







Mineta Transportation Institute



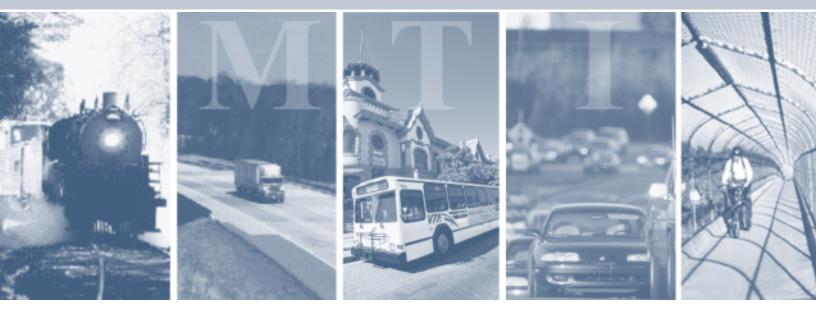
annual report 2000-2001

MINETA TRANSPORTATION INSTITUTE

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CENTER THEME

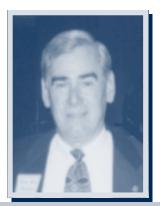


POLICY GUIDANCE AND MANAGEMENT OF TRANSPORTATION SYSTEMS

As originally designated by Congress in ISTEA in 1991 and reaffirmed by the Institute's Board of Trustees after reauthorization in TEA-21 in 1998, the Mineta Transportation Institute (MTI) undertakes research, education, and technology/ information transfer programs relative to the policy control and management of all surface transportation modes. In short, MTI accomplishes case studies of the best examples of surface transportation policy and management activities in the world, accumulates those into peer reviewed publications, and communicates those "best practices" to our professors, students, and those affected throughout the nation's transportation community.

During the 1991 ISTEA and 1998 TEA-21 debates, Congress strongly expressed the desire to assure the international competitiveness of the nation's transportation systems. Because of the availability of much larger motor vehicle fuel taxes in the other industrialized countries, the U.S. will not be able to outspend so must instead outsmart the competition. MTI's objective is, therefore, to identify through research, to teach through education, and to broadly disseminate through our technology/information transfer programs the best transportation practices in use throughout the world. MTI's work encompasses all modes of surface transportation, including the interface between modes.

The Institute is organized by function with principal staff operating in each of four departments: Administration, Research, Education, and Technology/Information Transfer. These programs, however, overlap and are mutually supportive in an integrated team effort.



Rod Diridon

A Note from the Executive Director

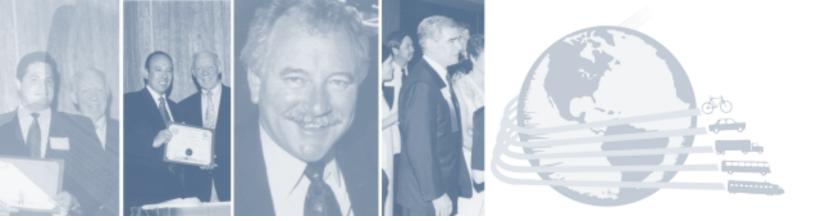
BACKGROUND

The Mineta Transportation Institute (MTI), formally known as the Norman Y. Mineta International Institute for Surface Transportation Policy Studies, has experienced a metamorphosis during the past two years. Less than three years ago, with a \$500,000 annual budget, the Institute had four research projects in process and was conducting a Master of Science in Transportation Management (MSTM) and graduate Certificate in Transportation Management (CTM) with less than a dozen students enrolled. Though a webpage existed, funding shortages precluded the required improvements.

A congressionally designated five-year TEA-21 grant was provided by the U.S. Department of Transportation's Research and Special Programs Administration along with a matching grant from the California Legislature via Caltrans. Delays resulted in MTI receiving three fiscal years of grant funding between April 1999 and July 2000. The MTI staff rose to the challenge of putting those funds to work.

RESEARCH

Since mid-1999, MTI has begun and published three peer reviewed research projects, has 23 more under contract and in process, of which 16 are in peer review and will be published within the next three months. At least two projects from last year's selection round should reach the contract stage by this coming fall. The fourth needs assessment and request for proposals cycle under this grant has been completed. Eight additional research proposals were selected and are in contract review. The current fiscal year's research budget is approximately \$1.3 million, retaining over 60 of the Institute's certified Research Associates (RA), most of whom are Ph.D.s, plus over 40 student research assistants. Research topics are selected through a carefully structured annual needs assessment process involving designated U.S. DOT and Caltrans committees and other national transportation leaders. The projects and research teams are chosen after a structured bidding and selection process.



EDUCATION

Twelve California State University System accredited MSTM degrees have been granted since 1999, three of which were conferred this fiscal year. Beyond the graduates, current attendance in the degree and certificate programs has expanded substantially to 17 fully matriculated MSTM students plus seven pre-matriculation or CTM students. The Caltrans-provided 14-site statewide videoconference format is now supplemented with two-way online, videostreaming instruction available to mobility-impaired and out-of-state students. The student counseling, syllabi, assignments, homework, testing, and a "chat room" for each class are provided through the education section of the MTI webpage or via e-mail and telephone contact with the professors.

TECHNOLOGY/INFORMATION TRANSFER

The MTI webpage, *TransWeb*, has been expanded to include new publications available online; the MTI quarterly newsletter *The World In Motion* is published and distributed in hard copy and on-line, and support of the education program has been significantly enhanced. A major portion of the annual research needs assessment, request for proposal distribution, and proposal responses are conducted via e-mail and the webpage. In addition, to promote information transfer, MTI has conducted and published the proceedings of four national symposia and regional forums as well as the proceedings of a regional AASHTO meeting. MTI will conduct four more events before the end of the calendar year. Also, during the past year, the Executive Director, Research Director, and Research Associate project leaders have given several dozen speeches and panel presentations on MTI and UTC-related issues both throughout the U.S. and, when the costs have been covered, in foreign countries. Those will be summarized in the Directors' "successes" sections.

STAFFING

Valuable additions to the staff since July 2000 are Research and Publications Assistant Sonya Cardenas, Education Program Assistant Viviann Ferea, Web Administrator Barney Murray, and Acting Communications Director Leslee Hamilton. Biographical information for these talented individuals is provided in the report. MTI is pleased that 4 of the 6 full-time staff and all of the student assistants and part-time staff are from traditionally underrepresented segments of the population.

CONCLUSION

The past year provided remarkable growth and continuing challenges. The MTI staff enjoys this dynamic opportunity to identify, teach, and share with the nation the world's best surface transportation policy and management practices. Indeed, the U.S. transportation community, with the help of the national University Transportation Centers' program, will outsmart the competition and prevail in the global geo-economic competition of the 21st century.



A DMINISTRATION



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Resigned, effective July 2001

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Rod Diridon has directed MTI's efforts since its inception. Known as the "father" of modern transit service in Santa Clara County, California, Rod has chaired over one hundred national, state, and local programs and projects, most related to transit and the environment. Before leading the MTI team, Rod completed five terms and served six times as Chairperson of both the Santa Clara County Board of Supervisors and Transit Board. He has also served as Chairperson of the American Public Transit Association and as North American Vice President of the Union Internationale des Transports Publics (International Transit Association) in Brussels where he continues as a member of the Board of Directors. Rod chaired the National Association of Counties' Transit and Railroads Committee for 18 years. He has been a member of the Federal Transit Administration's Transit Industry Technical Advisory Committee and the National Research Council's Transportation Research Board Transit Cooperation Research Program, which he was elected to chair in 1995. He currently serves as chair of the TRB/TCRP panel on "Combating Global Warming Through Sustainable Transportation Policy" and was recently appointed by the Governor to the California High Speed Rail Authority Board. He has a BS in Accounting and an MSBA from San José State University and was president of a private research corporation for seven years. He also served two combat tours as a U.S. Navy officer in Vietnam.



Rita Freitas-Maxstadt, **Executive Assistant**

Rita Freitas joined the Institute in March 2000. Born and raised in Santa Clara, she has thrived in a variety of administrative positions, including five years at United Way. Ms. Freitas' nonprofit experience and administrative skills enabled her to jump right in and take on the varied administrative duties that support all Institute efforts.

Leslee Hamilton, **Acting Communications Director**

A former Peace Corps Volunteer, Leslee Hamilton has extensive administrative and communications experience through her work with environmental organizations, on electoral campaigns, and as former Communications Director for San Jose Mayor Ron Gonzales. She has a BA in Business Economics from UC Santa

Barbara. In addition to handling MTI's administrative functions, Ms. Hamilton will work to increase the exposure and use of MTI's research products. An avid outdoor enthusiast, she commutes to work by bicycle. Ms. Hamilton replaces Rita Freitas-Maxstadt who moved from Silicon Valley to rural northern California with her new husband.

The Administration Department provides general management in areas such as budget control, grant acquisitions and management, personnel functions, facilities, office management, Board of Trustees and the Research Associate's Policy Oversight Committee activities, university, state and federal relations, and general correspondence and communications.

ADMINISTRATIVE SUCCESSES

In January 2001, MTI submitted the semi-annual report to U.S. DOT-RSPA. The report presented summaries of MTI successes for the preceding six month period. Those relating to the Administrative Department will be updated in this section.

During the past fiscal year, the Executive Director presented 43 speeches, panel presentations, media interviews, Op-Ed articles, and other public presentations relating to MTI and the national UTC program. Those included a presentation to the International Transportation Association's (UITP) Board of Directors in Paris, France (at no cost to the Institute); keynote speaker at the Western Resource Center, FHWA annual retreat; the "transportation color commentator" on several National Public Radio syndicated "Forum" shows; MC and a keynote speaker at the 40th anniversary of the founding of the Association of Bay Area Governments; keynote speaker for the San Francisco Bay Area's Earth Day Celebration; presenter at the "National Operations Regional Dialogue Session" for the West Coast for FHWA; afternoon keynoter for the "Innovations in Transportation Education and Workforce Development" national symposium at the Volpe National Transportation Systems Center; panelist for the "Automated People Movers" eighth international conference; a presenter and introducer of Amory Lovins for the Commonwealth Club of California's syndicated National Public Radio show; and others.

On May 29, MTI was pleased to host a helpful day-long program review by U.S. DOT RSPA Associate Administrator for Research, Innovation, and Education Tim Klein and the Caltrans Chief of New Technology and Research John Allison.



On June 30, MTI conducted a similar formal review with House Transportation and Infrastructure Committee Ranking Member James Oberstar, Caltrans Director Jeff Morales, U.S. DOT RSPA Acting Deputy Administrator Ed Brigham, and 19 of the MTI Trustees during the all day Board of Trustees meeting. The 10th Annual Mineta Transportation Institute Board of Trustees Awards Banquet followed, during which each of the three dignitaries was a guest speaker. The Board of Trustees roster is appended to this report. The banquet raises scholarship funds for the MTI students.

