Today’s public transportation professionals must cope with information overload and balance competing priorities while striving to make their services more efficient, productive, and attractive to the traveling public. They must sift through a morass of performance data. They struggle to keep up with industry news and trends by pouring over journals and research reports that magically appear in their inboxes. And stagnant budgets force more managers to streamline staffing levels and curtail travel for conferences and training. Managers must make more tradeoffs between continual improvement of knowledge and skills of staff and the cost of travel in terms of time and money.

Faced with fiscal realities as well as the reluctance of some staff to air travel after 9/11, managers may believe shelving the periodicals and cutting back training and conference travel budgets are the only routes to take. However, netconferencing opens up another path to balance the needs with the resources.

Netconferencing requires simply a phone and a computer with an Internet connection to “attend.” In a netconference, “attendees” hear the portion of the presentation via a telephone call and simultaneously view the PowerPoint presentation via Internet. The National Center for Transit Research (NCTR) at USF uses netconferencing tools to reach the public transportation industry throughout the country.

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Netconferences also facilitate both on-line and real-time communication between the audience and the panelists. The live text chat feature allows learners to participate interactively during a live training delivery. They can privately post questions to instructors or content experts who may then choose to respond privately (to the learner) or publicly (to the entire audience). In effect, netconferencing moves the presentation from conference hall to each attendee’s office.

“NCTR’s netconferencing program offers us an entirely new communication channel,” said Joel Volinski, Director of NCTR. “We can now conduct professional presentations and seminars that enable us to reach more public transportation professionals more often.”

If there was any doubt about netconferencing’s appeal to the public transportation community, one need look no further than the August 14th workshop sponsored by NCTR in partnership with Association for Commuter Transportation. “Getting to Yes! Lessons Learned for Increasing the Effectiveness of Commuter Benefit Programs” was a one-hour session. NCTR leveraged its 20 virtual seats acquired from PlaceWare® online communication services by sponsoring sessions with local ACT chapters throughout the country to expand its reach. More than 100 transit and transportation demand management professionals “attended” this conference from a dozen locations across the country to hear Michael Grant of ICF Consulting and co-author of the upcoming Transit Cooperative Research Program report “Strategies for Increasing the Effectiveness of Commuter Choice” and Tracy Simpson of Millennium Pharmaceuticals in Cambridge, Massachusetts. Grant gave his presentation from his office in Washington, D.C. and summarized national research on employer experiences with commuter benefits. Simpson provided an insider’s view of setting up and maintaining a commuter benefit program within a company, presenting from her telework location home in the Boston area.

“We were thrilled with the results of this netconference as a way to inform and educate our members on commuter benefits,” said Donna Smallwood, chair of ACT’s Professional Development committee and moderator for the netconference. “We will partner with NCTR again.”

The benefit of netconferences extends beyond the actual live event. In a netconference application, entire events can be recorded for on-demand playback. The slide and audio content is indexed, enabling self-paced instruction by allowing the learner to move within the recording simply by clicking on the title of the slide. These recorded sessions are streamed directly to a learner’s media player or can be captured on a CD-ROM. The recorded version of the “Getting to Yes!” netconference can be found at NCTR National TDM and Telework Clearinghouse website at http://www.nctr.usf.edu/clearinghouse/. NCTR’s netconferencing approach is an ideal, cost-effective conduit for sharing information with more public transportation professionals, more often and more efficiently. With net conferencing, geography and travel expenses are no longer an issue.

To suggest a netconference topic, or for more information, contact Philip L. Winters, CUTR TDM Program Director, at winters@cutr.usf.edu.
Community impact assessment booklet developed for transit agencies

To provide information and materials on issues and resources related to environmental justice, Title VI, and social equity using community impact assessment techniques, the Florida Department of Transportation and the National Center for Transit Research at CUTR collaborated to develop tools that may be used by transit agencies to assess the impact of decisions, to work with communities to avoid, mitigate, or minimize these impacts, and to develop transportation strategies that enhance communities.

Since the issuance of Executive Order 12898 and the U.S.DOT Order on Environmental Justice, transportation agencies have been asked to give more consideration to social equity issues in planning, project development, and throughout service delivery. While the Federal Transit Administration (FTA) has not issued an order, the Federal Highway Administration (FHWA) and other U.S. DOT administrations have done so. This project provided the opportunity for transit agencies to begin to address these issues in a proactive manner. Community impact assessment provides a framework for consideration of environmental justice, Title VI, and other social issues in the planning, programming, and implementation processes.

