

LEONARD TRANSPORTATION CENTER ANNUAL REPORT



DECISION MAKING
AND MANAGEMENT OF
TRANSPORTATION SYSTEMS

2006|2007

An investment in
knowledge always pays
the best interest.

Benjamin Franklin: U.S. author, diplomat, inventor, physicist, politician, and printer (1706 - 1790)

**WILLIAM AND BARBARA LEONARD UNIVERSITY
TRANSPORTATION CENTER**

Annual Report FY 2006/2007

Decision Making and Management of Transportation Systems
CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO

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MESSAGE FROM THE DIRECTOR

The Leonard Transportation Center is pleased to present its first annual report. In the past months we have established a credible beginning and we recognize we have a long way to go.

The first big step was the preparation and subsequent approval by the U.S. Department of Transportation of our Strategic Plan and Caltrans' approval of our funding contract. The Strategic Plan approval was achieved last November and the Caltrans contract was awarded in May.

Though we have plans for future staff expansion, we are presently fully staffed with Rusty Thornton as program coordinator. Rusty has been essential to our progress. And Chazney Russell has been our capable student assistant.

Bill Leonard, long a valued and indispensable citizen of San Bernardino and the Inland Empire, who with his wife Bobbie made a substantial financial commitment to the Center, agreed to serve as the Advisory Board's first chairman. I am grateful for the most active and helpful participation of our outstanding Advisory Board.

We are concentrating on rolling out various programs. Our first Transportation Forum, held in May, focused on the movement of goods and was a great success. The first 13 "small" research grants were funded in May to research teams from Cal State San Bernardino, Cal Poly Pomona and Cal Poly San Luis Obispo. This fall we will be awarding several larger "needs-based" grants. These projects will focus on priority transportation issues approved by the Advisory Board.

We have also established the beginning of a partnership with both Cal Poly Pomona and Cal Poly San Luis Obispo. These schools bring engineering and other transportation resources to the center to supplement CSUSB resources.

I am convinced that there is an important role for the Leonard Transportation Center to play, particularly at the state level and within the Inland Empire. No area of the country faces greater transportation pressures and challenges. We intend to be active in assisting the transportation community in meeting these challenges.

We have at least two major challenges. On campus it will be our challenge to assist the university with building a stronger transportation curriculum and increase the number of students involved in transportation studies. Off campus we hope to provide a neutral forum to facilitate regional discussions about solutions to our transportation challenges and to target our research activities to assist our elected officials and transportation practitioners.

THEME AND VISION

The theme of this center is Decision-Making and Management of Transportation Systems. It reflects the commitment to confer local, state, and federal transportation providers with increased capability for improved transportation decisions, while also imparting a methodology to better manage transportation systems and transportation investments through focused research and increased educational opportunities.

The Inland Empire is one of the fastest growing areas of the country, consisting primarily of Riverside and San Bernardino counties — the two largest counties in the country. With a combined population of 4 million people, the area is experiencing severe transportation challenges. In addition to dealing with rapid population and job growth, Southern California and in particular the Inland Empire must deal with the rapidly expanding growth of port-related cargo that traverses the area. More than two thirds of the total volume of containers imported through the Ports of Los Angeles and Long Beach (40% of all container movements in the United States) leave Southern California to be consumed in other states. The air pollution, congestion, maintenance and capacity impacts on the area's transportation system are profound. On the positive side, the logistics industry is providing many new jobs in the Inland Empire and Southern California.

Considerable transportation infrastructure is under construction with project management provided by a combination of agencies, most particularly the California Department of Transportation (Caltrans) and in the Inland Empire Regional Transportation Agencies such as the San Bernardino Associated Governments (SANBAG) and the Riverside County Transportation Commission (RCTC). Funding for such projects comes from state and federal funding allocations (including portions of the state and federal gas tax) and increasingly from a local county ½ cent sales tax imposed by the voters in both counties. There are seven bus transit agencies operating in the Inland Empire and a commuter rail system (Metrolink) which is operated by a five county joint powers agency.

In this context the Inland Empire is an ideal laboratory for the Leonard Transportation Center to build upon its educational resources in transportation and to study and analyze the processes of decision-making and management of transportation systems.

Decision-making: The present mix of decision-making authority among the key institutions, including Caltrans, California Transportation Commission (CTC), Southern California Association of Governments (SCAG), the Metropolitan Planning Organization

TRB's 'Critical Issues in Transportation, 2005' highlights the need to expedite "a decision-making process that has become slow and cumbersome" and goes on to state, "fragmented authorities and structures for decision-making and regulation inhibit the ability to address problems in highways, waterways, public transit, railroads, air transportation and pipelines from a systems

for all of Southern California, the Regional Authorities RCTC, SANBAG, Orange County Transportation Commission (OCTC) and the Los Angeles Metropolitan Transportation Commission (Metro) and the public transit agencies is not always clear. Resolution of goods movement issues is also evasive, because decisions made by private sector users (such as the shippers and railroads) have a critical impact on the efficiency of the public transportation system. There is not an adequate institution encompassing all relevant public and private interests that acts as a focal point for negotiation and decision-making. In addition, various state and federal planning, funding and operational regulations, and legislation add complexity and often confusion.

For all of these reasons a focus on transportation decision-making with emphasis on documenting present shortcomings and making suggestion for changes is a priority, not only for the Inland Empire, but in all likelihood for most other urban and urbanizing areas throughout the country.