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FACILITIES

The Institute is located in the Business Tower on the beautiful San José State University campus, the oldest and one of the largest of the 24 California State University campuses. Located in downtown San Jose, the campus is in the heart of Silicon Valley. The six full-time staff members and five part-time student assistants work in eight rooms provided by the University, which also provides videoconferencing, classroom, meeting, and other facilities. The College of Business also provides utilities, some equipment, and technical support for MTI's extensive computer systems.

FINANCIAL CONTROLS

Communications Director Leslee Hamilton administers MTI's QuickBooks accounting system to provide real-time project-based budget and expenditure information for all projects and functions. The Institute uses this system to track expenditures in detail and to supplement the funding source-based accounting reports from the San José State University Foundation. The QuickBooks system is used daily to track fund and expense balances. The SJSU Foundation's reports are provided monthly, corroborate the MTI system's balances, and provide grant-based budget information.

OFFICE ADMINISTRATION

Acting Communications Director Hamilton administers the office as well as external communications. She is in the process of updating the extensive office procedures manual that documents and helps streamline procedures for all program areas. The manual is an ongoing effort that the staff, under Ms. Hamilton's direction, continues to maintain and refine as Institute activities evolve.

PARTNERSHIPS

California University Transportation Centers

In 1999, at the urging of the MTI Executive Director, Caltrans created the "UTC Cal Group" consisting of the Directors of the three California UTCs and Caltrans liaison staff. The group has met three times per year since, hosted on a rotating basis by the three centers. During the 2000/1 fiscal year, MTI attended meetings at the other centers and hosted the group in San Jose. At the MTI-hosted meeting, Caltrans staff presented elements of a possible national research agenda and outlined possible focus areas for F-SHRP, TRB, and FHWA. Caltrans and the UTCs considered ways to contribute to the agenda and the ensuing research and ways to involve policy makers, especially to support the research programs and use the resulting products.

Council of University Transportation Centers

The MTI Executive Director was elected to the CUTC Executive Committee during the fiscal year and has been active in several other CUTC committees. The Research Director represented MTI at the annual summer meeting of both CUTC and the University Transportation Centers Directors' Association at the University of Arkansas. MTI was chosen to host that annual meeting in 2002 in San Jose.

University Transportation Centers Directors' Association

The MTI Executive Director founded the UTC Directors' Association in 1995 and chaired the group until last year when he nominated Mike Kyte and Steve Albert as co-chairs. MTI has contributed several important policy documents and assisted the organization's members to work more closely together to benefit the total national UTC program.

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During the past fiscal year, MTI co-sponsored projects with the following organizations: Transit Cooperative Research Program of TRB, AASHTO, APTA, Transportation Trades Department of AFL/CIO, National Modern Transportation Society, California State Automobile Association, University Transportation Research Center at CUNY, San Francisco Bay Area MTC, San Francisco Bay Area Council, Commonwealth Club of California, Silicon Valley Manufacturing Group, *San Jose Mercury News, Silicon Valley Business Ink*, KNTV Channel 11, KLIV Radio, National Public Radio, Santa Clara University, City of San José, Santa Clara Valley Transportation Authority, Bay Area Rapid Transit District, and others. Most of these partnerships generated attendance and/or financial support for MTI programs and also resulted in successful projects that garnered hundreds of media notices regarding the MTI and UTC efforts.

Community Involvement

Jointly Sponsored Symposia, Forums, and Projects



significant collateral activities in the community. For example, the Executive Director chairs a NRC/TRB/TCRP panel on "Combating Global Warming Through Sustainable Transportation Policy," was recently appointed by the Governor to the California High-Speed Rail Authority Board (an unpaid position), and is a member of several other transportation boards and committees. The Research Director is the President of the local Rotary Club, is a sought after speaker on transportation and environmental issues, and is on several related boards and committees. These kinds of activities are encouraged by the University and the MTI Board of Trustees with the understanding that the MTI responsibilities come first and that no MTI funding is used to discharge the collateral activities. The service advantages to the community are obvious, but these kinds of activities also promote a support network for MTI which has proven to be extremely valuable both in terms of program effectiveness as well as fiscal support for both programs and scholarships for the MTI students.

Both the MTI Executive Director and Research Director Trixie Johnson maintain

CHALLENGES

During the past two years, the very high Silicon Valley cost of living and the temptation of career opportunities in the related industry have caused some staff turnover. That seems to have stabilized now that the "dot com" bubble has burst and competing salaries are dropping. The major challenge facing MTI during the coming year is the large number of research projects in process, many of which are now in peer review and will proceed into publication during the next three months. A significant additional number will reach the peer review stage around the first of the year. At the same time the student interest in the MTI GTMP program is exploding and will require a major effort to guide matriculations and develop additional classes. That work load bulge is occurring during the same time frame as the TEA-21 Group B and C competition, which must be a priority. The MTI staff recognizes the challenge and will do all possible, including relying on part-time short-term staff assistance and volunteers from the University, to maintain quality while accommodating the major volume increase.



The Research Program manages selection and completion of research projects and sponsors symposia and fora. The Research Director coordinates the selection and efforts of the Institute's Research Associates, which now number 124 professionals and educators. The research staff works closely with the Information and Technology Transfer area to publish the final research reports and event proceedings.



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Honorable Trixie Johnson Research Director

Before joining the Mineta Transportation Institute in July 1999, Trixie Johnson served the full limit of two terms on the San Jose City Council (1991 through 1998). Ms. Johnson is recognized as a land use and environmental specialist. Her council service included two years as Vice Mayor, and several years as the chairperson of the city's Transportation, Development and Environment Committee. Other public service included chair of the Environmental Quality Committee and member of the Board of Directors for the League of California Cities; vice-chair of the Energy, Environment and Natural Resources Committee of the National League of Cities; and member of the Bay Area Air Quality Management District. Specifically in transportation, she was a founding board member of the Santa Clara County Transportation Authority (VTA) and chair of their Congestion Management Committee; vice-chair of the Caltrain board (commuter rail); and served on the Legislative Committee of the American Public Transit Association (APTA). Ms. Johnson is a Phi Beta Kappa graduate of the University of Utah with a B.A. in History. She earned her M.A. in English from the University of Washington.



RESEARCH PROGRAM GOALS

The Mineta Transportation Research Program seeks to involve a diverse and growing number of certified research associates and student research assistants in a wide spectrum of research projects which are judged by peers and other experts to advance the body of knowledge in transportation policy and management from an intermodal perspective.



Biker on Light Rail

PEOPLE

The Institute actively recruits academic involvement from several departments at San José State University and from other colleges and universities. The Institute also taps the experience and knowledge of individuals from other public and private sector organizations to build our research teams. Each team includes at least one academic member and student, and projects are conducted in an academic format, including research methodology, report writing, and peer review of work prior to publication.

MTI certifies all Research Associates prior to their involvement in Institute projects. Certification requires a completed application with references, a résumé, and a sample of published research. The Research Associates Policy Oversight Committee (RAPOC), composed of the department heads or representatives of the primary SJSU academic departments that work with MTI, reviews the applications and recommends certification where appropriate. Final certification is granted by the Executive Director. Certification must be renewed every five years.

PROJECTS

Project selection begins with an extensive needs assessment process by staff, Caltrans and the Institute's Board of Trustees. This past year, the Institute began formal needs assessment with the U.S. DOT Resource Center in San Francisco, and they have expressed an interest in expanding their involvement in our research selection in the future. The Institute then issues a formal Request for Proposals. The Institute's academic advisors RAPOC, Caltrans, and a representative from U.S. DOT review the responses. After referral to the board of trustees, the Executive Director makes the final decision.

The Institute emphasizes policy and management research, rather than technical research. We seek projects that address improving the development and operation of the nation's surface transportation systems, improving transportation decision-making, and ensuring the global competitiveness of the United States. We select research products with immediate and practical value for transportation officials and practitioners. To that end, the Institute has adopted the following areas of emphasis:

- Transportation planning and policy development
- Intermodal connectivity and integration
- Interrelationships among transportation, land use, the environment, and the economy
- Sustainability of transportation systems
- Collaborative labor-management issues and strategies
- Safety and security of transportation systems
- Transportation decision-making and consensus building
- Financing of both public and private sector transportation improvements



TRANSFER OF RESEARCH INFORMATION

All research is published following peer review, and every new report is available on the Institute's website, http://transweb.sjsu.edu. Over the coming year, the Institute will be publishing past reports on the Web as well. The Institute has developed a number of other approaches to information transfer, including sponsoring symposia, funding post-research travel for researchers to address groups of end-users, and developing cost-effective materials to present the research in summary form for distribution to practitioners.

RESEARCH PROGRAM ACCOMPLISHMENTS

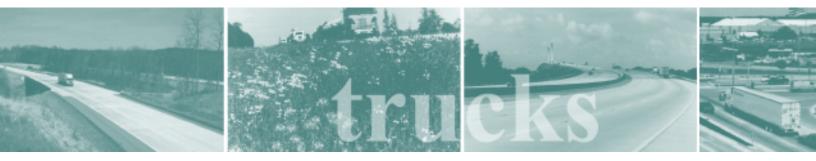


Robust Research Program

MTI research teams and Institute staff are pursuing completion of twenty-seven projects on a wide range of topics, and sixteen of those projects have completed the active research phase with submission of their draft final reports. Those sixteen are in the final stages of editing and printing, are in peer review, or are with the author for response to review. All will be published by October 2001.

Of the remaining eleven projects, seven are fully approved by Caltrans, under contract, and making progress toward completion of the final draft; all should reach that point in the fall of 2001. The four projects not under contract have all been recommended by RAPOC but are in various stages of change and negotiation prior to submittal to Caltrans for approval. Until that approval is received, the Institute does not consider them a research project, even though they have been assigned project numbers.

The active projects utilize sixty-seven professional research contracts and fifty-eight student appointments at both the undergraduate and graduate levels. We also train student editors in-house, and two of those student editors have since graduated and joined us as Editorial Associates. The MTI research program utilizes only professional level researchers, as opposed to student researchers preparing dissertations and theses. Publication of student papers is discussed later in this report.



Editing and Peer Review Processes Refined

To assist with the extensive editing, conversion to FrameMaker, and other pre-publication tasks, the Institute recruited experienced, professional editors to work on a contract basis. Our new Editorial Associates keep many projects moving simultaneously, thus significantly decreasing the time required in comparison to earlier Institute publications. We have prepared detailed instructions and templates for their use.

Special emphasis was placed on an expanded peer review process during the past year. At least three reviews per project assure that a variety of perspectives, both from academia and the world of practitioners, assess the value and content of the reports. Systems and procedures for both the reviewers and for the responding authors were developed to ensure that the reviews are both easy to use and are indeed used.



Major Research Project Completed

Under a separate contract for over \$289,000 with the Planning Division of Caltrans and their District 6 Planning staff, the Mineta Transportation Institute undertook our largest research project to date, the *Sustainable Communities/San Joaquin Valley Growth Response Study*. The final products of that research have been delivered: two major draft final reports, three comprehensive working papers, five lesser reports, and a compendium of research materials. This project was our largest in every way: the largest research team, the largest budget, the largest set of deliverables, the largest number of outside reviews, and by far the largest number of printed pages. The project inspired the team to continue exploring issues related to sustainability in the face of dramatic growth in California. Their new proposal is presented later in this report.