CUTR staff reviewed current literature on community impact assessment, environmental justice, public involvement, and related topics. A short survey was faxed to all Florida transit agencies to gauge their knowledge of Title VI, environmental justice, and related legislation and policies. Agencies also were asked to indicate various community impact assessment and public involvement techniques used in decision-making. Telephone and face-to-face interviews were held with representatives of Florida transit agencies. These activities were coordinated with other community impact assessment research and related projects, and the findings were synthesized in a booklet titled Community Impact Assessment and Environmental Justice for Transit Agencies: A Reference.

Federal focus

Although the bulk of the literature and practice continue to focus on roadway projects, greater emphasis on moving community impact assessment into planning and increasing public involvement in all transportation actions occurred during the course of the project. The FTA Office of Planning has established a website on the environmental process, and FTA and FHWA established and continue to maintain a joint website on environmental justice. Various TRB subcommittees addressed community impact assessment during their mid-year meetings. A TRB Joint Subcommittee on Community Impact Assessment was established at the 80th Annual Meeting and TRB, two FHWA Resource Centers, and other agencies planned regional meetings.

Survey and booklet development

CUTR researchers worked with these agencies and committees to gather information and other resources for the project by means of a survey. These materials were combined with the findings from the survey and interviews.

Overall, the survey respondents had some knowledge of community impact assessment techniques and were most familiar with public involvement techniques. Many, however, were not familiar with a number of resources that have become available recently, which suggested that a bibliography, complete with Internet addresses,
would be appropriate for the booklet.

**Community impact assessment basics**

The basics of the community impact assessment process are to:

- determine the action and define the study area,
- develop a community profile,
- analyze alternatives and identify potential impacts and affected populations,
- identify potential solutions, and
- document findings.

Central to the process is the development of the community profile. The community profile includes assessing community trends and conditions. It also is an inventory of study area features and provides opportunity to identify community issues. Another product of the profile is a socioeconomic inventory map.

Transit agencies are required by UMTA (FTA) Circular 4702.1, Title VI Program Guidelines for Federal Transit Administration Recipients, to develop demographic and service profile maps, overlays, and charts. The charts are updated after each federal census or when there are significant changes in services, but at least every three years. The demographic and service profile components include a base map, minority population overlays and transit service overlays, and racial population distribution charts. The components are similar to those of the community profile. In *Community Impact Assessment and Environmental Justice for Transit Agencies: A Reference*, it is suggested that transit agencies begin with the Title VI Demographic and Service Profile, using this resource to expand into community impact assessment.

Although the service and profile map contains the transit system's total service area, it can be updated to do more in-depth analyses. This is part of the iterative nature of community impact assessment. The update may include defining the community or study area boundaries and locating businesses, residences, and activity centers. Additional overlays, such as demographic characteristics of the study area at the block group area, median household income, and the economic base, may be useful. Depending on the type of action under consideration, other analyses may include population growth, age distribution, average household size, and concentrations of other subgroups of the population, such as persons with disabilities. Other economic characteristics, such as unemployment rates and trends also may be included.

Generating additional map overlays or layers of community facilities may help analysts understand how the community uses these facilities and help to identify potential impacts. Consideration should be given to the location of the following facilities within the study area:

- medical and health care facilities,
- educational facilities,
- religious institutions,
- public works and services,
- civic centers,
- recreational facilities,
- aesthetic, cultural, and historical resources,
- commercial facilities, and
- land-use characteristics and transportation facilities.

While the demographic and service profile or community profile may appear intensive, much of the data may already be available to transit agencies, but in need of updates. *Community Impact Assessment and Environmental Justice for Transit Agencies: A Reference* lists potential data sources and resource agencies. Several Florida metropolitan planning organizations are in the process of developing or updating much of the demographic and socioeconomic data due to the release of the 2000 Census.

In addition to providing the update as required by the circular, the profile can be beneficial in the analysis of environmental justice and Title VI issues. The profile helps community analysts focus limited resources. Combined with other community impact assessment techniques, especially public involvement, transit agencies are provided a structured framework for not only analyzing and resolving adverse impacts, but also engaging communities as partners in decisions. Other applications include analyzing services to welfare transition program participants, preparing transportation development plans, and service planning analysis.

