When does a ribbon become a keystone?

According to USC Professor Tridib Banerjee, “Ribbons of transit” can become true keystones for urban planning in Los Angeles and other U.S. cities.

Banerjee collaborated with USC Profs. Dowell Myers and Clara Irazabal, along with Deepak Bahl Associate Director, USC Center for Economic Development. Their recent METRANS-funded research has demonstrated the possibility that transit corridors, particularly rapid bus corridors, create opportunities to increase housing density without sacrificing quality of urban life.

Impetus for the study came from the overwhelming need for housing in Southern California. The six-County area is projected to grow by two Chicsagos by 2030. In the City of Los Angeles, approximately 60,000 units will be needed by 2005.

Ventura Blvd. vs. Vermont Ave. The team compared bus ridership along Ventura Blvd. and Vermont Ave., analyzing each stop and surrounding “walking distance.”

Both corridors are long (13+ miles) and straight, well connected to other transit routes, and provide both regular and “rapid” bus service. Rapid bus service has limited stops and signal priority to maintain velocity. The Ventura corridor is wealthier, mostly white, and less dense with many single-family homes, compared to the Vermont Ave. corridor.

The challenge, according to Banerjee, was to investigate how ridership might be increased on both routes, using existing infrastructure and “smart growth” concepts such as balancing jobs and housing, with mixed-use buildings blending into existing land patterns.

Density and Bus Ridership Go Together. The team found a positive relationship between density and ridership—as density increases at the bus stops, ridership also is up. What surprised the researchers, according to demographer Myers, is that this increase in ridership is independent of the number of household cars. That is, even though L.A. residents may have cars, when they live in dense neighborhoods, they’re still more likely to use the bus.

The team’s other findings suggest that with mixed-use, infill development, housing can be provided along bus

(Continued on page 2)
Imagine learning in-depth trends in global transportation on your own schedule, at your desk, from industry experts. Meet the new “GLS® Online,” or the Global Logistics Specialist via the internet. After a two-year period of development, the course is receiving “rave” reviews.

“Timing is an acute issue for people in transportation,” says Marianne Venieris, Director of California State University Long Beach’s Transportation Programs. “A typical classroom schedule is almost impossible, especially for government transportation specialists, due to their travel and work schedules.”

In addition, many inquiries were received from individuals living too far away from CSULB, where the classroom course is taught. It was time to offer a new delivery mode. The “GLS® Online” was thus born of necessity. The first enrollees started in Spring 2004.

METRANS Sponsored Online Development. METRANS funding, together with a significant cost-sharing commitment from CSULB, made development of the online course possible. Venieris is unaware of similar programs elsewhere, yet there is great demand. The online version means it can be delivered anywhere.

Students From Across U.S. Like Flexibility. Student Joe Wippel logs on from Green Bay, Wisconsin. He likes the flexibility. “I can log online at any time, download the material, read posted materials, think about how to prepare my answers, etc.” As Customer Service Manager, International Operations, for Schneider Logistics, Inc., Wippel has many other demands on his time in addition to education.

“This online course gives me the opportunity to participate in class before and after work, on the weekends, and while on travel (provided the hotel has an internet service!),” says Bernice J.

(Continued on page 4)
METRANS Completes Sixth Year, Submits Annual Report

The METRANS Annual Report was submitted in July 2004, covering the sixth year of operations and the second year of funding at the $1 million level. We have expanded existing activities and launched new ones. Our 1999 Strategic Plan objectives have been largely achieved, and we are now planning for the next six years. Highlights include:

Research. METRANS issued a sixth RFP. We received 18 proposals requesting a total of $1,440,565. Proposals came from 30 faculty representing 10 different departments. After an extensive peer review process, nine excellent proposals were selected for funding this year. Three additional proposals that had been deferred from the 2002-03 round were also funded.

The new applied research program Monitoring the Ports was launched with two projects at CSULB. The program funds data collection, monitoring, and short-term research that supports outreach and technology transfer in goods movement and international trade.

