



Norman Y. Mineta **International Institute for Surface Transportation Policy Studies**

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In Memory of Sharon D. Banks Former IISTPS Chair and Board of Trustees Member and General Manager, AC Transit (1945 to 1999)



Elected to the IISTPS' Board of Trustees in October 1992, Sharon served as IISTPS Chair for the 1996/97 term. Sharon D. Banks lent her vision, creativity, and exceptional leadership skills to guide the Institute's development and operation. Since 1990, Ms. Banks first served as General Counsel and General Manager of the Alameda-Contra Costa County Transit District (AC Transit), where she managed a \$146 million annual operating budget and supervised the activities of over 2,000 transit workers who serve the system's 230,000 daily riders.

Ms. Banks' time at AC Transit was anything but business-as-usual. Her strong leadership brought about the "most significant and sweeping route and schedule improvements in AC Transit history." She had the vision to introduce a smoke-free work environment and to establish a clean bus initiative. Sharon had the creativity to implement a "4/10" (four ten-hour days) workweek and to promote employee leadership through "Leadership 2000" and created costcontainment teams.

Prior to AC Transit, Ms. Banks was an attorney in the Palo Alto, CA, law firm of Whitmore, Kay and Stevens. It was in this capacity that she gained her experience in labor/employment law while representing both public and private agencies throughout California.

Ms. Banks earned a Bachelor of Science degree in Speech Pathology and Audiology from Southern Illinois University, Carbondale, and went on to receive a Masters degree from California State University-Hayward. She earned a Juris Doctor degree from Hastings College of Law in San Francisco. She served on the Boards of the American Public Transit Association, Chaired the National TRB Executive Committee, and many others.

Her extensive contribution of experience in surface transportation and her exceptional leadership are an invaluable legacy to the Institute and to its Board of Trustees.

"She had a genuine ability to touch each member of the AC Transit team at a personal as well as professional level. For that reason, above all others, AC Transit will miss her. Sharon's human touch is a legacy that will long be remembered here, and throughout the nation's transit industry." Matt Williams, President of the district's Board of Directors.

Sharon is survived by her husband and one adult son.

- Education Update Directions
- Research Update Technology Corner



OUTSTANDING STUDENT OF THE YEAR: We are proud to announce Mark Jensen as the Master of Science in Transportation Management Student of the Year for 2000. The student of the year is selected by program faculty based on strength in academic work, leadership, research, and contribution to the Mineta Transportation Institute. This is Mark's second award in the program; he received a Mineta Transportation Institute Scholarship in the spring of 1999. Mark is pursuing his MS in addition to working as a Senior Engineer/Analyst for Science Applications International Corporation.

FEE REDUCTION: Recent negotiations with the College of Business at San José State University have been very successful in reducing course fees from \$990 per course to \$750 per course - effective Spring 2000! In conjunction with our ongoing scholarship program, both the CTM and MSTM become much more affordable to aspiring transportation professionals. This is an essential first step to improve quality and increase enrollment in our education program.

MINETA TRANSPORTATION INSTITUTE SCHOLARSHIP: The Mineta Transportation Institute congratulates the recipients of our Fall 1999 scholarships:

Technology

Miriam Ayllon, Valley Transportation Authority Donna Kelsay, Sacramento Regional Transit Judy Li, Caltrans (California State DOT)

CLASS NEWS: The Fall '99 B session is nearing its close. We were proud to have offered the following course:

MTM 203: Transportation Markets and Business Development. One of the six core classes in the MSTM curriculum, MTM 203 was taught by Rob Vitale, faculty member of San José State University and former Education Director of the Institute. We are privileged to retain Rob's active participation in the program.

Registration for Spring 2000 classes is in progress. We are offering the following courses:

MTM 217: Leadership and Management of Transportation Organizations. One of the six core classes, MTM 217 will be taught by Professor Barbara Brown, faculty member in the College of Business at San José State University.

MTM 290: Strategic Management in Transportation. MTM 290 is the culminating "Capstone" course for our graduating students. Taught by Rod Diridon, Executive Director of the Institute, the course will involve a comprehensive project weaving together all facets of the MSTM degree program. The Mineta Transportation Institute plans to publish these final project papers.

