Rural Public Transportation Conference Targets Performance and Productivity

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In 1976 the first National Conference on Rural Public Transportation took place in Greensboro, North Carolina. From this beginning a tradition was developed by a small coalition of persons working in rural transportation, the U.S. Department of Transportation, and the Transportation Research Board. Several who were instrumental in this effort became members of the TRB Committee on Rural Public Transportation, which has served as a planning group for the conferences.

Until 1983 each of the conferences was very broadly based and attempted to cover any and all aspects of rural transportation without any single theme. The sixth conference, however, which was held in August at the University of Southern Maine, near Portland, did zero in on a single theme: system productivity and performance. There was a common concern that rural and small urban systems would need to give much greater emphasis than ever before to increase future cost efficiency, productivity, effectiveness, and overall performance. While the passage of the

Feature

Surface Transportation Act of 1982 seemed to provide a somewhat secure funding base for rural and small urban transportation, the state of the economy and the consequent continued belt-tightening of local, state, and federal revenue sources pose a serious threat for perhaps most systems throughout the country. System managers, state officials, federal officials, and researchers all seemed to agree that rural and small urban systems were generally going to have to find ways to get more production and service out of every dollar and transportation resource. Recent changes by UMTA to consider selected performance characteristics as a condition of operating assistance funds also added to the relevance of the conference theme.

The conference's opening general session provided attendees with an overview of what to expect. U.S. Representative John McKernan of Maine's First Congressional District was the keynote speaker. While discussing the importance of rural transportation for the rural elderly and disadvantaged, McKernan also highlighted the ever-increasing competition for scarce federal dollars. Six other panelists who served as workshop or general session directors gave the attendees a preview

of what their sessions would be offering. Each also spoke of their own views of productivity and the need for system managers to focus on improving performance.

SECTION 18 TRANSITION FROM FHWA TO UMTA

A major contingent of key staff from UMTA's central and regional offices attended the conference. The first general session included remarks by Richard Robertson, FHWA Associate Administrator for Planning and Policy Development, and Raymond J. Sander, Executive Director of UMTA. Lynn Sahaj was introduced as UMTA's Section 18 Program Coordinator who would be taking over all responsibilities for the program as the transition from FHWA is made, Sander noted UMTA's support for the Section 18 rural program and outlined his office's reorganization in response to the transfer. David Lee, Program Director for AASHTO, gave an overview of his organization's projects and programs dealing with rural transportation.

PERSPECTIVES ON PRODUCTIVITY

A total of 16 general sessions and workshops was held throughout the 4-day conference. William Underwood, Bureau Director at the Pennsylvania Department of Transportation, presided over a session giving state DOT perspectives on performance evaluation for rural transportation.

This panel showed that there were wide variations from state to state in the level and type of expectations, requirements, and involvement in measuring system performance. Michael Peterson told how the Michigan DOT had recently mandated specific performance indicators for all systems to be used as the base for state funding decisions. Frank Sherkow reviewed Iowa DOT's Uniform Data Management System, which probably represents one of the strongest centrally organized statewide data collection and analysis systems for performance in the nation. All public transit systems in lowa are required to report data into this central computerized system operated by the state. It provides for higher levels of state funding as the system performance indicators improve.

Pennsylvania's joint approach of providing performance bonus funding above minimal grant amounts along with the development of a performance evaluation guide for use by system managers was reviewed by Joseph Daversa of PennDOT. By meeting a set of standards under certain performance productivity criteria, systems in Pennsylvania are

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able to increase their grant funding from the state from a minimum of 66.67 percent of non-federal deficit to a maximum of 75 percent. Passengers per vehicle hour, operating revenue per vehicle hour, deficit per passenger, and having an on-time, accurate, and complete application are the indicators Pennsylvania uses to decide on bonus funding. The state developed a performance evaluation guide during 1982, which was provided to all managers to not only help them meet the bonus criteria but also to help them conduct thorough performance evaluations.