**State and national efforts**

State and national efforts continue to increase the use of community impact assessment techniques to improve decisionmaking. The FTA Office of Planning has requested additional copies of the booklet and has

*continued on p.15*
Message from the Director

We are pleased to present this 2002 annual report of the activities of the National Center for Transit Research (NCTR) at the USF Center for Urban Transportation Research. Most University Transportation Centers (UTCs) are proud of their research capabilities as well as their ability to help produce the next generation of transportation professionals through their classes and degree programs. With an emphasis on practical applications that are of use to operating transportation agencies, NCTR’s faculty appreciates the value of basic research but are focused on providing information and solutions that can be put to use immediately. The theme of the center is “to enhance the performance and relevance of public transportation and alternative forms of transportation in urban areas.” We cannot possibly achieve this objective if our program is not relevant to operating transportation agencies’ current needs. We at NCTR are dedicated to our theme, as this annual report will demonstrate.

After three years of work as a University Transportation Center, NCTR has completed 24 research and technical assistance projects. That level of productivity is among the very best of the 33 designated UTCs in the country, but what is more satisfying is that the results of our work have reached so many transportation professionals who, in turn, have been able to use our information to help improve their services to the traveling public.

In just the past 12 months, NCTR faculty members have made 45 presentations on the results of their program-funded research at a variety of state and national conferences, providing direct information to more than 1,000 professionals in the process. NCTR faculty have arranged 40 training sessions and developed the programs for two statewide professional development conferences attended by more than 1,100 public transportation officials. Our listservs have more than 1,000 members who enjoy the ability to share up-to-the-minute information on public transit, vanpooling, telecommuting, commuter benefits programs, and much more on an ongoing, convenient basis. Our Journal of Public Transportation reaches more than 1,700 subscribers from more than 47 nations. Our website offers full reports as well as streamed-video summaries of much of NCTR’s research.

In the past year, NCTR has made special contributions in the areas of Bus Rapid Transit and Community Impact Assessment and in identifying barriers to the use of transit. We invite you to read more of the detail on these and many other programs in this annual report. NCTR was recently rewarded for its record of achievement by being selected in a highly competitive process to receive two more years of federal funding as a University Transportation Center. We look forward to continuing to provide research, technical assistance, education, and training assistance to the public transportation community.

Joel Volinski, NCTR Director
**Program Overview**

**Funding**
NCTR just completed its third year, having been approved for funding in September 1999. The federal funding for this program helps to significantly expand the area of public transportation research already conducted by CUTR staff over the last 14 years. Federal funds for the program are matched with a 100 percent cash match from the Florida Department of Transportation (FDOT), creating a doubling of total program funding.

The FDOT funding used to match the USDOT funds is made available at a 5 percent indirect rate, as compared to the federal indirect rate of 45 percent. This low indirect rate results in an almost 250 percent increase in direct funds available for public transportation research. FDOT’s commitment to match this grant was secured before July 1999, and it is important to note that the relationship remains strong, with FDOT remaining committed to providing this match for the duration of the program. FDOT also has designated three senior members of its management staff to serve on the NCTR Advisory Committee to help select future projects and guide the program.

**UTC Competition**
In a recent competition among 17 University Transportation Centers (UTCs) in the U.S., NCTR was awarded an additional two years of program funding at an increased level of $2 million per year ($1 million USDOT, $1 million local match). This award was made to only 10 of the original 17 UTCs.

**Third-Year Accomplishments**

**Research**
The third year of the NCTR program has supported 18 projects approved by the NCTR Advisory Committee. These projects consist of 6 core programs that will be conducted throughout the life of NCTR and 12 new annual research projects that explore methods to accomplish the goals of the Center in enhancing the performance of public transportation. Core program areas include continued development and maintenance of:

- the National Transportation Demand Management (TDM) and Telework Clearinghouse,
- the National Bus Rapid Transit Institute (NBRTI),
- the Student Transportation Education Program,
- ongoing production of teleconferences and webcasting;
- graduate student professional development, and
- the *Journal of Public Transportation*. 
In FY 2002, in addition to projects that fall into these core program areas, research topics were solicited from public transportation professionals throughout the U.S. and Canada; 85 research ideas were received and 12 were selected for funding. New, ongoing, and completed research projects and their principal investigators for FY 2002 are listed below.

