, State Highway Engineer, Wisconsin Division of Highways

Fletcher Krause, Assistant Chief Counsel, Federal Highway Administration

Dorn McGrath, Chairman, Department of Urban and Regional Planning, George Washington University

Louis J. Pignataro, Director, Division of Transportation, Polytechnic Institute of Brooklyn

Richard Ravitch, Executive Vice President, HRH Construction Corporation Irving Rubin, Director, Detroit Regional Transportation and Land Use Study

Ralph Tabor, Assistant Director for Federal Relations, National Association of Counties

Session Chairmen

- Richard J. Barber, Deputy Assistant Secretary for Policy Development, U. S. Department of Transportation
- C. Beverly Briley, Mayor of Nashville, Tennessee
- A. E. Johnson, Executive Director, American Association of State Highway Officials
- E. H. Holmes, Director, Office of Policy Planning, Federal Highway Administration

List of Attendees

Walter J. Addison
Deputy Chief Engineer for
Planning and Safety
Maryland State Roads Commission
300 West Preston Street
Baltimore, Maryland 21201

T. F. Airis Director Department of Highways & Traffic 14th and E Streets, N.W. Washington, D. C. 20004

Donald G. Alexander Legislative Assistant National League of Cities 1612 K Street, N.W. Washington, D. C. 20006

Peter E. Allen Commissioner of Planning The Borough of York Planning Board 2000 Weston Road Weston, Ontario, Canada

G. W. Anderson
Deputy Director of Planning
Iowa State Highway Commission
Highway Commission Building
Ames, Iowa 50010

Jerome F. Anderson, Chief Federal Coordination Division Bureau of Outdoor Recreation Interior Building 18th and C Streets Washington, D. C. 20240

Kenneth C. Anderson Architect Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

R. H. Anderson Vice President DeLeuw, Cather & Company 165 West Wacker Drive Chicago, Illinois 60601

Richard J. Anderson Senior Transportation Planner The Port of New York Authority 111 Eighth Avenue at 15th Street New York, New York 10011

Warren T. Anderson Principal Planner Baltimore Planning Department 1200 American Building Baltimore, Maryland 21202 F. L. Anthony
Deputy Regional Administrator
Federal Highway Administration
18209 Dixie Highway
Homewood, Illinois 60430

Paul H. Arizumi Property Management Officer State Department of Transportation 869 Punchbowl Street Honolulu, Hawaii 96813

Richard E. Arms Planning Director Arlington County Office of Planning 2049 15th Street Arlington, Virginia 22201

Albert Arnst
Division of Information and
Education
U. S. Forest Service
P. O. Box 762, Ben Franklin Station
Washington, D. C. 20044

Frederick T. Aschman Executive Vice President Barton-Aschman Associates 1730 K St., N.W., Suite 712 Washington, D. C. 20006

Norman Ashford Director Transportation Planning Program Florida State University Tallahassee, Florida 32306

Joseph M. Axelrod, Chief Interstate Division for Baltimore Maryland State Roads Commission 1001 Cathedral Street Baltimore, Maryland 21202

John E. Baerwald, Director Highway Traffic Safety Center University of Illinois 418 Engineering Hall Urbana, Illinois 61801

P. O. Bailey, Jr. Director, Urban Planning Division State Road Commission of W. Va. 1260 Greenbrier Street Charleston, West Virginia 25311 Tridib Banerjee
Research Assistant
Urban Systems Laboratory
Massachusetts Institute of
Technology
Cambridge, Massachusetts 02139

James J. Barakos Engineer Manager Bureau of Public Roads JFK Building Boston, Massachusetts 02022

Richard J. Barber
Deputy Assistant Secretary for
Policy Development
U. S. Department of Transportation
800 Independence Avenue, S.W.
Washington, D. C. 20590

Charles Barnes
Vice President
Alan M. Voorhees and Associates,
Inc.
7670 Old Springhouse Road
McLean, Virginia 22101

D. J. Barney McGraw-Hill National Press Building Washington, D. C. 20004

Robert Barron District Engineer Bureau of Public Roads P. O. Box 29 Olympia, Washington 98501

W. E. Baumann Engineer of Design Illinois Division of Highways 2300 South 31st Street Springfield, Illinois 62706

Carroll G. Bayne
J. E. Greiner Company
c/o Urban Design Concept
Association
1001 Cathedral Street
Baltimore, Maryland 21201

Robert M. Beckley Associate Professor of Architecture University of Michigan Ann Arbor, Michigan 48104 Fred J. Benson
Dean of Engineering
Texas A & M University
College Station, Texas 77843

Vincent C. Berberich Supervising Engineer New Jersey Department of Transportation 1035 Parkway Avenue Trenton, New Jersey 08625

R. N. Bergendoff Partner Howard, Needles, Tammen & Bergendoff 1805 Grand Avenue Kansas City, Missouri 64108

Carl Berkowitz
Associate Planner
New York State Office of Planning
Coordination
1841 Broadway
New York, New York 11414

Michael M. Bernard Transportation Planning Consultant Administration and Finance 44 Martin Street Cambridge, Massachusetts 02138

Neal H. Bettigole, Owner N. H. Bettigole Company 1465 Broadway New York, New York 10036

William Bidell
Director of Planning
Department of Highways
Province of Ontario
Downsview, Ontario, Canada

