1994
Annual Report

Center for Urban Transportation Research
College of Engineering
University of South Florida
In 1994, improvement and growth in USF's overall academic and research programs earned us a new ranking as a Research University II. This prestigious rating recognizes USF's substantial gains in sponsored research as well as the depth and breadth of our academic offerings. Sponsored research reached an unprecedented $85 million in 1994, a 30 percent increase over last year. CUTR played a significant role in that success, becoming one of the top attractors of research funding at USF. As we continue our quest to become an institution of first choice for those who want to be a part of a model urban research university for the 21st century and beyond, I applaud CUTR for its energetic pursuit of excellence and its contribution to USF, the community, and the state.

It has been my pleasure to work with the dedicated and talented CUTR faculty and staff and the CUTR Advisory Board in their pursuit of relevant, high-quality research. Through its success in attracting research funding and through meaningful research into areas such as increases in funding of programs for Florida's transportation disadvantaged, development of a process for reviewing the effectiveness of Florida's public transit systems, and improving the "customer service" and cost-effectiveness of Florida's toll roads through the application of intelligent transportation systems, CUTR continues to prove its value. I look forward to my return to the College of Engineering and my continued association with CUTR, and I congratulate it on yet another outstanding year.

CUTR has completed another outstanding year, and its contributions to the College of Engineering are unquestioned. Through the national scope of its research projects, the visibility of the College has been substantially raised. Through CUTR's continued record of providing practical work and research experience for its student research assistants, teaching courses, providing service to the community, and maintaining a high level of excellence, the ability of the College to attract and educate the next generation of transportation professionals has been enhanced. We look forward to the growth of the Graduate Interdisciplinary Transportation Program and to the construction of CUTR's new building within the Engineering complex and continue to take pride in CUTR's accomplishments.

Betty Castor
President, University of South Florida

Michael G. Kovac
Interim Provost, University of South Florida

Melvin W. Anderson
Interim Dean, USF College of Engineering
As I look back over the last seven years since my appointment as director of CUTR, I am struck by the tremendous amount of energy invested in the Center’s activities—by our faculty, staff, students, and Advisory Board, by USF and State University System administrators, by the Florida Department of Transportation, the Florida Transportation Commission, the Florida Legislature, colleagues, and friends. That energy has built and continues to ensure a valuable resource to USF and to the state and has directly translated not only into successes for CUTR, but also into more efficient and less costly transportation for the people of Florida.

We achieved several milestones in 1994. Perhaps the most exciting to me personally were the funding and preliminary design of the new CUTR building. Scheduled to break ground in Fall 1995 and open in early 1997, the building will present great opportunities for us to expand our research and outreach capabilities with its labs, lecture halls, and teleconferencing facilities.

Also in 1994, we formed an outstanding Editorial Board for our Journal of Public Transportation, the first issue of which will be published in Summer 1995. The Journal will provide a much-needed means for the sharing of current, original research associated with public transportation modes and related transportation and policy issues.

The multi-phase, multi-year State Transportation Policy Initiative conducted for the Florida Legislature is nearing completion, and the recommendations for changes in the way Florida plans and funds its transportation system are certain to have an impact for years to come. The reports resulting from this research contain recommendations for improving the relationship between land use and transportation planning as well as estimates of future dramatic funding shortfalls.

The Dade County Technical Assistance Project was completed in 1994. This $1.5 million project included a broad range of more than 15 tasks. Importantly, our research has yielded many positive changes, such as the attainment of a joint development contract that is expected to earn Dade County $40 million over its 90-year term and the adoption of an ordinance regarding the seizure, impoundment, and forfeiture of illegal jitneys.

My family was honored by the CUTR faculty and staff’s decision to establish the Georgia Brosch Memorial Transportation Scholarship in memory of our daughter. This scholarship will be awarded for the first time in 1995.

We continue to strengthen our expertise in public transportation, intelligent transportation systems, transportation demand management, transportation safety, transportation for the elderly and disabled, access management, and transportation finance and economics. Also, as a result of new projects and new faculty, we now count geographic information systems, aviation, and freight transportation among our areas of expertise.

But even with all our successes and opportunities in the past, the future presents great new challenges, which I look forward to with excitement—and trepidation. Fiscal conservatism is the order of the day, and with it comes the possibility of decreased funding for research, for transportation, for education. We must look for even more effective ways to examine and investigate, to maintain and enhance our mobility, to pass on knowledge. We must now, more than ever, prove the value of our research, not on its own merits, but by assuring its applicability to the everyday lives of people.

To all of you whose energy has sustained us and whose dedication has invigorated us, let me say thank you. I look forward to another exciting year of opportunities and challenges at CUTR and welcome any comments you wish to send our way.

Gary L. Brosch
Director, CUTR
Recent legislation and fiscal trends in the state of Florida and nationwide have created a unique combination of constraints and opportunities, providing an impetus for examining the way Florida conducts transportation planning. In response to these challenges, the Florida Legislature and the Governor's Office directed CUTR to undertake the State Transportation Policy Initiative (STPI) as part of its base-funded research.

STPI is a multi-phase study that addresses several important policy issues. These include a comprehensive evaluation of the state and local level transportation planning processes as they relate to the implementation of Florida's growth management laws. In response to the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, STPI is reevaluating the way transportation infrastructure and services are planned and developed at the state and local levels and formulating options for implementing ISTEA requirements.

The project, begun in 1992 and guided by a Steering Committee, which oversees research progress, and a Technical Advisory Group, which provides technical input, includes the following tasks:

- a comprehensive review of local and regional planning in Florida in the context of State growth management requirements and federal legislation (resulting in a publication titled Transportation and Growth Management: A Planning and Policy Agenda)

- an evaluation of the impact of community design on transportation needs (Impact of Community Design on Transportation)

- a review of the literature on the transportation costs of urban sprawl (The Transportation Costs of Urban Sprawl)

- an evaluation of comprehensive transportation planning for state purposes (Transportation Planning for State Purposes)

- an examination of the relationship between air quality and transportation planning, as practiced in Florida (A Review of Mobile Source Air Quality Practices in Florida)

- an evaluation of trends and forecasts of Florida's population and transportation characteristics (Trends and Forecast of Florida's Transportation Needs)

- a study of transit, transportation demand management, level of service, and concurrency issues and of congestion management and urban mobility planning (The Role of Level of Service Standards in Florida's Growth Management and Moving People in Florida: Transit, TDM, and Congestion)

- a study of sustainable community design and transportation (Transportation, Land Use, and Sustainability)

- preparation of a map depicting the future land use elements of Florida's local government comprehensive plans

- a study of statewide transportation needs and funding (Statewide Transportation Needs and Funding Study)

- recommendations for a new strategic planning process for Florida that recognizes uncertainty (A New Strategic Urban Transportation Planning Process)

- a review of the extent to which local land development regulations complement comprehensive plans

An Executive Summary and a video highlighting findings and recommendations are being prepared for widespread distribution in 1995 to legislators, transportation professionals, and policymakers throughout the state.

Sponsoring Agency: Florida Legislature
In 1991, a National Urban Transit Institute was established at CUTR by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. From 1992-1997, the bill awards $1 million annually to a consortium of Florida universities that includes the University of South Florida, Florida A&M University, Florida State University, and Florida International University. Each university is conducting research projects as part of this program; projects being conducted by CUTR include:

**The Journal of Public Transportation**
This project will fill a national need for a high-quality refereed transportation journal dedicated specifically to public transportation. Distributed at no charge initially, the Journal will be produced on a quarterly basis and will focus on the identification of innovative solutions to transportation problems.

**Commute Alternatives Educational Outreach**
This project introduced and enhanced knowledge of transportation demand management strategies to individuals responsible for implementing these concepts nationwide. Workshops were conducted throughout the U.S.

**Paratransit and Land Use: Facility Siting Considerations**
Using 10-15 local-area case studies, this study identifies practices that result in more efficient integration of paratransit routes and placement of the facilities used by paratransit customers.

**State Transportation Policy Initiative Data Support**
This study developed a database of travel and journey-to-work information to assist transportation planners and decisionmakers in the state of Florida. Specific issues selected for detailed study in this project included minority and elderly demographics and travel behavior.

