## SELECTED BIBLIOGRAPHY ON PARKING MANAGEMENT

bу

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(The opinions, findings, and conclusions expressed in this report are those of the authors and not necessarily those of the sponsoring agencies.)

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### ABSTRACT

Two hundred thirty-two references on parking management are listed in accordance with 16 subject areas to provide sources to supplement the study findings that are documented in a separate report.

### FOREWORD

The results of the research study entitled "Traffic Restraints: An Evaluation of Parking Controls" are reported in two documents. The primary findings and study method are described in the report "Evaluation of Parking Management Strategies for Urban Areas" by Martin R. Parker and Michael J. Demetsky, while a complete list of references by subject area is given in this report.

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There are many published documents relevant to the use, impacts, and problems with implementing parking management and support strategies. These documents have been categorized into the following subject areas to aid those who wish to obtain information beyond that provided in the primary report.

Section	Subject Area	Page
Α	Parking Studies	2
В	Bibliographies on Parking	6
C	Parking Management Programs	7
D	Parking and Mode Choice	9
E	Parking Pricing	11
F	Parking Strategies and Environmental Quality	12
G	Impact of Parking Strategies	14
Н	Fringe Parking	15
·I	Parking Management Planning	17
J	Methods of Evaluating Parking Strategies	18
K	Parking Models	19
L	Loading Terminals in Urban Areas	20
М	Urban Transportation Planning	21
N	Transportation Systems Management Strategies	22
0	Methods for Limiting Traffic	23
P	Methods for Improving Transit Service	26

## A. Parking Studies

- 1. Alexander, Laurence A., "The Downtown Parking System", Traffic Quarterly, Vol. 23, No. 2, Eno Foundation for Transportation, Westport, Connecticut, April 1969.
- Anniston Parking Authority and Downtown Action Corporation, "Short-Range Parking Needs: Analysis and Recommended Action Program for the City of Anniston, Alabama", Anniston, Alabama, February 13, 1975.
- 3. Automotive Safety Foundation, "Traffic Control and Roadway Elements Their Relationship to Highway Safety", Washington, D. C., 1963.
- 4. Burrage, Robert H., and Edward G. Mogren, "Parking", Eno Foundation for Highway Traffic Control, Saugatuck, Connecticut, 1957.
- 5. Central Missouri State University, "Parking Restrictions: Commuter Parking", The National Traffic Law News, Vol. 4, No. 11, Warrensburg, Missouri, November 1977.
- 6. Crabb, Clyde S., and Michael J. Weiner, "Parking Garages Complement Downtown Revitalization", Public Works, Vol. 109, No. 4, Public Works Journal Corporation, Ridgewood, New Jersey, April 1978.
- 7. DeLeuw, Cather & Company, "Downtown Honolulu Comprehensive Parking Study", Honolulu, Hawaii, August 1973.
- 8. District of Columbia Department of Transportation, "Improved Parking and Traffic Enforcement in the District of Columbia", Washington, D. C., April 1977.
- 9. Federal Highway Administration, "Utah's Carpool Parking Survey", Newsletter, No. 12, Offices of Research and Development, Washington, D. C., April 1977.
- 10. Glanville, John, "A Survey of Parking in European Cities", Traffic Engineering and Control, Vol. 12, No. 12, Printerhall Limited, London, England, April 1971.
- 11. Highway Research Board, "Highway Capacity Manual", Special Report 87, Washington, D. C. 1965.
- 12. Highway Research Board, "Parking Principles", Special Report 125, National Academy of Sciences, Washington, D. C., 1971.

- 13. Hitchock, S. T., "Influence of Population, Sales, and Employment on Parking", Highway Research Board, Proceedings of the 32nd Annual Meeting, Vol. 32, Washington, D. C., 1953.
- 14. Hoel, L. A., and E. S. Roszner, "The Pittsburgh Parking Strike", report prepared for the U. S. Department of Transportation, Transportation Research Institute, Carnegie-Mellon University, Pittsburg, Pennsylvania, December 1972.
- 15. Humphreys, Jack B., Paul C. Box, and T. Darcy Sullivan, "Safety Considerations in the Use of On-Street Parking", Transportation Research Record 722, Transportation Research Board, Washington, D. C., 1979.
- 16. Ihnat, George, "Cleveland Transit and Parking Operations", Highway Research Circular No. 91, Highway Research Board, Washington, D. C., January 1969.
- 17. Ilschner, Ed, Jr., "Operational Efficiency in On-Street Parking in Wichita Falls, Texas", <u>Technical Notes</u>, Vol. 3, No. 3, Institute of Transportation <u>Engineers</u>, Arlington, Virginia, October 1978.
- 18. ITE Committee 60, "Traffic Planning Considerations in Locating CBD Parking Facilities", <u>Traffic Engineering</u>, Institute of Traffic Engineers, Arlington, Virginia, June 1971.
- 19. Karkeet, Kenneth W., Jr., "Regional Parking Inventory and Analysis Part I, Supply and Costs", Southeast Michigan Council of Governments, Detroit, Michigan, March 1975.
- 20. Levin, David R., "Parking Facilities as Public Utilities", Highway Research Board, Proceedings of the 30th Annual Meeting, Vol. 30, Washington, D. C., 1950.
- 21. Mayer, Peter A., and Woodrow W. Rankin, One-way Streets and Parking, Chapter 10 of Traffic Control and Roadway Elements—Their Relationship to Highway Safety, Highway Users Federation for Safety and Mobility, Washington, D. C., 1971.
- 22. Pignataro, Louis J., <u>Traffic Engineering Theory and Practice</u>—
  Chapter 16 Parking Studies and Chapter 27 Curb-Parking Controls,
  Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1973.
- 23. Purdue University, "Conference on Downtown Parking", Proceedings, Lafayette, Indiana, September 3, 1958.
- 24. Ralph Andersen and Associates, and D. Jackson Faustman, "Parking Needs and Financing Alternatives: City of Coronado 1976", Coronado, California, 1976.