MTI Study Wins National Award

Transportation and Land Use Innovation: Impacts on Household Residential Choice (Dr. Jonathan Levine, University of Michigan, Principal Investigator) received one of the six inaugural awards for National Urban Policy Scholarship from the U.S. Department of Housing and Urban Development and the Association of Collegiate Schools of Planning (ACSP). The award followed a presentation of a portion of the study at the annual meeting of the ACSP.

Tax Election Research Leads to National Conference

The American Public Transportation Association (APTA) requested that MTI co-sponsor and host a national conference on passing transportation tax referenda. The request was a direct result of the research both completed and continuing by Dr. Richard Werbel and Dr. Peter Haas, who will be featured participants. Their research focuses on the many factors that affect the outcomes of elections that are increasingly important to local and regional transportation providers. Not coincidentally, Santa Clara County, where MTI is located, has a history of passing difficult measures, including Measure A (2000) recently for six billion dollars. The conference is scheduled for July 29 and 30, 2001 and will be followed by a half-day session on New Starts, offered by the Federal Transit Administration.

Two Mineta Transportation Institute Projects Selected for TRB Workshops (January 2001)

Dr. Peter Haas, Professor of Political Science at San José State University, presented conclusions of the published study *Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data* and preliminary information from the current study *Passing Local Transportation Tax Measures: A Follow-up Study* during a TRB Workshop entitled "Financing Transportation During Difficult Times" (Session 189). Given the need for local matching funds in state and federally funded projects, local agencies have a heightened interest in passing local measures.



Dr. Caroline Rodier of UC Davis, who served as the graduate research assistant for *Applying an Integrated Urban Model to the Evaluation of Travel Demand Management Policies in the Sacramento Region,* presented in the workshop "Travel Models and Accessibility" (Session 399). Joining her on the panel were Dr. J. D. Hunt and Dr. John E. Abraham of the University of Calgary-Canada, subcontractors for the MTI study. Professor Robert A. Johnston (UC Davis), the Principal Investigator



for the project, provided comments from the audience. The presentation provided a comparison of various models assessed for use in analyzing induced travel and the choice of the Sacramento region MEPLAN model, together with a discussion of issues raised by the modeling project. The same panel presented a second paper in the session focused on the local application of the model in the Sacramento region, a subject of both the current study and a second year extension of the study that adds new topics for integration into the model.

Lewison Lem of the U.S. Environmental Protection Agency presented this same material on Dr. Rodier's behalf at the Transportation Research Forum in Annapolis, Maryland (November 29 – December 1, 2000).

Formal Needs Assessment Begun with U.S.DOT Western Resource Center

In past years MTI included the federal perspective on research needs in MTI's process by inviting one U.S. DOT representative from either RSPA or the Western Resource Center in San Francisco to join in a project selection meeting and by researching recent federal statements on research needs. This last spring we laid the groundwork for a more inclusive and extensive needs assessment process. Executive Director Diridon and Research Director Johnson met at the Resource Center with representatives and staff of the various agencies. We introduced them to the Institute's research and education programs and specifically requested that they start considering us in their discussions about needed research. We will be visiting again, prior to the next RFP release, to have that first needs assessment discussion.

The need for such a process was made evident by the initial reaction to our request for the meeting. They were surprised that a university research program even cared about what the federal agencies had on their research wish list.





New Seed Grant Program Initiated

At the suggestion of RAPOC, the Institute has established a new seed grant program, designed to encourage transportation research by additional members of the San José State University faculty. The grant will cover the initial research and writing needed to develop a proposal, and requires submission of a written report at completion. Assuming the research identifies a viable project, the written report could be a formal proposal for full funding. Two faculty members are pursuing grants already, even though the program was only announced in late June.

MTI Research Director Selected For UCLA Lake Arrowhead Symposium Panel

Trixie Johnson, Research Director for the Mineta Transportation Institute, assisted in a planning session for the October 1999 symposium, and was subsequently asked to serve on the final panel to summarize the three days of discussion and charge attendees with new directions for research and action.

The topic, "The Transportation, Land Use, and Environment Connection – Growth and Quality of Life," provided for crosscutting discussion among several disciplines. Many elected and appointed officials participated, providing a valuable opportunity for academics, professionals, and policy makers to interact.

MTI in Demand as a Research Partner

The Brookings Institution and the Irvine Foundation approached the Institute in the past year. Brookings had surveyed the university research programs and determined that MTI's focus and mission made MTI ideal for the subjects they wished to pursue. Irvine wishes to explore the potential for sponsored research in the coming year.

Two corporations requested that MTI join their team in applying for major federal transportation grants. MTI agreed to one and, if awarded, will provide analysis and planning for the MELE Corporation for a five-year period.

The Operations Division of Caltrans has expressed an interest in contracting with MTI for research, following a successful MTI study under our RSPA/Caltrans grant that was requested by the Division. The study on integrating bicycles and pedestrians on freeways, toll bridges and tunnels (restricted access facilities), involved frequent contact and coordination with Caltrans to ensure that the work addressed their needs and those of the advocacy groups who wanted an independent organization to do the study. MTI looks forward to the opportunity to continue this successful relationship.



MTI Study Forms Basis for Rail Renovation Project

MTI Report 99-3 Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure inspired the community of Taft, California to pursue rebuilding of the "Sunset Railroad," a former SP-SF joint line from Bakersfield to Taft. This short-haul line would provide an alternative to truck transportation from the oil fields. The PI for the study, Dan Evans, is working with the City's team in approaching the state for matching funds to tap TEA-21 Railroad Rehabilitation and Improvement Financing funds. Congress has expressed concern that these funds have not been used, and this project might to be the first one that would do so. As a result of this project and the MTI study, California appears ready to review the entire question of state support for freight infrastructure.



Valley Transportation Authority bicycle-friendly buses

RESEARCH PROJECTS COMPLETED



Principal Investigator: *George Gray*

Published: September 1999 Impacts of the North American Free Trade Agreement on Transportation in the Border Areas of the United States: With Emphasis on the California Border with Mexico

Report 99-2 (# 9700)

The signing of the North American Free Trade Agreement (NAFTA) put immense pressure on transportation systems along the U.S.-Mexico border. The continued growth of tourism and border area population, and now increased trade, have exacerbated the need for transportation service improvements. Caltrans requested a review of the surface transportation policy issues along the California-Baja California border and a prioritization of issues they will need to address.

This study examines 53 policy issues, of which 21 are recommended for action in the near future. These range from initiating legislation to clarifying existing state statutes and undertaking studies.

A sampling of the recommendations includes:

- Request studies of the air quality at Calexico and San Ysidro Points of Entry.
- Proceed with environmental studies of Route 11 immediately after the corridor preservation study is complete and accepted.
- Obtain legal opinion on Caltrans' roles and responsibilities in regard to the Indian Nations affected by the department's projects.
- Instigate legislation to establish the intent of the State Highway System vis-à-vis international ports of entry.
- Inform the General Services Administration that it is in its best interest to have first right of refusal for ownership of the Virginia Avenue property in San Diego and the inactive Calexico commercial Point of Entry.
- Encourage legislation to allow public or private toll roads within the border zone.



Principal Investigator: *Dan Evans, J.D.*

Published: December 1999 Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure. Report 99-3 (#9701)

Both ISTEA and TEA-21 have increased the focus on the nation's freight infrastructure and on efficient and reliable movement of goods. Additionally, the emergence of justin-time delivery systems, the recent mergers of American railroads, the passage of the North American Free Trade Agreement, and the integration of railroads in Canada, the United States, and Mexico have raised additional issues. All this has highlighted the economic importance of freight infrastructure investment, but institutional, legal, political, and competition issues have limited the investment of public funds in privately-owned railroad infrastructure.

This study examines the general prohibition against the use of public funds for private development in light of the national and regional economic benefits of more efficient freight movement. It addresses the legal issues of whether the state can make investments in privately-owned infrastructure and which public funds may be used.

Some of the findings and recommendations include:

- The California legislature has the legal power to invest public funds in privatelyowned freight infrastructure projects.
- State Highway funds, except gas tax revenues, may be used for such investment.
- Gas tax revenues are restricted to highway use by current interpretations of the California Constitution. Political (legislative) processes are the way to approach changing this restriction.
- Gas tax revenues may be invested in roadway segments of freight infrastructure projects.
- An analytical system of guidelines, which includes economic development, should be developed to score and evaluate any proposed freight infrastructure project.
- Public agencies should maintain political contacts in order to control the political short-circuits of the planning process, namely "demonstration projects" and "high priority projects."
- Caltrans should develop a Freight Improvement Priority System for the purpose of prioritizing all freight improvement projects.



Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data Report 00-1 (# 9702)

Local governments and transportation agencies face increased pressure to develop funding sources to meet the increased demand for traffic and congestion relief and must often turn to the ballot for those funds. Initial research revealed a complex landscape with many important factors affecting the success of transportation tax elections.

Principal Investigator: *Peter Haas, Ph.D.*

Published: July 2000 The study used both statistical analysis of community-level characteristics from many communities in California and the nation and four qualitatively focused case studies of Sonoma and Santa Clara Counties in California, of Seattle-Tacoma, and of Denver to explore the question. The statistical analysis did not provide clear direction, so the case studies became more important in determining findings and recommendations. Some of these include:

- Identify a budget cap. For sales tax measures this should not exceed ten years of collecting a .005 rate. This forces prioritization of the package.
- Base priorities on information from many sources, including likely voters.
- Include both car-oriented and transit projects, where feasible.
- Have contingency plans for dealing with the opposition. Most likely negative arguments: high total costs, use of current dollars rather than new, and ineffectiveness of transit to reduce congestion.
- News coverage is better than paid advertising for dealing with complexities.
- Geographical distribution of benefits is not always a plus.
- Consider an incremental approach to a long-range plan, covering several elections.
- Linking population growth restrictions to a measure needs more analysis.

ONGOING RESEARCH PROJECTS

Sixteen research projects have completed their active research phase and are nearing publication. All will be published by September 2001. Seven additional projects will be submitting final drafts between July and September 2001 and will be published by the fall of 2001.

Principal Investigator: George Gray (see also project # 99-2 page 15)

Final Report scheduled : Summer 2001

California Border Zone Land Transportation Issues # 9802

The project is the second by Gray examining impacts and issues related to the California-Mexico border following the North American Free Trade Agreement (NAFTA). Since the completion of the original research (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.



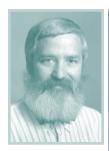
Principal Investigator: Jonathan Levine, Ph.D.