A workshop on alternatives and case studies examined some innovative ways to increase productivity and cost efficiency at the local level. Innovations reviewed included expanding the use of school buses for public transportation in Florida and the management of riders compared with vehicle management in central Vermont. James R. Richburg, President of Florida's Chipola Junior College, explained how the college and the local school district cooperated to increase the use of school buses. The college pays the school district to allow college students to ride the school bus, which simply drops off school students first, then goes on to the college. The trip order is reversed at the end of the day.

A workshop on personnel productivity provided attendees with insights and ideas on what could be done from the personnel management side to improve overall system productivity. Peter Schauer of Boonville, Missouri, and Arthur Saltzman of North Carolina A&T State University (Greensboro) discussed the need to emphasize staff management that avoided employee "burnout" and provide motivation for staff to improve their abilities and skills. Linda Wilson, Director of JAUNT, Charlottesville, Virginia, discussed the importance of screening applicants, training, and goal-oriented evaluations of employees. Rewards for productivity and good communication techniques were found to be most effective. JAUNT has a comprehensive



Key participants in the National Conference on Rural Public Transportation are (L-R) Robert Goble, Carter-Goble Associates, Inc.; Lynn Sahaj, UMTA's Section 18 Program Coordinator; and Raymond J. Sander, Executive Director of UMTA. (TRB photo by Wm. Campbell Graeub)

approach to all aspects of personnel management supported by written guidelines and tests developed by Wilson.

Terry Young, Director of Brazos Valley Transit, Bryan, Texas, focused on recruiting, hiring, and training drivers. Through his survey research, Young developed a risk management approach to driver selection, using a model that has nine key steps in the driver recruitment and hiring process. Randy Issacs, Director of the Mid-Cumberland Transportation System, Nashville, summarized the presentation with an emphasis on the importance of using a systematic auditing or monitoring approach that can help improve personnel productivity and funding assistance.

A general session on productivity and performance offered a variety of examples from state officials and consultants. Michael Peterson recounted Michigan's legislative mandate to establish standard performance and accounting recordkeeping for all transit systems. Although local managers initially reacted unfavorably to the idea, feeling that funding based on performance would be unworkable, their position changed after a pilot test of ten properties was completed. Michigan, like some other states, found that by involving system managers in the development of the performance evaluation system, its adoption became more feasible.

Ann Palmer of the Transportation Division of the Governor's Office of South Carolina reviewed a different approach whereby the state simply provided consulting technical assistance to local system managers to conduct performance audits. South Carolina's project resulted in developing performance ratios in five categories: service quality, customer service, cost effectiveness, maintenance, and organizational efficiency. Both system managers and the state concurred that trend analysis was of the most value. The South Carolina approach appears to be somewhat similar to Pennsylvania's, whereby performance evaluation by the local managers is encouraged and supported as opposed to being mandated on a statewide basis as is done in lowa and Michigan.

Schauer gave an overview of the importance of personnel management and its impact on productivity. His proposals for special programs included methods for process improvements; structural changes such as quality circles, job enrichment, and autonomous work groups; incentive programs that use performance targets, recognition systems, and task systems; the use of ratios to quantify such things as job description versus the actual job; number of routes missed due to no drivers versus total routes; routes driven by supervisory personnel versus total routes; recruiting and training program planned versus actual; and planned compensation versus actual compensation.

Session moderator, Jon Burkhardt of Ecosometrics, Inc., Bethesda, Maryland, focused on the uses and abuses of data. He suggested that in conducting performance evaluations much closer consideration needs to be given to the objectives for the use of particular data items. Based on his company's experience in the field, Burkhardt recommended that cost per passenger, cost per vehicle hour, cost per vehicle mile, passengers per vehicle hour, passengers per vehicle mile, monthly passengers per total population, and operating ratio have been some of the most useful indicators for performance evaluation.