J. K. Bilbrey State Right of Way Engineer Tennessee Highway Department 1017 Highway Building Nashville, Tennessee 37219

Joseph A. Bischof Expressways Engineer City of Cincinnati 801 Plum Street, Room 318 Cincinnati, Ohio 45202 Charles A. Blessing
Director
Detroit City Planning Commission
Detroit, Michigan 48226
Fred P. Bosselman, Partner
Ross, Hardies, O'Keefe, Babcock,
McDugald & Parsons
122 South Michigan Avenue
Chicago, Illinois 60603

Charles N. Brady Director, Highway Department American Automobile Association 1712 G Street, N.W. Washington, D. C. 20006

Lloyd M. Braff Executive Director Central Business District Association 1610 Gulf States Building Dallas, Texas 75201

Daniel Brand, Partner Peat, Marwick, Livingston & Co. 7 Water Street Boston, Massachusetts 02109

Austin E. Brant, Jr. Associate Partner Tippets-Abbett-McCarthy-Stratton 375 Park Avenue New York, New York 10022

Richard P. Braun Assistant Commissioner Minnesota Highway Department John Ireland Boulevard St. Paul, Minnesota 55101

Dwight H. Bray President Brighton Engineering Company P. O. Box 558 Frankfort, Kentucky 40601

Lowell K. Bridwell Federal Highway Administrator Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

C. Beverly Briley Mayor of Nashville Courthouse, Public Square Nashville, Tennessee 37201 W. S. G. Britton Director, Programming and Planning Virginia Department of Highways 1221 E. Broad Street Richmond, Virginia 23219

Sandra Brooks Staff Writer Professional Engineering Magazine 2029 K Street, N.W. Washington, D. C. 20036

Michael T. Browne Research Analyst Cleveland Transit 1404 East Ninth Street Cleveland, Ohio 44114

Stewart G. Bryant Planner Skidmore, Owings and Merrill 1001 Cathedral Street Baltimore, Maryland 21201

David A. Buckley Yale University 96 Bishop Street New Haven, Connecticut 06511

Robert D. Bugher Executive Director American Public Works Association 1313 East 60th Street Chicago, Illinois 60637

John Calbreath Burdis Planning Director Nassau County Planning Commission 240 Old Country Road Mineola, New York 11501

Calvin Burkhart Research Engineer The Franklin Institute 1101 17th Street, N.W. Washington, D. C. 20036

W. J. Burmeister
State Highway Engineer
Wisconsin Department of
Transportation
State Office Building
Madison, Wisconsin 53702

Lloyd G. Byrd Partner Bertram D. Tallamy Associates 1411 K Street, N.W. Washington, D. C. 20005

Mike Cafferty Consultant Mayor's Office 1200 Municipal Building Seattle, Washington 98102

Jo Campbell, Reporter American Public Works Association 1755 Massachusetts Avenue, N.W. Washington, D. C. 20036

E. Wilson Campbell Director Chicago Area Transportation Study 230 N. Michigan Avenue Chicago, Illinois 60601

E. T. Canty Transportation Research Department General Motors Research Labs Twelve Mile & Mound Roads Warren, Michigan 48090

T. L. Carlson Director of Real Estate Bay Area Rapid Transit 814 Mission Street San Francisco, California 94103

M. Elliott Carroll, Administrator Department of Public Services The American Institute of Architects 1735 New York Avenue, N.W. Washington, D. C. 20006

Judson F. Cary Chief, Design Division Federal Highway Administration Federal Building 819 Taylor Fort Worth, Texas

Francis S. Chapman Senior Civil Engineer Massachusetts Department of Public Works 100 Nashua Street Boston, Massachusetts 02114 Donald S. Cherpak, Associate James P. Purcell Associates 643 Maple Avenue Hartford, Connecticut 06114

Robert R. Churchill Engineer of Road Design State Road Department of Florida Haydon Burns Building Tallahassee, Florida 32304

Francis O. Clark Urban Planner Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Kenneth K. Clark, Jr. City Planning Director Madison Planning Department 210 Monona Avenue Madison, Wisconsin 53709

Thomas A. Clary Chief, Campus Planning Section Office of Education U. S. Department of Health, Education and Welfare Washington, D. C. 20202

Paul B. Coldiron Location and Design Engineer Virginia Department of Highways 1221 East Broad Street Richmond, Virginia 23219

Leon M. Cole, Director
Systems Research and Development
Division
U. S. Department of Housing and
Urban Development
Washington, D. C. 20410

John S. Coleman Executive Officer National Academy of Sciences 2101 Constitution Avenue, N.W. Washington, D. C. 20418

Charles A. Conrad Executive Director National Capital Planning Commission 726 Jackson Place, N.W. Washington, D. C. 20006

Robert Conradt, Head
Highway Planning & Design
Department
DeLeuw, Cather & Company
of Canada, Limited
133 Wynford Drive
Don Mills (Toronto) Ontario, Canada

Robert L. Cox Frederick R. Harris 300 East 42nd Street New York, New York

D. A. Crosbie
Director, Legal Branch
Department of Highways
Province of Ontario
Administration Building
Downsview, Ontario, Canada

Edwin Cuebas
Assistant Secretary, Technical
Puerto Rico Department of
Public Works
P. O. Box 8218
Santurce, Puerto Rico 00910

Calvin B. Dalton, President Dalton-Dalton Associates 979 The Arcade Cleveland, Ohio 44114

George A. Dando, County Engineer Shelby County 161 Jefferson Ave. Memphis, Tennessee 38103

Harley T. Davidson
Chief of Long Range Planning for
State and Local Roads
Connecticut State Highway
Department
24 Wolcott Hill Road
Wethersfield, Connecticut 06109