WEBSITE: Visit *http://transweb.sjsu.edu* to keep up-to-date with our spring registration, classes, syllabi, scholarship information, and scheduled presentations.

Corner

By Jeanne Dittman, Web Administrator

http://transweb.sjsu.edu

 $TransWeb^{TM}$ is the online transportation information hub created and maintained by the Institute.

Valuable Links on TransWeb

Caltrans Districts (maps and telephone numbers) Certificate in Transportation Management **Government Agencies** Kids and Transportation Master of Science in Transportation Management Need a Ride? Quick Transit Links Publications in PDF format (including Impact of the North American Free Trade Agreement on Transportation in *the Border Areas of the United States*) **Research Project Descriptions Transportation Education** Transportation Events Transportation Libraries Transportation News **Transportation Statistics** University Transportation Centers

The list goes on and on...

Research Update

A flurry of research activities marked the fall months. Many of the projects selected in the spring are in progress, and all of them have been approved by Caltrans. The fall selections have been in negotiation to create successful prospectuses, and most have now been submitted for Caltrans approval. One notable success was recruiting a team to conduct a high priority safety study for *Bicycle and Pedestrian Accommodation on Freeways, Tunnels, and Toll Bridges*. Given recent controversies on two San Francisco Bay Bridge projects, this will be a high-profile study with great potential for impact in California. The emphasis on multimodal transportation which underlies TEA-21 promises to make this a nationally significant study as well. At this writing we are close to inking the final agreements.

Several publications are on their way to the printer: Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure; Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data; Crossing the Bay: The Water Transit Initiative Forum; Our Transportation Crisis: Who Will Pay? (a regional forum); Driving Into the Twenty-First Century: Technology Solutions to Transportation Problems (a national symposium); Proceedings: AASHTO Region 4 Summer Meeting; and the brochures for several publications. We are also preparing the capstone projects of our four Masters graduates for publication.

Recently we learned that the Transportation Planning Program at Caltrans is in the process of awarding us a new grant for a study of sustainable communities. Based on initial discussions, we would be looking at what communities need to do to be sustainable – what they should include in their General Plans; what operations need to be in place and with what characteristics; what role they should expect the transportation community to play in making a sustainable community a reality; and how projects creating sustainable development look, using such tools as GIS. The team will also look at the future by including a discussion of potential federal support for sustainability efforts and guidelines for applying for related federal grants. And finally, the team would prepare a draft scope of work for Caltrans' future actions. The Institute also plans to leverage this study beyond the working papers required by the grant by adding a final publication and exploring the possibility for a national symposium. Given all the discussion of "smart growth, smart communities, and livable communities" now occurring throughout the country, we are excited about a study that can provide a practical guide for communities and state transportation departments seeking to assure current and future residents of a more sustainable future.

The studies in our current program represent an exciting array of topics. Following is a list of the projects and a short description of a sampling from the list to illustrate the scope and practicality of the work we do.

Summer 2000

Assisting Public Transportation Operators in Responding to Chemical and Biological Threats

Principal Investigator: Brian Michael Jenkins

The Institute has previously sponsored a national symposium (IISTPS Report 96-1) and an earlier research project by the same Principal Investigator (IISTPS Report 97-4, *Protecting Surface Transportation Systems and Patrons from Terrorist Activities*). The latter produced case studies of security in New York, Atlanta, Paris, and Amtrak, and combined them with results of a Federal Transportation Agency survey of nine public transportation systems in the U.S. This multiphase project continues with a study of best practices for protecting surface transportation systems against terrorism and serious crime, including chemical and biological threats. The scope includes case studies in the U.S., Tokyo, London, and other international sites to identify lessons learned and best practices.