This general session was complemented by a workshop

session on productivity, efficiency, and effectiveness evaluation, chaired by James Miller, Director of the Public Transportation Program at Penn State's Transportation Institute. Performance evaluation techniques were reviewed by David Cyra of the University of Wisconsin's Transportation Extension Program and Linnea McCaffrey of the Beaver County Transit Authority; Beaver Falls, Pennsylvania. Miller explained the use of the performance evaluation guide recently completed for PennDOT and Pennsylvania's rural and small urban system managers. He indicated that from the extensive research conducted in developing this guide, the initial objective of developing norms or standard values for the performance ratios was dropped because the extreme diversity found among rural systems made it more feasible to have systems performance evaluated on a case-by-case basis, and external data comparison needed to be individually tailored to each system.

McCaffrey explained how her organization uses an inhouse microcomputer to collect and analyze performance data. The data are used on a regular basis for monthly board meetings as well as on a week-by-week basis for management's evaluation of their fixed-route and demandresponse service. McCaffrey reminded participants of the importance of considering qualitative factors as well as quantitative indicators since some routes or services may be socially or politically necessary, although they may not be as productive or efficient as other parts of the system.

Cyra reviewed Wisconsin's experience with two case studies: one in Eau Claire, which has a small urban fixed-route system, and the other in Walworth County, which has an agency-based system primarily for the elderly and the handicapped. Wisconsin's case study performance indicators were collected and compiled for use by the managers simply for informational purposes. No requirement of performance achievement was tied to funding decisions. In a follow-up to these case studies, it was found that performance evaluation methods and procedures had been instituted and retained as an ongoing part of the overall management of each of the systems.

A general session on revenue enhancement and funding resources was complemented by a workshop session on the same topic. Bill Osborne, Director of Southeast Missouri Transportation Service, Inc., presided over the general session, which provided overviews of two successful rural systems, the Green River Intercounty Transit System in Kentucky and the Black River Area Arkansas Development Corporation System. The Green River system provided an excellent example of how the integration of human service agency transportation and general public rural transportation can provide for economies of scale and cost recovery that are simply not possible in most freestanding and general public systems. The Green River system attained a 40 percent recovery of operating cost from the farebox.

The Arkansas Black River system is one of the few systems offering general public service that operates at a zero deficit. This appears due to the consolidation of agency service within this system. All costs are allocated back to the individual agencies on monthly billings. Black River has maintained the same billing rates for the past three years. Contributing to this is also a strong cost-containment effort on the labor side, whereby in addition to six full-time drivers, nine part-time drivers and eight volunteer drivers are also used.



Rural public transportation meeting attendees take a look at some of the vehicles displayed. (TRB photo by Wm. Campbell Graeub)

PennDOT's Underwood explained "a tax people love to pay," the Pennsylvania State Lottery system that funds senior citizen transportation on fixed-route and demandresponsive service throughout Pennsylvania. As of 1983, more than 600 million free rides had been given to seniors in Pennsylvania through the use of a lottery system that reimburses carriers for 75 percent of the average fare. Pennsylvania's lottery program has clearly had a substantial impact on expanding transit throughout the state and, with a recent amendment to allow the funds to be used for non-fixed-route services, can be expected to expand even more in the future. The use of a lottery for generating transit funding, Underwood indicated, is a much easier way to obtain funding than traditional taxation methods.

Ronald Morse of Wisconsin DOT discussed prepaid fares as a means of enhancing revenues for transit systems. While there has been a great deal of experience in urbanized areas, Wisconsin is probably the first to seriously examine the potentials for rural systems. Wisconsin's study found that prepaid fare plans do have a significant impact on increasing revenues. Prepaid fares with a percentage cost reduction were found to be especially useful at times when general fare increases were being instituted. The availability of reduced prepaid ticket passes were able to "soften the blow."