- 25. Rankin, Woodrow W., <u>Parking</u>, Chapter 10, Traffic Control and Roadway Elements Their Relationship to Highway Safety. Revised, Highway Users Federation for Safety and Mobility, Washington, D. C., 1971.
- 26. San Diego Metropolitan Area Transportation Study, "Downtown Parking Studies 1956-58", San Diego, California, July 1958.
- 27. Schoppert, David W., "Parking Studies by Abbreviated Methods", Proceedings, Thirty-six Annual Meeting, Highway Research Board, Washington, D. C., 1957.
- 28. Shoup, Donald C., and Don H. Pickrell, "Problems with Parking Requirements in Zoning Ordinances", <u>Traffic Quarterly</u>, Eno Foundation for Transportation, Westport, Connecticut, October 1978.
- 29. Stout, R. W., "Trends in CBD Parking Characteristics: 1956 to 1968", <u>Highway Research Record 317</u>, Highway Research Board, Washington, D. C., 1970.
- 30. Traffic Engineering Department, "Parking Meter and Curb Usage Study", Fort Worth, Texas, January 1975.
- 31. Trampln Company, "Summary: Bellevue CBD Parking Study", City of Bellevue, Washington, April 1976.
- 32. Transportation Research Board, "Car-Pool Parking Meters", Paratransit, published by the Committee on Urban Transport Service Innovations, Washington, D. C., February 1978.
- 33. Transportation Research Board, "Determining the Effect of Residential Parking Permits", Newsline, Vol. 5, No. 1, Washington, D. C., December/January 1979.
- 34. Voorhees, Alan M., "A Parking Study Designed for Downtown Planning", Highway Research Board, <u>Proceedings</u> of the 41st Annual Meeting, Vol. 41, Washington, D. C., 1962.
- 35. Wallace Champagne Associates, "Central Business District Parking Study", Albany, New York, May 1975.
- 36. Weant, Robert A., "Parking Garage Planning and Operation", Eno Foundation for Transportation, Inc., Westport, Connecticut, 1978.
- 37. Wilbur Smith and Associates, "Administration and Management of the Parking Authority of Jersey City, New Jersey", Jersey City, New Jersey, January 1974.

- 38. Wilbur Smith and Associates, "Summary Report: An Access Oriented Parking Strategy for the Boston Metropolitan Area", report prepared for the Massachusetts Department of Public Works, Boston, Massachusetts, July 1974.
- 39. Wilbur Smith and Associates, "Parking in the City Center", prepared under commission from the Automobile Manufacturers Association, New Haven, Connecticut, May 1965.
- 40. Witheford, David K., and George E. Kanaan, "Zoning, Parking, and Traffic", Eno Foundation for Transportation, Saugatuck, Connecticut, 1972.

- B. Bibliographies on Parking
- 41. Highway Research Information Service, "Parking Controls to Reduce Air Pollution and Congestion in Urban Areas", National Academy of Sciences, Washington, D. C., November 25, 1975.
- 42. Highway Research Information Service, "Parking Management Techniques", National Academy of Sciences, Washington, D. C., March 9, 1977.
- 43. Kessler, Mary Z., "Automobile Parking: A Selected List of References", Exchange Bibliography 228, Council of Planning Librarians, Monticello, Illinois, October 1971.
- 44. Ramm, Dorothy V., "Traffic Restraint: A Bibliography", Transportation Center Library, Northwestern University, Evanston, Illinois, February 1974.
- 45. Transportation Research Board, "Parking: Selected References 1970", Bibliography 54, National Academy of Sciences, Washington, D. C., 1972.

- C. Parking Management Programs
- 46. Bruton, M. J., "Parking Policy as an Instrument of Traffic Restraint", The Journal of the Institution of Highway Engineers, London, England, January 1973.
- 47. Bureau of Traffic Engineering, "Downtown Parking and Circulation Policy", Adopted by the City Council, Portland, Oregon, February 26, 1975.
- 48. City Planning Commission, "Palo Alto Comprehansive Plan 1977-1990", Palo Alto, California, November 1976.
- 49. Donahy, Barbara, "Why Is This Bus System So Popular?", <u>Transportation</u>, <u>portation USA</u>, Vol. 3, No. 2, U. S. Department of Transportation, Washington, D. C., Winter 1977.
- 50. Demetsky, Michael J., "Working Plan Traffic Restraint: An Evaluation of Parking Controls", VHTRC 76-WP2, Virginia Highway and Transportation Research Council, Charlottesville, Virginia, October 1975.
- 51. Department of Transportation Planning, "Parking Management Policies and Auto Control Zones", Metropolitan Washington Council of Governments, Washington, D. C., February 1975.
- 52. East-West Gateway Coordinating Council, "Parking Management Study", St. Louis Council of Governments, St. Louis, Missouri, May 1976.
- 53. Ellis, Raymond H., "Parking Management Strategies", Special Report 172, Transportation Research Board, Washington, D. C., 1977.
- 54. Gillen, David W., "Parking Policy, Parking Location Decisions and the Distribution of Congestion", Transportation, Vol. 7, No. 1, Elsevier Scientific Publishing Company, Amsterdam, Netherlands, March 1978.
- Jackson, Ralph E., "Parking Policy as an Integral Part of Urban Development Objectives", <u>Highway Research Record No. 474</u>, Highway Research Board, Washington, D. C., 1973.
- 56. Keyani, Barbara I., and Evelyn S. Putnam, "Transportation Systems Management: State of the Art, Section 4 Parking Management", Urban Mass Transportation Administration, U. S. Department of Transportation, Washington, D. C., September 1976.
- 57. Los Angeles Parking Management Program, "Basic Aspects of the Parking Management Park-and-Ride Proposal", Draft Copy, Los Angeles, California, April 1977.