Norman Day Associate Professor of City Planning University of Pennsylvania Philadelphia, Pennsylvania 19104 Leo F. DeMarsh Assistant Chief Engineer Massachusetts Department of Public Works 100 Nashua Street Boston, Massachusetts 02114

Tom Dickman National League of Cities 1612 K Street, N.W. Washington, D. C. 20006

Jack H. Dillard State Highway Research Engineer Virginia Highway Research Council Box 3817 University Station Charlottesville, Virginia 22903

E. A. Disque Chief, Landscape Division Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Richard C. Dresser Director of Publications The Asphalt Institute Asphalt Institute Building College Park, Maryland 20740

Robert Duckworth
U. S. Department of Housing and
Urban Development
Seventh and D Streets, S.W.
Washington, D. C. 20024

Robert E. Dudley, President Tracey, Brunstrom & Dudley, Inc. 815 Northern Life Tower Seattle, Washington 98101

E. M. Duffey Chief, Right of Way Division Regional Office Federal Highway Administration 1720 Peachtree Street Atlanta, Georgia 30309

Wayne O. Early, Principal Western States Landscape Association 301 West Indian School Road, Suite 128 Phoenix, Arizona 85013 David Einhorn, Urban Planner U. S. Department of Housing and Urban Development 451 Seventh Street, S.W. Washington, D. C. 20410

E. W. Elliott Manager, Highway Safety Chrysler Corporation P. O. Box 1919 Detroit, Michigan 48231

Raymond H. Ellis Senior Consultant Peat, Marwick, Livingston & Co. 1140 Connecticut Avenue, N.W. Washington, D. C. 20036

F. E. Engelking
Connecticut State Highway
Department
24 Wolcott Road, P. O. Drawer A
Wethersfield, Connecticut 06109

B. F. Everhart Urban Projects Engineer Ohio Department of Highways 25 South Front Street Columbus, Ohio 43215

Arthur L. Finkle
Principal Planner
New Jersey Department of
Transportation
1035 Parkway Avenue
Trenton, New Jersey 08625

Thomas W. Fletcher Deputy Mayor Commissioner District of Columbia 508 District Building Washington, D. C. 20004

Charles M. Fornaci
Right of Way Coordinator
New York State Department of
Transportation
1220 Washington Avenue,
State Campus
Albany, New York 12226

W. M. Foster
Assistant Director for Highway
Development
State Highway Department of
Washington
Highways-Licenses Building
Olympia, Washington 98501

Philip H. Friedly
Economist
U. S. Department of Housing and
Urban Development
Washington, D. C. 20410

Stanley H. Froid Vice President Tudor Engineering Company 525 Market Street San Francisco, California 94105

Miss Geraldine Galli Transportation Editor Engineering News-Record 330 West 42nd Street New York, New York 10036

John W. Galston Skidmore, Owings & Merrill 1100 Connecticut Avenue, N.W. Washington, D. C. 20036

John Gerba Regional Planner Office of High Speed Ground Transportation U. S. Department of Transportation 400 Sixth Street, S.W. Washington, D. C. 20024

Marjory F. Gibson Special Assistant U. S. Department of Transportation 800 Independence Avenue, S.W. Washington, D. C. 20590

William Gillitt Principal City Planner Baltimore Department of Planning 1200 American Building Baltimore, Maryland 21202

Donald R. Gilmore Senior Economist Central Business District 477 Madison Avenue New York, New York 10022

Robert E. Giltner Planning Office, Room 300 City and County of Denver 1445 Cleveland Place Denver, Colorado

Sidney Goldin Asiatic Petroleum Corporation One Rockefeller Plaza New York, New York 10020

William R. Gomberg Program Coordinator Office of Construction Service U. S. Office of Education Seventh and D Streets, S.W. Washington, D. C. 20202

David N. Goss
Urban Transportation Research
Engineer
Battelle Memorial Institute
Columbus Laboratories
505 King Avenue
Columbus, Ohio 43201

Albert A. Grant
Technical Director
Transportation Planning Board
Metropolitan Washington Council
of Gov'ts.
1225 Connecticut Avenue, N.W.
Washington, D. C. 20036

Sigurd Grava
Associate Professor of Urban
Planning
School of Architecture
Columbia University
New York, New York

William C. Greene, Landscape Architect Bureau of Public Roads Federal Highway Administration Fairbank Research Station 1717 H Street, N.W. Washington, D. C. 20591 Clint Gregory
Urban and Traffic Engineer
South Dakota Department of
Highways
Highway Building
Pierre, South Dakota 57501

Elmer Haile Highway Engineer U. S. Department of Transportation 1000 N. Glebe Road Arlington, Virginia 22201

Robert G. Hall Regional Land Architect, Region 9 Federal Highway Administration Federal Center, Building #40 Denver, Colorado 80225

E. E. Halmos Civil Engineering Magazine 345 East 47th Street New York, New York 10017

Donald E. Hammer Engineer-Manager Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Philip Hammer Hammer, Greene & Siler Assoc., Inc. 1140 Connecticut Avenue, N.W. Washington, D. C. 20036

C. S. Harmon Director of Research & Planning Tennessee Department of Highways 805 Highway Building Nashville, Tennessee 37219

George K. Harris Vice President O'Dell, Hewlett and Luckenbach, Inc. 950 N. Hunter Boulevard Birmingham, Michigan 48011

William D. Hart
Manager, Research Department
National Highway Users
Conference
202 National Press Building
Washington, D. C. 20004