Conference. This year METRANS joined with the new Keston Institute for Infrastructure at USC to sponsor a conference, “The Alameda Corridor: Blueprint for the Future?” held in February 2004. The conference brought together academics and stakeholders in the goods movement and international trade community to consider the Alameda Corridor as a model for future transportation infrastructure investments. Speakers included key leaders in the development and financing of the Alameda Corridor. The conference was held jointly with the METRANS semiannual Advisory Committee Meeting, allowing members to see first-hand one of METRANS’ outreach activities. A supporting White Paper and conference summary were published.

6th Town Hall Meeting. The Sixth Annual Center for International Trade and Transportation (CITT) State of the Trade and Transportation Industry Town Hall Meeting was held in March 2004. Entitled “Quality of Life and Port Operations: Challenges, Successes and the Future,” the event addressed the challenge of managing growth of international trade while maintaining quality of life in Southern California.

Educating Students. The new Global Logistics Specialist-Online certificate program was launched in June. After nearly two years of development, the online version of the Global Logistics Certificate (GLS) started its first class. The GLS is a unique and highly successful professional training program in logistics and supply chain management. The online version was developed to serve ever increasing demand and to make it available outside the Southern California region. (See related story, p.2.)

The first class of the Master of Arts Degree in Global Logistics graduated in Fall 2003 with 19 students. The MAGL combines the analytical skills of a traditional MBA with a strong emphasis on logistics in a global setting. (See related story, p.6.)

Awards and Recognition. Graduate students continue to win awards and recognition. Ms. Jennifer Russell, Ph.D. student in Industrial and Systems Engineering, USC, was selected for the Northrop Grumman Excellence in Teaching Award for 2003.

Faculty and Administrators. METRANS Director Genevie Giuliano served as Chair of the Transportation Research Board’s Executive Committee for 2003.

CSULB Professor Hamid Rahai, Department of Mechanical Engineering, won the Northrop Grumman Excellence in Teaching Award for 2004.

Matching Funds. METRANS continues to attract matching funds. In addition to the full dollar-for-dollar match by Caltrans, USC researchers have received $323,000 in research funding from the Los Angeles County Metropolitan Transportation Authority for grants in progress 2002 through 2004.

Additional funding of $150,000 from Caltrans was provided for various research and training projects. The Ports of Los Angeles/Long Beach continue to support the CITT Town Hall (nearly $20,000 this year), and have now established scholarships for the Master of Arts Degree in Global Logistics at CSULB.
MS. YING CHEN, AN AUGUST 2004 USC MASTERS OF PLANNING GRADUATE, LEAVES AN ENVIABLE RECORD OF ACHIEVEMENT BY WINNING TWO MAJOR AWARDS AS A GRADUATE STUDENT. SHE RECEIVED THE HELENE M. OVERLY MEMORIAL SCHOLARSHIP AND AN ACADEMIC ACHIEVEMENT AWARD FOR EXCELLENT ACADEMIC PERFORMANCE FROM THE USC OFFICE OF INTERNATIONAL SERVICES.

The Overly Scholarship was established by the Womens Transportation Seminar to encourage women to pursue careers in transportation. It was established in memory of the WTS first executive secretary, who nearly doubled the organization’s size in two years.

With an undergraduate degree in global shipping management from Shanghai Maritime University, Chen learned that transportation planning is important in U.S. urban planning. She is negotiating for a job as a transportation planner in Los Angeles and plans to pursue her career in this country. Reflecting on her recent studies, she says, “I owe a lot to USC and the PPD School, where the professors were very supportive to me.”
One of METRANS’ major outreach activities is support of the annual State of the Trade and Transportation Industry Town Hall Meeting. It was held at the CSULB campus on March 24, 2004. As co-sponsors of the meeting, METRANS and the Center for International Trade and Transportation (CITT) decided a larger audience needs to know the concerns expressed by the gathering. Thus, a webcast of the event is available at www.uces.csulb.edu/citt and a White Paper has been commissioned. Tom O’Brien, Applied Research Coordinator, authored the document, just published by METRANS and CITT.