- 58. Lueck, Curtis C., and Edward A. Beimbarn, "Empirical Analysis of the Interdependence of Parking Restrictions and Modal Use", Transportation Research Record 722, Transportation Research Board, Washington, D. C., 1979.
- 59. May, A. D., "Parking Control: Experience and Problems in London", Traffic Engineering and Control, Vol. 16, No. 5, Printerhall Limited, London, England, May 1975.
- 60. Parker, Martin R., Jr., "An Evaluation of Parking Management Strategies for Urban Areas", Master's Thesis, University of Virginia, School of Engineering and Applied Science, Charlottes-ville, Virginia, May 1977.
- 61. Peers, John B., and Oreste M. Bevilacqua, "San Francisco Bay Area Parking Management Plan", Transportation Engineering Journal, Vol. 102, No. TE4, American Society of Civil Engineers, New York, New York, November 1976.
- 62. Public Technology, Inc., "Parking Management", Transportation Task Force of the Urban Consortium for Technology Initiatives, Washington, D. C., July 1978.
- 63. Rappaport, Ann B., "Designing a Parking Management Program", Transportation Research Record 644, Transportation Research Board, Washington, D. C., 1977.
- 64. San Francisco Department of Public Works and the Department of City Planning, "Parking in San Francisco: A Study of Policies and Programs for Parking Management", San Francisco, California, December 1975.
- 65. Schoon, John C., and Hubert S. Levinson, "New Concepts in Urban Parking", <u>Transportation Engineering Journal</u>, Vol. 100, No. TE3, American Society of Civil Engineers, New York, New York, August 1974.
- 66. Somerfeld, Warren O., Michael Hoffman, and Thomas Favour, "Case Studies: Madison, Wisconsin", Special Report 172, Transportation Research Board, Washington, D. C., 1977.
- 67. Wilbur Smith and Associates, "An Access Oriented Parking Strategy for the Boston Metropolitan Area", prepared for the Massachusetts Department of Public Works, Boston, Massachusetts, July 1974.

- D. Parking and Mode Choice
- 68. Bock, Frederick C., "Factors Influencing Modal Trip Assignment", National Cooperative Highway Research Program Report 57, Highway Research Board, Washington, D. C., 1968.
- Behnom, Jahanbakhsh, and Robert E. Beglinger, "Effect of Energy Shortage and Land Use on Auto Occupancy", <u>Transportation Engineering Journal</u>, Vol. 102, No. TE2, American Society of Civil Engineers, New York, New York, May 1976.
- 70. Dueker, Kenneth J., Brent O. Bair, and Irwin P. Levin, "Ride Sharing: Psychological Factors", <u>Transportation Engineering Journal</u>, Vol. 103, No. TE6, American Society of Civil Engineers, New York, New York, November 1977.
- 71. Gillen, David W., "Parking Policy, Parking Location Decisions and the Distribution of Congestion", <u>Transportation</u>, Vol. 7, No. 1, Elsevier Scientific Publishing Company, Amsterdam, Netherlands, March 1978.
- 72. Hoey, William F., and Herbert S. Levinson, "Attitude Surveys, Transit Planning, and Automobile-Use Constraints", Transportation Research Record 625, Transportation Research Board, Washington, D. C., 1977.
- 73. Johnson, Michael A., "Attribute Importance in Multiattribute Transportation Decisions", Transportation Research Record 673, Transportation Research Board, Washington, D. C., 1978.
- 74. Lambe, Thomas A., "The Choice of Parking Location by Workers in the Central Business District", <u>Traffic Quarterly</u>, Vol. 23, No. 3, Eno Foundation for Transportation, Westport, Connecticut, July 1969.
- 75. Margolin, Joseph B., Marion R. Misch, and Ricardo D. Dobson, "Incentives and Disincentives to Ride-Sharing Behavior: A Progress Report", Transportation Research Record No. 592, Transportation Research Board, Washington, D. C., 1976.
- 76. Pratt, Richard H., Neil J. Pedersen, and Joseph J. Mather, "Travel Response to Transportation System Changes", prepared for U. S. Department of Transportation, Washington, D. C., February 1977.
- 77. Weiss, David L., "Citizen Opinions on Public Transportation Roles, Service, and Financing", <u>Transportation Research Record No. 590</u>, Transportation Research Board, Washington, D. C., 1976.

78. Williams, Martin, "Factors Affecting Mode Choice Decisions in Urban Travel", <u>Transportation Research</u>, Vol. 12, No. 2, A. Weaton & Co., Ltd., London, England, April 1978.

- E. Parking Pricing
- 79. Brown, S. A., and T. A. Lambe, "Parking Prices in the Central Business District", <u>Socio-Economic Planning Science</u>, Vol. 6, Pergamon Press, Great Britain, 1972.
- 80. Frayne, Anthony, "Effectiveness of Pricing in Restraining City Traffic", Special Report 168, Transportation Research Board, Washington, D. C., 1976.
- 81. Gillen, David W., "Effects of Parking Costs on Urban Transport Modal Choice", Transportation Research Record 637, Transportation Research Board, Washington, D. C., 1977.
- 82. Gillen, David W., "Effects of Changes in Parking Prices and Parking Restrictions on Urban Transport Demands and Congestion Levels", Research Report No. 25, University of Toronto-York University, Toronto, Ontario, Canada, February 1975.
- 83. Kulash, Damian J., "Can Parking Taxes Help?", <u>Transportation</u>
  Research Record 528, Transportation Research Board, Washington,
  D. C., 1974.
- 84. Kulash, Damian, "Parking Taxes as Roadway Prices: A Case Study of the San Francisco Experience", <u>Transportation Research Record</u> 494, Transportation Research Board, Washington, D. C., 1974.
- 85. Kulash, Damian, "Parking Taxes for Congestion Relief: A Survey of Related Experience", The Urban Institute, Washington, D. C., March 1974.
- 86. Levin, David R., "Parking Meters: A Study of Their Number, Revenue, and Use", <u>Bulletin 81</u>, Highway Research Board, Washington, D. C., 1954.
- 87. Okechuku, C., and T. A. Lambe, "Parking Patterns and Prices in the CBD", Transportation Research Record 514, Transportation Research Board, Washington, D. C., 1974.
- 88. Rhudy, Ralph H., "Free Parking in Richmond's CBD", Compendium of Technical Papers, Institute of Transportation Engineers, 48th Annual Meeting, Atlanta, Georgia, August 1978.
- 89. Transportation Research Board, "Parking Revenue Control", Transportation Research Circular 184, Washington, D. C., June 1977.