W. A. Hartig Chief Engineer, Development State Road Commission 1800 Washington Street, East Charleston, West Virginia 25305

John E. Hartley
Deputy Director for Traffic
Engineering and Operations
Department of Highways and Traffic
14th and E Streets, N.W.
Washington, D. C. 20004

George W. Hartman Chief, Economics & Requirements Div. Bureau of Public Roads Federal Highway Administration

Washington, D. C. 20591

Kevin E. Heanue Chief, Urban Development Branch Bureau of Public Roads U. S. Department of Transportation Washington, D. C. 20591

Vincent J. Hearing, Acting Director Office of Urban Transportation Development U. S. Department of Housing and Urban Development Washington, D. C. 20410

William J. Hedley Consultant Federal Railroad Administration U. S. Department of Transportation 400 Sixth Street, S.W. Washington, D. C. 20591

Samuel H. Hellenbrand, Vice President Industrial Development and Real Estate Penn Central Company 466 Lexington Avenue New York, New York 10017

Hugh B. Henry Chief, Design Division Federal Highway Administration 222 S.W. Morrison Street Portland, Oregon 97204 Bruce A. Herman J. E. Greiner Company 1106 N. Charles Street Baltimore, Maryland 21201

Gil Herr Market Development Division Caterpillar Tractor Company Peoria, Illinois 61602

Frank W. Herring 21 Pine Street Port Washington, New York 11050

John Hibbs Geometric Design Engineer Federal Highway Administration 18209 Dixie Highway Homewood, Illinois 60430

Donald M. Hill, Partner
Peat, Marwick, Livingston &
Company
2050 Tower Building, Prudential
Center
Boston, Massachusetts 02199

Stuart L. Hill, Senior Right of Way Agent California Division of Highways P. O. Box 1499 Sacramento, California 95807

Irving Hoch Research Associate Resources for the Future 1755 Massachusetts Avenue, N.W. Washington, D. C. 20036

E. H. Holmes, Director Office of Policy Planning Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

Roger F. Honberger, Acting Director Division of Transportation Planning Coordination U. S. Department of Housing and Urban Development Seventh and D Streets, S.W. Washington, D. C. 20410 William L. Hooper Technical Assistant Office of Science & Technology Executive Office of the President Washington, D. C. 20506

Richard W. Huffman Chief, Renewal Planning Philadelphia City Planning Commission Philadelphia City Hall Annex Philadelphia, Pennsylvania 19106

Don Hummel
Assistant Secretary for Renewal and
Housing Assistance
U. S. Department of Housing and
Urban Development
Washington, D. C. 20410

Thomas F. Humphrey Program Officer Office of the Secretary U. S. Department of Transportation 800 Independence Avenue, S.W. Washington, D. C. 20591

Austin K. Hunsberger Director of Engineering Virginia Department of Highways 1401 East Broad Street Richmond, Virginia 23219

James R. Hunter Yale University 96 Bishop Street New Haven, Connecticut 06511

Donald J. Igo, Economist
Office of High Speed Ground
Transportation
U. S. Department of Transportation
Sixth and D Streets, S.W.
Washington, D. C. 20591

Lawrence Irvin Planning & Development Director Planning & Development Division 501 City Hall Minneapolis, Minnesota 55415 Richard Ives
Director, Research & Technology
Surplus Land for Community
Development
U. S. Department of Housing and
Urban Development
Washington, D. C. 20410

John B. Jacka, Planning Consultant H. F. Wise and Associates, Inc. 1750 Pennsylvania Avenue, N.W. Washington, D. C. 20006

John R. Jamieson
Deputy Federal Highway
Administrator
Federal Highway Administration
Sixth and D Streets, S.W.
Washington, D. C. 20591

A. E. Johnson, Executive Director
American Association of State
Highway Officials
341 National Press Building
Washington, D. C. 20004

Dale W. Johnson, Vice President Johannessen & Girand, Consulting Engineers, Inc. 6601 N. Black Canyon Highway Phoenix, Arizona 85015

Floyd B. Johnson Model Cities Program Coordinator 1100 W. Fifth Street Dayton, Ohio 45407

Morgan Johnson, Professor Department of Civil Engineering University of Santa Clara Santa Clara, California 95053

Walter K. Johnson Executive Director Delaware Valley Regional Planning Commission 1317 Filbert Street Philadelphia, Pennsylvania 19107

Allan Jones Committee on Public Works United States Senate Washington, D. C. 20510 Joseph S. Jones State Highway Engineer State Road Commission of W. Virginia 1800 Washington Street, East Charleston, West Virginia 25305

Thomas D. Jordan, Management Engineer The Port of New York Authority 111 Eighth Avenue at 15th Street New York, New York 10011

Robert T. Jorvig, Executive Director Metropolitan Council 550 Cedar Street St. Paul, Minnesota 55101

Harvey R. Joyner Transportation Planner Barton-Aschman Associates 1730 K Street, N.W. Washington, D. C. 20006

George A. Karas, Chief Planning and Engineering Branch U. S. Department of Housing and Urban Development 451 Seventh Street, S.W. Washington, D. C. 20410

Mart Kask, Director Dayton Transportation Study 418 Third National Building Dayton, Ohio 45402

Charles E. Keiser Chicago Transit Authority Merchandise Mart Plaza Chicago, Illinois 60654

James H. Kell, Partner Peat, Marwick, Livingston & Co. 275 5th Street, Suite 301 San Francisco, California 94103

