



U.S. Department
of Transportation

Federal Highway
Administration

FREEWAY MANAGEMENT HANDBOOK

FREEWAY MANAGEMENT CONCEPTS

COMMUNICATIONS

SURVEILLANCE

ECONOMIC
ANALYSIS

DECISION
PROCESS

CONTROL
CENTERS

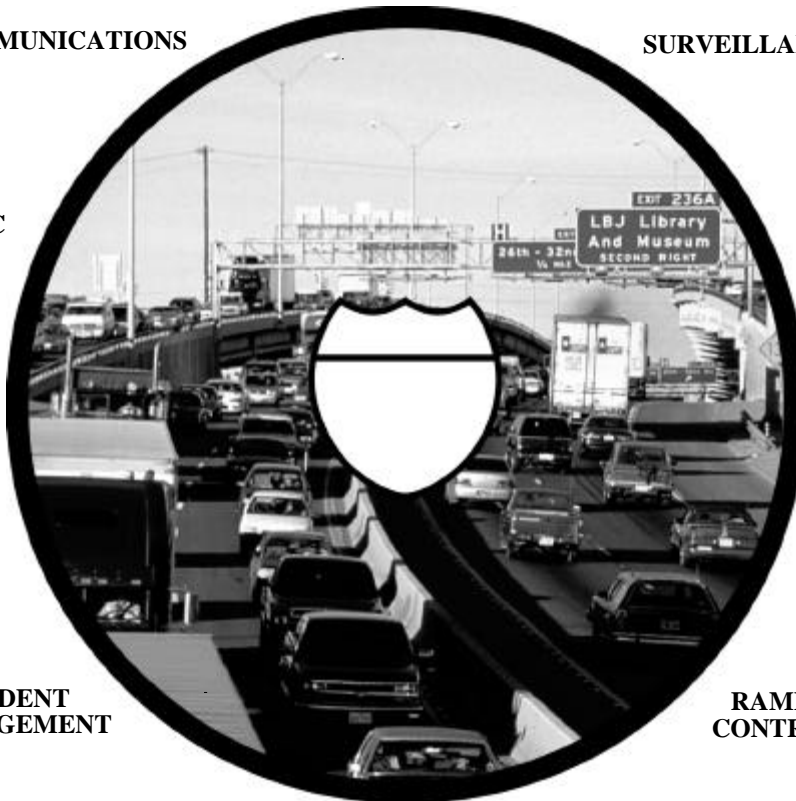
LANE USE
CONTROL

INCIDENT
MANAGEMENT

RAMP
CONTROL

INFORMATION
DISSEMINATION

HOV
CONCEPTS



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<p>Abstract:</p> <p>This handbook, 1997 <i>Freeway Management Handbook</i>, is an update of the 1983 <i>Freeway Management Handbook</i> and reflects the tremendous developments in computing and communications technology. It also reflects the importance of <i>Integrated</i> Transportation Management Systems and the development of the concept of Intelligent Transportation Systems (ITS). The handbook development began with a survey of current practice, including site visits and interviews, of ten Freeway Management Systems throughout the country. It was developed under the advice of a panel of freeway management practitioners' panel.</p> <p>The 1997 <i>Freeway Management Handbook</i> is organized in modular fashion with each module addressing a particular aspect or technology of the freeway management task. The modules are stand-alone treatments of particular areas of freeway management but are cross-referenced to reflect their interdependence. Each module is organized as follows:</p> <p>INTRODUCTION- Including Module Objective and Scope. DECISION PROCESS- Partners and Consensus Building, Establishing Goals and Objectives, Performance Criteria, Functional Requirements, System Architectures, Identification and Screening of Technologies, and Implementation. TECHNIQUES AND TECHNOLOGIES - Applications specific to the module. LESSONS LEARNED - Experiences and observations from operating systems. REFERENCES - Comprehensive list of references used in module preparation.</p> <p>Specific modules are as follows:</p> <table border="0"> <tr> <td>INTRODUCTION AND EXECUTIVE SUMMARY</td> <td>6. HOV CONCEPTS</td> </tr> <tr> <td>1. FREEWAY MANAGEMENT CONCEPTS</td> <td>7. INFORMATION DISSEMINATION</td> </tr> <tr> <td>2. DECISION PROCESS</td> <td>8. INCIDENT MANAGEMENT</td> </tr> <tr> <td>3. SURVEILLANCE</td> <td>9. COMMUNICATIONS</td> </tr> <tr> <td>4. LANE CONTROL</td> <td>10. CONTROL CENTERS</td> </tr> <tr> <td>5. RAMP CONTROL</td> <td>11. ECONOMIC ANALYSIS</td> </tr> </table>				INTRODUCTION AND EXECUTIVE SUMMARY	6. HOV CONCEPTS	1. FREEWAY MANAGEMENT CONCEPTS	7. INFORMATION DISSEMINATION	2. DECISION PROCESS	8. INCIDENT MANAGEMENT	3. SURVEILLANCE	9. COMMUNICATIONS	4. LANE CONTROL	10. CONTROL CENTERS	5. RAMP CONTROL	11. ECONOMIC ANALYSIS
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Practitioners' Panel

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Site Visit Facilitators

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- ***1979 Traffic Control Systems Handbook*** - Pinnell, Anderson, and Wilshire and Assoc.
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- ***1993 Communications Handbook for Traffic Control Systems*** - Dunn Engineering and Assoc.
- ***1996 Traffic Control Systems Handbook*** - Dunn Engineering and Assoc.

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