**Summary of Year 3 Projects**
- Safe Operation of Low Speed Vehicles and Golf Carts (Hardin)
- 2001 Florida Transportation Almanac (Baltes)
- Evaluation of First-Year Florida MPO Transit Capacity and Quality of Service Reports (Perk)
- Ridership Models at the Stop Level (Xuehao)
- Repair Time Standards for Transit Vehicles (Staes)
- Why People Cross Where They Do (Chu)
- Expanding Commuter Choice Tax Benefit Options (Hagelin)
- Best Practices in Voluntary Driving Cessation Programs for Seniors (Hardin)
- FDOT Statewide GIS for Transit Technical Assistance Program (Catalá)
- National Transit Database Automated Data Collection Procedures (Kamp)
- Assessment of Transit Information Materials and Development of Selection Criteria for Prototype Design Elements (Hardin)
- Public Transportation Syntheses Series (Volinski)
- Worksite Trip Reduction Model and Manual (Winters)

**Summary of Ongoing Projects**
- Lessons Learned in Transit Efficiency—Part II (Volinski)
- Analysis of National Transit Database (Polzin)
- Bus Rapid Transit—Phase 1, Evaluation of the South Miami-Dade Busway (Baltes)
- FSUTMS Mode Choice Modeling—Factors Affecting Transit Use and Access (Zhao, FIU)
  - Bus Rapid Transit Technology—A Case Study of the Lynx LYMMO Project in Downtown Orlando, Florida (Baltes)
  - Qualitative Methods for Transit Research (Cleland)
  - Perceptions of Transit Safety (Hardin)
  - Customer Surveying for Public Transit: A Design Manual (Baltes)
  - Synthesis of Transit Non-User Surveys (Perone)
  - Quantifying the Business Benefits of TDM (Winters)
  - An Investigation of the Structure/Performance Relationships of Public Transit Agencies (Simmonds, FAU)
Summary of Completed Projects

- Analysis of the FDOT Transit Corridor Program (Staes)
- FDOT Statewide On-Site Technical Assistance Program (Staes)
- FDOT Statewide Transit Training Program (Staes)
- Inventory and Analysis of Advanced Public Transportation Systems in Florida (Rey)
- Analysis of Florida Transit Bus Accidents (Rey)
- Enhancement of the Public Transportation Promotional Materials Clearinghouse (Mustard, FSU)
- Evaluation of the Economic Viability of Narrow-Gauge Local Rail Systems (Land)
- Transit Customer Satisfaction Index (Cleland)
- Assessment of Operational Barriers and Impediments to Transit Use (Hardin)
- Cops, Cameras, and Enclosures (Allan, Volinski)
- State Park-n-Ride Lot Program Manual (Land)
- Pedestrian Mid-Block Crossing Difficulty (Chu)
- Neighborhood Intermodal Transfer Facilities (Land)
- Where Are Tomorrow's Maintenance Technicians Coming From? (Reep)
- Telecommunication and Its Future Role in the Public Transportation Arena (Hendricks)
- Effectiveness of Bus Signal Priority (Chada)
- Environmental Justice and Community Impact Assessment for Transit Agencies (Ward)
- Land Developer Participation in Providing for Bus Transit Facilities/Operations (Hendricks)
- Synthesis of Securement Device Options and Strategies/Accident Tracking (Hardin)
- Florida Transit Training Program (Staes)
- Florida Transit Technical Assistance Program (Staes)
- Public Transit Investment Decisions: Per Capita Decisions, Trends and Impacts (Gregg)
- National Transit Bus Accident Data (DeAnnuntis)
- Evaluation of First-Year Florida MPO Transit Capacity and Quality of Service Reports (Perk)

Fourth-Year Projects

NCTR recently completed the process to solicit and select research ideas for the FY 2003 program year. Letters requesting research ideas and proposals were sent to all of the transit agency directors, MPO directors, and FDOT public transit managers. Idea requests also were sent to all public transportation-related committees of TRB, APTA committee chairs, and national listservs. From the submission of 108 different research ideas, the NCTR Advisory Committee provided assistance in selecting 8 core program and 12 research projects for funding in FY 2003.
Education