A. B. Kelley Director, Public Affairs Federal Highway Administration U. S. Department of Transportation 400 Sixth Street, S.W. Washington, D. C. 20590 David B. Kelley Regional Design Engineer Federal Highway Administration 31 Hopkins Plaza Baltimore, Maryland 21201

Wayne F. Kennedy, Chief Right of Way Division Federal Highway Administration 31 Hopkins Plaza Baltimore, Maryland 21201

Jerry L. King Traffic Engineer City Hall, Room 702 Houston, Texas 77002

Norman M. Klein Skidmore, Owings & Merrill 1100 Connecticut Avenue, N.W. Washington, D. C. 20036

George Kopecky Committee on Highways U. S. House of Representatives Washington, D. C. 20515

J. C. Kordella Director of Public Works Department of Public Works 108 South Perry Street Rockville, Maryland 20850

Leo A. Korth Assistant Director of Operations Minnesota Department of Highways Highway Building, Room 413 St. Paul, Minnesota 55101

Richard H. Kraft Urban Planner Bureau of Public Roads Matomic Building 1717 H Street, N.W. Washington, D. C. 20591

Martin H. Kramer Senior City Planner Department of Housing and Community Development 10 N. Calvert Street Baltimore, Maryland 21218

Fletcher Krause Assistant Chief Counsel Office of Chief Counsel Federal Highway Administration Washington, D. C. 20591

Abraam Krushkhov, Vice President Daniel, Mann, Johnson, Mendenhall 3325 Wilshire Boulevard Los Angeles, California 90005

Theodore H. Kruttschnitt, Jr. Assistant to Chief Engineer Southern Pacific Company 65 Market Street San Francisco, California 94105

Herman A. J. Kuhn Assistant Professor of Civil Engineering University of Wisconsin 2208 Engineering Building Madison, Wisconsin 53704

Wesley LaBaugh, Partner Edwards and Kelcey 8 Park Place Newark, New Jersey 07102

Alvar K. Laiho Senior Associate Planning Research Corporation Washington, D. C. 20009

Dick G. Lam Office of the Deputy Undersecretary U. S. Department of Transportation Washington, D. C. 20590

Thomas Lammers California Division of Highways P.O. Box 1499 Sacramento, California 95807

Dennis P. Larkin Division Head Dalton-Dalton Associates 979 The Arcade Cleveland, Ohio 44114 Kent R. Larrabee Environmental Development Bureau of Public Roads U. S. Department of Transportation Washington, D. C. 20591

Leon N. Larson Highway Engineer Federal Highway Administration Federal Building Kansas City, Missouri

Carl H. Lehmann, Jr. Special Attorney Maryland State Road Commission 1001 Cathedral Street Baltimore, Maryland 21201

Jack E. Leisch
Vice President
DeLeuw, Cather and Co. of
Canada, Ltd.
1127 Leslie Street
Don Mills, Ontario, Canada

David R. Levin
Deputy Director
Office of Right of Way and Location
Bureau of Public Roads
Federal Highway Administration
U. S. Department of Transportation
Washington, D. C. 20591

Harrison Lewis
Deputy Attorney General
Department of Justice
State Highway Division
Highway Building, Room 236
Raleigh, North Carolina 27602

S. I. Lipka, Chief Division of Transportation Planning Department of Public Works 108 South Perry Street Rockville, Maryland 20850

Joseph H. Looper Partner-in-Charge Howard, Needles, Tammen & Bergendoff 6413 West Capitol Drive Milwaukee, Wisconsin 53216 D. W. Loutzenheiser, Chief Highway Standards and Design Div. Bureau of Public Roads Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

Warren B. Lovejoy, Chief Central Research & Statistics Div. The Port of New York Authority 111 Eighth Avenue at 15th Street New York, New York 10011

Glenn McCarty Senator Minnesota Highway Interim Comm. Minneapolis, Minnesota 55402

Edward E. McClure
Associate Professor & Chairman
Department of Urban & Regional
Planning
Florida State University
Tallahassee, Florida 32306

John M. McCombs Associate for Planning Ralph Calder and Associates 1600 Mutual Building Detroit, Michigan 48226

Monroe McCorkle Assistant Director of Public Works Dallas, Texas 75201

James McDonnell, Chief Travel Facilities Branch Bureau of Public Roads U. S. Department of Transportation Washington, D. C. 20591

Dorn McGrath, Jr., Chairman
Department of Urban & Regional
Planning
George Washington University
Joseph Henry Building
2100 Pennsylvania Avenue, N.W.
Washington, D. C. 20037

William R. McGrath Traffic Commissioner Traffic and Parking Department 112 Southampton Street Boston, Massachusetts Frederick A. McLaughlin, Jr.
Director, Plans, Programs and
Evaluation Staff
Office of Metropolitan Development
U. S. Department of Housing and
Urban Development
Washington, D. C. 20410

L. V. McLaughlin Assistant to Chief Engineer Missouri State Highway Department State Highway Building Jefferson City, Missouri 65101

George E. MacDonald, Partner Bertram D. Tallamy Associates 1411 K Street, N.W. Washington, D. C. 20005

Mason Mahin Director, Laws Division Automotive Safety Foundation 200 Ring Building Washington, D. C. 20036

Alger F. Malo, Director Department of Streets & Traffic Water Board Building Detroit, Michigan 48226

M. F. Maloney Office of Engineering U. S. Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Marvin L. Manheim Associate Professor Department of Civil Engineering Massachusetts Institute of Technology Cambridge, Massachusetts 02139

George T. March District Engineer Illinois Division of Highways 300 North State Street Chicago, Illinois 60202

