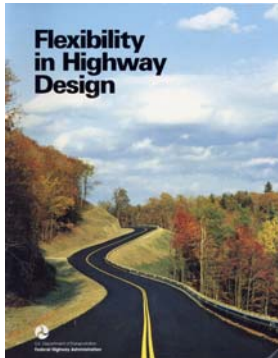


THE FREEWAY IN THE CITY

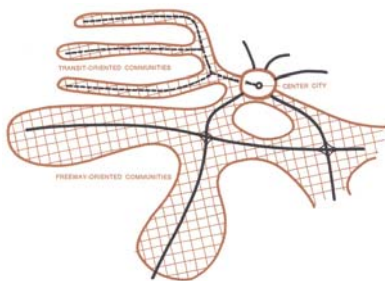


Rapuano, Michael, Lawrence Halprin, et al. (1968). *The Freeway in the City: Principles of Planning and Design*. US Government Printing Office, Washington, DC.

ABSTRACT



The Freeway in the City was written by a group of eight engineers, architects, landscape architects, and planners at the invitation of the Federal Highway Administrator to prepare a set of guidelines for the planning and design of urban expressways. The report was directed initially to the Bureau of Public Roads (which became the Federal Highway Administration); state, county and municipal highway officials; professionals in the fields of urban design and environmental planning; decision makers at state and local levels; and interested members of the public. Written in 1968, the report is outdated, but the main points are still relevant and, suprisingly, anticipate the principles of CSS.

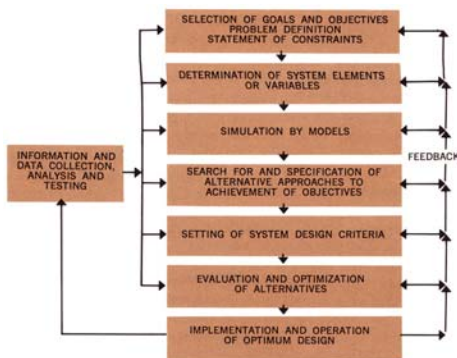


The book is divided into seven chapters, each highlighting a principle of urban freeway planning and design. The principles are not suggested to be used individually, but rather to be used as a “checklist to improve the performance, appearance and acceptance of urban freeways.” A summary of each chapter follows, preceded by an overview of the major recommendations provided by the authors.

The Introduction describes the situation in the mid 1960s where city, state, and county highway departments made great advances in highway design during the development of the Interstate Highway System. However great these strides were, the programs were under attack from the public, some of whom viewed highways as elements that divide and break up communities. The authors proposed that something was wrong and that new approaches were needed in highway development.

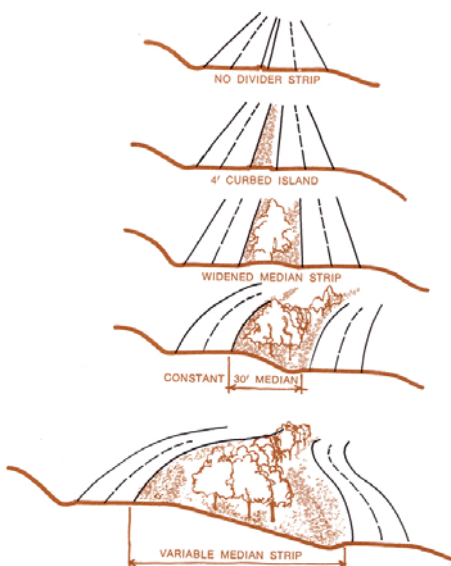
Major Recommendations. The group of urban advisors created a list of recommendations that they felt would improve urban freeways and their development process. Their recommendations included:

1. Expand the application of the techniques of systems analysis and operations research as the most rational approach to the problem of planning, locating, and designing urban freeways.