Final Report scheduled: Summer 2001

Transportation and Land Use Innovation: Impacts on Household Residential Choice # 9803

Most current thinking assumes that the market determines what is built, or that the market must be regulated if better land use is to occur – and, in either event, the effect on transportation and on vehicle miles traveled will be negligible. Much land use planning now actually discourages development of alternatives to the large lot and single-family house. If planners viewed changes to their current rigid templates as opening up choices for residents – choices that households desire and would act upon, they might be able to plan for both a reduction in automobile use and a better land use environment.

This project examines the relationship between people's preferences for land use and transportation environments on the one hand and their residential choices on the other. The research will use surveys, GIS analysis and discrete choice modeling to estimate the loss of household choice associated with a highly automobile dependent metropolitan area. The research focuses on Boston as a region offering rich opportunities for residence in pedestrian and transit-oriented neighborhoods (and relatively low vehicle miles traveled per capita), and on Atlanta, an area with few such opportunities and very high vehicle miles traveled per capita. The contrast will shed light on the spectrum of choices residents would make if transit or pedestrian-oriented neighborhoods were available.



Principal Investigator: *Robert Johnston*

Final Report scheduled: Summer 2001 Applying an Integrated Urban Model to the Evaluation of Travel Demand Management Policies in the Sacramento Region #9804

The standard approach to regional transportation planning is to project the travel demands of the past into the future and then plan how to best meet the needs. This method does not analyze the social equity effects of plans and projects. The old models generally do not represent changes in number of trips, trip lengths, auto ownership, time of travel, and land development due to changes in transportation policies, nor the dynamic that more roadway capacity leads to induced travel.

This study builds on four years of work at the University of California, Davis. Using an integrated urban model (travel and land use) called SacMEPLAN2, the team and their subcontractor (who taps talent at the University of Calgary, Canada) will add elements dealing with departure time choice, land use, and allowable uses. These will be run on 2020 scenarios. Because the upgraded model will facilitate simulation of critical travel behaviors not usually modeled, it should better represent the effects of such travel demand management policies and thus encourage their use. The project will involve local groups interested in making regional transportation planning more responsive to environmental and social equity concerns and, in a later phase, will lead to recommendations for the local MPO.



Principal Investigator: *Brian M. Jenkins*

Final Report scheduled: Fall 2001

Protecting Public Surface Transportation Against Terrorism and Serious Crime: Continuing Research on Best Security Practices # 9805

The Institute has previously sponsored a national symposium (Report 96-1) and an earlier research project by the same Principal Investigator (Report 97-4, *Protecting Surface Transportation Systems and Patrons from Terrorist Activities*). The research project included 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. 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.



Principal Investigator: *Tom Horan, Ph.D.*

Final Report scheduled: Summer 2001

GIS for Livable Communities #9806

TEA-21 seeks to integrate transportation into urban life while pursuing goals of sustainability, economic development, global competitiveness, and increased multimodal options. Tools such as Geographical Information Systems (GIS) can help achieve these policy goals by providing planners, policy makers, and stakeholders with spatial data on community transportation preferences. This enables better decisions about transportation and community design by assessing transportation options for community livability through use of place-based planning.

The five case studies in the project will provide a model for cities wishing to enact place-based planning strategies. Specifically planners can reflect community preferences by geocoding survey data for the development of rich spatial maps, full of details about community travel patterns and citizen perceptions of community relationships. The city of Riverside, California has been selected for an in-depth prototype analysis.



Principal Investigator: *Dick Nelson*

Final Report scheduled: Summer 2001 Creating a Planning Template for Non-work Travel and Transit Oriented Development (TOD) # 9807

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, 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, factors that will determine TOD regional (not just station-area) success, planning process steps and plan outputs.



Principal Investigator: *Evelyn Blumenberg, Ph.D.*

Final Report scheduled: August 2001

The Travel Behavior and Needs of Welfare Recipients # 9808

A successful transition from welfare to work for the millions of recipients transitioning into the paid labor market will be largely 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 the University of California Los Angeles. 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 observed and stated preferences and will examine the relationship between recipients' access to transportation and their economic outcomes.



Principal Investigator: Andrew Nash

Final Report scheduled: Summer 2001

mplementation of Zurich's Transit Preferential Program # 9809

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. 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.



Principal Investigator: *Earl G. Bossard, Ph.D.*

Final Report scheduled: Fall 2001

Envisioning Neighborhoods with Transit-Oriented Development Potential # 9810

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 socio-economic, 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.



Principal Investigator: Donald R. Rothblatt, Ph.D.

Final Report scheduled: Fall 2001

Best Practices in Developing Regional Transportation Plans #9811

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 20 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 and degree of citizen involvement, evaluation processes used, and the databases available to support evaluation. Ultimately, the study will try to determine if and how MPOs affect transportation outcomes in a region. The publication is expected to be of particular benefit to smaller MPOs.



Principal Investigator: Scott Lefaver, Ph.D., AICP

Final Report scheduled: Summer 2001

Construction of Transit-Based Developments: New Policy Initiatives for Governments # 9901

This study is in response to a need expressed by many of the local governments involved during a prior study (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 that impeded implementation, in spite of stated policies encouraging such development.

The study will look at potential actions for all levels of government that 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 use case studies 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.



Principal Investigator: **David Koffman**

Final Report scheduled: Fall 2001

How to Best Serve Seniors on Existing Transit Services # 9902

The project seeks to identify those aspects of transit service that if improved, would have the greatest capacity to make existing transit service more useful and more attractive to seniors, whose needs and concerns do not necessarily match those of working-age riders. By providing quantified information about senior preferences, the study will assist system operators in experimenting with service modifications.

The research is analyzing several recent rider and general household surveys conducted by transit agencies. Two recent Transit Cooperative Research Project (TCRP) reports, TCRP Report 36, *A Handbook: Using Market Segmentation to Increase Transit Ridership and* TCRP Report 37, *A Handbook: Integrating Market Research into Transit Management,* have discussed techniques for using analysis of consumer satisfaction and preference information to establish priorities for improving service in ways that will have the greatest impact. This study, combined with the TCRP reports, will provide tools for better service to the growing senior population.



Principal Investigator: Joseph J. Giglierano, Ph.D.

Final Report scheduled: Fall 2001

Effects of Online Shopping on Vehicular Traffic Patterns # 9903

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 (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 also looks 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 early/late majority 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.



Principal Investigator: *Richard A. Werbel, Ph.D.*

Final Report scheduled: *Fall 2001*

Passing Local Transportation Tax Measures: A Follow-up Study # 9904

The original report 00-1, *Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail*) examined four case 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 important issues previously identified for more research: incremental vs. 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 10 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.



Principal Investigator: Aseem Inam, Ph.D.

Final Report scheduled: *Fall 2001* Developer-Planner Interaction in Transportation and Land Use Sustainability # 9905

One side of conventional wisdom holds that developers build to meet market demand and that more sustainable development with a better integration of land use and transportation will occur only when it is commanded and controlled by government. Another side of conventional wisdom holds that it is community regulations themselves which dictate auto-dependent, low density development patterns, particularly in job-rich suburban communities. By using four case studies the team will explore such questions as: Do developers want to build more sustainably than regulations allow? Is there potential profit motive for developers who build sustainable projects? What tools or incentives would yield more sustainable growth patterns and attract developers?

The study will also include a survey of national developers who have a demonstrated interest in sustainable development at the local, regional, and national levels. They will be asked about market acceptance, perceptions of unmet market demand, long-term benefits for developers who produce more sustainable development forms, and obstacles to their building more sustainably (regulations, community opposition, uncooperative planning authorities, and financing difficulties).

By exploring these questions the study should assist developers, planners, and communities to explore improvement which will yield more sustainable relationships between land use and transportation.



Principal Investigator: *Herb Oestreich, Ph.D.*

Final Report scheduled: Summer 2001

Transit Labor Relations Guide # 9906

External and internal pressures are forcing both public and private transit entities to formulate new and innovative policies and strategies to improve their labormanagement relations. Studies have shown that the collective bargaining relationship between union and management is the factor with the most direct and measurable effect on organizational effectiveness. Many transit managers and union leaders want a more cooperative relationship and are exploring a negotiating style called "interest-based" or "mutual problem solving," but they are exposed to much misinformation on the subject. Exaggerated success stories have oversimplified the process required and hide the many failures.

Through literature review and extensive interviews this study will produce a guide, or handbook, for successful cooperative union-management relations in the transit industry, with emphasis on the reasons behind successes and failures. It will include a thorough explanation of the legal framework, which is different from other private or public sector labor relations systems, and which must be understood regardless of the negotiating and dispute resolution styles employed.

Principal Investigator: George Gray (see also project # 99-2 page 15)

Final Report scheduled: Summer 2001

Non-Pricing Methods to Optimize High Occupancy Vehicle Lane Usage # 9908

The unused capacity of High Occupancy Vehicle (HOV) lanes often leads to pressure to abandon their use, especially when the condition exists next to congested mixed-flow freeway lanes. One means of increasing their use has been congestion pricing which allows single occupant vehicles to use the lane for a variable fee. This study will explore non-pricing methods that could optimize use of excess capacity in carpool lanes. It will focus on identifying and evaluating the spectrum of possible methods that might be considered and recommend worthy candidates for additional study, if warranted.

Some possible items to be covered include expanding the universe of allowable users (electric or alternative fuel vehicles, handicapped drivers via special plates or transponders, taxicabs and limousines on radio dispatch), reevaluating existing users (motorcycles, emergency vehicles, multiple-rider vehicles of varying numbers, buses), outright conversion to bus and truck lanes, and changing the hours of operation between HOV use and mixed-flow use. Ease of use, ease of enforcement, system efficiency, cost-effectiveness, safety, and ease of identification will be among the criteria used to screen the options.



Principal Investigator: *Dr. Thomas C. Ferrara*

Final Report scheduled: Summer 2001

A Statewide Study for Bicyclists and Pedestrians on Freeways, Expressways, Tunnels and Toll Bridge # 9909

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 that 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.

Principal Investigator: *Earl G. Bossard, Ph.D.* (see also project # 9810 page 21)

Final Report : August 2001 Publication Date scheduled: October 2001

sing the Internet to Envision Neighborhoods With TOD Potential # 2007

MTI study #9810 developed the Envisioning Tool. In this study Dr. Bossard expands the research to take advantage of additional data sources and new means of displaying that data. The project focuses on developing systematic ways to find, filter, transform, model and synthesize these data into small replicate maps, charts, digital images and tables that can be combined to enable envisioning of areas with transit-oriented development (TOD) potential. An internet-friendly envisioning tool will be more usable and effective than the version developed for the first study.

This project will estimate travel times to transit centers, add bicycle-commuting data to the current sites and identify additional sites that have good network data, bicycle data or information related to special needs populations. The publication will include a CD, and a demonstration website will be available on the MTI website *TransWeb* as part of the web posting of the project. The goal continues to be development of a tool that will assist planners, developers, funders, and others to analyze the potential of sites for transit-oriented development.