RESEARCH PROJECTS IN PROCESS DECEMBER 1, 1999

Project Title	Principal Investigator
Applying an Integrated Urban Model to the Evaluation of Travel Demand Management Policies in the Sacramento Region	Dr. Robert Johnston
Assisting Public Transportation Operators in Responding to Chemical and Biological Threats	Brian Jenkins
Best Practices in Developing Regional Transportation Plans	Dr. Donald N. Rothblatt
Construction of Transit-Based Developments: New Policy Initiatives for Governments	Dr. Scott Lefaver
Creating a Planning Template for Non-work Travel and Transit Oriented Development (TOD)	Dick Nelson
Developer-Planner Interaction in Transportation and Land Use Sustainability	Dr. Aseem Inam
Effects of Online Shopping on Vehicular Traffic Patterns	Dr. Joe Giglierano
Envisioning Neighborhoods with TOD Potential	Dr. Earl G. Bossard
GIS for Livable Communities: Using GIS to Improve Transportation Planning and Community Livability	Dr. Tom Horan
How to Best Serve Seniors in Existing Transit Services	David Koffman
Implementation of Zurich's Transit Preferential Program	Andrew Nash
NAFTA II: California Border Zone Land Transportation Issues	George Gray
Non-pricing Methods to Optimize High-Occupancy Vehicle Lane Usage (still under review)	George Gray/Stuart Harvey
Passing Local Transportation Tax Measures: A Follow-up Study	Dr. Richard Werbel
Statewide Safety Study of Bicyclist and Pedestrian Accommodation and Safety on Freeways, Expressways, Toll Bridges, and Tunnels	Dr. Thomas C. Ferrara
Transit Labor Relations Guide	Dr. Herb Oestreich
Transportation and Land Use Innovation: Impacts on Household Residential Choice	Dr. Jonathan Levine
Transportation and Welfare Reform: The Travel Behavior and Needs of Welfare Recipients	Dr. Evelyn Blumenberg

Transportation security officials will be interviewed and their responses analyzed. The project concludes with the publishing of a "Best Practices" Handbook. An additional project phase is anticipated in the following year with limited access training workshops for operators.

Envisioning Neighborhoods with Transit Oriented Development Potential

Principal Investigator: Dr. Earl G. Bossard

Summer 2000

While there are many advocates for transit oriented development (TOD), implementation has not realized the full potential. The project will develop techniques for use by regional planning agencies, local governments and developers to screen, analyze, select, and promote areas with TOD potential. The package includes socioeconomic, demographic, land use, transportation, and design measures in a spatial setting. The focus will be on light and heavy rail corridors in the greater San Francisco Bay and Sacramento regions.

The "Envisioning Neighborhoods" (EN) technique uses census data and brings together multiple maps, charts, and

images. Data screening will be designed to facilitate use of year 2000 data. The technique also utilizes digital ortho photos for analysis of developable and redevelopable land and GIS map analysis to estimate densities of population, potential riders, workers, and customers in rings and sectors around transit stops. To increase understanding, the EN technique will use multiple digital images of block fronts and video pans. The final publication is expected to include a CD to facilitate use of the technique.

Best Practices in Developing Regional Transportation Plans

Principal Investigator: Dr. Donald R. Rothblatt

Both ISTEA and TEA-21 increased the importance of the regional transportation plans (RTPs) developed by metropolitan planning organizations (MPOs). The quality of the plans could be improved by identifying and sharing best practices. The study will examine up to twenty RTPs representing a balance of geographic location, growth rate, transit orientation, size, density, and air quality conformity status. The analysis will compare the planning process and documentation in terms of past history and current progress in planning approaches toward addressing the transportation impacts of land use decisions, methods/degree of citizen involvement, evaluation processes used, and the databases available to support evaluation. Ultimately the study will try to determine how or if MPOs affect transportation outcomes in a region. The publication is expected to be of particular benefit to smaller MPOs.

Transportation and Welfare Reform: The Travel Behavior and Needs of Welfare Recipients

Principal Investigator: Dr. Evelyn Blumenberg

Part of a successful transition from welfare to work for the millions of recipients transitioning into the paid labor market will be dependent on transportation. Previous studies have examined the adequacy of the transportation links between welfare populations and potential job centers or the effect on mobility of not having an automobile. This study focuses on actual recipients by looking at their day-to-day travel behavior and needs. The heart of the study will be an extensive multilingual survey of current and former welfare recipients using proprietary information developed at UCLA. The study will be enhanced by participation of an advisory committee of individuals from agencies and organizations in the subject counties and by the use of focus groups of recipients representing urban and rural areas. Incentives are included to assure participation in the survey by the desired sample. The analysis will look at both revealed and stated preferences and examine the relationship between recipients' access to transportation and their economic outcomes.