George T. Marcou, President Marcou, O'Leary and Associates 1735 K Street, N.W. Washington, D.C. 20006 William R. Marston Deputy Commissioner City of Chicago Chicago, Illinois 60602

Richard C. Massell, Director Planning & Regional Affairs City Hall, P. O. Box 178 Alexandria, Virginia 22314

J. O. Mattson, President Automotive Safety Foundation 200 Ring Building Washington, D. C. 20036

John T. Mauro, Director Department of City Planning Public Safety Building Pittsburgh, Pennsylvania 15219

Robert L. May Assistant Minority Counsel House Committee on Public Works United States Congress Washington, D. C. 20515

Edward W. Melchen, Jr.
Traffic Engineer
American Automobile Association
1712 G Street, N.W.
Washington, D. C. 20006

Thomas P. Melone
Director
Urban Planning, Research and
Demonstration
U. S. Department of Housing and
Urban Development
Washington, D. C. 20024

M. Berry Meyer Counsel of the Committee Committee on Public Works United States Senate Washington, D. C. 20510

Harold L. Michael Professor of Highway Engineering Civil Engineering Building Purdue University Lafayette, Indiana 47907 D. Grant Mickle Executive Vice President Automotive Safety Foundation 200 Ring Building Washington, D. C. 20036

David R. Miller, Vice President Daniel, Mann, Johnson & Mendenhall 3325 Wilshire Boulevard Los Angeles, California 90005

Robert E. Molumby The Perkins & Will Partnership 309 West Jackson Boulevard Chicago, Illinois 60606

J. Robert Moore Harland Bartholomew & Associates 188 Jefferson Avenue Memphis, Tennessee

Theodore F. Morf Deputy Chief Highway Engineer Illinois Division of Highways 2300 South 31st Street Springfield, Illinois 62706

Robert L. Munson, Partner Consoer, Townsend & Associates 360 East Grand Avenue Chicago, Illinois 60611

Richard J. Naish, Associate Tippetts, Abbett, McCarthy and Stratton 375 Park Avenue New York, New York 10022

Ross D. Netherton, Chief Division of Research & Education Bureau of Outdoor Recreation U. S. Department of the Interior Washington, D. C. 20240

R. L. de Neufville
Associate Director
Urban Systems Laboratory
Massachusetts Institute of
Technology
77 Massachusetts Avenue
Cambridge, Massachusetts 02139

James M. Newton District Engineer Bureau of Public Roads 12-14 Russell Road Albany, New York 12206

Charles M. Noble Consulting Engineer Cherry Valley Road Princeton, New Jersey 08540

Mohammed Noor Engineer J. E. Greiner Company 1106 N. Charles Street Baltimore, Maryland 21201

R. Allen Norris
City Planner
John Graham and Company
1426 Fifth Avenue
Seattle, Washington 98101
Doug Nunn
Urban Affairs Editor
The Courier-Journal
Louisville, Kentucky 40202

Roger F. Nusbaum Deputy Chief Highway Engineer Division of Highways Springfield, Illinois 62706

Edward K. Ochiai, Head Right of Way Branch State Department of Transportation Highways Division 869 Punchbowl Street Honolulu, Hawaii 96813

Thomas B. O'Connor General Manager Chicago Transit Authority Merchandise Mart Plaza Chicago, Illinois 60654

Jeremiah D. O'Leary, Jr. Vice President Marcou, O'Leary and Associates 1735 K Street, N.W. Washington, D. C. 20006

Michelle Osborn Columnist Philadelphia Bulletin 30th and Market Street Philadelphia, Pennsylvania 19101 Roland A. Ouellette, Assistant Director Highway Development and Traffic Safety General Motors 3340 W. Grand Boulevard Detroit, Michigan 48202

Wilfred Owen Senior Engineer Brookings Institution 1775 Massachusetts Avenue, N.W. Washington, D. C. 20036

David Pampu, Transportation Planner Denver Regional Council of Governments 2475 West 26th Avenue Denver, Colorado 80211

Lewis E. Parker
State Highway Urban Engineer
State Highway Department of
Georgia
2 Capitol Square
Atlanta, Georgia 30334

Frederick Pearson Project Director, Traffic Gruen Associates 63330 San Vicente Boulevard Los Angeles, California 90048

Peter E. Pekkala Transportation Economist Automobile Manufacturers Association, Inc. 320 New Center Building Detroit, Michigan 48202

Stephen G. Petersen Senior Traffic Engineer Alan M. Voorhees and Associates 7670 Old Springhouse Road McLean, Virginia 22101

Henry Peyrebrune
Principal Transportation Analyst
New York State Department of
Transportation
1220 Washington Avenue
State Campus, Building #4
Albany, New York 12054

Wendell H. Pigman Consultant U. S. Department of Transportation 4th & Independence Avenue, S.W. Washington, D. C. 20590

Louis J. Pignataro Director, Division of Transportation Polytechnic Institute of Brooklyn 333 Jay Street Brooklyn, New York 11201

Milton Pikarsky Commissioner of Public Works City of Chicago, City Hall 121 North LaSalle Chicago, Illinois 60602

Robert J. Piper
Associate Director — Planning and
Urban Design
The Perkins & Will Partnership
309 West Jackson Boulevard
Chicago, Illinois 60606

Fletcher N. Platt
Traffic Safety and Highway
Improvement Department
Ford Motor Company
The American Road
Dearborn, Michigan 48180

Mathew Platt, Assistant Director Office of Planning Washington Metropolitan Area Transit Authority 950 South Building L'Enfant Plaza, S.W. Washington, D. C. 20004