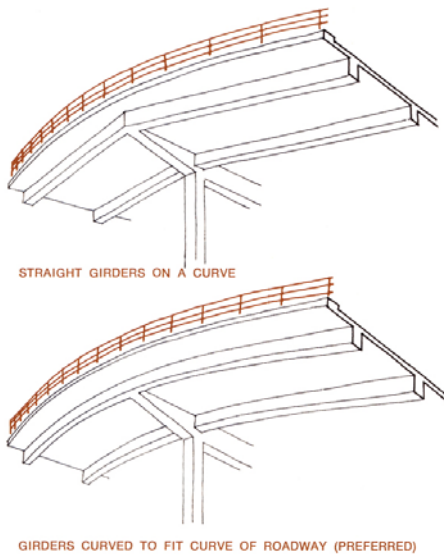
2. Adopt the systems concept of interdisciplinary team approach to urban freeway planning on every level—federal, state, regional and local.
3. Appoint an independent review board composed of qualified professionals to serve the Federal Highway Administrator, the state highway engineer, or the city public works chief in an advisory capacity.
4. Encourage and aid formal education in urban transportation and highway planning and design.
5. Establish a system of regional urban design institutes.
6. Encourage the formulation within each state of a total environmental planning commission.
7. Coordinate freeway considerations with the comprehensive planning of every affected community, city and region.
8. Promote the integration of freeways with all other elements of the urban transportation system.
9. Stimulate more research on better ways of moving people and goods.
10. Investigate the possibilities of giving highway departments the authority to condemn and purchase lands adjacent to a proposed freeway or interchange.
11. Provide a more equitable basis of compensation for lands acquired for highway purposes.
12. Stimulate increased emphasis on the exploration and use of new modes of urban transit.
13. Encourage the multiple utilization of urban freeway rights-of-way.
14. Encourage state highway departments and local agencies to purchase and develop freeway and recreation corridors jointly.
15. Develop and promote the passage by states and the federal government of advanced highway-related enabling legislation.
16. Encourage a high level of visual quality in every proposed freeway.

Chapter 1: Comprehensive Planning and Community Values describes the “modern” city plan with the many plans, reports, and diagrams that record the vision of the city for future planning, including social, economic, and political policies. The chapter outlines the physical values that influence its evolving structure and highlights transportation facilities as being the one that has the greatest impact. There are several design principles listed at the end of the chapter for how to incorporate urban freeways into communities.



Chapter 2: The View from the Freeway concentrates on the views seen from and of urban freeways. The principles listed in this chapter identify ways to make views and the visual enjoyment of the freeway deliberate and not a coincidental byproduct of the design and planning process.

Chapter 3: Location of the Freeway deals with the process of planning and locating urban freeways. Considering that urban freeways are generally more expensive and more controversial, the principles listed in this chapter focus on locations for freeways that are responsive to the community and the existing natural and man-made features.



Chapter 4: The Roadway highlights the unique features of urban freeways compared to rural freeways. The principles identified in this chapter discuss how an urban freeway must be designed given the difficult environment of an urban setting.

Chapter 5: Highway Structures identify principles that inform planners and designers about designing and constructing roadway structures. The authors suggest that studying both European roadway structures and the natural world for clues and insight for future bridge and roadway structure designs.

Chapter 6: Multiple Use of the Corridor discusses what the authors consider an insistent and compelling idea of using the highway to structure or restructure the city. The key points of this discussion relate to multiple uses of highway corridors—both vertically and horizontally—and ways that highway development can promote urban renewal.

Chapter 7: The Systems Approach outlines a decision-making process that “considers alternative approaches to overall design to arrive at a system that provides optimum performance with respect to established criteria.” An approach like this is well suited for complex projects, such as urban freeways and has been used by government agencies for many other complex projects such as military logistics. The systems approach is not a method of design, but a process that leads to design. This chapter identifies in detail the steps and the components of the systems approach as they relate to urban freeway design.

SUMMARY

This book, though a little outdated, shows that the basic principals of CSS—the use of interdisciplinary teams, the integration of highway planning, designing for multiple modes of transportaion, and the inclusion of aesthetics—have been promoted by progressive engineers and urban planners for decades. CSS is not merely a fashionable approach to transportation problems but has substantial historic precedent. Planners and designers will benefit from reviewing the principles and concepts in this book.

KEY WORDS

Applicable Project Delivery Stages: Administration, Planning, Design, Construction

Applicable Transportation Professionals: Highway Engineers, Structural Engineers, Planners, Landscape Architects, Urban Designers

Applicable Transportation Modes: Vehicular, Bicycle, Pedestrian, Transit

Transportation Topics: Freeway Design, Highway Structures, Systems Analysis, City Planning, Land Use, Highway Planning, Roadway Alignment, Partnerships, Balance, Access Management, Road Surface, Process, Shoulders, Sidewalks, Travel Lanes, Flexibility, Coordination, Aesthetics, Crosswalks, Curbs, Bridges, Walls, Visual Quality