California Border Zone Land Transportation Issues

Principal Investigator: George Gray

The project is the second by this PI examining impacts and issues related to the California-Mexico border following the North American Free Trade Agreement (NAFTA). Since the original research (IISTPS 99-2, Impacts of the North American Free Trade Agreement on Transportation in the Border Areas of the United States) many new issues have evolved. Many have emerged from the passage of TEA-21, California legislation (SB 45) revising transportation planning and funding, completion of the "Binational Border Transportation Planning and Programming Study" and recent activities in Mexico to privatize rail systems, ports, and airports. To further review these issues, the study will analyze new, modified and proposed land transportation policies and their effect on U.S.-Mexico trade. Areas of study include a review of the existing systems and their condition, funded improvements and proposed projects. The report will analyze the issues, determine alternatives and recommend resolutions for at least five of the key issues, selected with the assistance of District 11, California Department of Transportation.

Summer 2000

Summer 2000

Summer 2000

Implementation of Zurich's Transit Preferential Program

Principal Investigator: Andrew Nash

Zurich, Switzerland has implemented a successful transit preferential program, even in the face of competing demands for roadway space. This study examines Zurich and, in less detail, other European transit preferential systems, to provide an understanding of the measures used and how they were implemented. Transit preferential programs have been more difficult to implement in the U.S., and this study will look at Santa Clara County, California as an example to compare with the European case studies.

The case studies will inventory and describe the measures used to provide priority, and may include videotapes of their operation. Most importantly the team will interview key decision-makers to determine why they made the technical and political choices they did. Elected officials, civil servants, transit staff, researchers, business and community groups will be surveyed. The focus will be on analyzing and understanding the political and practical aspects of implementation.

Creating a Planning Template for Non-work Travel and Transit Oriented Development (TOD)

Principal Investigator: Dick Nelson

This project seeks to improve the planning methodology for TOD by bringing a sharper focus on data display and analysis on non-work trip generators. Using the central Puget Sound region as a case study data source, the team will map and analyze the non-work travel environment of the Seattle-Tacoma-Bellevue-Everett metro area and use the results to create a planning template for transportation and land use planners pursuing TOD. Trip generators will be mapped using desktop GIS capabilities, using private and public sector databases and field surveys. Spatial relationships will be analyzed. The team will quantify the increasingly larger trade areas of the new retail formats. The study will reach conclusions and provide recommendations for regional and local TOD planning methodologies. The report will serve as a planning template and will specify the activities that should be mapped, forces such as electronic commerce that are shaping urban retail form, the factors that will determine TOD regional (not just station-area) success, planning process steps, and plan outputs.

Construction of Transit-Based Developments: New Policy Initiatives for Governments

Principal Investigator: Dr. Scott Lefaver, AICP

This study is in response to a need expressed by many of the local governments involved during a prior study (IISTPS 97-1, *Public Land with Private Partnerships for Transit-Based Development*) for more policy guidance in implementing transit-based development. The prior study identified both policy and legislative issues which impeded implementation, in spite of stated policies encouraging such development. The study will look at potential actions for all levels of government which might encourage more TBD. These actions might include legislative powers, monetary, and policy incentives such as tax or environmental exemptions. The focus will be on practical recommendations and explanations. The team will develop three scenarios to demonstrate how to implement successful TBDs using a public-private partnership. Variables will include financing, timing, and permit processing, including environmental reviews. The team will evaluate the setting and attitudes that can create the environment for a successful partnership. The report will recommend changes, explain what works and under what circumstances, and provide a recommendation on how to proceed.

Summer 2000

Fall 2000

Summer 2000

Effects of Online Shopping on Vehicular Traffic Patterns

Principal Investigator: Dr. Joseph J. Giglierano

Online purchasing of consumer products and services became firmly established over the last year and is projected to increase. This is the Institute's second study of the impact of the so-called "information superhighway" on traffic patterns and trip demand (IISTPS 96-4, *Issues Relating to the Emergence of the Information Superhighway* and California Societal Changes). The current study examines how the changes in consumer buying will affect shopping trip traffic volume, traffic patterns, and traffic timing, including any anticipated changes in the use of public transit. The study will also look at increases in shipping to individuals rather than to stores and the consequent traffic changes. The study assumes that different segments of the consumer population will adopt online shopping at different rates and change their transportation patterns at different rates as well. Thus the data will represent consumer innovators, early adopters, and potential adopters of online shopping. The net result of the changes in consumer buying and travel patterns has implications for transportation and land use planning, such as parking standards. By identifying the projected changes anticipated in the near future, the report will assist public policy makers in preparing for that future.