- F. Parking Strategies and Environmental Quality
- 90. Bellomo, Salvatore, "Providing for Air Quality and Urban Mobility", Highway Research Record 465, Highway Research Board, Washington, D. C., 1973.
- 91. Bennett, Elizabeth, Greig Harvey, Marvin Manheim, John Suhrbier, Mabelle Bessey, and John Bain, "The Transportation Control Planning Process: Findings and Recommendations for Improved Decision Making Phase I", Center for Transportation Studies, Massachusetts Institute of Technology, Cambridge, Massachusetts, March 1975.
- 92. Dern, J., J. Cole, B. Fallon, J. Heller, S. Hickey, J. Holmes, and R. Sanson, "Parking Management Strategies for Reducing Automobile Emissions", prepared for Environmental Protection Agency, Washington, D. C., September 1976.
- 93. Environmental Protection Agency, "Parking Management Regulations", Federal Register, Vol. 39, No. 164, U. S. Government Printing Office, Washington, D. C., August 1974.
- 94. Environmental Protection Agency, "Indefinite Suspension of Parking Management Regulations", Federal Register, Vol. 40, U. S. Government Printing Office, Washington, D. C., July 15, 1975.
- 95. Hunnicutt, James M., "Parking and the Environment: Where Are We Now?", <u>Traffic Engineering</u>, Vol. 45, No. 11, Institute of Transportation Engineers, Arlington, Virginia, November 1975.
- 96. Ingram, Gregory K., Gary R. Fauth, and Eugene Kroch, "Cost and Effectiveness of Emission Reduction and Transportation Control Policies", Revista International di Economia dei Transport, Vol. 2, No. 1, Rome, Italy, April 1975.
- 97. Keefer, Louis E., "Transportation Control Plans: The Next Round", ITE Journal, Vol. 48, No. 6, Institute of Transportation Engineers, Arlington, Virginia, June 1978.
- 98. Keefer, Louis E., "The Traffic Engineer, the Clean Air Act and Energy", ITE Journal, Vol. 49, No. 12, Institute of Transportation Engineers, Washington, D. C., December 1979.
- 99. Maeder, Edward C., address given at the Workshop on Parking Management Regulations of the Environmental Protection Agency, Washington, D. C., May 1, 1975.

- 100. Obinani, Felix C., "Air Quality Control Strategies: The Public Viewpoint", <u>Traffic Quarterly</u>, Eno Foundation for Transportation, Inc., October 1977.
- 101. Peers, John B., and O. Michael Beviloqua, "Parking Regulations and Their Impact on Air Pollution", <u>Tech Notes</u>, Vol. 3, No. 7, Alan M. Voorhees and Associates, McLean, Virginia, April 15, 1976.
- 102. Revis, Joseph S., "Short-Term Transportation Control Strategies for Air Pollution Control", <u>Highway Research Record 465</u>, Highway Research Board, Washington, D. C., 1973.
- 103. Seltz-Petrash, Ann, "Transportation Planners Join Battle for Cleaner Air", Civil Engineering, Vol. 49, No. 11, America Society of Civil Engineers, New York, New York, November 1979.
- 104. Suhrbier, John H., Terry J. Atherton, and Elizabeth A. Deakin, "Improved Air Quality Through Transportation System Management", Transportation Research Record 722, Transportation Research Board, Washington, D. C., 1979.
- 105. Watkins, Robert O., James B. Borden, and Fred F. Kirchner, "Can Vehicle Travel be Reduced 20 Percent in the South Coast Air Basin?", <u>Transportation Research Record 492</u>, Transportation Research Board, Washington, D. C., 1974.

- G. Impact of Parking Strategies
- 106. Bentfeld, G., "Effect of Parking Policies on Traffic Volumes", Traffic Engineering and Control, Vol. 12, No. 7, Printerhall Limited, London, England, November 1970.
- 107. Crabb, Clyde S., and Michael J. Weiner, "Parking Garages Complement Downtown Revitalization", <u>Public Works</u>, Vol. 109, No. 4, Public Works Journal Corporation, Ridgewood, New Jersey, April 1978.
- DiRenzo, John F., "Travel and Emissions Impacts of Transportation Control Measures", Transportation Research Record 714, Transportation Research Board, Washington, D. C., 1979.
- 109. Goldstein, Gerald S., and Leon N. Moses, "Transport Controls, Travel Costs, and Urban Spatial Structure", <u>Public Policy</u>, Vol. 23, No. 3, Summer 1975.
- 110. Harrison, A. H., "Car Parking Studies in Coventry", Traffic Engineering and Control, Vol. 11, No. 12, Printerhall Limited, London, England, April 1970.
- 111. Hirst, Eric, "Transportation Energy Conservation Policies", Science, Vol. 192, No. 4234, American Association for Advancement of Sciences, Washington, D. C., April 1976.
- 112. May, A. D., "Traffic Management and Restraint by Parking Control in Greater London", <u>Highway Research Record No. 474</u>, Highway Research Board, Washington, D. C., 1973.
- 113. May, A. D., "Parking Control: Experience and Problems in London", <u>Traffic Engineering and Control</u>, Vol. 16, No. 5, Printerhall Limited, London, England, May 1975.
- 114. O'Cinneide, D., "Parking Control by the Park System in Cork", Traffic Engineering and Control, Vol. 18, No. 4, Printerhall Limited, London, England, April 1977.
- 115. Remak, Roberta, and Sandra Rosenbloom, "Peak-Period Traffic Congestion Volume 1", prepared for the National Cooperative Highway Research Program, Washington, D. C., December 1974.
- 116. Remak, Roberta, and Sandra Rosenbloom, "Peak-Period Traffic Congestion: Options for Current Programs", NCHRP Report 169, Transportation Research Board, Washington, D. C., 1976.
- 117. U. S. Department of Transportation, "Energy Conservation in Transportation", Research and Special Programs Administration, Washington, D. C., January 1979.
- 118. Valdes, Antonio, "Public Parking Policy in Madrid", Traffic Engineering and Control, Vol. 11, No. 12, Printerhall Limited, London, England, April 1970.