**National Transportation Data**
This study analyzed the Nationwide Personal Transportation Study, the American Housing Survey, and the Census Journey-to-Work databases to evaluate current trends in household demographics and commuting behavior in the U.S.

**Economics and Policy Considerations of APTS Applications**
This project investigated the economic benefits and costs of adapting various Advanced Public Transportation Systems technologies for use by fixed-route and demand-responsive transit systems.

**African-American Mobility Symposium**
This project will build on the experiences and issues provided at the 1994 symposium and will serve to continue the discourse on the special transportation needs of the African-American community.

**African-Americans, Other Minorities, and Women in the Transit Industry**
To examine the role of transit as it relates to African-Americans, other minorities, and women, CUTR will evaluate the effect that changes during the past three decades in the transit industry and society have had on employment and contracting opportunities.

**Improving Paratransit Productivity: Automatic Vehicle Locator Applications**
The potential benefits of AVL technology will be assessed in an effort to determine whether paratransit providers would benefit from using AVL systems.

*Sponsoring Agency: U.S. Department of Transportation*
In 1993, Metropolitan Dade County selected CUTR to develop innovative solutions to a variety of transportation problems within the county. During the term of the project, more than 20 task orders were completed, and Phase II tasks will begin in 1995. A brief description of the project follows.

**MDTA (Metro-Dade Transit Agency) Strategic Plan**
To accommodate changes in transportation planning and services resulting from ISTEA, the effects of Hurricane Andrew, and changes in Dade County’s system of governance, MDTA updated its 1991 Strategic Management Plan, with CUTR serving as process coordinator.

**Advanced Public Transportation Systems (APTS)**
Determined the applicability of intelligent transportation system (ITS) technologies to MDTA operations.

**Metro-Dade Transit Survey Design**
Survey instruments were designed for an on-board survey of MDTA patrons and an urban area travel survey. On-site data were collected, and CUTR worked with County staff to review and determine objectives and conduct the surveys.

**Joint Development Implementation Support**
Joint development projects at U.S. transit properties were reviewed and a workshop was produced; existing Dade County requests for proposals for joint development projects were reviewed, and changes were instituted.

**Transportation Utility Fee (TUF) Feasibility Study**
The legal and economic implications of adopting a TUF in Dade County to fund transportation infrastructure investment, maintenance, and operations were reviewed and assessed.

**Bus Operators’ Procedures Manual Review**
CUTR assisted with the preparation of a bus operators’ procedures manual for MDTA bus operators.

**Pedestrian Promenade for Downtown Miami**
With Miami-Dade Community College, the potential of promoting increased use of public transportation in downtown Miami and enhancing pedestrian movements between the two downtown Metromover stations, Miami-Dade Community College, and Bayside Marketplace were studied.

**Fare Cross-Elasticities**
Analyzed information from surveys on the usage patterns and behavior/motivations of MDTA patrons who purchase monthly passes. Cash fare and pass fare cross-elasticities and methodologies for forecasting the impact of fare structure changes on mode of fare payment were developed.

**Metromover Extensions Transfer Analysis**
Addressed MDTA’s bus to mover and mover to bus transfer and fare policy by means of survey analysis of existing riders; an equitable fare transfer policy was recommended, and an alternative bus routing and implementation plan was recommended.

**MDTA On-Board Survey**
Surveyed MDTA passengers and analyzed results to provide ridership demographics and travel behavior characteristics.

**Jitney Enforcement Strategies**
Analyzed strategies adopted at transit agencies around the U.S. to combat problems posed by illegal jitneys and private vans, resulting in the approval of an enforcement ordinance.

**Special Transportation Service Brokerage**
Provided technical assistance in the phase-in of this program to determine methods of paratransit trip distribution and balancing of cost, availability, and service quality issues.

**Improved Non-Motorized Access to Transit**
Evaluated the feasibility of establishing a “Bikes-on-Bus” program and developed a plan for instituting a small-scale demonstration project.

**Transit Corridor Investment Proposals**
Reviewed the status of progress in improving transit service in six different corridors in the Metro-Dade area as it relates to the County’s Program of Interrelated Projects.

**Bus Operator Productivity & Efficiency Analysis**
Reviewed current and historical labor practices and trends and various labor productivity issues for bus operators at MDTA and compared MDTA to peer systems nationwide.

**Parking Policy Literature Review**
Presented the Metropolitan Dade County MPO with information that will serve as a major foundation for the larger countywide parking study being undertaken in 1995.

Sponsoring Agency:
Dade County
As a prelude to the historic Summit of the Americas held in Miami in December 1994, Tampa hosted top transportation officials from 12 countries throughout the Western Hemisphere who met in October to discuss a wide range of key transportation issues. The conference was the first of its kind, and ministers and senior officials shared experiences relating to strategic infrastructure investment, economic regulation, technology development and deployment, and harmonization of technical standards. CUTR served as a working member of the Host Committee; several CUTR faculty members were invited to sit in on the proceedings; and CUTR faculty and students interacted and initiated working relationships with the Ministers at a series of conference events.

Sponsoring Agency:
U.S. Department of Transportation,
Florida Legislature

Long-Range Transit Operations Planning Guidance

This research effort involves investigating long-range transit operations planning. The intention is to develop guidance that will support improved methods for developing long-range bus service plans. Effective operations planning and processes, techniques, and generalizable guidance will support improved long-range bus service operations planning and assist urban areas as they evaluate various transit service plans as part of their long-range planning efforts.

Sponsoring Agency:
Federal Transit Administration

Intermodal Guideway Public Transit Systems

CUTR is engaged in a collaborative three-year project with Florida International University to look at factors leading to the successful implementation of intermodal guideway public transit systems. A major goal of this project is to provide a frame-
Intrastate Air Service Feasibility Study

UTR is studying issues that determine the need for and economic feasibility of commercial air service. Only air taxi (on-demand service) and commuter operators (scheduled service in small markets) are included in the study. The current condition of commercial air service and airport facilities is being assessed, and community and service area data are being assessed for information on air taxi and commuter air service operations. Factors affecting demand (consumer preference, cost of other modes, consumer expectations, income, consumer perceptions) and supply (the cost to provide service, labor availability, cost of other service inputs) will be evaluated. The final report will provide guidelines that can be applied to a community’s specific air service development criteria and can serve as marketing, promotional, and planning tools.

Sponsoring Agency: Florida Department of Transportation

FDOT Performance Survey

The Florida Transportation Commission requested that CUTF conduct a three-pronged survey of the general public, of vendors and contractors for the Florida Department of Transportation (FDOT), and of local government bodies and associations. The purpose of the survey is to measure attitudes and perceptions of these three populations with respect to the performance of the Florida Department of Transportation. This survey is intended to be used as a part of the annual evaluation of the Department.

Sponsoring Agency: Florida Transportation Commission
GIS Applications in Transit Planning and Analysis

Geographic Information Systems (GIS) is an innovative technology that allows users to easily manage and display spatial data. GIS data can be shared between users and can be integrated from multiple databases. To help Florida’s transportation planning organizations realize the full potential of GIS, CUTR will research GIS applications in transit planning and analysis. Work will begin with the identification of national applications of GIS in transit planning. An inventory of transportation-related GIS systems, databases, and applications in Florida will be made. GIS applications to transit planning will be documented, and those with value for Florida’s transit systems will be recommended by CUTR for pursuit in more detail. Applications chosen by FDOT will be pursued and developed by CUTR.

Sponsoring Agency:
Florida Department of Transportation

PSTA Bus Stop Inventory

At the request of the Pinellas Suncoast Transit Authority (PSTA), CUTR will conduct a bus stop inventory in an effort to develop a database file. This will enable PSTA to decide whether a particular paratransit trip can be made using a fully-accessible fixed route service in lieu of paratransit service. The database will also assist in responding to customer inquiries as to the amenities and configuration of a particular bus stop. The database will be created using a geographic information system and augmented by adding route alignment, route characteristics, demographic information, background road network, and jurisdictional boundaries. Color maps of the county including bus routes will be provided, and a final report will be prepared.