Passing Local Transportation Tax Measures: A Follow-up Study

Principal Investigator: Dr. Richard A. Werbel

The original study (IISTPS 99-4, Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail) examined four cases studies, as well as national data. The objective was to ascertain the impact on voter approval of a large number of variables, including the process, the coalitions in support and opposition, the nature of the package and the funding mechanism, the campaign and its messages. This study examines especially important issues previously identified for more research: incremental versus comprehensive transportation improvement packages, importance of geographic distribution of benefits, growth containment bundled with traffic relief, the role of organized opposition, and contingency strategies. The study will again use the case study approach, focusing on initiatives featuring expensive and complex projects with a transit component. The team anticipates six studies involving on-site visits and an additional ten sites covered by telephone interviews. The resulting publication, combined with the original study, will provide valuable information for agencies and communities seeking to improve their ability to pass transportation funding measures.

A Statewide Study for Bicyclists and Pedestrians on Freeways, Expressways, Tunnels and Toll Bridges

Principal Investigator: Dr. Thomas C. Ferrara

Recent proposals for access to two major San Francisco Bay bridges were the impetus for this study. Groups representing pedestrians and bicyclists have become increasingly active in seeking access to such restricted facilities. The California Department of Transportation (Caltrans) also desires a fresh look at their policies in this area in light of the multi and intermodal nature of both ISTEA and TEA-21. To assure that all views are considered, the team will work with a broadly representative advisory committee throughout the study. The study uses literature review and surveys of most of the states, approximately eight other countries, and the comments of advocates both as individuals and as groups. Data will include accident records, facility characteristics and intensity of use for facilities with access and a control group without access. A reference group will comprise a third data set, indicating accident trends unrelated to the presence or absence of bicycles and pedestrians. Following the data analysis the team will develop recommendations and policy guidelines for Caltrans which account for impacts on all users and affected agencies. The report will cover proposed policies, facility design and modifications, guidelines, and a methodology for monitoring safety and operations of implemented recommendations.

Fall 2000

Fall 2000

Fall 2000

DIRECTIONS

What a year to end the millennium! The Mineta Transportation Institute has hit its stride and our capacities far exceed our expectations. With twenty transportation policy research projects involving over fifty Research Associates, and students, (costing over \$1.3 million) plus our mature MSTM and CTM transportation management education programs, our budding has flowered abundantly. Kudos to our Research (Trixie Johnson) and Education (Dr. Glenn Shephard) Directors, Web Administrator (Jeanne Dittman), and Education Assistant (Sunshine Shepard), all new this year. The staff, old (compliments to Administrative Director Teresa Battisti who implemented a new cost-control system this year) and new, are working hard and enjoying the successes.

The coming year holds even more challenges with another research project selection cycle which will commit an additional estimated \$500,000 in shorter-term transportation policy projects. The Education Program is rapidly expanding, thanks particularly to the aggressive support of new Caltrans Director, Jose Medina. We'll also publish, both electronically on our web page and in hard copy, the twenty research projects currently in process.

Recall, please, that our Winter Board of Trustees' meeting at TRB in Washington D. C. has been cancelled and that we are focusing on our 9th Annual Awards Banquet (Friday, May 12) and Annual Board of Trustees' meeting (Saturday, May 13) in San Jose. Those gatherings will be celebrations of success which will be shared with the top policy leaders from the Nation's transportation community. You'll receive formal invitations to the dinner in March but may care to reserve that date now.

THE STAFFS OF SAN JOSÉ STATE UNIVERSITY AND THE MINETA TRANSPORTATION INSTITUTE WISH YOU A MOST ENJOYABLE HOLIDAY SEASON AND A CHALLENGING AND SUCCESSFUL NEW MILLENNIUM!!

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The World in Motion For more information about IISTPS, call (408) 924-7560 or e-mail us at *iistps@iistps.cob.sjsu.edu*.