## H. Fringe Parking

- 119. Abdus-Samad, U. R., "Change of Mode Parking Facilities", Purdue University, Lafayette, Indiana, 1972.
- 120. Allen, Douglas A., "Design Guidelines for Park-and-Ride Lots", Compendium of Technical Papers, presented at the 49th Annual Meeting, Institute of Transportation Engineers, Toronto, Canada, September 1979.
- 121. Brown, Gerald R., "Influence of Park-and-Ride Factors in Modal Shift Planning", <u>Transportation Research Record 557</u>, Transportation Research Board, Washington, D. C., 1975.
- 122. Demetsky, Michael J., "Analysis of Express Bus-Fringe Parking Operations", VHRC 73-R23, Virginia Highway Research Council, Charlottesville, Virginia, November 1973.
- 123. Demetsky, Michael J., "Applications Manual for Logit Models of Express Bus-Fringe Parking Choices", VHTRC 77-R22, Virginia Highway and Transportation Research Council, Charlottesville, Virginia, September 1976.
- Demetsky, M. J., R. N. Robertson, and Robert E. Jalette, "Evaluation of the Greenwood Drive Fringe Parking Facility", VHTRC 78-R45, Virginia Highway and Transportation Research Council, Charlottesville, Virginia, March 1978.
- 125. Ellis, Raymond H., John C. Bennett, and Paul R. Rassam, "Considerations in the Design of Fringe Parking Facilities", Highway Research Record No. 474, Highway Research Board, Washington, D. C., 1973.
- 126. Kerchowskas, Kathy, and Ashish K. Sen, "The Park-and-Ride Planning Manual", University of Illinois at Chicago Circle, Chicago, Illinois, November 1977.
- 127. Levinson, Herbert S., "Planning Transit Facility Parking for the Boston Metropolitan Area", <u>Transportation Research Record</u> 601, Transportation Research Board, Washington, D. C., 1976.
- 128. Miller, Gerald K., and James T. McQueen, "Park-and-Ride in the Shirley Highway Corridor", <u>Transportation Research Record 606</u>, Transportation Research Board, Washington, D. C., 1976.
- 129. Mufti, R. K., L. S. Golfin, and C. D. Dougherty, "Procedure for Estimating Demand for Regional Fringe Parking Facilities", <u>Transportation Research Record 644</u>, Transportation Research Board, Washington, D. C., 1977.

130. Wester, Kenneth W., and Michael J. Demetsky, "TSM Planning for Fringe Parking Transit", Transportation Engineering Journal, Vol. 105, No. TE3, American Society of Civil Engineers, New York, New York, May 1979.

- I. Parking Management Planning
- 131. Alexander, Laurence A., "The Downtown Parking System", <u>Traffic Quarterly</u>, Vol. 23, No. 2, Eno Foundation for <u>Transportation</u>, Westport, Connecticut, April 1969.
- 132. Demetsky, Michael J., and Martin R. Parker, Jr., "The Role of Parking in Transportation Systems Management", paper presented at the 57th annual meeting of the Transportation Research Board, Washington, D. C., January 1978.
- 133. Dern, J., J. Cole, B. Fallon, J. Heller, S. Hickey, J. Holmes, and R. Sanson, "Parking Management Strategies for Reducing Automobile Emissions", prepared for Environmental Protection Agency, Washington, D. C., September 1976.
- 134. Federal Highway Administration and Urban Mass Transportation Administration, "Transportation Improvement Program", <u>Federal Register</u>, Vol. 40, No. 181, U. S. Department of Transportation, Washington, D. C., September 17, 1975.
- 135. Jackson, Ralph E., "Parking Policy as an Integral Part of Urban Development Objectives", Highway Research Record 474, Highway Research Board, Washington, D. C., 1973.
- 136. Rappaport, Ann B., "Designing a Parking Management Program", <u>Transportation Research Record 644</u>, Transportation Research Board, Washington, D. C., 1977.
- 137. Schoon, John G., and Herbert S. Levinson, "New Concepts in Urban Parking", <u>Transportation Engineering Journal</u>, Vol. 100, No. TE3, American Society of Civil Engineers, New York, New York, August 1974.
- 138. Schulman, Lawrence L., "Parking as an Element Within the Comprehensive Transportation Planning Process", Public Roads, Vol. 35, No. 1, U. S. Department of Transportation, Federal Highway Administration, Washington, D. C., April 1968.
- 139. Weant, Robert A., "Parking Garage Planning and Operation", Eno Foundation for Transportation, Inc., Columbia University Press, New York, New York, 1978.

- J. Methods of Evaluating Parking Strategies
- 140. Ellis, Raymond H., and Paul R. Rassam, "Structuring a Systems Analysis of Parking", <u>Highway Research Record 317</u>, Highway Research Board, Washington, D. C., 1970.
- 141. Holland, Edward P., "Approaches for Evaluating Alternative Methods of Restraint", Transportation Research Record 494, Transportation Research Board, Washington, D. C., 1974.
- 142. Institute of Transportation Engineers, "Manual of Traffic Engineering Studies", Fourth Edition, Arlington, Virginia, 1976.
- 143. Knoflacher, H., "A Method of Verifying the Effectiveness of Limited Parking Zones", Traffic Engineering and Control, Vol. 19, No. 2, Printerhall Limited, London, England, February 1978.
- Nie, Norman H., Dale H. Bent, and C. H. Hull, <u>Statistical</u>
  Package for the Social Sciences, McGraw-Hill Book Company,
  New York, New York, 1970.
- Parker, G. Brian, "A Method of Assessment of the Effects of Parking Policy on Traffic Movement", Traffic Engineering and Control, Printerhall Limited, London, England, May 1973.
- 146. Silence, Steiner M., "Procedures for Measuring the Activity Level and the Parking Demand of the CBD", <u>Highway Research Record 474</u>, Highway Research Board, Washington, D. C., 1973.
- 147. Sosslau, Arthur B., Amin B. Hassam, Maurice M. Carter, and George V. Wickstram, "Quick-Response Urban Travel Estimation Techniques and Transferable Parameters: User's Guide", National Cooperative Highway Research Program Report 187, Transportation Research Board, Washington, D. C., 1978.
- 148. Thomas, Edwin N., and Joseph L. Schofer, "Strategies for the Evaluation of Alternative Transportation Plans", National Cooperative Highway Research Program Report 96, Highway Research Board, Washington, D. C., 1970.