Sponsoring Agency:
Pinellas Suncoast Transit Authority

National Conference on GIS and Transit

This project seeks more effective application of GIS in transit by providing a forum for sharing experiences through a National Conference on GIS. The two-day conference, to be held in Tampa in August 1995, will be highly interactive, possibly resulting in formal committees within established national transportation organizations or a GIS information clearinghouse and newsletter. National experts in GIS and vendors from across the country will participate. Before the conference, CUTR will conduct a thorough literature review and prepare actual case studies of innovative GIS applications in transit. A conference summary will be prepared and disseminated.

Sponsoring Agency:
U.S. Department of Transportation
Five-Year Statewide Transit Development Concepts

UTR is preparing a statewide urban transit concept plan for Florida for fiscal years 1994/95 through 1998/99. Several scenarios are presented that indicate the investment needed to provide different levels of transit service. These scenarios include an exploration of funding needs if recent Florida transit service and ridership trends continue into the future; summation of existing local transit development plans; establishment of goals based on geographic coverage of transit networks and service related to population density; examination of the level of transit investment needed to increase transit mode share to certain target levels; and identification of equipment and service needed to raise Florida transit services to levels attained in a set of peer cities and states.

Sponsoring Agency:
Florida Department of Transportation

Transit Development Plans

UTR produced several transit development plans (TDPs) in 1994, including those for LeeTran, the transit division of the Lee County Department of Public Services; Space Coast Area Transit in Brevard County; and the Tri-County Commuter Rail Authority in Ft. Lauderdale. A similar approach was followed in each of the plans, focusing on demographic and economic data; perceptions of the transit system held by key local officials, riders, and non-users; transit-related goals and objectives; an evaluation of existing services; an assessment of demand for transit and mobility needs within the community; identification and evaluation of future alternatives for the transit system; and a prioritized list of recommendations.

Although the approach was similar in all TDPs, the findings and recommendations differed considerably by system. Key recommendations for LeeTran included a vehicle replacement program and a pilot program to increase frequency of service on selected routes. For Space Coast Area Transit, it was recommended that the existing mix of services be maintained but that the agency be willing to provide different types of service to different areas of the county. Key recommendations for Tri-Rail included improvements in service reliability and frequency and modernization of the signal system.

UTR is completing work on a TDP for Manatee County Area Transit (MCAT). While work is still underway, preliminary areas of focus include expanded service, increased passenger amenities, and the appropriate place for MCAT within the County organization.

Sponsoring Agencies:
Lee County; Brevard County; Tri-County Commuter Rail Authority; Manatee County.
Assessing Saturation of Men’s Travel

CUTR reviewed the Nationwide Personal Transportation Study (NPTS) survey data that indicate that males 25 to 55, the highest travel group, seem to be showing signs of stability in overall travel growth. Through a literature review and further evaluation of NPTS data, several key questions were addressed, such as: Are there significantly different trends in male/female travel and travel by age group that support the idea of lesser growth by the highest travel propensity travel groups? Is there some maximum amount of time that people are willing to spend on travel? Does this trend signal some kind of upper limit on travel propensity? A final report was prepared in 1994.

Sponsoring Agency:
Federal Transit Administration

Performance Evaluation of Florida’s Transit Systems

As a result of Florida legislation requiring that FDOT and each transit system develop and report on transit system performance, CUTR conducted performance evaluations of Florida’s urban fixed-route transit systems using 1992 and 1993 data. Following four previous annual evaluations conducted by CUTR, these studies consisted of two parts: a trend analysis and a peer review analysis. In the trend analysis, performance indicators and measures for the previous five years were reviewed to determine how individual systems and the state as a whole have performed over time. In the peer analysis, performance measures of Florida’s transit systems were compared with similar systems across the country. The 1994 study also included an investigation of State block-grant required performance reporting. A study using 1994 data will be conducted.

Sponsoring Agency:
Florida Department of Transportation
Section 15 Data Collection Training

CUTR was retained by FDOT to conduct a Section 15 Data Collection Training Seminar in Ft. Lauderdale. Held in conjunction with the Federal Transit Administration's 1994 Section 15 Training Seminar on data reporting, the workshop provided Florida transit system personnel with an understanding of and techniques for useful data collection and compilation of selected Section 15 indicators such as passenger trips, passenger miles, vehicle miles, revenue miles, and directional route miles, among others. These data are used extensively by FDOT in its block grant funding formula and in its annual Performance Evaluation Study conducted by CUTR.

Sponsoring Agency: Florida Department of Transportation

1994 Tri-Rail On-Board Survey & Analysis

CUTR designed and administered a third on-board survey of Tri-County Commuter Rail Authority (Tri-Rail) passengers and performed an analysis of the results. The purpose of the survey was to ascertain demographics, travel behavior, and the satisfaction of the users with the system service. CUTR began with a review and refinement of the survey instrument. After the survey was administered, the data were coded and entered, then processed, reviewed, and analyzed. Results will be compared with 1991 and 1993 survey results and a final report will be submitted.

Sponsoring Agency: Tri-County Commuter Rail Authority

Development Incentives that Support Transit

This study identified regulatory barriers to the appropriate development of land surrounding transit nodes and determined ways to overcome these barriers and increase the attractiveness of development opportunities at transit stations and surrounding properties. The concurrency management systems of Metro-Dade, Broward, and Palm Beach counties were reviewed, and methods to improve incentives and remove disincentives for appropriate development near transit stations were investigated. The evaluation included a review of county and municipal land development regulations. Local planning and zoning officials and transit officials were interviewed, and alternative approaches used by other urban areas were investigated. The final report made recommendations for improving existing ordinances and recommended new mechanisms for implementation.

Sponsoring Agency: Tri-County Commuter Rail Authority

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Feasibility of Safety Restraints in School Buses

At the request of the Florida Legislature, CUTR researched the feasibility of installing safety restraints in large school buses to determine the safety of the restraints, assess the benefits compared to the costs, and identify legal, liability, and enforcement issues. Phase I of the project included a comprehensive literature review of crash and sled tests, review of the safety records of school buses in the U.S., and an assessment of the findings. Phase II consisted of a descriptive analysis of Florida school bus accident data, a summary of professional, expert, and interest group opinions and related issues, a detailed safety cost-benefit analysis, and identification of future actions and recommendations.

Sponsoring Agency:
Florida Legislature

Fund Allocation for Florida’s Pupil Transportation

The Florida Department of Education asked CUTR to conduct an in-depth review and assessment of the formula used to allocate funds for student transportation in Florida. CUTR worked in conjunction with a Transportation Formula Study Group (FSG) that found the funding formula substantially deficient and in need of review. Numerous analyses to attain a better funding formula were conducted, and a mathematical non-linear regression-based allocation model was selected. Revisions to Subsection (4)f of F.S. 236.082 were proposed that incorporate the new formula. Recommendations were made to consider improved data collection and the implementation of a statewide automatic transportation routing system.

Sponsoring Agency:
Florida Department of Education

Deerfield Beach Transit Options Study

Solving a problem of limited access from the mainland to the beaches in the City of Deerfield Beach is the focus of this project. A statewide survey of Florida beach communities was conducted, and an evaluation of existing transportation capacity and demand for City of Deerfield Beach beaches was made. Transit service options that mitigate traffic to the beaches and help meet travel demands are being developed—direct service to park and ride lots, alternative parking policies, and TDM strategies are being considered. Service options, costs, and financing options will be evaluated, and different service choices that may make transit more attractive will be considered. The final report will offer improvement options to the City of Deerfield Beach and generalized findings applicable to other barrier island communities in Florida.

Sponsoring Agencies:
City of Deerfield Beach, Florida Legislature

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Safety Option Costs in Large School Buses

<table>
<thead>
<tr>
<th>Safety Investment Option</th>
<th>Installation Cost/Bus</th>
<th>Annual Maintenance Cost/Bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lap-belts</td>
<td>$1,500</td>
<td>$35</td>
</tr>
<tr>
<td>Lap/shoulder belts</td>
<td>$3,801</td>
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<td>Lap/dual shoulder belts</td>
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<tr>
<td>Higher seat backs</td>
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</tr>
<tr>
<td>Adult school bus monitors</td>
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<tr>
<td>Crossing control arms</td>
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<td>$15</td>
</tr>
<tr>
<td>Rearward-facing seats/flip-belts</td>
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<td>$35</td>
</tr>
<tr>
<td>External loudspeaker systems</td>
<td>$350</td>
<td>$15</td>
</tr>
</tbody>
</table>

Cost estimates are for newly purchased buses only; retrofitting costs are not included.