Leonard Prosser Associate Editor, Asphalt Magazine The Asphalt Institute Asphalt Institute Building College Park, Maryland 20740

James P. Purcell Partner James P. Purcell Associates 643 Maple Avenue Hartford, Connecticut 06114 Clyde E. Pyers, Technical Director Cleveland Seven County Transportation Land Use Study 439 The Arcade Cleveland, Ohio 44114

William H. Quirk Editorial Director Contractors & Engineers Magazine 757 Third Avenue New York, New York 10017

Walter S. Rainville, Jr. Director of Research American Transit Association 815 Connecticut Avenue, N.W. Washington, D. C. 20006

G. M. Randich DeLeuw, Cather & Company 165 West Wacker Drive Chicago, Illinois 60601

Gus Rappold, Planner Nassau County Planning Commission 240 Old Country Road Mineola, New York 11501

C. F. Rassweiler, President Rassweiler Consultants 9 Montview Avenue Short Hills, New Jersey 07078

Richard Ravitch Executive Vice President HRH Construction Corporation 515 Madison Avenue New York, N. Y. 10022

Marshall F. Reed Highway Engineer Automotive Safety Foundation 200 Ring Building Washington, D. C. 20036

Richard Reed Special Assistant to Federal Highway Administrator Federal Highway Administration 400 Sixth Street, S.W. Washington, D. C. 20591

Daniel M. Reisner Project Engineer Tippetts, Abbett, McCarthy and Stratton 375 Park Avenue New York, New York 10022

Arlee T. Reno Research Assistant Massachusetts Institute of Technology 77 Massachusetts Avenue Cambridge, Massachusetts 02139

Don P. Reynolds Civil Engineering 345 E. 47th Street New York, New York 10017

Homer K. Richards Urban Freeway Engineer Arizona Highway Department 206 South 17th Avenue Phoenix, Arizona 85007

Frederick J. Richardson Vice President Dalton-Dalton Associates 979 The Arcade Cleveland, Ohio 44114

Lloyd A. Rivard, Chief Engineer Office of Planning and Programming Department of Highways & Traffic 14th and E Streets, N.W. Washington, D. C. 20004

E. Grover Rivers Director of Roadside Development State Road Department of Florida Haydon Burns Building Tallahassee, Florida 32304

Louis P. Robbins Partner Grossberg, Yochelson, Brill & Fox 1707 H Street, N.W. Washington, D. C. 20006

Thomas H. Roberts
Director of Regional Planning
Metropolitan Washington Council
of Governments
1225 Connecticut Avenue, N.W.
Washington, D. C. 20036

Carlton C. Robinson Director Traffic Engineering Division Automotive Safety Foundation 200 Ring Building Washington, D. C. 20036

W. G. Roeseler
Director of Urban and Regional
Planning
Howard, Needles, Tammen &
Bergendoff
1805 Grand Avenue
Kansas City, Missouri 64108

Archibald Rogers Rogers, Taliaferro, Kostrisky & Lamb 806 Cathedral Street Baltimore, Maryland 21201

B. H. Rottinghaus
Partner
Howard, Needles, Tammen & Bergendoff
6750 France Avenue South
Minneapolis, Minnesota 55435

Irving Rubin
Director
Detroit Regional Transportation and
Land Use Study
1248 Washington Boulevard
Detroit, Michigan 48226

August Saccoccio Highway Safety Engineer National Transportation Safety Board Normandy Building Washington, D. C. 20591

Gilbert T. Satterly, Jr.
Associate Professor of Civil
Engineering
Department of Civil Engineering
Wayne State University
Detroit, Michigan 48202

G. I. Sawyer
Deputy Director for Design,
Engineering & Research
Department of Highways & Traffic
14th and E Streets, N.W.
Washington, D. C. 20004

William J. Schneider City Planner III Dayton Planning Board Third and Ludlow Streets Dayton, Ohio 45402

James R. Schuyler State Highway Engineer New Jersey Department of Transportation 1035 Parkway Avenue Trenton, New Jersey 08625

J. F. Schwar Professor Ohio State University 2070 Neil Avenue Columbus, Ohio 43210

Carol Schwartz
Urban Planning Research and
Demonstration Program
Department of Housing and
Urban Development
451 Seventh Street, S.W.
Washington, D. C. 20410

David Scribner, Jr.
Senior Appraiser and Market Analyst
Real Estate Research Corporation
1101 17th Street, N.W.
Washington, D. C. 20036

Thomas H. Sellew
Assistant Chief Engineer
Connecticut State Highway
Department
24 Wolcott Hill Road
Wethersfield, Connecticut 06109

James Selvaggi
U. S. Department of Housing and
Urban Development
Seventh and D Streets, S.W.
Washington, D. C. 20024

Peter Semrad, Head
Department of Transportation
Planning and Economics
Tippetts-Abbett-McCarthy-Stratton
375 Park Avenue
New York, New York 10022

K. W. Shiatte, Director Planning and Research Bureau New York State Department of Transportation State Campus Albany, New York 12226

James L. Shotwell Special Assistant to Director Bureau of Public Roads Washington, D. C. 20591

W. A. Siems Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

Nelson S. Silver Principal Planner Division of State and Regional Planning 520 E. State Street Trenton, New Jersey

James M. Smith Vice President Wilbur Smith and Associates 4500 Jackson Boulevard Columbia, South Carolina 29202

Richard J. Solomon, Editor The Journal of Urban Transportation P. O. Box 166 GCS New York, New York 10017