**Quality of Life Causes Concerns.** Titled “Quality of Life and Port Operations: Challenges, Successes and the Future,” the sixth annual meeting attracted organized labor, port authorities, industry representatives, and public officials.

The Ports of Los Angeles and Long Beach, occupying 10,000 acres, move a combined 160 million tons and $200 billion worth of cargo each year, more than 80% via container. This total is greater any other maritime port in the nation including New York/New Jersey, Charleston, Houston and Seattle/Tacoma. Between 50 and 60% of all imports that move through the San Pedro Port Complex are destined for delivery outside of Southern California.

Recognizing the cost of providing such massive trade service to the rest of the nation is not fully captured by the marketplace or transfers from the federal government. Thus, Southern California (in fact all of California) is a donor region when it comes to trade; and it is increasingly difficult to find the funds needed to both maintain and expand the infrastructure that allows for the efficient and effective movement of goods. With Asian imports making up some 40% of all U.S. trade, and over 70% of the Asian goods entering the country through California, both the benefits and costs of port-related operations will remain critical issues.

**Attendees Confront Issues Head-on.** CITT Director Marianne Venieris and CSULB Provost Gary Reichard reminded the audience of the objective role of such a forum—to help find solutions to shared problems.

Prof. Genivieve Giuliano, Director of METRANS Transportation Center, set the stage by noting the just-released “Port Report Cards” issued by the Natural Resources Defense Council, which suggests that both the Ports of Los Angeles and Long Beach have room for improvement in the face of their continuing growth.

A video and formal remarks preceded a lively discussion, moderated by Richard Hollingsworth, President of the Gateway Cities Partnership, Inc.

**Panelists Represent Broad Interests.** Speakers at the Town Hall included The Hon. Alan Lowenthal, whose State Assembly district includes both the Ports of Los Angeles and Long Beach; The Hon. Frank Colonna, Long Beach Vice-Mayor and City Councilmember; Julie Masters, Staff Attorney with the Natural Resources Defense Council; Douglas A. Tilden, President and CEO of Marine Terminals Corp.; Thomas H. Warren, Harbor Commissioner, Port of Los Angeles, and past president of ILWU Local 63, Marine Clerks Association; Stephanie Williams, Vice President of the California Trucking Association.

**Dialogue Encourages Consensus on Issues.** While the mission of the Town Hall forum is not to create policy, it is designed to foster thoughtful dialogue, paving the way toward consensus. General agreement seemed to exist that:

- Forces beyond local control dictate trade growth and change—e.g., nationwide consumer demand and federal regulations.
- Ports and trade are not only valuable sources of economic growth but also major polluters. Pollution abatement has begun, but more is needed.
- More rail usage and better coordination of goods flow, such as extended terminal gate hours, are essential.
- Better coordination will create a more unified message to regulators about what works.

**Research Will Address Issues.** Building upon the agendas developed by this dialogue, researchers at METRANS and CITT will develop research topics. They will gather objective data for the foundation of policy. Both long-term and short-term research projects will assure high-quality information for trade and transportation planning and ultimately to enhance the quality of life near the ports and along the transportation routes.

Industry innovation and funded research are essential to make the future of local transportation beneficial for all stakeholders.

Alum Brings Lessons from China, USC to SCAG

When Huasha Liu, a 1991 Master of Planning graduate, compares her native China to the U.S., she thinks of community. “There is a different style of community in China,” she reminisces in her role as Interim Director of Information Services at the Southern California Association of Governments (SCAG). “Chinese-style community focuses on support to families and households,” which are supported by the Central and Municipal governments with money and personnel. “This is lacking in this country,” she says. She feels such family support is a major factor needing improvement in the U.S.

Cultural Revolution and Family Shaped Liu’s Early Education. A child of educated parents during China’s Cultural Revolution, Liu recalls the stark lessons of violence and forgiveness she learned in Nanjing, her home. Though her father was beaten by a young friend of her brother during the height of the Red Guard movement, he later helped the youth find a job. He used that effort as a lesson to Liu. “‘What is most important in life?’ he asked; ‘To love…and to forgive is even more important, for if you cannot forgive, you cannot love.’” In fact, her father’s influence was so powerful that today she is writing a book about him. She hopes to finish it this year.