Education is a core program area of NCTR and, in light of the growing appreciation of the importance of professional capacity building, the educational component of NCTR is getting additional attention. Student involvement in project research always has been a high priority of CUTR and remains so in the NCTR program. For many years, CUTR has been an active member of the Southeastern Transportation Center (STC), a consortium dedicated to training professionals to address the transportation safety needs of the region and nation. During the first three years of NCTR, more than 30 graduate and undergraduate students participated in public transportation research projects and were supported by funding from NCTR. The major areas of study of these students are multidisciplinary in nature, including engineering, economics, anthropology, business, geography, and public administration. Through research and guidance, NCTR helps develop well-informed, educated individuals, some of whom will serve as future ambassadors in the public transportation industry while others will carry out their career activities with a far richer understanding and appreciation of public transportation. The following are summaries of specific core areas of the NCTR education program.

Exploration of the Feasibility of a Transportation Degree

The Transportation Degree Evaluation is an initiative designed to determine the feasibility of establishing a graduate degree program designed for persons with an interest in transportation careers, with special emphasis on public transportation issues. A report outlining how such a program would be implemented at USF has been produced. The working proposal recommends a master's degree transportation program that would complement the USF Department of Civil and Environmental Engineering's transportation master's program and the Graduate Interdisciplinary Transportation Program coordinated by CUTR. The degree proposal has been preliminarily reviewed by USF administrators and the Dean of Engineering. Current activities include modifying the program in response to comments received through focus group meetings and strategizing how to fund this initiative in light of extremely tight education budgets. This proposal will be taken to USF Board of Trustees, who have authority for approving new master's degree programs. Working with USF administrators, the proposal will be presented to the Board, and, simultaneously, work will continue with university administrators to identify appropriate funding strategies for the program.

Graduate Interdisciplinary Transportation Program

The Graduate Interdisciplinary Transportation Program is a certificate program offered and administered by CUTR/NCTR in cooperation with the USF departments of Economics, Public Administration, and Civil and Environmental Engineering. Ten students currently are enrolled in the program. Eighteen semester hours of core courses are offered to provide a firm grounding in transportation and to meet degree requirements within the respective departments. Participants are exposed to a multidisciplinary perspective on transportation and develop a rich perspective and appreciation for the nature of transportation policy. The program is evaluated on an ongoing basis, with initiatives targeted toward modifying content, increasing marketing, and involving additional departments. Public transportation is an integral part of the course material and an appropriate area to which students should be exposed.
Research Experience for Teachers Program (RET)
This program was designed to solicit science and math teachers from the local high schools and middle schools and have them work for four weeks on the university campus with a faculty researcher. Developed and conducted by the USF College of Engineering, the program involved 13 teachers in its pilot year, three of whom were teamed with NCTR faculty and involved in transportation/transit projects. A requirement of the teachers in the program was development of teaching plans for use in their classrooms, with the plans placed on the internet for use by other teachers.

Developing Interest in the Field of Public Transportation
NCTR conducted the Summer Transportation Education Program (STEP), a three-day program geared towards high school students to provide them with the opportunity to learn more about careers in the field of public transportation through discussions with practicing professionals, hands-on activities, and field trips. The 14 participants, who represented high schools throughout the Tampa Bay area, were introduced to public transportation career opportunities related to engineering, safety, operations, and planning, as well as many others. They participated in discussions with planners and engineers from two planning/engineering firms, learned about bus rapid transit, and visited Tampa International Airport, the Tampa Port, and Hillsborough Area Regional Transit.

Another initiative that NCTR has begun is the development of a multi-media educational toolkit that can be used by students of all ages to encourage interest in public transportation. The information included in the toolkit will be organized such that public transportation professionals and teachers will be able to generate lesson plans or activities geared toward specific ages. At the high school level, in particular, the toolkit will include activities that advocate public transportation careers. While the distribution process has yet to be determined, the goal is to ensure that multi-media toolkits are available to transportation professionals participating in “career day” activities and to teachers for their normal yearly curriculum.

Technology Transfer
Excellent research is of limited value if the results are not made available to as many parties as possible that might benefit from the findings. Extensive technology transfer is a key determinant of NCTR’s value. The following sections summarize specific accomplishments in the area of technology transfer by NCTR staff over the last year.