Principal Investigator: *Robert Johnston* (see also project # 9804 page 18)

Publication Date scheduled: *August 2001*

Applying an Integrated Urban Model in the Evaluation of Travel Demand Ianagement Policies in the Sacramento Region: Year Two # 2002

This study continues the development of a model that could incorporate the evaluation of travel demand management policies, which has particular importance in coordinating transportation and air quality planning. This increment adds submodels for floor space, for heavy truck freight, and for analysis of impact on households by income (for use in assessing equity issues). The model interfaces with a GIS model, and the resulting information is to be presented to local citizen groups to assess its potential for empowering participants in the regional transportation planning process.



Principal Investigator: *Richard Lee, Ph.D., AICP*

Currently in Peer Review Publication Date scheduled: September 2001

The California General Plan Process and Sustainable Transportation Planning # 2003

All California cities and counties are required to have local general plans that serve as the "constitution for all future developments" in their jurisdiction. These plans have the potential to serve as a basis for sustainable development, and this study assesses the role played by the concepts of sustainable development or sustainable transportation in a wide sampling of current plans. The study will define and then identify criteria for assessing sustainability in the elements of a plan, especially in the transportation/circulation element. It will establish a baseline against which progress can be measured. The research will emphasize a review of current planning efforts because sustainability in plans is a relatively new concept. Guidelines and model language for the circulation, land use and housing elements will be explored, as well as the potential for a separate sustainability element.



Principal Investigator: *Brian D. Taylor, Ph.D.*

Final Report Due: August 2001 Publication Date scheduled: October 2001

Increasing Transit Ridership: Lessons from the Most Successful Transit Systems in the 1990's # 2005

The 1990's saw volatile movement in transit ridership, from the stagnation of the recession early in the decade to stabilization at the end. Some systems, however, increased ridership even in the recession or grew dramatically during the recovery. This study will examine why these increases occurred. Industry information is sometimes anecdotal and not always accessible; academic research has been arcane and not visible to practitioners. This research aims to bridge the gap with a workbook of clear and carefully constructed case studies of the best practices for increasing ridership, plus information on operational strategies, management philosophies, organizational structures, policies, implementation strategies, and innovative service delivery ideas.

This work should be of value to transit agency managers, board members and analysts, as well as urban planners and city administrators.



Principal Investigator: *Walter Siembab*

Final Report Due: August 2001 Publication Date scheduled: October 2001 Using Fiber Networks to Stimulate Transit Oriented Development: Prospects, Barriers and Best Practices # 2007

Transit authorities currently have few incentives they can use to encourage transitoriented development (TOD) adjacent to rail stations. Yet this development is needed to help generate long-term ridership and justify the capital investment that rail requires. This project will conduct research into whether fiber optic networks developed in rail authority rights-of-way can be used, in some cases, as an incentive to encourage TOD. If so, rail authorities will have a new tool for increasing long-term ridership which has potential value to local governments and developers.

This study will examine three California counties/regions that have rail systems, commuter rail systems, and TOD policies: the Bay Area (BART), Los Angeles County and San Diego County. It will determine if current policies, programs, and practices affect fiber network development, especially related to TOD sites. Is there any use of networks as a development incentive? Are there barriers? Is there any budget support for fiber projects? One aspect of the study will survey the use of telecommunications policies as development incentives elsewhere in the nation and in Western Europe.

Future Projects

Even as ongoing projects are completed, MTI is preparing for what comes next. Some of the proposals selected for this past year did not mature, but their development is continuing. MTI plans to seek Caltrans approval in 2001-2002 and proceed with the studies listed below. Details will be available on the Research Project Description pages of *TransWeb* once the prospectuses have received final approval and become actual projects.

 Designing a Template for Understanding Freight Movement and Logistics at the Metropolitan Region Level

Principal Investigator: John S. Niles

• Update of Needs Assessment for Management Training and Education in Surface Transportation in the United States and Canada Principal Investigator: Peter Haas, Ph.D.

MTI Research Associate Dr. Anne Lawrence continues to monitor labor mediation activity in California to identify parties willing to allow a research and videotape team to observe their process. The result would be a guide to successful mediation for both management and labor participants, but the project depends upon an unpredictable opportunity.

Eight proposals submitted in late spring 2001 are also being developed for Caltrans approval. These, too, will be detailed in the Research Project Description pages of *TransWeb* once they receive Caltrans approval but are not considered projects until then.

- Regional Transportation Planning for Smart Growth
 Principal Investigator: Robert Johnston
- Sustainable Transportation Indicators for California Principal Investigator: Richard Lee, Ph.D.
- Bridging the Gap: Planning Interjurisdictional Transit Services Principal Investigator: Patrick McGovern, Ph.D., J.D.
- Integrating High-Speed Rail Systems with Cities: Best Practices
 Alternative Topic: TEA-21 High-Speed Rail Corridors: Analysis of Progress and
 Recommendations for Final Selection Criteria
 Principal Investigator: Andrew Nash
- Verifying the Accuracy of Regional Models Used in Transportation and Air Quality Principal Investigator: Caroline Rodier, Ph.D.
- Impact of Ethnic Diversity on Transit: How Do Various Population Groups View and Utilize Various Transit Modes?
 Principal Investigator: Richard A. Werbel, Ph.D.

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- Integration of Transportation and Land Use Planning: Policy and Program (Framework Development Project)
 Principal Investigator: Kenneth Schreiber
- Integration of Transportation and Land Use Planning: Policy and Program (Outreach and Dissemination Project)

Principal Investigator: Kenneth Schreiber

The last two projects on this list are an outgrowth of the major Sustainable Communities project completed recently on a separate Caltrans contract. The focus of the first project will be a framework for the State of California to develop a comprehensive growth management approach to smart growth, and sustainable and livable communities. It will suggest direct policy and program options. The second project is technically an Information Transfer project, but it will integrate and overlap with the research project in ways that make separate discussion impractical. The ultimate goal of the two would be to provide a solid basis for statewide dialogue and then to foster that dialogue in a systematic fashion.

Mid-Year Project Selection for 2001-2002

In anticipation of seed grant responses and proposals in reserve, RAPOC suggested at their spring meeting that MTI begin planning a project selection round in the fall of 2001. Completion of the bulk of our ongoing projects will allow accurate assessment of the funds available for additional projects, and we do expect to proceed with a shortened RFP cycle to put those funds to use.



INFORMATION and TECHNOLOGY TRANSFER

The area of Information and Technology Transfer manages hardcopy and online dissemination of surface transportation policy information, including information resulting from MTI research and education programs. Among other projects, this area includes TransWeb, the transportation library program, and all of the Institute's publications.

INFORMATION & TECHNOLOGY TRANSFER

Research and Publications Assistant, Sonya C. Cardenas Mineta Transportation Institute College of Business-BT550 San José of Business-BT550 San José, CA 95192-0219 Office phone: 408-924-5582 Office fax: 408-924-7565 e-mail: cardenas @mti.sjsu.edu



Sonya Cardenas Research and Publications Assistant

With a career as varied as a buyer and as a program director for a NASA program, Research Program and Publications Assistant Sonya Cardenas brings a fresh approach to one of MTI's most important assignments, that of publishing transportation issue studies for use by both the public and private sectors.

A lifelong Bay Area resident, Sonya most recently served as the Education Program Director for NASA Ames Research Center's STELLAR education program. In that position, she was the recipient of several awards for program excellence, including the National Rotary Award in Space Education in 1999, and 12 Specific Productivity Awards from NASA Ames from 1985 to 1996. Married and living in Gilroy, Sonya takes pleasure in time spent with her teenage son.

Web Administrator, Barney Murray Mineta Transportation Institute College of Business-BT550 San José State University San Jose, CA 95192-0219 Office phone: 408-924-7563 Office fax: 408-924-7565 e-mail: murray@mti.sjsu.edu



Barney Murray

Web Administrator

Web Administrator Barney Murray brings over 25 years of computer expertise and creativity to the Mineta Transportation Institute as the creative force for *TransWeb*, the Institute's website. Barney took charge of the site in October 2000. Hits to the site increased 23 percent the first month and have peaked as much as 85 percent higher over a nine-month period.

A native of White Plains, New York, Barney's computer background includes working in computer science research and development, hard drive failure analysis, as well as Web design. Knowledgeable in all aspects of Internet technology, and proficient in programs used to design websites, Barney is always searching for ways to improve the user experience and available functions.

As a self-employed business consultant, Barney has provided marketing plans, market research, and website development to small businesses throughout the Bay Area and East Coast.

INFORMATION & TECHNOLOGY TRANSFER GOALS

The goals of the Information and Technology Transfer Program are to:

- provide research results in the form of quality publications in print and on the Web for use by transportation professionals around the world,
- disseminate the recorded results from discussions of significant transportation issues, and
- provide library and Web resources for a wide range of transportation interests.

INFORMATION & TECHNOLOGY TRANSFER

LIBRARY

The Mineta Transportation Institute and San José State University's Clark Library have teamed up to enhance the effectiveness of MTI's transportation library. Academic Services Librarian Sandra Belanger, who managed the creation of the library, and Acquisitions Librarian Lucille Yonemura have successfully integrated our materials and collections with the main collection. Each MTI item is identified in the catalogue and by a special bookplate that credits the U.S. DOT-RSPA and Caltrans for acquisition funding. We are now seeing the benefits of increased circulation and visibility as a result of the transfer from our offices to the library.

Some duplicate materials are retained at MTI and are readily accessible to the staff, research associates, graduate students, and student assistants. Institute staff review new incoming material and enter collection information into the MTI database before transfer to the Clark Library.

MTI has arranged for special borrowing privileges for active researchers who are not eligible for access through the California State University system.



FORA AND SYMPOSIA

2025 Visioning Session: Silicon Valley Forum 00-2

On June 24, 2000, U. S. Secretary of Transportation Rodney E. Slater participated in a forum, co-sponsored by the Mineta Transportation Institute and the Commonwealth Club of California. The topic, "2025 Visioning," was designed to elicit ideas for the 2025 Transit Choice Report for a subsequent international transportation symposium in Washington, D.C. Participation in the roundtable discussion was by invitation and included several Silicon Valley transportation and industry representatives and political dignitaries. The purpose was to highlight some of the best ideas in transportation and transportation technology.

The discussion covered issues of congestion, technologies, shifting from construction to management of facilities, resistance to modal development, regulations, experimentation, attitudinal changes, and air traffic control.

MTI produced a transcript of the proceedings, which is available on *TransWeb* or in hardcopy.

BART to Silicon Valley: How Now? Regional Forum held April 6, 2001

This was the first of three potential forums dealing with "hot spots" in the San Francisco Bay Area. This "hot spot," like the others, was chosen because of the severity of its gridlock, both in the congestion and the policy sense. In November 2000, voters in Santa Clara County passed a sales tax extension that provides the local matching funds for extending BART service from Alameda County. The election left many questions unanswered, and the responsible agencies had just adopted their public and private negotiating positions for addressing those questions when the forum was held.



Congressmember Mike Honda at BART Forum

In many ways the forum was an education for the community on the process of funding and planning a New Start project. It introduced some of the BART leadership and highlighted the roles that familiar local leaders will be playing as negotiations proceed.

