

Edward Weiner

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# Urban Transportation Planning in the United States

History, Policy, and Practice

*Fifth Edition*



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Edward Weiner  
Silver Spring, MD, USA

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# Urban Transportation Planning in the United States

## Preface

Urban transportation planning is carried out primarily by state and local agencies. Over the years, much experience has been gained in the planning and evaluation of urban transportation systems. This knowledge can be useful to planners and decision makers in the development and implementation of transportation system changes. In this context, it is important to understand the transportation and planning options which have been tried and how they developed into the approaches we have today. This book describes the evolution of urban transportation planning over the last 70 years.

This is the fifth edition of the book which was first published in 1987. The fourth edition discussed urban transportation planning to mid-2012. This edition updates the evolution of urban transportation planning and policy to 2016. It also contains some additions and revisions to the earlier edition. This book is an updated version of "Evolution of Urban Transportation Planning" which was first published in 1979 as Chap. 15 in *Public Transportation: Planning, Operations, and Management*, edited by George E. Gray and Lester L. Hoel. It was revised and published in 1992 as Chap. 3 in *Public Transportation*, second edition, edited by George E. Gray and Lester L. Hoel.

The book focuses on the key events in the evolution of urban transportation planning including developments in technical procedures, philosophy, processes, and institutions. But, planners must also be aware of changes in legislation, policy, regulations, and technology. These events have been included to provide a more complete picture of the forces that have affected and often continue to affect urban transportation planning.

Summarizing so much history in a single book requires difficult choices. The efforts of many individuals and groups made important contributions to the development of urban transportation planning. Clearly, not all of these contributions could be included or cited. This book concentrates on the key events of national significance and thereby tries to capture the overall evolution of urban transportation planning. Focusing on key events also serves as a convenient point to discuss developments in a particular area.

The book is generally arranged chronologically. Each period is titled with the major theme pervading that period as viewed by the author. Not all key events fit

precisely under a particular theme, but many do. The discussion of the background for some events or the follow-on activities for others may cover more than one time period and is placed where it seemed most relevant.

The book takes a multimodal perspective and attempts to provide a balanced view among a number of subject areas including:

- Significant federal legislation
- Major, relevant federal regulations and policies
- Highway concerns
- Transit concerns
- Environmental issues
- Energy issues
- Safety issues
- Climate change concerns
- Financing
- Relevant conferences
- Technological developments
- Transportation service alternatives
- Infrastructure resilience
- Manuals and methodological developments
- National transportation studies
- National data resources
- Local events with national significance

Over the years, the author has discussed these events with many persons in the profession. Often they had participated in or had firsthand knowledge of the events. The author appreciates their assistance, even though they are too numerous to mention specifically.

In preparing this book, the author was directly aided by several individuals who provided information on specific events. Their assistance is appreciated: Jack Bennett, Barry Berlin, Susan Binder, Norman Cooper, Frederick W. Ducca, Sheldon H. Edner, Christopher R. Fleet, Charles A. Hedges, Kevin Heanue, Donald Igo, Anthony R. Kane, Thomas Koslowski, Ira Laster, William M. Lyons, James J. McDonnell, Florence Mills, Camille C. Mittelholtz, Norman Paulhus, Elizabeth A. Parker, John Peak, Alan Pisarski, Sam Rea, Carl Rappaport, Elizabeth Riklin, James A. Scott, Mary Lynn Tischer, Martin Wachs, Jimmy Yu, and Samuel Zimmerman.

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Any errors of fact or interpretation are the responsibility of the author.

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# Chapter 1

## Introduction

On October 23, 1962 President John F. Kennedy into law the Federal-Aid Highway Act of 1962. More than 50 years have now passed since that act created the federal mandate for urban transportation planning in the United States. The act was the capstone of two decades of experimentation and development of urban transportation procedures and institutions. It was passed at a time in which urban areas were beginning to plan the Dwight D. Eisenhower National System of Interstate and Defense Highway routes through and around their areas. The 1962 Act, combined with the incentive of 90 % federal funding for Interstate highway projects, caused urban transportation planning to spread quickly throughout the United States. It also had a significant influence on urban transportation planning in other parts of the world.

In some ways, the urban transportation planning process and planning techniques have changed little over the 50 years. Yet in other ways urban transportation planning has evolved over these years in response to changing issues, conditions and values, and a greater understanding of urban transportation phenomena. Current urban transportation planning practice is considerably more sophisticated, complex, and costly than its highway planning predecessor, and involves a wider range of participants in the process.

Modifications in the planning process took many years to evolve. As new concerns and issues arose, changes in planning techniques and processes were introduced. These modifications sought to make the planning process more responsive and sensitive to those areas of concern. Urban areas that had the resources and technical ability were the first to develop and adopt new concepts and techniques. These new ideas were diffused by various means throughout the nation, usually with the assistance of the federal government and professional organizations. The rate at which the new concepts were accepted varied from area to area. Consequently, the quality and depth of planning is highly variable at any point in time.