Loretta Sharpe, Director of Portland's Regional Transportation Program, Inc., and Pat Saindon, Bureau Chief of Montana's Transportation Division, conducted the workshop that gave participants an exercise in expanding revenue sources. Three sequential exercises were used. Participants were asked to (a) indicate from a specified list of funding programs which ones they were familiar with and, of those, which actually contributed to their operating budget; (b) list all income sources that they had not mentioned in exercise 1 but were either aware of or currently using; and (c) give experience and recommendations under service funding responsibility, approaches to revenue enhancement, methods of costing and billing, and the impli-

Four other sessions provided particular cases and uses of productivity and performance methods. The general session headed by Don Tudor, Director of the South Carolina Governor's Office, Division of Transportation, used a case study of a small fixed-route transit system that had gone through major change and rehabilitation to beome a much more productive and efficient system. The case was also used to provide a private operator's views of improving efficiency by Bill Williams, President of Raleigh Transportation Service, Inc. Ray Mundy of the University of Tennessee coordinated a workshop on working with local elected officials. This session focused on techniques and approaches for ensuring that local support is attained and on a review of what appeared to be conditions leading to a lack of local support in two small New England cities where transit was terminated.

Richard Garrity, Director of North Carolina DOT's Rural Transportation Program, conducted a workshop on vehicles. It focused on examples and methods of life-cycle costing and retrofitting standard vans. The workshop on financial management, chaired by Frank Sherkow of Iowa

DOT, examined the common problem of developing sound and efficient accounting and reporting systems.

THE FUTURE

Donald Nelson of the U.S. Department of Agriculture directed a session on rural America and public transportation trends and outlooks. Edmund Jansen from the University of New Hampshire; David Raphael, Executive Director of Rural America; and Ed Good of Friendly Taxi in Lancaster, Pennsylvania, discussed the need for public transportation in rural America and the notion that this need would be increasing rather than decreasing. The exodus from rural America appears to have been reversed and rural areas have begun to share in the same structural economic changes that have been so profound in urbanized areas. The agricultural sector is no longer the only area of strength for rural America and its diversifying and growing employment base can be expected to increase the need for transit and paratransit in the future. Moreover, the value of the private sector such as taxi operators, private bus companies, and private paratransit operators will become much more important in meeting rural transportation needs.



55-MPH Speed Limit Study Under Way at TRB

FRANCIS P. MULVEY AND STEPHEN R. GODWIN

A major life-saving public transportation policy or an unwarranted, costly, bureaucratic intrusion on individual freedom? Americans hold widely divergent views on the 55-mph National Maximum Speed Limit. Faced with pleas for stricter enforcement alongside those for a less stringent limit, Congress asked the National Research Council to study the benefits and costs of the 55-mph speed limit. A 19-member committee, chaired by Alan A. Altshuler, Dean of the Graduate School of Public Administration at New York University, was formed to assess alternative policies. The committee, which includes experts from numerous disciplines, will present its findings and recommendations to the Congress and the Secretary of Transportation by September 1984. In addition to Altshuler, members of the study committee are Harry T. Adair, Assistant Commissioner, Staff, California Highway Patrol, Sacramento; John R. Borchert, Regents Professor of Geography, University of Minnesota, Minneapolis; Joseph M. Clapp, Senior Vice President, Roadway Express, Inc., Akron, Ohio; Walter

Dale Compton, Vice President for Research, Ford Motor Company, Dearborn, Michigan: R. Adams Cowley, Director, Maryland Institute for Emergency Medical Services Systems, University of Maryland, Baltimore; Benjamin O. Davis, Lt. General, U.S.A.F. (retired), Arlington, Virginia; John J. Fearnsides, Technical Director, Air Transportation Systems Engineering Division, MITRE Corporation, McLean, Virginia; Paul H. Fowler, Automobile Club of Southern California, Los Angeles; Trevor O. Jones, Vice President and General Manager, Transportation Electrical and Electronics Operations, TRW Inc., Solon, Ohio; Charles A. Lave, Professor of Economics, University of California, Irvine; Darrell V Manning, Director and CEO, Idaho Transportation Department, Boise; H. Laurence Ross, Chairman, Department of Sociology, University of New Mexico, Albuquerque; Peter J. Safar, Director, Resuscitation Research Center, School of Medicine, University of Pittsburgh; Wayne W. Sorenson, Vice President-Research, State Farm Insurance Companies, Bloomington,