Journal of Public Transportation
The Journal of Public Transportation is a respected international journal containing refereed articles on engineering, planning, GIS, finance, and safety, and include methodological, technological, and financial perspectives, with emphasis on the identification of innovative solutions to public transportation problems. The Journal’s circulation exceeded 1,700 subscribers in the past year, representing the U.S. and 47 countries, and boasts a distinguished editorial board.
NCTR Website

NCTR continues to improve its website (www.nctr.usf.edu) to push research results into the field and pull transit professionals, students, and others to help set the research agenda. The redesigned website makes it easier to find reports and journal articles, obtain assistance via listservs, submit research ideas, and view streaming media presentations. The website contains more than 20 final reports, numerous streaming media presentations, and abstracts of articles published in the Journal of Public Transportation. NCTR also hosts two types of listservs to complement and supplement NCTR’s research and technical assistance efforts. Discussion listservs allowing subscribers to read, search, and contribute messages by web or email, providing researchers and others quick access to the field to help locate unpublished information or fulfill a request for short-term technical assistance. NCTR sponsors listservs on bus rapid transit, Leadership APTA, telework, and transportation demand management, the largest NCTR listserv with over 550 subscribers. The new eNewsletter allows NCTR to send news and announcements of additions to the website, upcoming training sessions, etc.

Web-Based Training, Meetings and Conferencing

In its continual quest to work harder and smarter, NCTR continues to expand the use of eLearning, netmeetings, and netconferences. These innovative approaches help NCTR transfer research results and engage students and transit professionals in fully-functional virtual classrooms. NCTR’s approach to eLearning allows instructors and learners to view, access and interact with a variety of content forms in numerous ways. NCTR will continue to pursue new and creative ways of bringing research results to the attention of the industry and to engage the transportation professionals of today and tomorrow.

Conclusion

In its third year, the National Center for Transit Research is producing a large volume of high-quality research of practical value to public transportation agencies throughout the country. The results of the research are being effectively distributed through a variety of means, including new electronic techniques that allow fast and flexible access to the information NCTR is producing. The program is helping to cultivate the next generation of transportation professionals by providing opportunities for dozens of students who assist in the research being conducted. Many of them are joining public and private sector transportation agencies upon graduation. NCTR is excited about the possibilities of establishing an interdisciplinary transportation degree program that will attract even more students to the profession.

NCTR continues to enjoy a strong relationship with the Florida Department of Transportation and is leveraging UTC program funds through partnerships and contracts with non-profit foundations and the Federal Transit Administration. The research faculty and students of NCTR look forward to contributing to the rising success of public transportation agencies throughout the nation.
Getting the word out about BRT

Since inception in January 2002, the National BRT Institute (NBRTI) has been busy promoting the concept of Bus Rapid Transit in the U.S. The goal of the institute is to encourage transit agencies, local and State governments, and metropolitan planning organizations engaged in coordinating infrastructure improvements, technology deployment, and operations to consider the benefits of BRT. The desired outcome is to improve mobility and accessibility, advance economic growth and trade, and enhance environmental quality. Research has shown that BRT can improve travel time, service reliability and customer convenience, foster livable communities, and introduce cost-effective, environmentally-friendly technology. Following are highlights of the most recent activities of the National BRT Institute.

Written congressional testimony
NBRTI staff presented testimony at a hearing in June 2002 by the House Committee on Transportation and Infrastructure related to the Federal Transit Capital Grants Programs to discuss bus rapid transit. Written testimony pertaining to the role and future of BRT in the U.S. for publication in Congressional Record also was submitted.

Consortium activities
Currently, 17 cities comprise a consortium of members of the Federal Transit Administration’s BRT Demonstration project. Consortium members were present the August 2002 grand opening of the Silver Line BRT system in Boston, the first BRT service offered in Boston and one of the first of its kind in the country to operate in a dedicated running way. Utilizing the latest in tracking and transportation technology, the innovative BRT service offers commuters a fast and reliable connection between Dudley Station and Downtown Boston. The Massachusetts Bay Transportation Authority believes that BRT offers the best quality service for the Washington Street Corridor while providing the flexibility not available with fixed rail.