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Actual Statewide Expenditures Compared to Current Formula Allocation and Legislative Funding Level

![Graph showing Actual Statewide Expenditures Compared to Current Formula Allocation and Legislative Funding Level]
Community/Corridor Traffic Safety Plans

CUTR developed and implemented evaluation plans for two community/corridor traffic safety programs (CCTSPs) in central Florida. CCTSPs are innovative programs with goals of reducing the number of motor vehicle crashes and their associated deaths and injuries. Project countermeasures evaluated include increased law enforcement efforts, engineering improvements, improved emergency medical response times, and public information and education campaigns. CUTR performed both process and impact evaluations of the two CCTSPs, and an implementation manual was produced in 1994.

Sponsoring Agencies:
Florida Department of Transportation-State Safety Office,
National Highway Transportation Safety Administration

Passenger Assistance Training

To help transportation managers and operators improve safety and customer relations among elderly patrons and passengers with disabilities, CUTR conducted three passenger assistance and sensitivity training workshops. Passenger assistance was taught using Transportation Management Associates’ (TMA) Passenger Assistance Techniques (PAT) course. Additional information on passenger sensitivity and special assistance necessary in an emergency was added by CUTR. Each workshop offered students classroom and practical experience and resulted in a TMA course completion certificate, uniform insignia, and wallet identification card. In consideration of the limited budgets of many rural transportation providers, participants were offered reimbursement of all travel-related expenses.

Sponsoring Agency:
Florida Department of Transportation

Florida Maintenance Training Program

In 1991, CUTR and the Florida Department of Transportation entered into a joint participation agreement to provide maintenance training resources to public transit agencies throughout Florida. Now in its fourth year, the project includes CUTR acting as a broker in delivering classroom and laboratory maintenance training for transit mechanics; maintaining a resource center that provides training programs, audiovisual materials, and reference materials to Florida transit agencies on a free-loan basis; conducting advisory committee meetings; producing and distributing a quarterly newsletter, Transit Training, which provides infor-

Early in 1994, CUTR completed the Statewide Operations Report (SOR): Fiscal Year 1992/93 for the Florida Commission for the Transportation Disadvantaged. CUTR previously compiled SORs for FYs 1989/90, 1990/91, and 1991/92. The SOR contains a variety of financial and operating data for each of the community transportation coordinators (CTCs) in Florida. Each CTC is profiled in a two-page summary, and composite tables were created showing data for each CTC to allow for peer comparisons among various categories. This information is used in conjunction with several of the modules contained in the “Evaluation Workbook for CTCs and Providers” in Florida that CUTR developed for the Commission.

Sponsoring Agency:
Florida Commission for the Transportation Disadvantaged

Wheels of Independence Video

During the summer of 1994, CUTR was the executive producer of an 11-minute video titled “Wheels of Independence.” Focusing on mobility and people helping people, the video highlighted several transportation disadvantaged (TD) programs and showed how the transportation services supported adult day care programs, child care programs, work trips, shopping trips, medical visits, and other trips needed to maintain independence and an enhanced quality of life. The purpose of the video was to educate the public, elected officials, potential TD users, and TD providers and their boards, as well as other interested persons, about the TD program in Florida. Produced by Hendrick Creative of Tampa, it has been showcased at a number of national meetings.

Sponsoring Agency:
Florida Commission for the Transportation Disadvantaged

ADA Impacts Study

The Florida Commission for the Transportation Disadvantaged contracted with CUTR to assess the extent to which local community transportation coordinators were being affected by the Americans with Disabilities Act (ADA) of 1990. The ADA requires public transit systems to provide paratransit service as a complement to their fixed-route transit service for persons with disabilities who are unable to use the fixed-route system. The ADA’s complementary paratransit requirement affected 16 of the 48 CTCs operating in Florida in 1993; 13 of those CTCs were directly involved in providing or coordinating some or all of the local ADA paratransit service. Using data from the 1993 annual ADA plan updates, the study found that in 1992 approximately $21 million was being spent to operate ADA paratransit service. By 1997, when all transit systems must be fully compliant with the ADA, the study estimates that annual operating costs will exceed $55 million.
Statewide Transportation Disadvantaged Plan

UTR prepared a five-year (1992-1996) plan for the Florida Commission for the Transportation Disadvantaged in 1992 and was selected to prepare the new plan. This effort also will include preparation of a 20-year strategic plan designed to bring into focus the long-range vision for how TD transportation services should be coordinated. UTR will analyze the environment in which the TD program exists to determine external barriers and opportunities and will review the status of the current statewide program to determine its strengths and weaknesses. The five-year plan will be developed to support the vision that was created during the strategic planning process and will include goals and objectives as well as strategies for their accomplishment.

Sponsoring Agency:
Florida Commission for the Transportation Disadvantaged

Hernando County TD Services

UTR assisted the Spring Hill/Hernando County Metropolitan Planning Organization on two tasks associated with Hernando County’s transportation disadvantaged transportation program. An examination of the current coordinated transportation system was made, which included an evaluation of the Medicaid transportation system and the current Community Transportation Coordinator system.

Potential options for regulating public transportation providers operating in Hernando County also were reviewed. This involved the review of public transportation regulations in other counties to identify potential options for Hernando County.

Sponsoring Agency:
Tindale-Oliver & Associates

Community Transportation Coordinator Advanced Training

UTR conducted six one-day advanced training workshops for community transportation coordinators throughout Florida. The workshops stressed the importance of performance evaluations and taught participants how to conduct self evaluations. The workshops were based on the “Evaluation Workbook for Florida’s Community Transportation Coordinators and Providers,” prepared by UTR. Prior to the workshops, field tests of the evaluation model and workbook were conducted, the results of which were included in the final version of the workbook.

Sponsoring Agency:
Florida Commission for the Transportation Disadvantaged
Cost Effectiveness of Travel Demand Management Strategies

This project is designed to assist in the development of information and tools to advance the knowledge and implementation of travel demand management (TDM) strategies. Specifically, CUTR, as part of a team with COMSIS, is performing an extensive data collection effort to establish design factors of employer-based TDM programs; assessing the information on benefits and costs related to these programs and determining if and how this information was used to make program decisions; developing a benefit-cost methodology that synthesizes the findings into a set of procedures; and obtaining information from public agencies on their roles and expectations, related to employer-based TDM programs and their need for information.

Sponsoring Agency:
Transit Cooperative Research Program, Transportation Research Board

TMA Clearinghouse

The Florida Department of Transportation and the Florida Energy Office contracted with CUTR in 1991 to establish the TMA Clearinghouse, a service developed to foster the formation of transportation management associations (TMAs) in Florida and across the nation. Now in its fourth year, Clearinghouse activities include maintenance of a resource center of TDM materials; production of a national newsletter, TMA Clearinghouse Quarterly, which details current events and information in the TDM area; provision of assistance upon request to district FDOT offices with the formation of TMAs or assistance to existing TMAs and to the Florida Commuter Assistance Program; and development of formal evaluation criteria to be used by FDOT to monitor the performance of Florida TMAs.

Sponsoring Agency:
Florida Department of Community Affairs-Florida Energy Office, Florida Department of Transportation

TDM Training Program

As an extension of the “Integration of Commute Alternatives into the Growth Management Process” project completed in 1992, CUTR researched and designed a TDM training program. This program provided intensive training in TDM to state and local decisionmakers, employers, developers, and others to facilitate the implementation of TDM across the state. Working with a Steering Committee comprised of TDM professionals, State agency representatives, and others, CUTR researched existing TDM training programs across the country, developed an intensive curriculum and training materials, and offered the course in 1994. Phase II of the project will commence in 1995, with two training courses being offered.

