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Gloria J. Jeff, Associate Administrator for Policy, Federal Highway Administration
FOREWORD

It was a distinct pleasure for the Federal Highway Administration to sponsor the Women’s Travel Issues Second National Conference in October 1996. In the last 18 years, the transportation industry has seen significant changes. One of the most important has been the large-scale entry of women into the work force and the corresponding increase in overall travel. FHWA, in meeting the challenges of the new century, recognizes that there are important gender-differentiated trends that will impact how, where, and what the transportation system of the 21st century will need to be.

While women have made great strides in the time between the first Conference held in 1978 and this one, women continue to face the daunting task of balancing their individual, family, and career responsibilities. Women’s travel continues to grow not only in the total vehicle miles of travel but also in the number of trips, the frequency of trips, and the length of trips. Women’s trip purposes also impact policies to improve air quality. Today, child care responsibilities are still most likely held by women; women must make career and job location decisions in part based on the accessibility to family from those jobs. America’s elderly population is a fast-growing segment of the population, and women still make up the majority of that group. Their needs for transportation continue to change. Security issues are still of much interest to women as they travel in their vehicles and as they arrive at their destinations. Welfare-to-work is of real concern for women in transition, not only because they face all of the family constraints discussed above, but because they may lack access to a wide range of destinations, including employment sites.

The Conference offered a rare opportunity in the transportation profession where women were in the majority! Ideas were flying fast and furious, and there was a congenial atmosphere in which participants shared research, discussed the implications of existing policies, and considered new or revised policies to improve the quality of life for Americans, especially women. I hope these proceedings serve as a catalyst for improvements in travel and the transportation industry in the immediate future.

I would like to thank Dr. Sandra Rosenbloom for being idea-woman/advocate, producer/translator of ideas to the Conference, and Chair of the Conference Steering Committee. Her championship of this Conference was untiring, and the results reflect her efforts.

Gloria J. Jeff
Deputy Administrator

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INTRODUCTION
Dr. Sandra Rosenbloom

BACKGROUND

The Women’s Travel Issues Second National Conference was held in Baltimore in October 1996. The number in the title led many people to assume that the Conference was an annual, or at least a frequent, event. In fact, the first National Conference was held in the fall of 1978—a gap of over 17 years. The 1978 Conference brought together scholars from many disciplines for the first time to address a wide range of women’s transportation topics, from transit security to how older women got around.

In the following two decades, researchers in fields as diverse as geography, planning, sociology, history, anthropology, government, engineering, and economics have found that otherwise comparable men and women often have very different transportation concerns and travel. Moreover, most researchers concluded that these differences were not explained by traditional factors such as income or employment status. But, significantly, these findings rarely made their way into the traditional transportation planning process, and they rarely affected public policy.

The Women’s Travel Issues Second National Conference, funded by the Federal Highway Administration and organized by the Drachman Institute of the University of Arizona in cooperation with Morgan State University, had a whole new set of goals. In addition to bringing together the latest research on women’s travel issues from a number of disciplines, the Conference was structured to alert policymakers and planners of the need to pay serious attention to the very real differences in the travel behavior and patterns of men and women, and among subgroups of women.

The Conference focused on the latest research in many of the same areas addressed almost 20 years earlier—and it is striking how similar the findings were. Current research continues to show major differences in the travel patterns of men and women—which are explained in part by historical and economic trends but, more significantly, by the roles each sex assumes, the responsibilities they accept, and the duties they carry out. At the same time, research suggests that there are substantial differences among subgroups of women—which may be greater than aggregate differences between the sexes. Studies described at the Conference found that variations in the travel patterns of women may result from differences in the residential and labor market opportunities open to various groups of women in a community, as well as differences in the transport options they have. Additional work suggested that race, ethnicity, and country of origin may have profound impacts on the travel behavior of men and women—generally independent of economic factors—and may explain differences among otherwise comparable women travelers.
Women’s Travel Issues  
Proceedings from the Second National Conference

The Conference brought together a series of thoughtful and often challenging papers that identified differences in the patterns of women and men over time, evaluated the potential planning and policy implications of those differences, and presented decisionmakers and planners with a coherent view of the interlinked transportation, economic, social, environmental, and land use constraints facing women and their families.

The Conference organization was guided by a Steering Committee whose members reflect a wide range of interests, affiliations, and perspectives. As an historical note, over half of the members of this Steering Committee were directly involved with the First National Conference in 1978.