## K. Parking Models

- 149. Austin, Terence W., "Allocation of Parking Demand in a CBD", Highway Research Record 444, Highway Research Board, Washington, D. C., 1973.
- 150. Bates, John W., "A Gravity Allocation Model for Parking Demand", Highway Research Record 395, Highway Research Board, Washington, D. C., 1972.
- 151. Bennett, John C., Raymond H. Ellis, and Paul R. Rassom, "A Guide to Parking Systems Analysis", report prepared by Peat, Marwick, Mitchell and Co. for the Federal Highway Administration, Washington, D. C., October 1972.
- 152. Ellis, Raymond H., and Paul R. Rassam, "Structuring a Systems Analysis of Parking", <u>Highway Research Record No. 317</u>, Highway Research Board, Washington, D. C., 1970.
- 153. Gillen, David W., "Effects of Parking Costs on Urban Transport Modal Choice", Transportation Research Record 637, Transportation Research Board, Washington, D. C., 1977.
- 154. Goyal, S. K., "Two Models for Allocating Car Parking Spaces",

  Traffic Engineering and Control, Vol. 19, No. 2, Printerhall
  Limited, London, England, February 1978.
- 155. Kanafani, Adib K., "Location Model for Parking Facilities", <u>Transportation Engineering Journal</u>, Vol. 98, No. TEl, American Society of Civil Engineers, New York, New York, February 1972.
- 156. Mullen, P., and G. P. Lawson, "Low-Budget Model Split Analysis: An Application of Free Fares and Parking Restraint Policy", <u>Traffic Engineering and Control</u>, Vol. 17, No. 5, Printerhall Limited, London, England, May 1976.
- 157. Schulman, Lawrence L., and Robert W. Stout, "A Parking Study Through the Use of Origin-Destination Data", Highway Research Record No. 317, Highway Research Board, Washington, D. C., 1970.
- 158. Walker, E. L., Jr., and John J. Cummings, "Forecasting Impacts of Transit Improvements and Fringe Parking Developments on Downtown Parking Needs", <u>Highway Research Record 395</u>, Highway Research Board, Washington, D. C., 1972.
- 159. Whitlock, E. M., "Use of Linear Programming to Evaluate Alternative Parking Sites", Highway Research Record 444, Highway Research Board, Washington, D. C., 1973.

- L. Loading Terminals in Urban Areas
- 160. Christiansen, Dennis, "Off-Street Truck-Loading Facilities in Downtown Areas: Requirements and Design", <u>Transportation Research Record 668</u>, <u>Transportation Research Board</u>, <u>Washington</u>, D. C., 1978.
- 161. Crain, John, Larry Glazer, Tom Higgins, David Koffman, and Dale Ross, "Actions to Reduce Vehicle Use in Congested Areas", Special Report 172, Transportation Research Board, Washington, D. C., 1977.
- 162. Goettee, David, and Ernest R. Cadotte, "Freight Movement: A Crucial Component of Transportation System Management", Special Report 172, Transportation Research Board, Washington, D. C., 1977.
- 163. Habib, Philip A., and Kenneth W. Crowley, "Space Allocation Guidelines for Off-Street Loading Facilities", Transportation Research Record 668, Transportation Research Board, Washington D. C., 1978.

- M. Urban Transportation Planning
- Byer, Philip H., and David Saunders, "Choosing Objectives in Transportation Planning", Transportation Engineering Journal, American Society of Civil Engineers, Vol. 105, No. TEl, New York, New York, January 1979.
- 165. Federal Highway Administration and Urban Mass Transportation Administration, "Transportation Improvement Program", Federal Register, Vol. 40, No. 181, U. S. Government Printing Office, Washington, D. C., September 17, 1975.
- 166. Highway Research Board, "Citizen Participation in Transportation Planning", Special Report 142, Washington, D. C., 1973.
- 167. Hutchinson, B. G., <u>Principles of Urban Transport Systems</u>
  Planning, Scripta Book Company, Washington, D. C., 1974.
- 168. JHK & Associates and Peat, Marwick, Mitchell & Co., "Measures of Effectiveness for Multimodal Urban Traffic Management", Working Papers prepared for the Federal Highway Administration, Washington, D.C., June 1978.
- 169. Kay, Jack L., "Measures of Effectiveness", Proceedings of the International Symposium on Traffic Control Systems, Vol. 1, Berkeley, California, August 1979.
- 170. Levinson, Herbert S., "Urban Transportation Programs: Myths and Realities", <u>ITE Journal</u>, Vol. 49, No. 11, Institute of Transportation Engineers, Arlington, Virginia, November 1979.
- 171. Lichteheld, John, and James Etmanczyk, "Framework for Involving Local Citizens in a Small Urban Area's Transportation Planning Process", Transportation Research Record 731, Transportation Research Board, Washington, D. C., 1979.
- 172. Meyer, J. R., J. F. Kain, and M. Wohl, The Urban Transportation Problem, Harvard University Press, Cambridge, Massachusetts, 1965.
- 173. Technical Committee 6F-14, "The Impact of Low/No Growth Policy on Transportation", <u>ITE Journal</u>, Vol. 49, No. 11, Institute of Transportation Engineers, Arlington, Virginia, November 1979.