The keynote address by Congressmember Mike Honda, a new member of the House Transportation and Infrastructure Committee, emphasized the need for local consensus and a clean, well-developed project if the area were to be successful in securing federal funds. Our co-sponsor,

the Commonwealth Club of California, aired the speech over the NPR network. Extensive newspaper and business weekly coverage highlighted the forum and the messages of the participants. This media interest expanded the dialogue well beyond the audience of close to two hundred who attended the five-hour session.

The proceedings will be published in August 2001.

National Youth Videoconference on Sustainable Transportation June 7, 2001 Principal Investigator: Dongsung Kong, Ph.D.



Meadow School Staff and students at the Annual Awards Banquet

The second Mineta Transportation Institute National Youth Videoconference for youth connected middle school-age students from Washington, D.C.; Hampton Roads, Virginia; Oakland and San Jose, California. MTI sponsored the conference and the preceding classroom activity with the goal of interesting young people in transportation issues and the potential for a career in the field. MTI chose this age group because the students will soon be selecting high school courses that could predetermine their eligibility for an appropriate course of study in college. MTI invited schools serving underrepresented groups.

Professor Dongsung Kong and his graduate assistant, Monica Baptista, assisted by a middle-school specialist from the College of Education, created a student workbook and teacher guide for a challenging three-week unit on sustainable transportation and issues they will be facing in "their century." Students then were asked to create a project showing some aspect of sustainable transportation to share during the videoconference. The winners displayed their project at MTI's Annual Banquet and were introduced during the program.



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Teachers raved about the curriculum materials and the excitement of their students for the whole project.

U. S. DOT Secretary Norman Y. Mineta opened the videoconference from the Washington, D.C. site, and his presence had a noticeable impact on the students in all locations. The site sponsors, members of MTI's Board of Trustees, generously answered questions for an extensive period after the project presentations. For these particular young people, the attention of so many top leaders was a once-in-a-lifetime experience. The session is being transcribed for publication, and next year's videoconference planning will begin soon. As a result of the enthusiasm of teachers for the curriculum material, Dr. Kong and Ms. Baptista will prepare a version for use without videoconference participation, which necessarily limits the reach of the information. These independent tools will be made available at cost early in the next school year, and an extensive outreach campaign to alert teachers to their availability will be part of the next project.



LOOKING FORWARD

The second MTI "hot spots" forum is planned for Fall 2001, covering the **Sonoma-Marin-Highway 101 Corridor** in the North Bay. Three elections for varying transportation improvements have all failed, each for different reasons, and the community is no nearer consensus now than it was during those elections. Yet the congestion in the corridor continues to increase, and public frustration is unabated. Dr. Kong will be the PI for this project, which will include the forum, a keynote speaker with radio broadcast, and a published transcript. The third forum, exploring **CalTrain to Downtown SF**, is waiting for the issue to return to the public front burner before proceeding.

MTI has been asked to co-sponsor a *national symposium on station-oriented development* by the Great American Station Foundation and MTI Board Member Hank Dittmar, its President/CEO. Many MTI projects have explored this connection between transit sites and adjacent land use activity, so our involvement is a natural extension of the research program into Information Transfer. Details will be provided on *TransWeb* when available.

Executive Director Rod Diridon has invited the **TCRP New Paradigms** panel to co-sponsor a symposium scheduled to take advantage of Railvolution, which will be in San Francisco in September 2001. There are some interesting new collaborative models emerging that would bring a touch of reality to the program and discussion (including a joint venture of HP and PriceWaterhouseCoopers to support continued introduction of state-of-the-art information technology to the global airline industry).

Under the leadership of MTI Executive Director Rod Diridon, MTI recruited the Commonwealth Club of California to co-sponsor a forum in September 2001 to examine *why zero emission vehicles (ZEV's) are not penetrating the California market*. The *ZEV Faire* will feature vehicle demonstrations in addition to the panel of experts, which will include Mr. Diridon. The event will be available on the NPR network, and MTI will publish a transcript of the discussion.

PUBLICATIONS AVAILABLE

MTI Report No.	Title	Authors/Moderators
94-1	An Assessment of Needs for Management Training and Education in Surface Transportation in the United States and Canada	J. Giglierano R. Vitale
95-1	Planning for Surface Transportation and Land Use: A Symposium	MTI Staff
96-1	Terrorism in Surface Transportation: A Symposium	MTI Staff
96-2	Conduct of Background Research for the Establishment of an International Surface Transportation Policy Conference in California—"Global Cooperation Through Transportation: Joining Forces Across Borders"	G. Murray et al.
96-3	Development of a Statewide Surface Transportation Network Utilizing the International Transportation Information System	S. Belanger et al.
96-4	Issues Relating to the Emergence of the Information Superhighway and California Societal Changes	J. Botha et al.
97-1	Public Land with Private Partnerships for Transit Based Development	S. Lefaver et al.
97-2	Toward a Cooperative Future? Labor-Management Relations in Surface Transportation: A Symposium	MTI Staff
97-4	Protecting Surface Transportation Systems and Patrons from Terrorist Activities: Case Studies of Best Security Practices and a Chronology of Attacks	B. Jenkins et al.
97-5	Capital versus Operating Grants for Transit: Economic Impacts for California	P. Haas et al.
F-98-1	Rail Transit: Issues and Opportunities for the Bay Area and California	MTI Staff
S-98-1	Sustainable Transportation in the 21 st Century: A National Videoconferenced Symposium with Elementary School Children in Support of the Secretary of Transportation's Garrett A. Morgan Technology Futures Program	MTI Staff
S-99-1	Driving Into the Twenty-First Century: Technology Solutions to Transportation Problems Symposium	MTI Staff
99-1	Maintenance and Continued Development of the IISTPS Transportation Information System, TRANSWEB™	S. Belanger S. Kwan
99-2	Impacts of the North American Free Trade Agreement on Transportation in the Border Areas of the United States: With Emphasis on the California Border with Mexico	G. Gray
99-3	Analysis of Policy Issues Relating to Public Investment in Private Freight Infrastructure	Dan Evans, J.D. Norman Kelley
00-1	Why Campaigns for Local Transportation Funding Initiatives Succeed or Fail: An Analysis of Four Communities and National Data	P. Haas et al.
M-00-1	Our Transportation Crisis: Who Will Pay?	MTI Staff
P-00-1	American Association of State Highway Transportation Officials, Region 4 Research Advisory Committee, Summer Meeting Proceedings (September 26 – 29, 1999)	MTI Staff
F-00-1	Crossing the Bay: Water Transit Initiative Forum	MTI Staff
F-00-2	2025 Visioning Session, Silicon Valley	MTI Staff

INFORMATION & TECHNOLOGY TRANSFER

MASTERS STUDENTS' CAPSTONE PAPERS

The Master of Science in Transportation Management program requires each graduate to produce a capstone project that represents significant research of a transportation issue. The quality of the initial projects led to the decision to publish selected papers. Minor editing for format is provided, and MTI arranges for peer review, but the final paper is the responsibility of the student. Two papers are currently being prepared for publication:

Examination of a More Effective Federal Role in the Deployment of Rural Intelligent Transportation Systems by Mark A. Jensen

System Management in the Bay Area: Improving the Connection Between Caltrans and the MTC by Judy Li

The ADA and Transportation: Community Issues and Answers by Donna Kelsay

These join previously published capstone papers:

Rationale and Model Business Strategy for Incorporating Alternate Fuel Vehicle Technology in Local Government Fleets by **Michael Lechner**

Institutional Complexities of California's Federal Statewide Transportation Improvement Program and their Relation to Project Delivery Failure by **Greg S. Wong**

Development and Management of Future Ferry Services in the San Francisco Bay Area by Mark Helmbrecht.



TRANSWEB

The Information and Technology Transfer area includes a recently redesigned and daily expanding website, *TransWeb* (http://transweb.sjsu.edu). *TransWeb* is a transportation information hub widely used by non-Institute individuals and organizations. The site provides links to national and international sites related to all modes of surface transportation policy. Also linked

to *TransWeb* is MTI's home page, which includes the Research Program and the Education Program websites.

In the past year, visitors to the *TransWeb* site have nearly doubled due to the efforts of Web Administrator Barney Murray and a concerted effort by MTI staff to provide relevant content which is intended to keep readers abreast of events within the transportation world and inform visitors what is new with MTI. The most popular page of the website is "Transportation News," and Webmaster Murray is currently working to optimize this area and encourage user-friendliness throughout the site.

The Mineta Transportation Institute website provides, among other items, contact information, standard forms used by research associates, research project descriptions of all active Institute research, as well as links to full-text files of MTI research final reports published since 1999. Posting of MTI publications printed prior to 1999 is in progress.

A new section is "Kids and Transportation," an interactive page complete with transportation links designed for youngsters of all ages. MTI is supporting efforts to encourage today's K through 12 students to pursue careers in transportation.

The Graduate Transportation Management (GTM) Program webpage remains a priority and has been updated and reorganized to better serve prospective and current students. It is first and foremost designed for current students, who are able to use the Education webpage to view upcoming class schedules, register for classes, and request information about the program. Course instructors utilize the Web by posting course syllabi and assignments, as well as exams. The assignment pages provide links to bulletin boards, white boards, and course chat areas used by students and instructors.

Development and redesign of all *TransWeb* components is an ongoing process affected by technological enhancements and information needs. As technology improves, so will accessibility to the virtual classroom, which is being pioneered by MTI.

Improvements planned for the near future include enhancing user-interface, adding a portal for online activity, and accessing related multimedia videos.



Mineta Transportation Institute TransWeb Hits

http://transweb.sjsu.edu http://transweb.sjsu.edu/acadnew.htm http://transweb.sjsu.edu/mtihome.htm

WORLD IN MOTION

First circulated in 1994, the quarterly *World in Motion* newsletter keeps researchers and the public up-to-date on the work MTI is encouraging through research, information and technology transfer, and education. Every issue includes an update from Executive Director Rod Diridon, as well as columns from Education Director Glenn Shephard and Research Director Trixie Johnson, and information transfer features and statistics.

The front page features a biographical profile of a member of MTI's Board of Trustees. Transportation officials profiled in the past year include Paul Toliver, Director of Transportation for King County, Washington; Dr. David W. Conrath, Dean of the College of Business at San José State University;



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Winter 2000

Spring 2001

an updated profile on United States Secretary of Transportation Norman Y. Mineta; and Susan M. Coughlin, Director and Chief Operating Officer of the American Trucking Association Foundation. Updates on research projects that have been approved or are in progress are included in the newsletter, and future plans include short articles by principal investigators on the research process or significant developments in their projects. Descriptions of approved research projects are published annually.

Feature stories over the past year include awards and accolades received by students in the MSTM program, changes and course enhancement in the education department, and stories about events hosted or co-hosted by MTI.

With a mailed circulation of 588, and availability on the Web, the newsletter is working to spread the word to the transportation community about MTI's ongoing surface transportation policy research and education efforts.