Early highway planning concentrated on developing a network of all weather highways connecting the various portions of the nation. As this work was being accomplished, the problems of serving increasing traffic grew. With the planning for urban areas came additional problems of dispersed land use development patterns,

dislocation of homes and businesses, environmental degradation, citizen participation, energy consumption, transportation for the disadvantaged, and infrastructure deterioration. More recently have been the concerns about traffic congestion, inter-modal connectivity, performance measures, sustainable development, environmental justice, climate change, national security and infrastructure resilience. The need for adequate financial resources has always been a concern.

Urban transportation planning in the United States has always been conducted by state and local agencies in many cases with the assistance of consulting firms and universities. This approach is entirely appropriate since highway and transit facilities and services are owned and operated largely by the states and local agencies, and more recently private entities. The role of the federal government has been to set national policy, provide financial aid, supply technical assistance and training, and conduct research. Over the years, the federal government has attached requirements to its financial assistance. From a planning perspective, the most important has been the requirement that transportation projects in urbanized areas of 50,000 or more in population be based on an urban transportation planning process. This requirement was first incorporated into the Federal-Aid Highway Act of 1962.

Other requirements have been incorporated into federal legislation and regulations over the years. Many of these are chronicled in this report. At times these requirements have been very exacting in their detail. At other times, greater flexibility was allowed in responding to the requirements. Currently, the emphasis is on increasing state and local flexibility in planning implementation, and in making the planning process more inclusive for all groups and individuals.

Over the years, a number of federal agencies have affected urban transportation planning (Table 1.1). The U.S. Bureau of Public Roads (BPR) was part of the U.S. Department of Commerce when the 1962 Highway Act was passed. It became part of the U.S. Department of Transportation (DOT) upon its creation in 1966 and its name was changed to the U.S. Federal Highway Administration (FHWA). The federal urban mass transportation program began in 1961 under the U.S. Housing and Home Finance Agency, which became the U.S. Department of Housing and Urban Development in 1965. The federal urban transit program was transferred to DOT in 1968 as the U.S. Urban Mass Transportation Administration (UMTA). The name was changed to the U.S. Federal Transit Administration (FTA) by the Federal Transit Act Amendments of 1991. The U.S. Federal Railroad Administration (FRA) was created at the same time as DOT. The National Traffic and Motor Vehicle Safety Act of 1966 established the National Traffic Safety Agency, and the Highway Safety Act of 1966 established the National Highway Safety Agency both in the U.S. Department of Commerce. The two safety agencies were combined by Executive Order 11357 in 1967 into the National Highway Safety Bureau in the newly created DOT. In 1970 it became the National Highway Traffic Safety Administration (NHTSA).

Other federal agencies became involved in urban transportation planning as new issues arose. The U.S. Department of Labor (DOL) became involved in 1964 to administer the labor protections provisions of the Urban Mass Transportation Act. The Advisory Council on Historic Preservation was established in 1966 to administer



**Table 1.1** Dates selected federal agencies were established

1849	Department of Interior
1913	Department of Commerce
1913	Department of Labor
1916	Bureau of Public Roads
1921	Bureau of the Budget
1947	Housing and Home Finance Agency
1953	Department of Health, Education and Welfare
1965	Department of Housing and Urban Development
1966	Department of Transportation
1966	Federal Highway Administration
1966	Federal Railroad Administration
1966	Advisory Council on Historic Preservation
1967	National Highway Safety Bureau
1968	Urban Mass Transportation Administration
1969	Council on Environmental Quality
1970	National Highway Traffic Safety Administration
1970	Office of Management and Budget
1970	Environmental Protection Agency
1977	Department of Energy
1979	Department of Health and Human Services
1991	Federal Transit Administration
1992	Bureau of Transportation Statistics
2000	Federal Motor Carrier Safety Administration
2001	Transportation Security Administration
2002	Department of Homeland Security
2005	Research and Innovative Technology Administration

national historic preservation programs. The Bureau of the Budget (BOB), later to become the Office of Management and Budget (OMB), issued guidance in 1969 to improve coordination among programs funded by the federal government. In later years, OMB issued guidance on many issues that affected urban transportation. To address environmental concerns that were increasing in the latter part of the 1960s, the Council on Environmental Quality (CEQ) was created in 1969 and the U.S. Environmental Protection Agency (EPA) in 1970. The U.S. Department of Health, Education and Welfare (HEW), now the U.S. Department of Health and Human Services (HHS), became involved in urban transportation as a result of the Rehabilitation Act of 1973 as part of its function to eliminate discrimination against handicapped persons in federal programs. With the passage of the Endangered Species Act of 1973, the Department of Interior and the Department of Commerce became involved in some aspects of urban transportation planning. In 1977, the U.S. Department of Energy (DOE) was created to bring together federal energy functions.

The Bureau of Transportation Statistics (BTS) was created by the Intermodal Surface Transportation Efficiency Act of 1991 for data collection, analysis, and