- N. Transportation System Management Strategies
- 174. Berg, William D., and Philip J. Tarnoff, "Research in Urban Traffic Management", <u>Transportation Research Record</u> 603, Transportation Research Board, Washington, D. C., 1976.
- 175. EcoPlan, "Transportation Systems Management in Delft: A Case Study", Transport Research Group, Draft Report, Paris, France, February 1978.
- 176. EcoPlan, "Transportation Systems Management in London: A Case Study", Transport Research Group, Draft Report, Paris, France, December 1977.
- 177. EcoPlan, "Transportation Systems Management in Milton Keynes: A Case Study", Transport Research Group, Draft Report, Paris, France, February 1978.
- 178. Federal Highway Administration and Urban Mass Transportation Administration, "Transportation Improvement Program", Federal Register, Vol. 40, No. 181, U. S. Government Printing Office, Washington, D. C., September 17, 1975.
- 179. Keyani, Barbara I., and Evelyn S. Putman, "Transportation System Management: State of the Art", report prepared for the Urban Mass Transportation Administration, Washington, D. C., September 1976.
- 180. May, Adolf D. and Dick Westland, "Transportation System Management: TSM-Type Projects in Six Selected European Countries", Traffic Engineering and Control, Printerhall Limited, London, England, February 1979.
- 181. Meyer, Michael, "A Review of Transportation System Management Plans Submitted in Response to New Federal Policy", Working Paper 76-3, Center for Transportation Studies, Massachusetts Institute of Technology, Cambridge, Massachusetts, October 1976.
- 182. Remak, Roberta, and Sandra Rosenbloom, "Peak-Period Traffic Congestion: Option for Current Programs", National Cooperative Highway Research Program Report 169, Transportation Research Board, Washington, D. C., 1976.
- 183. Remak, R., and S. Rosenbloom, "Implementing Packages of Congestion-Reducing Techniques: Strategies for Dealing with Institutional Problems of Cooperative Programs", National Cooperative Highway Research Program Report 205, Transportation Research Board, Washington, D. C., June 1979.
- 184. Transportation Research Board, "Increase in Public Transit Keyed to Revival of City Centers", Transportation Research News, No. 67, Washington, D. C., November-December 1976.

- 0. Methods for Limiting Traffic
- 185. Bone, R. A., M. Wrigley, and O. Pike, "Potential Impact of Traffic Restraint Measures on Central Area Land Uses", Colin Buchanan and Partners, London, England, 1974.
- 186. Cooper, B. R., and R. E. Layfield, "Nottingham Zones and Collar Study Results of the After Surveys", <u>Transport and Road Research Laboratory Report 365</u>, Department of Transport, Crowthorne, Berkshire, England, 1978.
- 187. Elmberg, Curt M., "Compartmentation as a Tool to Reduce Traffic Congestion and Improve the Environment", Gothenburg Transit Authority, Gothenburg, Sweden, August 1974.
- 188. Environmental Protection Agency, "Transportation Controls to Reduce Automobile Use and Improve Air Quality in Cities", Office of Policy Analysis, Washington, D. C., November 1974.
- 189. Gamble, Hays B., "Automobile Restricted Zones", <u>Transportation</u>
  Research Record 634, Transportation Research Board, Washington,
  D. C., 1977.
- 190. Garofalo, Steve B., and Robert H. Wortmen, "Summary of the Current Status of Knowledge on Traffic Restraint", University of Connecticut, Civil Engineering Department, Storrs, Connecticut, July 1976.
- 191. Holland, Edward P., "Approaches for Evaluating Alternative Methods of Restraint", <u>Transportation Research Record 494</u>, Transportation Research Board, Washington, D. C., 1974.
- 192. Holland, Edward P., and Peter L. Watson, "Traffic Restraint in Singapore", Traffic Engineering and Control, Vol. 19, No. 1, Printerhall Limited, London, England, January 1978.
- 193. Horowitz, Joel L., "Pricing the Use of the Automobile to Achieve Environmental and Energy Goals", Special Report 181, Transportation Research Board, Washington, D. C., 1978.
- 194. Hotta, Minoru, "Implementing Comprehensive Traffic Controls in Yamagata City", The Wheel Extended, Winter 1975-76.
- 195. Ingram, Gregory K., "Reductions in Automobile Use in Four Major Cities as a Result of Car Pooling and Improved Transit", <u>Transportation Research Record 650</u>, Transportation Research Board, Washington, D. C., 1977.
- 196. Kuhnemann, Jorg, and Robert Witherspoon, "Traffic-Free Zones in German Cities", Organisation for Economic Co-operation and Development, Environment Directorate, Paris, France, August 1972.

- 197. Kulash, Damian, "Congestion Pricing: A Research Summary", The Urban Institute, Washington, D. C., July 1974.
- 198. Lane, R., and D. H. Hodgkinson, "A Permit System for Traffic Restraint", Traffic Engineering and Control, Vol. 17, No. 3, Printerhall Limited, London, England, March 1976.
- 199. May, Anthony D., "The Restraint of Vehicular Traffic", <u>Traffic Engineering</u>, Vol. 46, No. 2, Institute of Transportation Engineers, Arlington, Virginia, February 1976.
- 200. May, A. D., "Supplementary Licensing: An Evaluation", <u>Traffic Engineering and Control</u>, Vol. 16, No. 4, Printerhall Limited, London, England, April 1975.
- 201. Maycock, G., "Implementation of Traffic Restraint", RRL Report LR4-22, Road Research Laboratory, Crowthorne, Berkshire, England, 1972.
- 202. Maximan, Robert J., and Darwin G. Stuart, "Sensitivity Analysis of Selected Transportation Control Strategies", Transportation Research Record 677, Transportation Research Board, Washington, D. C., 1978.
- 203. McDonald, J. W., "Transportation and/or Personal Freedom", <u>Tech-nical Notes</u>, Vol. 2, No. 1, Institute of Transportation Engineers, Arlington, Virginia, March 1977.
- 204. Mikdowsky, W. T., W. L. Stanley, and B. F. Goeller, "Effectiveness of New-Term Tactics for Reducing Vehicle Miles Traveled: A Case Study of the Los Angeles Region", Rand Cooperation, Santa Monica, California, December 1974.
- 205. Moseley, G. W., "Implementation and Enforcement of Restraints", David and Charles Limited, Devonshire, England, 1974.
- 206. Orksi, C. Kenneth, "Car-Free Zones and Traffic Restraints: Tools of Environmental Management", <u>Highway Research Record 406</u>, Highway Research Board, Washington, D. C., 1972.
- 207. Overway, Marvin L., F. L. Spielberg, and W. S. Herald, "Issues in Implementation of Auto Restricted Zones", <u>Tech Notes</u>, Vol. 3, No. 9, Institute of Transportation Engineers, Arlington, Virginia, May 15, 1976.
- 208. Roberts, John, "The Impact of Traffic Policies in Singapore", <u>Traffic Engineering and Control</u>, Vol. 18, No. 4, Printerhall <u>Limited</u>, London, England, April 1977.