USC Coursework Helps in SCAG Career. Liu tries to put to work lessons from her USC Planning graduate program along with those she brought from her native China. She also worked in planning for her home city, Nanjing. “At USC, I’ve learned how to think, to analyze problems…that’s very important.” At SCAG, she puts those lessons to work in managing SCAG’s tremendous stores of data, various information systems and staff, and its website. Her Masters program helped her “tremendously…from the technical side and policy, application, and inter-governmental relationships, and the impact of planning on the policy-making process.” Planning theory was helpful in understanding her work.

She fondly recalls classes with Profs. Tridib Banerjee, Genevieve Giuliano, Martin Krieger, James Moore, and Harry Richardson. “I felt many lessons I learned could not be learned from the book, and the case studies helped a lot. The technical course I took, Statistics, I never thought I’d use, but I’ve used it a lot,” she chuckled.

Work Complexity at SCAG Proves Challenging. With SCAG’s six counties, 187 cities, five county transportation commissions, and four sub-regions, Liu is challenged by so many stakeholders. Yet she truly enjoys it. Her philosophy of work involves several components to meet these challenges.

- First, she recognizes technology is very important, but strives to identify the appropriate technology for the work need—not technology per se.
- Second, effective labor relations is key to her. She feels in the U.S., managers often ignore the professional growth and opportunity for employees. “We use them, but don’t focus on how to develop them. I do not feel we have enough reward programs or incentives,” she says. “I feel effective employer-labor relations would focus not only on money, but recognition and, most important, how to nurture and mentor staff.”
- Finally, perseverance is a cornerstone. “Never give up…believe in what you do, and don’t give up.”

SoCal Housing & Transportation Need More Work. “Sometimes, we lack vision for the society as a whole,” according to Liu. “For example, take housing. We have a gap between income level and housing prices. With this situation, we want to encourage member cities to really focus on housing development, to be sure we have affordable housing. When revenues come from sales tax rather than property tax, there’s not as much focus on housing. So it’s very political. How can we make sure they understand the importance of the discrepancies between where people live and work?”

Such concerns for home and family may stem partly from Liu’s upbringing in Nanjing, but it’s clear she intends to apply the lessons in Southern California.

New Masters Degree in Global Logistics Propels Grads’ Careers

The first graduates of the METRANS-developed Masters of Arts in Global Logistics report the program has helped them in their transportation careers. “The best part of the program was my classmates,” according to Gareth Osborne, Latin America Trade Analyst for MOL (America) Inc. “With hundreds of years of combined industry knowledge in all aspects of the transportation and supply chain field, they were able to take the classroom material and relate it to real problems and situations they had faced.” Case studies sharpened the students’ analytical skills, which they apply directly to their jobs. Nineteen students graduated at the end of the Fall Semester 2003 from the CSULB campus.

Promotions Announced. Jason Blovad, Sr. Manager Logistics Strategy Planning, Sony Logistics of America, was recently promoted from Operations Supervisor, International Operations. His fellow alum Scott Huntress has recently been promoted from Director-Purchasing & Inventory Management to Vice President-Operations for Alltrade Tools LLC. Osborne was promoted from Export Sales Support Administrator to his current role as Latin America Trade Analyst.
METRANS Executive Committee

Genevieve Giuliano, Director
Professor, School of Policy, Planning, & Development, USC

Marianne Venieris, Deputy Director
Executive Director, Center for International Trade & Transportation, CSULB

Anastasios G. Chassiakos, Associate Dean, Research and Administration, College of Engineering, CSULB

Randolph Hall, Sr. Associate Dean, School of Engineering; Professor, Industrial & Systems Engineering, USC

Petros Ioannou, Professor, Electrical Engineering, USC

Joseph Magaddino, Chairman, Department of Economics, CSULB

James E. Moore, II, Chairman, Industrial & Systems Engineering; Professor, Civil Engineering and Public Policy & Management, USC