Sponsoring Agency:
Florida Department of Community Affairs-Florida Energy Office, Florida Department of Transportation
“Design and Application of TDM Techniques Including Telecommuting” Training Courses

This project will offer training to individuals in the public and private sectors who are responsible for implementing TDM and/or telecommuting projects. This will be achieved through the development and presentation of two courses: a three-day course titled “Design and Application of TDM Techniques” that focuses on the development, design, operation and evaluation of TDM programs for the public and private sectors and on research sponsored by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA); and a one-day course titled “Design and Application of Telecommuting Projects” that focuses on the development and implementation of a telecommuting plan on a regional basis as a TDM technique and on a worksite basis as an employer/employee program. The courses are being designed to be conducted together or independent of each other.

Sponsoring Agency:
Florida Department of Transportation, District One

Lee County Transportation Demand Management Study

At the request of Florida Department of Transportation District One, CUTR will prepare a transportation demand management plan for Lee County. Included will be the examination of existing transportation and congestion issues and determination of the applicability of TDM strategies to address the issues. A review committee will be established to provide input and project monitoring, and focus groups will be conducted to identify issues, concerns, and ideas. Attitudes of key officials and the public will be assessed, and data will be collected to identify market areas and mobility issues facing Lee County employers and commuters. Identified issues will be analyzed, goals and objectives will be set, and a plan will be developed.

Sponsoring Agency:
Federal Highway Administration

Key West Service Plan for South Roosevelt Boulevard Bus Route

In the City of Key West Transit Development Plan, CUTR recommended a transit route that would connect Old Town and Key West International Airport and serve hotels along the route. This project involved the investigation and design of such a route. CUTR began with site visits to examine and discuss various routing options and interviews with city, county, hotel/motel, and airport representatives. CUTR proposed and designed a route along South Roosevelt Boulevard. Bus stops, shelters, service frequency, use of existing bus fleet, load factors related to vehicle capacity, connection to existing transit service, coordination with airline schedules, fare policy, marketing strategies, and estimated operating costs were all considered. An implementation schedule was also included.

Sponsoring Agency:
City of Key West
St. Lucie County Bicycle and Pedestrian Plan

CUTR is serving as a subcontractor to Sprinkle Consulting Engineers, Inc., in the preparation of a Bicycle/Pedestrian Plan for St. Lucie County. CUTR is inventorying existing plans and policies affecting bicyclists and pedestrians and investigating potential project funding sources and will provide estimates of current bicycle/pedestrian usage, analyze bicycle/pedestrian crash data, and provide recommendations for plan implementation.

Sponsoring Agency:
Sprinkle Consulting Engineers, Inc.

University Commuter Center

In an effort to reduce single-occupant vehicle (SOV) travel to improve air quality, CUTR is working to establish a University Commuter Center. The Center likely will be located at USF’s Tampa campus and will promote alternatives such as using HARTline bus service, ridesharing, bicycling, and walking. Initially, the Center will assist with identifying commute options, process applications, and generate carpool matchlists; prepare and distribute orientation packets; and prepare campus newspaper inserts to promote the Center and disseminate information on air quality improvements that can result from non-SOV travel. Bicycle parking availability in the university area will be assessed and recommendations will be made for improvement. Ideas for the future include making university-owned bicycles available for cross-campus travel, safety education, and an on-campus shuttle.

Sponsoring Agency:
Florida Department of Transportation

University North Transportation Initiative

To address air quality, growth management, traffic congestion, and safety issues in the rapidly developing area surrounding the University of South Florida, the University North Transportation Initiative (UNTI) is being developed. Similar in function to a transportation management organization, UNTI will identify transportation problems in the area and provide a forum for public/private dialogue among community and business representatives. Strategies considered for increasing area mobility include improving transit service to the USF campus and other area destinations, employing strategies such as telecommuting and staggered work and class hours, arranging ridesharing opportunities, and providing a safer environment for biking and walking.

Sponsoring Agencies:
Florida Department of Transportation, City of Tampa,
Hillsborough County, USF

<table>
<thead>
<tr>
<th>Total Employees by Company Size</th>
<th>University North Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Employees*</td>
<td>No. of Companies</td>
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<tr>
<td>10,000+</td>
<td>1</td>
</tr>
<tr>
<td>1000-4999</td>
<td>4</td>
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<tr>
<td>500-999</td>
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<td>2330</td>
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<tr>
<td>TOTAL</td>
<td>89,090</td>
</tr>
</tbody>
</table>

*Includes USF employees and student commuters. All others are employers only.
Source: American Business List, May 1994
Alternative Fuels Information and Training Center

In 1994, CUTR established the Alternative Fuels (AF) Center to bridge the knowledge gap regarding alternative fuel vehicles (AFVs)—those using propane, compressed natural gas (CNG), liquefied natural gas (LNG), methanol, ethanol, and electricity. The Center provides technical assistance, answers questions regarding AFVs, hosts workshops, maintains a library of AFV-related information, distributes public documents contained in the library, and publishes a quarterly newsletter, Clean Fuels Florida. The primary audience for the Center's services are Florida fleet operators, both public and private, but individuals interested in converting their private cars to alternative fuels also may make use of information distributed by the Center.

Sponsoring Agency:
Florida Legislature

Florida Suncoast Clean Cities Coalition

At the request of the Florida Energy Office, CUTR will assemble and provide technical support for a Clean Cities Coalition for the Suncoast area of West Central Florida (Hillsborough, Manatee, Pasco, Pinellas, Polk, and Sarasota counties). The purpose of the Coalition will be to expand and accelerate the use of alternative fuel vehicles in urban areas. Tasks included in the project are recruiting a Coalition chair and members from among government representatives, fuel suppliers, conversion companies, local businesses, fleet operators, and elected representatives; organizing planning meetings and convening the Coalition; recruiting work group chairs and members; developing coalition documents such as a program plan; and investigating funding opportunities and preparing grant applications.

Sponsoring Agency:
Florida Department of Community Affairs-Florida Energy Office
Access Management Support to Local Government

This project is disseminating information contained in CUTR’s “Model Land Development and Subdivision Regulations That Support Access Management.” CUTR is refining and expanding the training materials used to educate local governments, including development of specific local government case studies. Four two-day regional workshops will be conducted for local governments, MPOs, and others on land development regulations that relate to access management.

Sponsoring Agency:
Florida Department of Transportation

Pavement Management Systems for Small Municipalities

It is anticipated that in the future FDOT may require the establishment of local operating pavement management systems (PMS) as a prerequisite to acquiring state roadway matching funds. In order to prepare small municipal governments in Florida for this potential requirement, CUTR is developing an informational brochure that will describe how pavement management systems can be implemented and “customized” for a municipality’s specific needs. CUTR’s successful implementation of a customized PMS for the City of Port Orange will be highlighted in the brochure along with other PMS activity in Florida and the U.S.

Sponsoring Agency:
Florida Legislature

Access Management Advisory Services

CUTR was retained by the Florida Department of Transportation to provide expert advice on access management standards and policies on a task order basis. Services included technical assistance on application of access management standards, advice on access cases going to administrative hearing, and review of access permit denials for complex cases. CUTR also prepared issue papers on median retrofit actions and public involvement for median projects, as well as draft procedures for involving the public and managing requests for deviations from median opening standards.

Sponsoring Agency:
Florida Department of Transportation
**Functional Classification of Florida’s Roadways**

A joint effort among CUTR, the Florida Department of Transportation, and the Florida Transportation Commission, this study was undertaken to develop, apply, and identify fiscal impacts of a new system for determining road ownership based on road function. CUTR was charged with determining detailed criteria to be used to define roadways serving a state purpose. DOT District Offices applied the proposed criteria to roads throughout the state to determine ownership of individual roadways, and CUTR estimated the fiscal impact to the state and to local governments of the potential shift. Workshops were held across the state to refine the application of the criteria, and a Fiscal Impact Task Force appointed by the Florida Transportation Commission conducted further review. Recommendations have been forwarded to the Florida Legislature.

*Sponsoring Agency: Florida Legislature*

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**IVHS Applications to Congestion Management**

CUTR will set up and manage a demonstration/operational test of a “modular” system of continuous, automatic, traffic data collection using various technologies such as sensors, vehicle tracking, wireless communications, video camera surveillance, and computer software/data management. These technologies allow continuous data collection that is quick, accurate, and easy. In addition, they can be combined to customize congestion management systems, which are being required statewide. The goal is to assist the FDOT and local metro areas in developing a workable, cost-effective tool that will meet federal ISTEA requirements for congestion management systems.