Clayton A. Sorenson
City Engineer — Director
of Public Works
City of Minneapolis
203 City Hall
Minneapolis, Minnesota 55415

William Sorrentino
Program Evaluation Officer
U. S. Department of Housing and
Urban Development
Seventh & D Streets, S.W.
Washington, D. C. 20410

George C. Sponsler Executive Secretary National Research Council Division of Engineering Washington, D. C. 20418 Robert C. Squier Regional Landscape Architect Federal Highway Administration 1720 Peachtree Road, N.W. Atlanta, Georgia 30309

William Steger CONSAD Research Corporation 5600 Forward Avenue Pittsburgh, Pennsylvania 15217

William K. Stevens, Reporter New York Times 229 W. 43rd Street New York, New York 10036

K. A. Stonex, Executive Engineer Automotive Safety Engineering General Motors Engineering Staff General Motors Technical Center Warren, Michigan 48090

Quentin Stringer, Chief, Right of Way Mississippi State Highway Department P. O. Box 1850 Jackson, Mississippi 39205

Darwin Stuart Research Associate Barton-Aschman Associates 1771 Howard Chicago, Illinois 60626

John A. Swanson Director of Right of Way and Location Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Ralph Tabor Assistant Director for Federal Relations National Association of Counties 1001 Connecticut Avenue, N.W. Washington, D. C. 20036

Robert J. Tait The Ohio State University 2070 Neil Avenue Columbus, Ohio 43210 Charles H. Taylor Director, Tunnels and Bridges Department The Port of New York Authority 111 Eighth Avenue at 15th Street New York, New York 10011

Floyd I. Thiel, Economist Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

Don Tillman Chief Deputy City Engineer City of Los Angeles City Hall, Room 800 Los Angeles, California 91403

George E. Toth
Chief Engineer
Transportation Administration of
New York City
40 Worth Street
New York, New York

Richard W. Tupper Associate Director, Department of Public Relations American Automobile Association 1712 G Street, N.W. Washington, D. C. 20006

F. C. Turner, Director Bureau of Public Roads Federal Highway Administration U. S. Department of Transportation Washington, D. C. 20591

George R. Turner, Jr. Chief, Design Division, Region 1 Federal Highway Administration 4 Normanskill Boulevard Delmar, New York 12054

Bill Utz Special Assistant to U. S. Senator Harry F. Byrd, Jr. Room 417, Old Senate Office Bldg. Washington, D. C. 20510

Paul W. Valentine, Reporter Washington Post 1515 L Street, N.W. Washington, D. C. 20005 F. L. Ventura Transportation Research Department General Motors Research Laboratory Twelve Mile & Mound Roads Warren, Michigan 48090

J. E. Vitt Transportation Research Department General Motors Research Laboratory Twelve Mile & Mound Roads Warren, Michigan 48090

R. D. Wallace, Deputy Director Department of Highways & Traffic 14th and E Streets, N.W. Washington, D. C. 20004

Allen Weber Assistant Associate Director Research Engineering 405 Hilgard Avenue Los Angeles, California

M. T. Weinberg
Cornell Aeronautical Lab., Inc.
4455 Genesee Street
P. O. Box 235
Buffalo, New York 14221
Foster L. Weldon, Director
Transportation Research &
Planning Office
Ford Motor Company
P. O. Box 2053
Dearborn, Michigan 48121

Tom Wellman, Principal Planner Memphis & Shelby County Planning Commission City Hall 125 North Main Memphis, Tennessee 38103

George Weltmer Transportation Engineer Parsons, Brinckerhoff, Quade & Douglas 111 John Street New York, New York

Edward G. Wetzel, Associate Consultant Edwards and Kelcey, Inc. 8 Park Place Newark, New Jersey 10707 Richard H. White, Representative Minnesota Highway Interim Commission 610 Midwest Plaza Minneapolis, Minnesota 55402

Henry D. Whitney, Chief Planner Tippetts-Abbett-McCarthy-Stratton 375 Park Avenue New York, New York 10022

Rex M. Whitton, Associate Howard, Needles, Tammen & Bergendoff 1805 Grand Avenue Kansas City, Missouri 64108

Carl R. Wilder, Manager
Public Works and Transportation
Section
Portland Cement Association
Old Orchard Road
Skokie, Illinois 60076

Samuel B. Wilkinson Senior Project Engineer Pennsylvania Power and Light Company 901 Hamilton Street Allentown, Pennsylavnia 18101

George Williams, Director Engineering & Operations Bureau of Public Roads 1717 H Street, N.W. Washington, D. C. 20591

Neil H. Wilson, Chief Highway Needs Branch Bureau of Public Roads U. S. Department of Transportation Washington, D. C. 20591

James A. Wright, Planning Director City of Birmingham 710 N. 20th Street Birmingham, Alabama 35203

Professor Robert R. Wright, III Director, Continuing Legal Education Program University of Arkansas Law School Fayetteville, Arkansas 72701

W. Wronski Commissioner of Planning Metropolitan Toronto Planning Board 19th Floor, East Tower, City Hall Toronto 1, Ontario, Canada

Henry M. Yamanaka District Design Engineer 300 N. State Street Illinois Division of Highways Chicago, Illinois 60610

W. Paul Yeager Principal Planner City of Birmingham City Hall Birmingham, Alabama 35203

Joseph Zitelli, Assistant Manager Project Engineering Division Tunnels & Bridges Department Port of New York Authority 111 Eighth Avenue New York, New York 10011