This document contains 40 peer-reviewed papers presented at the Conference that fall into nine substantive categories:

- Trends in Women’s Travel
- Historical Perspectives
- Women’s Emerging Travel Patterns
- Women, Space, and Place
- Gender, Race, and Ethnicity
- Travel Patterns of Women with Special Needs
- Safety and Security Issues
- Women in the Transit Industry
- Transportation Policy Issues with Special Implications for Women

Chapter 41 contains brief abstracts of research presented at Conference Poster Sessions.

The Proceedings conclude with the Research Agenda developed by the Steering Committee and Conference participants; research topics in need of exploration were identified in nine categories:

- Women’s Travel Constraints, Preferences, and Patterns
- Understanding the Travel Patterns of Women of Color
- Understanding the Travel Patterns of Aging Women
- Understanding Women’s Safety and Security Issues
- Women and Technology
- Land Use Patterns and Community Interaction
- Children’s Travel Patterns
- Developing Appropriate Research Design and Methods
- Policy Research and Analysis
ORGANIZATION OF CONFERENCE PROCEEDINGS

TRENDS IN WOMEN’S TRAVEL

Five papers presented in this section set the stage for an in-depth analysis of the importance of understanding women’s travel. These papers show how women’s travel patterns have come to more resemble men’s—while at the same time remaining very different in important ways.

Howard V. Hayghe traces the significant trends in women’s labor force participation showing that, in many ways, women’s overall labor force, employment, and earning experience are coming to resemble men’s. At the same time, he shows that there are many subgroups of women whose labor market activity varies considerably with age, ethnicity, marital status, and motherhood.

Sandra Rosenbloom uses census and other data to chart the trends in women’s and men’s travel patterns over the last decade. Women are closing the gap with men on a wide variety of travel indices—women are almost as likely as men to be licensed drivers, and women have substantially increased the number of miles they travel. At the same time, women make more daily trips than men and, in many cases, are more dependent on the car as a passenger or driver than comparable men.

Sharon Sarmiento reviews a variety of studies to show how the many demands placed on working women—from responding to children’s needs to doing the household grocery shopping—severely constrain their travel choices, requiring them to depend on the private car. She shows that women are more likely to chauffeur their children than men with the same worker status and presence of children and they are more likely to link trips together; for example, going shopping on the way home from work. Sarmiento suggests that women face substantial difficulties giving up their cars when faced with demands to carpool or use transit.

Heather MacDonald and Alan Peters outline traditional explanations for the length of a worker’s commute, reviewing the theories and studies that attempt to explain why women traditionally have shorter work trip commutes than men with comparable incomes, occupational status, or educational attainment. They show that explanations that work for urban women don’t always explain rural women’s travel patterns and that most theories about women’s travel are inadequate to explain all the differences between men and women and among subgroups of women.

Gloria J. Jeff and Regina McElroy summarize the remarkable societal changes that challenge us to fashion new and different transportation programs at all levels of government—the deindustrialization of society, the involvement of women with children in the labor force, suburbanization, the growth of the service sector, the concentration of poverty in the inner city. They describe the strengths and weaknesses of local, regional, state, and Federal programs and policy apparatus in responding to women’s special needs in the face of these trends.

AN HISTORICAL PERSPECTIVE ON WOMEN, TRAVEL, AND FREEDOM

Martin Wachs presents an engrossing description of women’s involvement with personal cars at the dawn of auto history in the U.S.; upper-class women were often the market for electric cars, which had limited range but were easy to start and operate. He shows how car makers early on focused their advertising on women and what these ads reflect about the society in which they were published.

Michael L. Berger shows how the coming of the car—often called a “flivver”—revolutionized rural society and the way in which people related to one another. People could, for example, take
more trips and stay for shorter periods; at the same time, farm families were free to pursue friends who shared common interests rather than those who lived nearby. As a result, farm women developed many more relationships.

**WOMEN’S EMERGING TRAVEL PATTERNS**

Six articles comprehensively describe how women’s travel differs from men’s in a number of important ways and how subgroups of women have patterns and needs that differ from one another. Martha J. Bianco and Catherine Lawson describe women’s complicated travel behavior and their greater propensity to link many trips together. Amy Helling shows how women’s travel patterns are shaped by, and often constrained by, the different locations of the jobs available to them. In a similar vein, Elizabeth Burns chronicles differences in men’s and women’s access to major employment locations in the central city.

Merritt Polk considers the environmental implications of women’s growing dependence on the private car in Sweden. Angela Astrop describes the dependence on bicycles and other human-powered conveyances by women merchants in India. Finally, Anne Bernard, Annarita Polacchini, Anne-Marie Seguin, and Yves Bussière describe the methods necessary to identify, measure, and analyze the differences between men’s and women’s travel patterns in different societal contexts.