*Sponsoring Agency: Florida Legislature*
**IVHS Applications for Measurement of Corridor Level of Service**

CUTR developed and tested new methodologies for determining roadway level of service using actual automobile travel speeds measured by an Automatic Vehicle Location (AVL) system. This contract is a three-phase project: Phase I consisted of determining the scope of services for future work; Phase II consisted of gathering vehicle travel speeds on Miami’s transportation network and developing a methodology that classifies roadway level of service using the data gathered. During Phase III, CUTR evaluated performance of Automatic Vehicle Location in the application. A private vendor donated the use of its AVL system for a 60-day demonstration test. A final report was produced in September.

*Sponsoring Agency: City of Miami*

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**Frequency Spectrum Surveys**

CUTR conducted field measurements at 30 FDOT-designated sites along the existing Florida Turnpike system. The spectrum survey performed a frequency sweep for the three ISM bands, and a hard copy of each frequency sweep for each site was provided. CUTR and the USF Electrical Engineering Department developed a logistics plan and organized and trained two two-man field survey teams. Field measurements were gathered, and field data were compiled and reviewed. A report of the findings was prepared that included a hard copy of all frequency sweep plots and a summary of findings by location.

*Sponsoring Agency: Office of Florida’s Turnpike*
Florida Transportation Almanac

To help fulfill its mandate of serving as an information resource to agencies and organizations in Florida, CUTR is producing the first Florida Transportation Almanac. The publication will contain a variety of transportation and related information that will be of use to both the public and private sectors, including state and modal statistics, demographics, travel behavior characteristics and trends, acronyms, information on state funding, spending, and legislation, directories of political and government officials and other organizations, and a variety of maps. The publication will be completed in 1995 and will be distributed throughout the state.

Sponsoring Agency:
Florida Legislature

African-American Mobility Symposium

CUTR, USF, and the Florida Department of Transportation presented a symposium on African-American Mobility issues in March 1994 in Tampa to examine the problems and issues related to mobility needs in African-American communities. The symposium featured speakers and experts from across the United States. Emphasized was the importance of including the unique socioeconomic and cultural experiences of the African-American community in the shaping of transportation policy. An open discussion on the Intermodal Surface Transportation Efficiency Act of 1991 was part of the program. Issues included decentralization of urban areas, modal bias and neglect, and growth in travel demand. A follow-up symposium will be held in April 1995.

Sponsoring Agencies:
Florida Legislature, University of South Florida, Florida Department of Transportation

Newsletters

Throughout the year, CUTR produces several quarterly newsletters for a variety of organizations and projects. Included are the following:

CUTRlines
Contains information on CUTR and its research projects and activities

TMA Clearinghouse Quarterly
Contains information related to transportation management associations, commuter assistance programs, and other TDM-related activities

Transit Training
Focuses on Florida transit agencies and activities related to fleet maintenance and training

Clean Fuels Florida
Focuses on information and activities related to alternative fuels

SFETalk
Newsletter of TRB’s Social and Economic Factors in Transportation committee

Paratransit Communiqué
Newsletter of TRB’s Paratransit committee

TSGlobe
Newsletter of the Association of American Geographers Transportation Geography Specialty Group

Sponsoring Agencies:
Florida Legislature, Florida Department of Transportation
Contributing to the education of future transportation professionals has been a primary goal of CUTR since its establishment. By working closely with student assistants on research projects and student organizations and activities, serving as thesis advisers, assisting students with job placement, teaching transportation and related courses, and developing an interdisciplinary transportation program at USF, CUTR faculty are dedicated to the professional and educational development of students in the College of Engineering and throughout USF. CUTR is committed to assisting the state in training Florida's brightest students for successful careers in transportation for the benefit of the citizens of Florida and the nation.

In 1994, positions as research assistants were awarded to 30 graduate and undergraduate students from a variety of disciplines. Their skills in research, writing, statistical analysis, database management, and graphics are an important contribution to CUTR's research program. In addition, students are provided with encouragement and assistance in co-authoring papers with CUTR faculty, attending and making presentations at local, state, and national conferences and meetings, and maintaining involvement in professional organizations and societies.

The Graduate Interdisciplinary Transportation Program for students in Civil Engineering, Economics, and Public Administration, expects to welcome its first students in Fall Semester 1995. Students in the program will enroll in a common set of core courses to allow them to acquire expertise in all three disciplines. Successful completion of the program will be noted on the student's transcript, and a certificate will be awarded.

1994 Student Research Assistants

Terry Agee  
Mechanical Engineering

Lisa Argiry  
Public Health

John Bradley  
Public Administration

Martin Català  
Public Administration

Forrest Cotten  
Public Administration

Suzi Dieringer  
Economics

David Gillett  
Civil Engineering

Joe Hagge  
Geography

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Jennifer Hardin  
Applied Anthropology

Mike Hartmann  
Civil Engineering

Weimin Huang  
Civil Engineering

Robert Nevins  
Civil Engineering

Irene Nikitopoulos  
Geography

Sherry Perry  
Electrical Engineering

Robert Quigley  
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Terry Reiss  
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Rachel Robinson  
Business

Tony Rodriguez  
Civil Engineering

Tiffany Turner  
Geography

Venkat Vattikuti  
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Fadhely Viloría  
Civil Engineering

Sujeeva (Anu) Weerasuriya  
Civil Engineering

Ray Yettaw  
Electrical Engineering
Gary L. Brosch  
Director  

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Transit Research Program Manager  
MPR, City and Regional Planning, Cornell University, 1977; BA, Urban Sociology, Cornell University, 1974. Specialties: transit operations planning, public policy analysis, transportation planning, statistical analysis, transit marketing, fare structure, strategic planning.

Glenn A. Burdick  
Dean Emeritus  
PhD, Massachusetts Institute of Technology. Specialties: electrical aspects of transportation, transportation safety, accident reconstruction, electromagnetic field theory, semiconductor physics, microelectronics.

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Research Associate  

William L. Ball  
Research Associate  
MA, Economics, University of South Florida, 1988; BS, Economics, and Political Science, Florida Southern College, 1986. Specialties: transportation planning and economics, public transportation, privatization, geographic information systems, demographic and travel behavior analysis.

Stacey G. Bricka  
Research Associate  

Xuehao Chu  
Research Associate  
PhD, Economics, University of California at Irvine, 1993; MA, Economics, University of California at Irvine, 1991; BS, Mathematics, Hangzhou University, China, 1982. Specialties: transportation economics, urban and regional economics, discrete choice analysis, quantitative methods.

R. Ben Gribbin  
Research Associate  
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Michael R. Baltes  
Research Associate  
MPA, Organization Management Theory, University of South Florida, 1992; BS, Political Science, University of South Florida, 1989. Specialties: policy analysis, transportation economics, student transportation, statistical analysis, survey design and analysis, safety.

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President Emeritus  
PhD, Columbia University. Specialties: vision and sensory systems, applications of sensory physiology and human factors in engineering, interactive video in education.

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Communications Manager  
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Sara J. Hendricks  
Research Associate  
MPA, Land Use Planning,  
University of North Carolina-Chapel Hill, 1991; BA, Film,  
The Pennsylvania State University, 1983. Specialties: land use planning and growth management, traffic and environmental impact analysis, bicycle/pedestrian facilities planning, communications.

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BS, Geology, Nicholls State University, 1987. Specialties: alternative fuels, specialized transportation, transportation planning, transportation modelling, urban planning and growth management.

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Paratransit Program Manager  
dynamic travel behavior modeling, ITS, intermodal planning, land use & air quality, telecommuting.

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MSCE, Transportation System Analysis, Massachusetts Institute of Technology, 1971; BSCE, Transportation, Worcester Polytechnic Institute, 1969. Specialties: transportation systems analysis, environmental impact analysis, traffic and parking studies, highway planning, transportation economics.

Victoria Perk
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Gwen Hollis  
Senior Secretary  
Elizabeth Manning  
Secretary  
Sherry Perry  
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Carrie Smith  
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Kevin Toso  
Senior Accountant  
Vicki Zambito  
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Wayne F. Echelberger, Jr., PE, PhD, University of Michigan. Specialties: environmental engineering, water resources, public works administration.