- 209. Simkowitz, Howard, Lajos Heder, and Edward Barber, "The Restraint of the Automobile in American Residential Neighborhoods", U. S. Department of Transportation, Transportation Systems Center, Cambridge, Massachusetts, May 1978.
- 210. Stuart, Darwin G., and Warren D. Weber, "Accommodating Multiple Alternatives in Transportation Planning", <u>Transportation Research Record 639</u>, Transportation Research Board, Washington, D. C., 1977.
- 211. Thomson, J. Michael, "Methods of Traffic Limitation in Urban Areas", Organization for Economic Cooperation and Development, Division of Urban Affairs, Paris, France, September 1972.
- 212. Tominaga, Seimi, "Reducing Traffic Volumes in Urban Japan", The Wheel Extended, Autumn 1975.
- 213. Vickrey, William, "Pricing, Metering, and Efficiently Using Urban Transportation Facilities", Highway Research Record No. 476, Highway Research Board, Washington, D. C., 1973.
- 214. Wigan, M. R., "Traffic Restraint as a Transport Planning Policy", Environment and Planning, Vol. 6, No. 5, Great Britain, 1974.
- 215. Wigan, M. Ramsay, and T. J. G. Bamford, "A Comparative Network Simulation of Different Methods of Traffic Restraint", TRRL Report LR566, Transport and Road Research Laboratory, Crowthorne, Berkshire, England, 1973.

- P. Methods for Improving Transit Service
- 216. Evans, H. R., and G. W. Skiles, "Improving Public Transit Through Bus Preemption of Traffic Signals", Traffic Quarterly, Vol. 24, No. 4, Eno Foundation for Transportation, Westport, Connecticut, October 1970.
- 217. Haynes, J. J., J. N. Fox, and B. T. Williams, "Public Attitudes Toward Transit Features and Systems", Transportation Research Record 649, Transportation Research Board, Washington, D. C., 1977.
- 218. Holthoff, William C., and Robert G. Knighton, "Cost Increases, Cost Differences, and Productivity of Transit Operations in New York State", <u>Transportation Research Record 625</u>, Transportation Research Board, Washington, D. C., 1977.
- 219. Kraft, Walter H., and Harold Deutschman, "Bus Passenger Service Time Distributions", <u>Transportation Research Record 625</u>, Transportation Research Board, Washington, D. C., 1977.
- 220. Kumar, Ashok, and William P. Goss, "A Modal Choice Model for Fare-Free Transit", Transportation Engineering Journal, Vol. 103, No. TE2, American Society of Civil Engineers, New York, New York, March 1977.
- 221. Levinson, Herbert S., William F. Hoey, David B. Saunders, and F. Houston Wynn, "Bus Use of Highways: State of the Art", NCHRP 143, National Cooperative Highway Research Program Report Transportation Research Board, Washington, D. C., 1973.
- 222. Levinson, Herbert S., Crosby L. Adams, and William F. Hoey, "Bus Use of Highways: Planning and Design Guidelines", NCHRP 155, Transportation Research Board, Washington, D. C., 1975.
- 223. McCrosson, Dennis F., "A TSM Traffic Management Guide for Transit", Traffic Engineering, Vol. 47, No. 5, Institute of Transportation Engineers, Arlington, Virginia, May 1977.
- 224. Meyer, Michael, "Planning Process for the Design of Integrated Fixed- and Flexible-Route Bus Service in Rochester", Trans-portation Research Record 650, Transportation Research Board, Washington, D. C., 1977.
- 225. Roth, Gabriel, "Regulation of Buses in Cities", <u>Highway Research Record No. 476</u>, Highway Research Board, Washington, D. C., 1973.

- 226. Rowan, Neilan J., Donald L. Woods, and Vergil G. Stove, "Alternatives for Improving Urban Transportation", Texas Transportation Institute, prepared for the Federal Highway Administration, Washington, D. C., October 1977.
- 227. Schwartz, Martin L., "Consumer Reaction to Transit Marketing in Boulder, Colorado", <u>Transportation Research Record 625</u>, Transportation Research Board, Washington, D. C., 1977.
- 228. Sherman, Roger, "Incentives for the Coordination of Decentralized Transit Choices", <u>Highway Research Record No.</u> 476, Highway Research Board, Washington, D. C., 1973.
- 229. Sosslav, Arthur B., Amin B. Hassam, Maurice M. Carter, and George V. Wickstrom, "Travel Estimation Procedures for Quick Response to Urban Policy Issues", NCHRP 186, Transportation Research Board, Washington, D. C., 1978.
- Tober, Ronald J., "Improving Service Quality and Efficiency Through the Use of Service Standards", Special Report 172, Transportation Research Board, Washington, D. C., 1972.
- Wynn, F. H., and H. S. Levinson, "Some Considerations in Appraising Bus Transit Potentials", <u>Highway Research Record No. 197</u>, Highway Research Board, Washington, D. C., 1967.
- 232. Ziegler, Eldon, "Integrating Transit and Paratransit", Transportation Research Record 650, Transportation Research Board, Washington, D. C., 1977.