**WOMEN, SPACE, AND PLACE**

Four articles describe how land use patterns and the spatial distribution of jobs and homes differentially impact men and women. Daphne Spain shows how the shape of most American communities requires women to travel longer and make more complicated trips; Susan Hanson questions how the geographic location of employment opportunities currently affects the way women structure their lives and the possible implications of telecommuting and other technological improvements. Ruth L. Steiner and Susan Handy each focus on the non-work trips of women, suggesting how the shape of our communities and neighborhoods impact their travel options.

**GENDER, RACE, AND ETHNICITY: TRANSPORTATION INTERACTIONS**

Four papers demonstrate that poor women and women of color may face special burdens which constrain their travel patterns. Ibipo Johnston shows that Black women travel further for low-paying jobs than comparable white women; Sara McLaflerty and Valerie Preston also find these patterns and suggest it is because Black women don’t have the luxury of making shorter trips in order to balance home and work. Brian Taylor and Michael Mauch, and Karen Chapple and Rachel Weinberger also show that women of color have different travel patterns, generally being forced to travel longer to access jobs which match their skills levels.

**THE TRAVEL PATTERNS OF WOMEN WITH SPECIAL NEEDS**

Three papers consider the needs of households which face special barriers to their travel. Jon Burkhardt, Arlene M. Berger, and Adam T. McGavock show the serious extent of mobility loss facing older women who can no longer drive. Lalita Sen examines cross-cultural American women—focusing her research upon cultural differences between immigrants and natives that may impact their demands for alternative transportation as they age. Mary R. Lupa focuses on a special subgroup of poor and older women—those living in households without a car—and considers what a burden that places on them.
WOMEN’S SAFETY AND SECURITY ISSUES

Six papers focus on both safety and security, two issues of special concern to women travelers. Patricia Waller reports on the disturbing finding that women are becoming more likely to abuse alcohol than ever before and that drinking is playing a greater role in their accident rates. Lidia P. Kostyniuk, Lisa J. Molnar, and David W. Eby show that women are becoming greater risk-takers in many driving situations with predictable implications for accident rates. In a similar vein, Karl Kim shows that women’s per capita accident rates are climbing, only partially as a result of the fact that they are traveling more.

Patricia C. Dischinger shows that women have a greater tendency to suffer ankle and foot fractures in accidents because of their stature. Flaura Koplin Winston and Richard Reed, reporting on a series of 29 serious or fatal injuries in children attributed to airbags, conclude that additional information is needed to develop ways to maximize the effectiveness of airbags for children. They find that, while there is evidence of children’s accidents possibly related to airbag deployment, there is no good measure of the actual exposure of children to airbags, so the trade-off between protection and possible injury cannot be assessed. Finally Dorothy M. Schutz and Susan Gilbert focus on the way that large transit operators are attempting to make transit travel more secure for women, who often report a special concern for their safety.

WOMEN IN THE TRANSIT INDUSTRY

Four articles deal with how transit operators respond to women employees (and those of color) as well as to women customers. Carol Lewis reports on a national survey of transit agencies; Beverly Ward and Eric Hill describe a study showing that women and people of color are moving up in transit agencies. Nariida Smith and Marcus Wigan question whether agencies in which women did not play an important role could well serve women customers, while Sharon Hanlon questions how women’s special needs are identified and evaluated by transit systems.

TRANSPORTATION POLICY ISSUES WITH SPECIAL IMPLICATIONS FOR WOMEN

Six articles highlight important areas where governmental programs and policies may differentially impact men and women because of the differences in their travel patterns, attitudes, preferences, and opportunities. Hank Dittmar discusses the issues and values surrounding transportation education for women. Deb Niemeier shows that the ways in which regional infrastructure decisions are made and evaluated fail to take women’s transportation needs into account. Michael N. Bagley and his co-author evaluate how women respond to various telecommuting options, while Patricia L. Mokhtarian and Elizabeth L. Raney show how men and women react differently to public programs designed to reduce congestion.

Patrick Butler demonstrates that the way in which insurers charge for auto insurance disadvantages women because of the special nature of their travel patterns. Finally, Kristi M. Branch, Judith Heerwagen, Sally Tenney and Fotini Georgiadou detail the many ways in which travel reduction programs, and the incentives and sanctions they may contain, could seriously disadvantage large groups of women.