Manjiriker Gunaratne, PE, PhD, Purdue University. Specialties: modeling of geotechnical and pavement systems, pavement design.

Stanley C. Kranc, PE, PhD, Northwestern University. Specialties: bridges, fuel combustion, aerodynamics, fluid dynamics.

R. Jerry Murphy, PE, PhD, University of Oklahoma. Specialties: environmental engineering, air pollution control.

Larry W. Oline, PE, PhD, Georgia Institute of Technology. Specialties: bridge inspection, shock and vibration.

Mark A. Ross, PhD, University of Florida. Specialties: cohesive sediment transport in estuaries and coastal waters, hydraulic and water quality modeling, hydrologic modeling of agriculture.

Alberto A. Sagues, PE, PhD, Case Western Reserve University. Specialties: metallic and high temperature corrosion, mechanical wear, embrittlement of alloys, aqueous environments.

Rajan Sen, PE, PhD, State University of New York. Specialties: bridge design, testing and analysis, dynamic response of structure, prestress concrete, dynamic behavior of piles.


Abla Zayed, PE, PhD, North Carolina State University. Specialties: mechanical performance of materials including concrete, metals, and composites.

Rafael Perez, PhD, University of Pittsburgh. Specialties: artificial intelligence & expert systems development.

Electrical Engineering

Earl Claire, PhD, University of Florida. Specialties: communications, microelectronics, signal processing.

Larry Dunleavy, PhD, University of Michigan. Specialties: measurement and modeling of microwave and millimeter wave active devices and passive components.

Horace Gordon, PE, MSE, University of South Florida. Specialties: electronic circuit design, instrumentation failure analysis, logic design.

Rudolph E. Henning, ScD, Columbia University. Specialties: microwave and millimeter-wave microelectronic design, distributed monolithic ICs/interconnections.


Paris H. Wiley, PE, PhD, Virginia Polytechnic Institute and State University. Specialties: biomedical instrumentation, satellite communications.

Industrial Engineering

Paul Givens, PhD, University of Texas-Arlington. Specialties: manufacturing systems, engineering management, small business development, productivity and quality enhancement.

S.K. Khator, PE, PhD, Purdue University. Specialties: simulation, computer applications.

Geoffrey O. Okogbaa, PhD, University of Cincinnati. Specialties: quality engineering, automated production support systems, human performance in automated systems.

Ravi Sankar, PE, PhD, Penn State. Specialties: communication/computer networking, signal processing, speech processing, telecommunications.

Lee A. Weaver, PhD, University of Florida. Specialties: applied statistics, statistical reliability.
Anthropology

Alvin W. Wolfe, PhD, Northwestern University. Specialties: applied anthropology, urban anthropology, interorganizational networks.

Architecture

T. Trent Green, M.Arch, Harvard University. Specialties: urban design, architectural design.

Julie Johnson, MCP, Massachusetts Institute of Technology. Specialties: environmental design, site design, urban design.

James Moore, PhD, University of Pennsylvania. Specialties: community planning, daylighting, architectural technology.


Public Administration

John L. Daly, PhD, Indiana University. Specialties: public administration, public personnel policy, organizational theory and behavior, substance abuse policy.

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Business

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Communications

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Economics

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Richard McHugh, PhD, Syracuse University. Specialties: public finance, forecasting, regional economic development.

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Florida A&M University

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Florida State University

Joseph Cronin, PhD, Ohio State University. Specialties: strategic transportation planning, service quality measurement.

Andrew Dzurik, PhD, Cornell University. Specialties: regional planning, policy analysis, systems analysis.

James E. Frank, PhD, New York University. Specialties: infrastructure planning, fiscal dimensions of planning problems.

Ron Goldsmith, PhD, University of Alabama. Specialties: consumer behavior, marketing research and strategy.

Thomas A. Lynch, PhD, Florida State University. Specialties: transportation economics, high speed ground transportation economics, public transportation economics.

Lloyd Lyday, JD, University of Florida. Specialties: urban community policy analysis, legal research practices.

W. Virgil Ping, PhD, University of Texas at Austin. Specialties: transportation engineering, materials engineering.

Melvin Stith, PhD, Syracuse University. Specialties: marketing, management, social psychology.

Gregory Thompson, PhD, University of California Irvine. Specialties: policy analysis, transportation/land use interaction, public transportation costing and planning.

University of Central Florida

E. Assam Radwan, PhD, Purdue University. Specialties: traffic operation, highway safety, traffic simulation.

Roger Wayson, PhD, Specialties: transportation/environmental interactions, air pollution and noise impacts of transportation.

Texas A & M University

Vergil G. Stover, PE, PhD, Purdue University. Specialties: access management, transportation planning, site circulation design, urban land development and growth management, congestion management.
“State Transportation Policy Initiative: Transportation Costs of Urban Sprawl, A Review of the Literature”

“State Transportation Policy Initiative: The Role of Level of Service Standards in Florida’s Growth Management Goals”

“State Transportation Policy Initiative: Impact of Community Design on Transportation”

“State Transportation Policy Initiative: Trends and Forecast of Florida’s Transportation Needs”

“State Transportation Policy Initiative: Moving People in Florida, Transit, TDM, and Congestion”

“State Transportation Policy Initiative: Transportation and Growth Management, A Planning and Policy Agenda”

“State Transportation Policy Initiative: Transportation Planning for State Purposes”

“State Transportation Policy Initiative: Transportation, Land Use & Sustainability”

“Automatic Vehicle Location for Measurement of Corridor Level-of-Service: The Miami Method”

“Automatic Vehicle Location for Measurement of Corridor Level-of-Service: Statewide Feasibility Analysis”

“Bus Operating Productivity and Efficiency Analysis”

“Transit Fare Policies and Strategies”

“MDTA Video Training Program”

“Southeast Florida Regional Transit Fare Coordination Study”

“Strategic Plan for Advanced Public Transportation Systems for Metro-Dade Transit Agency”

“Tri-County Commuter Rail Authority Transit Development Plan”

“MDTA Fare Cross-Elasticity and Allocation”

“Proposals for Transit Corridor Investments in Dade County: An Assessment”

“Survey of Fare Policies at Large Transit Systems”

“MDTA On-Board Survey Analysis & Final Report”

“Metromover Extensions Transfer Analysis”

“Jitney Enforcement Strategies”

“Development Incentives that Support Transit”

“Demographic and Commuting Trends in Florida”

“1990 NPTS Report Series: An Assessment of the Potential Saturation in Men’s Travel”

“Assessment of Methodologies for Funding of Florida’s Student Transportation, Final Report”

“To Belt or Not To Belt? Experiences of School Districts that Operate Large School Buses Equipped with Seatbelts, Final Report”


“Analysis of Light Duty Buses and Vans vs. 30 Foot Buses in Fixed Route Revenue Service”

“ADA Impacts on Florida’s TD Programs, Final Report”

“Statewide Operations Report, 1992/93 (Florida Transportation Disadvantaged Commission)”

“Evaluation Workbook for Community Transportation Coordinators and Providers in Florida”

“Collier County Transportation Disadvantaged System Evaluation and Enhancement Study, Technical Memorandum No. 1: Community Transportation Coordinator Evaluation”

“Collier County Transportation Disadvantaged System Evaluation and Enhancement Study, Technical Memorandum No. 2: Public Input on Community Transportation”

“Hernando County Coordinated Transportation System Study”

“Evaluation Workbook for Community Transportation Coordinators and Providers”

“Wheels of Independence” (video)

“Brevard County Transit Development Plan, Technical Memorandum No. 1: Demographic and Transportation Data, Interviews, and Focus Groups”

“Lee County Transit Development Plan, 1995-1999”
“Technical Outreach Program Anti-Drug and Alcohol Workshops, Final Report”
“Passenger Assistance and Sensitivity Training for the Florida Rural Transit Assistance Program, Phase I, Final Report”
“The Effects of Age on the Driving Habits of the Elderly: Evidence from the 1990 NPTS”
“Assessing Travel Behavior by Blacks in the United States: A New Perspective”
“Public Involvement in Median Projects”
“Commuting Alternatives in the United States: Recent Trends and a Look to the Future”
“Transportation Demand Management and Intelligent Vehicle Highway Systems: The Need for Mutual Cooperation”
“Medians - A Discussion Paper”
“Model Land Development and Subdivision Regulations that Support Access Management for Florida Cities and Counties”