U.S. BRT activities
The Delaware Valley Multimodal Electronic Payment Systems, led by the Delaware Department of Transportation, is a demonstration project designed to test the feasibility of introducing a single payment system through which participating agencies can maintain autonomy while sharing a common clearinghouse function, payment method, and reconciliation process. Initially, the project will involve the installation of “Smart Card” compatible hardware and software to serve the DART transit fleet of over 300 buses. Subsequent phases include a limited deployment of Smart Cards for use at Delaware State University, the Delaware Turnpike, and select Wilmington municipal parking facilities. Technology assessment is under way, with procurement activities anticipated soon.

BRT evaluations
The National BRT Institute is currently conducting performance evaluations of two separate BRT systems in Florida: the Lynx LYMMO project in Orlando—a downtown circulator—and the South Miami-Dade Busway, a two-lane, bus-only roadway constructed in a former rail right-of-way adjacent to a major arterial (US 1). Careful documenting and analysis of the effects of the BRT systems and unique features of each will make it possible to determine which features are most effective in certain contexts, such as the type of service offered, the level of transit demand, the size of the region, passenger amenities used, and other characteristics to ultimately increase the usage of public transport.

APTA study mission
The theme of this study mission sponsored by the American Public Transportation Associate was “Better Service continued on p. 14
to Customers—Better Results for Management.” During meetings and site visits to BRT systems in Australia and New Zealand, participants explored seamless commuting initiatives, BRT and rail projects, fare integration, contracting and privatization, marketing and management innovations, and alternative fuels at BRT systems.

**Technology transfer and technical assistance**

As part of the National BRT Institute’s technology transfer activities, staff have attended or participated as speakers, moderators, and conference organizers for BRT workshops in Pittsburgh, Miami, Los Angeles, and Puerto Rico. Presentations also were made at the APTA Intermodal Planning Conference in New York, the Florida Public Transit Association in Tampa, and the DuPage County Transportation Discovery Conference in Chicago.

BRT staff assisted with the SpeedLink BRT system in Detroit as a member of its technical advisory committee and aided Hennepin County in Minnesota with its BRT planning efforts.

The National BRT Institute is currently a member and active participant in APTA’s Bus Rapid Transit Task Force.

NBRTI recently unveiled its new website—www.nbrti.org—devoted to BRT in the U.S. and globally. The site contains a host of information about BRT worldwide and includes a “peer-to-peer” BRT listserv for industry professionals to directly discuss BRT-related issues.

The latest issue of the *Journal of Public Transportation* is devoted to the innovative concept of BRT. A product of the National Center for Transit Research at CUTR, the special issue contains papers related to BRT from researchers and consultants on a variety of topics.

**Federal Transit Administration**

In support of BRT and the establishment of the National BRT Institute, the Federal Transit Administration and the Florida Department of Transportation continue to provide support with funding for research, evaluation, and technology transfer. In support of FTA’s marketing efforts for BRT, the Institute recently completed an Action Plan that spells out the specific actions FTA will pursue in marketing BRT as an alternative mode of public transportation.

**Upcoming conferences**

The Transportation Research Board held its 11th International HOV Conference in Seattle in October. With the theme of “Evolution … or Revolution?”, topics discussed included freeway transit stations (designing for pedestrians and transit operations, P&R integration), arterial HOV lane treatments, transit signal priority, transit planner/traffic engineer dialogue (examples and opportunities), preconditions for successful BRT implementation, BRT in alternatives analysis, and definition of alternatives and evaluation criteria. NBRTI staff participated in the conference.

For further information on the National BRT Institute, contact NBRTI Director Dennis Hinebaugh, hinebaug@cutr.usf.edu, (813) 974-9833, or Senior Research Associate Mike Baltes, baltes@cutr.usf.edu, (813) 974-9843.

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**Spring transportation classes**

CUTR and the USF College of Engineering are offering the following transportation classes in the Spring 2003 semester, which begins on January 6:

- Transportation and Society (CGN4933), Tuesdays-Thursdays, 3:30-4:45pm, Drs. Ward, Wambalaba, Polzin
- Graduate Transportation Seminar (TTE6930), Mondays, 11:00-11:50am, Dr. Pendyala
- Traffic Flow Theory (CGN6933), Mondays, 5:00-7:50pm, Dr. Lu
- Transportation Safety (TTE6315), Tuesdays, 5:00-7:50pm, Dr. Lu
- Public Transportation (TTE6651), Wednesdays, 5:00-7:50pm, Dr. Polzin
- Travel Demand Analysis Methods (TTE6507), March 10-15, 8:30am-5:30pm, Dr. Pendyala

For further information, contact the USF Department of Civil and Environmental Engineering at (813) 974-2275.
appointed a person to focus on this area. It was distributed at the Third National Community Impact Assessment Workshop in Madison, Wisconsin, in August. The booklet is linked to the community impact assessment website, which is sponsored by FHWA and FDOT Environmental Management Office. The booklet also has been added to the NCTR and CUTR websites.