The Education Department sponsors and supports the Graduate Transportation Management Program at San José State University. The Program offers a Master of Science in Transportation Management and a Graduate Certificate in Transportation Management.



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Dr. Glenn Shephard,

Education Director

Glenn Shephard has been a member of the faculty in the Management Information Systems Program at the San José State University College of Business since 1989. He joined the Mineta Transportation Institute (MTI) staff as Education Director in October 1999. Dr. Shephard has an MSc. from Ohio State University, an MBA from Columbia University, and a Ph.D. in Computer Information Systems from Arizona State University. He also has substantial prior business experience in both large and small scale companies including Syntex Laboratories, FMC Corp., and Arthur Andersen & Co. He brings to MTI broad experience teaching, mentoring, and collaborating within a multicultural and interdisciplinary educational community.



Viviann Ferea, Education Program Assistant

Viviann Ferea became the Education Program Assistant (EPA) in August 2000. As EPA, Ms. Ferea handles day-to-day course administration and is the primary point of contact with students and telecommunications staff. Viviann received her B.S. Degree in Business Marketing from U.C. Davis. Her studies in public relations and media sales led her to a position as Associate Enrollment Counselor for the University of Phoenix, and she brings to MTI valuable skills which she gained in program administration and recruiting.

EDUCATION PROGRAM GOAL

The goal of the Education Department is to develop and administer a multidisciplinary program of coursework and experiential learning that reinforces the transportation theme of policy guidance and management of transportation systems.

Overview

The Graduate Transportation Management Program (GTMP) had a successful year in 2000-2001, growing its student body, updating and modifying its administrative processes, and laying the groundwork for future program development. Important strides were taken to set the stage for significant improvements in program direction, quality, delivery, and enrollment during the next academic year.

The Education Director, Dr. Glenn Shephard, and Education Program Assistant, Viviann Ferea, form the administrative/development team that is successfully growing the GTMP as a dynamic, up-to-date, adaptively evolving distance learning program.

During Academic Year 2000-2001, the Education Department was successful in developing, negotiating, and receiving approval to offer a Continuing Student Performance (CSP) Financial Award Program for Certificate in Transportation Management (CTM) students. In addition, it was successful in winning approval to increase the two course credit waiver for the Master of Science in Transportation Management (MSTM) Program to a three course waiver for courses taken prior to matriculation into San José State University (SJSU) Graduate Studies.



Of special note, Caltrans – our ongoing partner in delivering our graduate transportation management education program – has taken a major step to help the GTMP deliver much higher quality transportation management classes across the State of California and beyond. Caltrans has delivered a complete, new state-of-the-art videoconferencing studio classroom to the SJSU College of Business (COB) that will ensure the uninterrupted delivery of high quality classroom experiences across a widely distributed student body.

MTI continues to use computer/telecommunications technology to improve the quality and effectiveness of GTMP marketing. A "24/7" web-based information presentation is offered through the education pages of MTI's *TransWeb* website, providing information about the program and allowing prospective students to pre-register for upcoming program courses.

Program courses offered this year had a standardized webpage that ensured student access to course information, learning tasks, collaborative interaction, and performance tracking. Exploiting the possibilities of delivering program courses to an even wider audience over the Internet, the GTMP in cooperation with the SJSU Academic Technology Network (ATN), successfully delivered classes using webcasting technology (one-way video, two-way audio) to individual students both in and outside of California. The program is now well on the way to establishing a robust hybrid communications network able to deliver program courses to an expanding number of receive sites both within and outside of California. The new Caltrans/MTI/COB Videoconferencing Studio Classroom will serve to accelerate the process.

Continuing the drive for improving program course quality and growth, the Core Course Enhancement Project (supported by a \$55,000 grant from the California State University Commission on Extended Education – CSU CEE) is well under way. This grant-supported project is enabling us to enrich the quality of GTMP core courses with web-based teaching tools.

PROGRAM ACCOMPLISHMENTS

Courses Offered

In Academic Year 2000-2001, the GTMP offered nine courses, with a record number of enrollments in Spring Session B. Details on enrollment and class receive sites follow:

MTM 201: Fundamentals of Transportation Management. 10 enrolled in Fresno, Oakland, Sacramento, San Luis Obispo, and San Bernardino.

MTM 214: Transportation Policy and Regulation. 25 enrolled in Parker, CO; Fresno, Los Angeles, Oakland, Sacramento, San Diego, San Jose, and Stockton, CA.

MTM 203: Transportation Markets and Business Development. 6 enrolled in Los Angeles, Oakland, San Bernardino, and Sacramento,CA.

MTM 215: Transportation Systems Planning and Development. 15 enrolled in Parker, CO; Fresno, Los Angeles, Oakland, Sacramento, San Diego, San José, and Stockton, CA.

MTM-BUS 286: Project Management.

7 enrolled in Parker, CO; Oakland, Pleasanton, Sacramento, San Jose, and Stockton, CA.

MTM 297: Current Topics in Transportation. 14 enrolled in Parker, CO; Oakland, Sacramento, San Diego, and San Bernardino, CA.

MTM 217: Leadership and Management of Transportation Organizations. 6 enrolled in Oakland, Sacramento, and San Jose, CA.

MTM 202: Accounting, Finance, and Business Systems. 8 enrolled in Bakersfield, Marysville, Oakland, Sacramento, San Bernardino, and Stockton, CA.

MTM 290: Strategic Management in Transportation. 3 enrolled in Oakland, San Diego and Stockton, CA.



Graduates

The faculty and staff of MTI and the College of Business at SJSU were proud to present the MSTM graduating class of 2001 at the 10th Annual MTI Board of Trustees Awards Banquet. As students, the graduates' positions in the transportation industry varied widely, and their added breadth of experience enriched many class sessions. Hard work, dedication, and determination over the past two and a half years have provided the graduates with the many skills and breadth of vision that they will need to become leaders in shaping the future of transportation. We are proud of their accomplishments and wish them well.

A Closer Look at MTM 290: Strategic Transportation Management

MTM 290 was offered this spring for the third time in the program's history. This capstone course, taught by Hon. Rod Diridon, required that each graduating student author an individual comprehensive project encompassing all aspects of the program.

The following is a list of the three MSTM graduates who were hooded at MTI's Tenth Annual Board of Trustees Awards Banquet along with the titles of their capstone projects. Copies will be available upon request.



Judy Li – System Management in the Bay Area: Improving the Connection between Caltrans and the MTC Donna Kelsay – The ADA and Transportation: Community Issues and Answers Mark Jensen – Examination of a More Effective Federal Role in the Deployment of Rural Intelligent Transportation Systems

In addition to our MSTM graduates, the following students received the graduate CTM:

- James Chai Art Duffy James Foster
- Mark Jensen Donna Kelsay Jeremy Ketchum

Nina Kretz Mark McCumsey Hector Romero Carole Sanders Lyle Stockton

This twelve-unit program is rigorous and intense, consisting of four MSTM program core courses. These students' hard work and determination during this academic year have led to their successful completion of the CTM program. Many students earn the CTM as a meaningful step towards achieving their MSTM degree.

Continuing Student Performance Financial Awards

Twice a year, subject to funding, the MTI awards up to ten \$1,000 MSTM Continuing Student Performance (CSP) Financial Awards. Thanks to this generous funding program, students are able to continue their studies in the MSTM. In the 2000-2001 Academic Year, \$14,000 was awarded through this CSP Financial Awards program to the following deserving MSTM students:

- * James Chai Art Duffy James Foster
- * Mark Jensen * Donna Kelsay * Jeremy Ketchum
- * Carole Sanders * Lyle Stockton



Paul Toliver, James Foster, Hon. James Oberstar, and Jeff Morales

* received a financial award both semesters

Twice a year, subject to funding, the MTI awards up to ten \$500 CTM CSP Financial Awards. Thanks to this generous funding program, deserving students are able to continue their studies in the GTMP. In the Academic Year 2000-2001, \$2,000 was awarded to the following CTM students:

* Todd Lacasse Leeanne Provost Jeffrey Spencer

* received a financial award both semesters



Paul Toliver and James Chai

INSTRUCTION

Bringing In the Experts

A continuing goal of the education program is to strengthen the ties between the GTMP and transportation industry experts for the benefit of our aspiring future managers. During the 2000-2001 Academic Year, MTI invited several industry leaders into the classes. Serving as guest speakers for the MTM 290 and MTM 297 classes, these leaders discussed a variety of important topics. The videoconferencing technology used by the program to deliver classes allowed guest speakers from various locations throughout California to participate in the GTMP classes from their local videoconferencing centers. The first speaker, MTI Executive Director Hon. Rod Diridon, spoke about the history of the transportation programs at the state and national levels, highlighting the complexities of obtaining state and federal funding. California Department of Transportation Director Jeff Morales, speaking by videoconference from Sacramento, discussed his views on the future of intermodal transportation in California. Finally, Executive Director of the regional Metropolitan Transportation Commission, Steve Heminger, speaking from Oakland, discussed the unique coordination and financial control powers that a federally designated Metropolitan Planning Organization has to help or hinder the planning, implementation, development, and operation of transportation systems.



Faculty and Core Course Enhancement

In January 2001, GTMP faculty under the leadership of Dr. Glenn Shephard met to kick off the Core Course Enhancement Project. The project, funded by a \$55,000 CSU CEE Grant, is now well under way. This project, entitled "Enhancing the Distributed Graduate Transportation Management Program" requires all participating faculty to complete a Teaching Technology Workshop and then to follow a prescribed process of analysis and course redesign.

The kickoff meeting generated shared insights, thoughts, and concerns about the future direction of the GTMP and how best to apply learning technologies to improve the program's ability to deliver state-ofthe-art transportation management learning environments to a distributed body of students. Discussion centered on the ways distance-learning technologies can effectively enhance program courses with computer-mediated learning and communication tools. Such tools include bulletin boards, chat-rooms, whiteboards, etc. Adding supplemental Internet-based tutorials, exercises, simulations, etc., all work to create a seamless learning environment throughout the duration of a course. When the project is completed, student learning opportunities will be enriched in variety and made available upon demand over a web-enabled computer system. The ultimate result of implementing the grant's objectives will be a dynamic, interactive management learning environment that drives students to a deeper understanding of transportation management and policy.

OUTREACH

A program outreach effort continues to be a vital part of MTI's ongoing program development efforts to locate, contact, and attract eligible student prospects. In the 2000-2001 Academic Year, the Education Department continued outreach efforts to include site visits to local transportation related agencies and underserved professional groups. Our Internet-based education program presentation continues to offer around-the-clock information availability to all interested student prospects. It is linked to and reachable through the MTI *Transweb* website.

RELATIONSHIPS WITH LOCAL TRANSPORTATION RELATED AGENCIES AND GROUPS

One of the wonderful features of the Silicon Valley is the diversity of its population. In order to continue expanding the GTMP and to reflect this diversity in our student body, MTI has developed relationships with local transportation-related agencies and groups. During this year, MTI initiated contact with the following groups: the Society for Women Engineers, the National Society of Black Engineers, the Society of Mexican-American Engineers and Scientists, the Society of Hispanic Professional Engineers, and the Society for the Advancement of Chicanos and Native Americans in Science. This is part of MTI's ongoing program to build and maintain a student body that is representative of the region.