“Frequency Spectrum Survey for Florida Turnpike System, Vols. 1 and 2”
“Frequency Spectrum Survey for Orlando-Orange County Expressway System”
“Transportation Technology and the Future” (Gary Brosch), Compendium, 45th International Industrial Engineering Conference
CLTRlines, Vol. 4, Nos. 3 & 4, Vol. 5, Nos. 1 & 2
Paratransit Communiqué, Vol. 1, Nos. 1 & 2
SEFTalk, Vol. 1, Nos. 2-4
TMA Clearinghouse Quarterly, Vol. 3, Nos. 1-3
Transit Training, Vol. 4, Nos. 1-4
Clean Fuels Florida, Vol. 1, No. 1
TSGlobe, Vol. 1, Nos. 1 & 2
Proceedings, 1994 ACT International Conference

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**Selected Presentations**

“Parking and Transit Policy Implementation: The Florida Experience,” 73rd TRB Annual Meeting (L. Lachance)
“Survey of Fare Policies at Large Transit Systems,” 73rd TRB Annual Meeting (D. Hinebaugh)
“Jitney Enforcement Strategies in New York City,” 73rd TRB Annual Meeting (D. Boyle)
“Making High Speed Rail Work,” High Speed Rail Conference (R. Sheck)
“Privatization in Mass Transit,” Executive Committee, Florida Department of Transportation (W. Ball)
“Advanced Technologies in Transportation Demand Management” TDM Certification Workshop (M. Pietrzyk)
“Strategies for Preventing Crime Against Tourists,” “Dade County League of Cities Workshop on Tourism Crime” (M. Pietrzyk, with A. Polk)
“Finding the Right IVHS Partnership at a Local Level,” IVHS America Annual Meeting (M. Pietrzyk)
“An Assessment of the Potential Saturation in Men’s Travel,” Nationwide Personal Transportation Study’s Specialty Conference (S. Polzin, J. Rey)
"The Americans with Disabilities Act of 1990."
American Society of Civil Engineers’ Transportation Seminar, Florida West Coast Branch (B. Gribbon)

"Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991," American Society of Civil Engineers’ Transportation Seminar, Florida West Coast Branch (M. Pietrzyk)

"Transportation Technology and the Future," 45th International Industrial Engineering Conference (G. Brosch)

"Measuring Effectiveness: How to Develop an Evaluation and Monitoring Program," Southeast Chapter Association for Commuter Transportation Conference (D. Rudge)


"Developing a Customized Pavement Management System for Port Orange, Florida," 3rd International Conference on Managing Pavements (M. Pietrzyk)

"User Fees Through Electronic Toll Collection," National Forum on Public Finance, Innovative Financing Strategies to Develop America’s Infrastructure (M. Pietrzyk)

"The Intermodal Guideway Research Project," South Florida Regional Planning Council (R. Sheck)

"Travel Demand Management and Intelligent Vehicle Highway Systems," National Policy Conference on Intelligent Transportation and the Environment (P. Winters, with A. Polk)

"Transit, TDPs, and Strategic Planning," South Florida Regional Planning Council (D. Boyle)

"New Trends in Business Supported Transportation Management Organizations," Business Transportation Council (P. Winters)

"Impact of Community Design on Transportation," Florida ITE’s Residential Planning, Design, and Traffic Control Conference (D. Rudge)

"Evaluating Your System for Improvement," 2nd Annual Transportation Disadvantaged (TD) Conference (R. Mathias)

"Impacts of ADA," 2nd Annual TD Conference (B. Gribbon)

"Florida Five- and Twenty-Year Transportation Disadvantaged Plan," 2nd Annual TD Conference (R. Jones)

"IVHS Applications to Congestion Management Systems," Hillsborough County CMS Steering Committee Meeting (M. Pietrzyk, with A. Polk)

"Understanding Carpool & Transit Markets: A National Perspective," Association for Commuter Transportation International Conference (W. Ball)

"Evaluation and Monitoring of TMA/TMO Performance in Florida: First Year Experiences," Association for Commuter Transportation International Conference (D. Rudge)

Testimony on Travel Behavior by Blacks in the US, Second Congressional Black Caucus Transportation Braintrust (E. Hill)

"State Transportation Policy Initiative," Central Florida Chapter of the Florida Engineering Society (E. Mierzejewski)

"Implementing Electronic Toll Collection," ITE Annual Meeting (M. Pietrzyk)

"An Overview of Tampa’s Transportation Future," Tampa Transportation Town Meeting (G. Brosch)

"Transit and Paratransit Demand Under ADA," 14th National TRB Conference on Accessible Transportation and Mobility (R. Mathias)


"What Can Advanced Technologies Do For Congestion Management Systems?", ITS Florida Forum Florida Section ITE Annual Meeting (M. Pietrzyk)

"Planning for Access Management," Arkansas Chapter, American Planning Association (K. Williams)

"Researching Guideway Transit and Intermodalism," American Association of State Highway and Transportation Officials (AASHTO), Standing Committee on Public Transportation (R. Sheck)

"IVHS Applications to Congestion Management Systems" and "Findings of the Miami AVL Test," Broward County CMS Committee (M. Pietrzyk, with A. Polk)
Ball, William
TRB A1C06, Social and Economic Factors in Transportation (newsletter editor)
TRB A1E05, Transit Management and Performance
NCATRB Panel A2-20, Economic Trends & Multimodal Transportation Requirements

Boyle, Daniel
TRB A1E06, Public Transportation Marketing and Fare Policy (chair)

Bricka, Stacey
TRB A1C03, Urban Transportation Data and Information Services (s)
TRB A1C04, Survey Methods (s)

Brosch, Gary
TRB, University Representative
IRF, Education Foundation (board member)

Gribben, Ben
TRB A1E02, Campus Transportation (s)

Henderson, Patricia
International Association of Business Communicators

Hendricks, Sara
ITE, Transportation Planners Council

Jones, F. Ron
TRB A1E10, Paratransit
TRB A1E09, Specialized Transportation

Mathias, Rosemary
TRB A1E08, Rural Transportation Conference (s)
TRB A1E09, Specialized Transportation
TRB A1E09, International Activities (s)
TRB A1E09, 15th National Conference on Accessible Transportation and Mobility (chair) (s)
TRB A1E10, Paratransit (newsletter editor)

Maull, Perry
TRB A1E02, Public Transportation Planning and Development

Mierzejewski, Edward
ASCE, Urban Transportation Economics (chair)
TRB A1E011, Ridesharing
ITE, Transportation Educators Council, Executive Committee; Student Chapters Committee

Miller, Tom
TRB A3B03, Operator Education and Regulation

Pietrzyk, Michael
ITE 6F-50, Selected Travel Behavior, Characteristics of the Elderly (chair)
ITS America, Benefits, Evaluations & Costs Committee; ETTM Subcommittee; Task Force on Public-Private Cooperation
ITS Florida, Executive Committee

Polk, Amy
ITS America, Benefits, Evaluation & Cost

Polzin, Steven
TRB A1E12, Light Rail Transit

Rey, Joel
TRB A1C03, Urban Transportation Data and Information Services (s)
ITE 6F-50, Accommodating the Elderly in Transportation Planning

Rudge, Daniel
American Planning Association, Transportation Research Committee
ACT, 1994 Conference Awards Committee (chair); TMA Council
TCRP Panel, S3-02, Suburb to Suburb Commuting

Sheck, Ronald
TRB A1E13, Intermodal Interface with Transit (s)
TRB A1E04, Committee on Rail Transit Systems
Association of American Geographers, Transportation Specialty Group (chair, newsletter editor)

Winters, Phil
TRB A1E011, Ridesharing (chair)
TRB, TDM Task Force
ITS America, TDM & Telecommuting Task Force
ITE, TDM Advisory Committee
ACT, 1994 Conference Program Committee (chair); Subcommittee on Ethics (chair)