For further information on this project, contact CUTR Ethnography and Transport Program Director Beverly Ward at ward@cutr.usf.edu, (813) 974-9773. ✹

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CUTR research staff expands

Larry Hagen, PE, PTOE, joins CUTR as Director of the ITS, Traffic Operations & Safety Program. Previously, he was Traffic Signal Systems Engineer with Broward County and Senior Traffic Engineer with Kimley-Horn and Associates. He holds a master’s degree in engineering from the University of Florida and is the current president of the Florida Section of the Institute of Transportation Engineers.

Jay Goodwill joins CUTR as a Senior Research Associate with the Transit Management Program, specializing in public transportation planning, marketing, funding, and performance analysis. Previously, he was General Manager of Sarasota County Transit. He holds an MS in civil engineering and a Master of Public Works from the University of Pittsburgh.

Fabian Cevallos joins CUTR as a Senior Research Associate in the Transit Research Program, specializing in transit operations, advanced public transportation systems, and GIS. Previously, he was a Senior Planner for Broward County Mass Transit. He holds a master’s degree in transportation engineering from San Jose State University and is pursuing a PhD in that field from Florida International University.

Robert Frey, AICP, joins CUTR as a Research Associate with the Planning and Corridor Management Program, specializing in transportation planning and policy and local transportation issues. Prior to joining CUTR, he was a transportation planner with Tindale-Oliver and Associates and Ghyabi Lassiter and Associates. Mr. Frey holds a master’s degree in public policy analysis from Baylor University.

Cheryl Thole joins CUTR as a Research Associate in the Transit Program, specializing in transportation planning, GIS, and paratransit. Before joining CUTR she was an ADA/Paratransit intern with the Regional Transit System in Gainesville. She holds a BA in political science from the University of Florida and will receive a master’s degree in urban and regional planning from UF in December.

Jennifer Perone joins CUTR as a Research Associate in the Transportation Demand Management Program, specializing in human factors and cognitive engineering design and statistical analysis. Previously, she was a graduate research assistant at CUTR and a teaching assistant in the USF Psychology Department. Perone holds a BA in psychology from USF and is pursuing a PhD in psychology.

Lisa Tucker joins CUTR as a Research Associate in the Transit Research Program, specializing in senior mobility issues, focus group moderation, and qualitative analysis. Previously, she was a graduate research assistant at CUTR and in the USF Department of Anthropology. Tucker holds a BA in anthropology from USF and will receive a master’s degree in applied anthropology from USF in December. ✹
On July 15-17, 2002, the National Center for Transit Research (NCTR) sponsored the 2002 Summer Transportation Education Program (STEP) for high school students. The program is part of an overall initiative of NCTR to develop activities that will attract young adults into careers related to public transportation. This three-day program provided the students with the opportunity to learn more through discussions with practicing professionals, hands-on activities, and field trips.

The 14 participants from local high schools learned about career opportunities related to engineering, safety, operations, and planning by participating in interactive discussions with planners and engineers from the Tampa offices of Kimley-Horn and Associates and URS Corporation and by learning about bus rapid transit and transit safety before and after September 11, 2001. They also visited the Tampa International Airport, the Tampa Port Authority, and Hillsborough Area Regional Transit (HART).

At the airport, the students toured the flight line and terminal and learned about the various jobs needed to effectively run an airport. Similarly, at the Port the students were given a boat tour and learned about the responsibilities of Tampa’s Port Authority and the various kinds of professionals that are needed to meet those responsibilities. Finally, the students visited HART’s facilities to learn about career opportunities in public transit.

Based on the response of the students and the participating partners, STEP has been deemed a success. Many of the students expressed that they have a new view of public transportation and what career opportunities may exist in the field. NCTR is encouraged by the student and professional participation in this program and looks forward to replicating the program in 2003.

For further information, contact STEP program coordinator Chandra Foreman, foreman@cutr.usf.edu, (813) 974-9793.