Michael Mahoney, Dean, College of Engineering, CSULB

METRANS Faculty

METRANS has funded 35 faculty at USC and CSULB who are now members of the METRANS Center. Consistent with METRANS’ interdisciplinary theme, the faculty come from five branches of engineering (aerospace, civil, electrical, mechanical and industrial & systems), as well as business, economics, geography, information sciences and public policy, planning & public administration. These faculty act as principal investigators on METRANS-funded projects and have responsibility for overseeing individual research projects. They also come together periodically to share insights through coordination meetings and conferences.

California State University, Long Beach:
Anastasios Chassiakos: Electrical Engineering
Lisa Grobar: Economics
Karl H. Grote: Mechanical & Aerospace Engineering
Ken James: Electrical Engineering
Tim Jordanides: Electrical Engineering
Joseph Magaddino: Economics
Kristen Monaco: Economics
Emily Parentela: Civil Engineering
Hamid Rahai: Mechanical Engineering
Reza Toossi: Mechanical Engineering

University of Southern California:
Tridib Banerjee: Policy, Planning, & Development
Satish Bukkapatnam: Industrial & Systems Engineering
Maged Dessouky: Industrial & Systems Engineering
Michael Driver: Business Administration
Genevieve Giuliano: Policy, Planning, & Development
Peter Gordon: Industrial & Systems Engineering
Randolph Hall: Civil Engineering
Le Dam Hanh: Information Sciences Institute
John Heideman: Electrical Engineering Systems
Petros Ioannou: Policy, Planning, & Development
Clara Irazabel: Civil Engineering
Erik Johnson: Industrial & Systems Engineering
Behrokh Khoshnevis: Civil Engineering
John Kuprenas: Civil Engineering
Naj Meshkati: ISE, CE and PPD
James E. Moore II: Policy, Planning, & Development
Dowell Myers: Industrial & Systems Engineering
Fernando Ordonez: Industrial & Systems Engineering
Kurt Palmer: Industrial & Systems Engineering
Mansour Rahimi: Policy, Planning, & Development
Christian Redfearn: Mechanical Engineering
Harry Richardson: Civil Engineering
Paul Ronney: Civil Engineering
Maria I. Todorovska: Civil Engineering
Mihailo D. Trifunac: Geography
Chris Williamson: Civil Engineering
Hung Leung Wong: Civil Engineering

METRANS Staff

Jacquette Givens, METRANS Administrator, USC
Alix Traver, METRANS Coordinator, CSULB
Greg Raitz, METRANS Webmaster, CSULB

METRANS Website

Information relating to transportation research, publications, education, training and technology transfer is currently available on the METRANS website: www.metrans.org. The website also has a faculty directory, news and links to other relevant sites as well as information on USC and CSULB transportation education programs.

METRANS News Editor

Mary E. Barton, Ph.D.
Dear Reader:

Welcome to the fifth issue of METRANS News. After a very busy summer of research, conferences and writing, faculty at USC and CSULB have returned to the classroom and to the many activities that are part of the academic year schedule. Our Executive Committee faculty are busier than ever. All of them have significant administrative responsibilities in addition to their research portfolios and teaching responsibilities. Prof. Anastasios Chassiakos, previously Chair of the Department of Engineering Technology, has been appointed Acting Associate Dean of Research at the CSULB School of Engineering. Prof. Randolph Hall, Associate Dean of Research, Viterbi School of Engineering, is Co-Director of the new USC Homeland Security Center for Risk and Economic Analysis of Terrorism Events, the first such center in the U.S. Prof. James Moore II has been appointed Chair of the Department of Industrial and Systems Engineering in the USC Viterbi School of Engineering. Professors Ioannou, Magaddino, and Dean Mahoney continue in their administrative positions. METRANS is truly fortunate to have leading faculty at both campuses guiding our research, education, and outreach programs.

Genevieve Giuliano
Director, METRANS Transportation Center