SUCCESS STORIES

New CTM CSP Financial Award Program

During July 2000, the Education Department developed, negotiated, and received approval to offer a counterpart CSP Financial Award Program for CTM students in the GTMP. As many of our MSTM students and graduates enter the GTMP through the CTM program, we found strongly expressed need to develop a vehicle that would reduce the financial burden of earning the graduate certificate for those students who are not yet committed to or qualified to pursue the MSTM degree. This financial aid program parallels and complements the existing MSTM CSP Financial Award Program which has been in effect since MTI has been sponsoring and supporting the GTMP.

New Three Course Waiver

During March 2001, the Education Department was successful in winning approval from the SJSU Graduate Studies & Research Committee to allow the COB to increase credit waiver for the MSTM program from "allowing up to two courses" of program credit to "allowing up to three courses" of program credit for courses taken prior to matriculation into SJSU Graduate Studies. This change allows enrolled and CTM students to receive credit for up to three GTMP courses taken before their formal acceptance into Graduate Studies. Given the accelerated nature of our program (ten weeks per course session vs 16 – 17 weeks per semester), this extension is a boon to beginning students trying to successfully manage ongoing job responsibilities, coursework, GMAT testing, etc. Until now, beginning students often faced unpleasant tradeoffs of taking and paying for MSTM courses without program credit or delaying their studies until the sometimes excessively long matriculation review processes were completed.

MTI's "Caltrans Videoconferencing Studio Classroom"

During Spring and Summer 2001, Caltrans – MTI's ongoing partner in delivering a quality graduate transportation management education program – took a major step in helping the GTMP deliver high quality transportation management classes via distance learning across the State of California and beyond. During this period, Caltrans delivered, assembled, and installed a state-of-the-art videoconferencing studio classroom facility in the SJSU COB Tower building for primary use in delivering GTMP courses.

Instrumental in bringing this facility into existence were Caltrans Division Chief John Allison, New Technology and Research, who enabled the transfer and movement of the PictureTel videoconferencing system into the COB and Caltrans Division Deputy Chief Gilbert Tafoya, Information Technology, who enabled the assembly, installation, and connection of the PictureTel system to the Caltrans videoconferencing network.

Ably assisting and facilitating this project are the following Caltrans and Caltrans-related personnel:

Jackye Barlow, Information Technology, Caltrans Steve Carr, Corporate Account Manager II, Enterprise Sales, Verizon David Henzler, Information Technology, Caltrans Wes Lum, Chief, Office of Infrastructure Research, Caltrans Sallybeth Scott, Associate Transportation Planner, Office of Infrastructure Research, Caltrans Dale Shawhan, Senior Transportation Planner, Office of Infrastructure Research, Caltrans Rich Vallee, Information Technology, Caltrans

Ably assisting and facilitating this project are the following SJSU administration, faculty, and staff:

Luann Budd, Administrator, SJSU Marc Catto, Network Analyst, Networking & Telecommunications, SJSU David Conrath, Dean, College of Business, SJSU Rod Diridon, Executive Director, Mineta Transportation Institute, SJSU Viviann Ferea, Education Program Assistant, MTI, SJSU Nancie Fimbel, Associate Dean, College of Business, SJSU S. Lee Jerrell, Associate Dean, College of Business, SJSU Chris Laxton, Director, Media Production & Delivery, SJSU Wayne Ross, Operations Coordinator, Academic Technology Network, SJSU Glenn Shephard, Director GTMP/Education Director, MTI, SJSU Mark Weisler, Telecommunications Director, Networking & Telecommunications, SJSU Andy Yeung, Network Administrator/Lab Manager, Business Computing Services, College of Business, SJSU

The Education Program at MTI extends sincere thanks to all those listed above for their time and effort in bringing this project forward.

MTI Outstanding Student of the Year: Jay Smink

The Transportation Education faculty and staff was proud to announce Mr. Jay J. Smink as the MSTM Student of the Year for 2001. Jay was selected by program faculty based on his strength in academic

work, leadership, research, and contribution to the Mineta Transportation Institute. In addition to the honor of this award, Jay received a \$1,000 scholarship. The award certificate for Outstanding Student of the Year was presented by the U. S. Department of Transportation, Research and Special Projects Administration, at TRB in January 2001. Jay is a prime example of how an able student can perform exceptionally well while taking the GTMP from a variety of different physical locations. As a MSTM student, he started taking courses from a Caltrans receive



Jay Smink and Deputy Director U.S. DOT Mort Downey (ret.)

site in Orange County, CA. He then moved to Parker, CO with his wife, Kris, where he successfully continues taking classes via Webcasting over the Internet.

Jay has both private and public sector transportation experience. In the private sector, his experience includes managing air forwarding (including Department of Defense contracts), courier and cartage, custom distribution and refrigerated warehousing. His current public sector experience is with the Regional Transportation District (RTD) in Denver, CO. He is currently involved in a major transportation project which is a safety system review encompassing all aspects of department and division operations for RTD. The courses that the MSTM Program provided have given Jay the knowledge base to easily and effectively interact with regional transportation district management to ensure a quality and beneficial way to review safety systems.

Jay feels strongly about the opportunity that distance learning technologies offer today's working transportation professional: "I have found the interesting mix of students involved with the [GTMP] program is one of its strengths. Professionals of all career levels and from many different areas of the transportation industry exchange ideas, experiences, and opinions. This free flow of ideas not only generates excitement within the classroom, but it stretches your preconceptions and creates an environment conducive to learning." He goes on to say, "I have greatly enjoyed the combination of academic professors, working professionals, and numerous guest speakers. This diverse and excellent quality of instruction gives the students both an understanding of academic theory and research as well as a concept of current industry thinking and application."

Donna Kelsay: Promoted to Assistant General Manager



We are pleased to announce that Ms. Donna Kelsay, a 1999 APTA Leadership Program participant and now one of MTI's new MSTM graduates, has also recently been appointed as Assistant General Manager of the San Joaquin Transportation Department. This represents an important step up from her former position as Facilities Contract Administrator for the Sacramento Regional Transit District. Donna graciously credits her learning experiences gained in the Graduate Transportation Management Program's MSTM courses as being instrumental in helping her achieve this notable success. As regards her APTA and GTMP experiences, Donna stated that, "this program and the MSTM program complement each other, and will help me [Donna] advance my career goals in the transit industry."

Donna Kelsay

MTI is very proud that Donna was also selected by the Eno Transportation Foundation for its prestigious Eno Leadership Foundation Program. She attended the five-day Eno Leadership Development Conference in Washington, DC in May 2001, which provided exposure to many of the leaders and agencies involved in shaping transportation policies and legislation.



Judy Li Awarded APTF National Scholarship

The Transportation Education Faculty and staff were proud to announce that Ms. Judy Li, a graduate student in the MSTM program, was awarded a \$2,500 American Public Transit Foundation (APTF) National Scholarship. Judy received the award at the annual meeting of the American Public Transit Association (APTA) in San Francisco in September 2000.

Judy Li

The APTA National Scholarship awarded to Judy Li was one of five National Scholarships offered each year to individuals in public transportation industry-related fields of study. The APTF scholarships are awarded after a national competition on the basis of scholastic achievement, leadership, instructor and employer recommendations, and an essay. Judy Li is an employee of Caltrans.

City of San José Department of Transportation Meeting

The Education Department conducted an on-site information meeting at the City of San José's Department of Transportation on May 16, 2001. Seventeen city transportation engineers and transportation associates attended the presentation, and the very spirited discussion that followed reflected high levels of interest on the part of many meeting attendees.

Executive Director of MTI, Hon. Rod Diridon presented an overview of MTI and the development history of the GTMP. He was followed by



Education Director Glenn Shephard at the City of San José

Education Director Glenn Shephard, who presented an overview of the program itself, that included the history of the program, the uniqueness of the educational opportunity that is offered, and the requirements for pursuing the MSTM and graduate CTM. Viviann Ferea, Education Program Assistant, then explained her role as liaison for students and primary point of contact.

GTMP Website Presents 24 / 7 Program Information

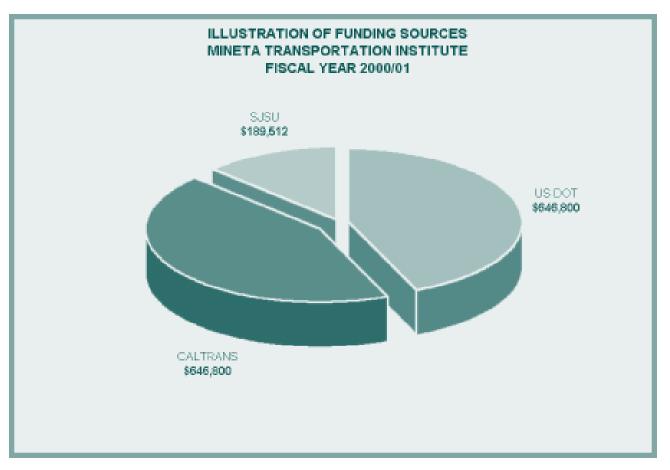
The GTMP website includes a web-based information presentation to allow prospective students access, anywhere at anytime, to an in-depth explanation of our MSTM and CTM programs of study. This presentation allows potential students to gather information about the program and then makes possible an on-line request to have application materials sent to them. The application also gives both prospective and actual students the ability to pre-register on-line for upcoming classes.

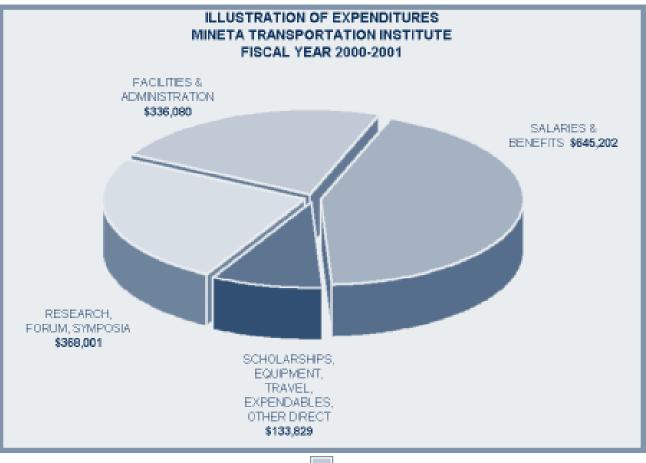
Education Program Needs Assessment Project

A needs assessment project that is approved in concept for the next fiscal year (Update of Needs Assessment for Management Training and Education in Surface Transportation in the United States and Canada) has been designed to examine how well GTMP is currently addressing and serving the transportation management education needs of today's transportation industry. It will be used to refocus and redirect the activities of the GTMP as indicated.

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