It is envisioned that the theme Decision-Making and Management of Transportation Systems will facilitate a disciplined focus on an array of local and national issues, many of which have not received much attention from the academic community

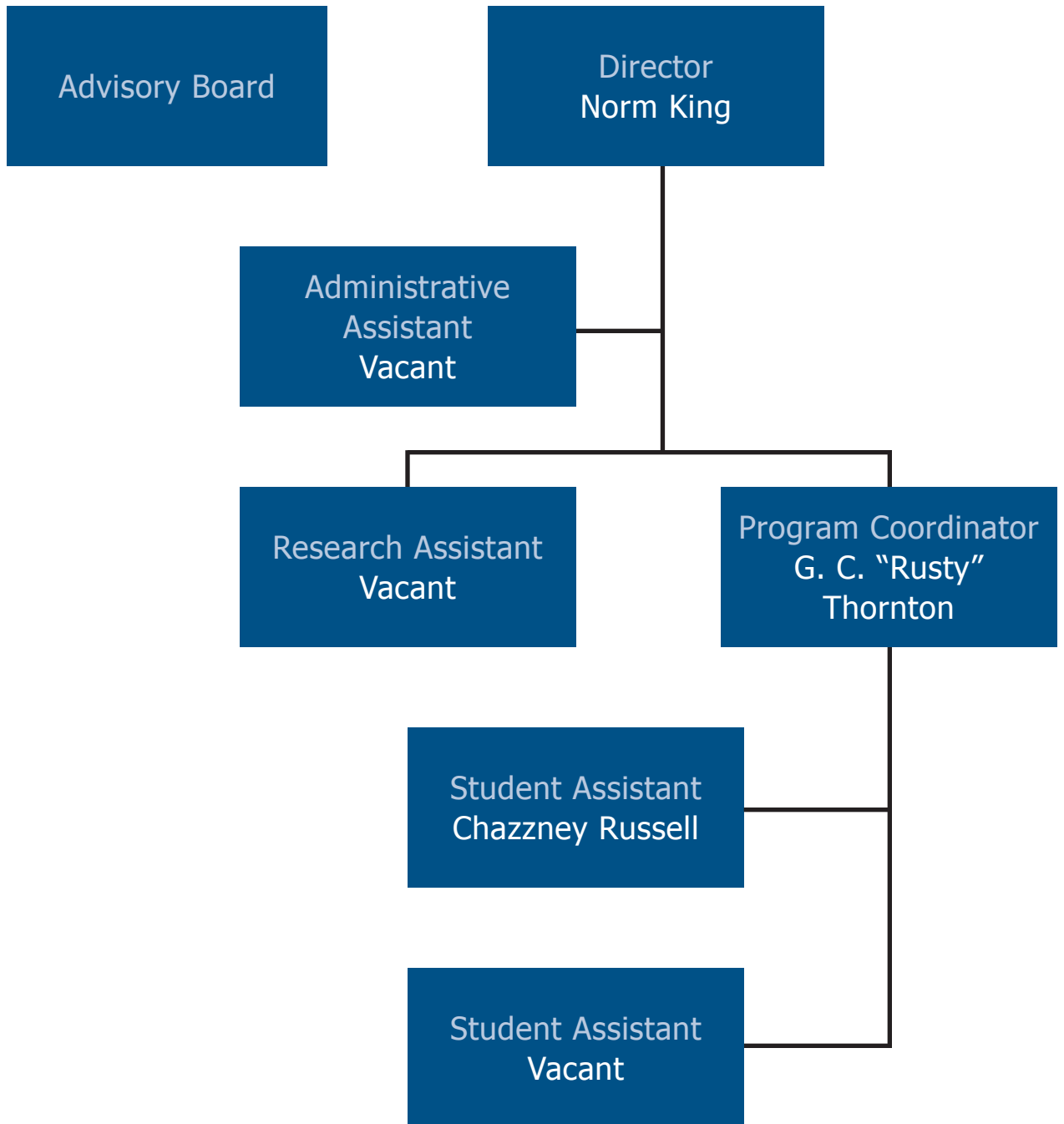
Management: With declining transportation resources the efficient management of the transportation system and transportation construction projects becomes even more critical. New wireless information sensors and systems such as GIS (Geographic Information Systems) and GPS (Global Positioning Systems) could be used to a greater extent to manage transportation facilities and operations. Accelerated design and construction concepts, such as design-sequencing and design-build, have often met resistance. Operational issues, such as security, routing, congestion and air pollution concerning the flow of goods after leaving the air and sea ports are becoming more critical. The role and impact of public transit merits attention as a possible way to reduce congestion. Time-of-day priced toll lanes have shown promise to increase traffic through-put and other market-based management tools may be appropriate.

With transportation employment increasing in Southern California, developing more undergraduate and graduate educational opportunities is imperative. Research in various aspects of transportation decision-making and management is clearly needed, and equally an aggressive program to increase the ability of the stakeholder agencies and companies to make use of this information is essential.

Though the Inland Empire is our natural laboratory, the issues we address affect many other parts of the state and nation. The Leonard Transportation Center addresses (Decision-Making and Management of Transportation Systems) from a local, regional, state and national perspective.

MANAGEMENT STRUCTURE

LEONARD TRANSPORTATION CENTER



KEY CENTER PERSONNEL

Norman R. King is the director. Mr. King retired from a career in local government management, most recently as executive director of the San Bernardino Associated Governments (SANBAG), which allocates transportation funds to member jurisdictions, constructs large scale freeway projects and is actively involved in region-wide air pollution, goods movement, transit and mobility issues.

The director is responsible for the overall management of the center, including reporting, matching fund solicitation, outreach, publications, education, development of the research agenda and request for proposals/qualifications. The director is the point of contact with the CSUSB faculty and staff participating in the center activities.

Norm formed an impressive Advisory Board comprising of representatives from faculty, transportation agencies and companies, Caltrans and USDOT. The Advisory Board is used to invite suggestions for research, recommend research activities, and assists in outreach and technology transfer activities. The director represents the center at external meetings with both public and private agencies and is the primary liaison with the USDOT and Caltrans. The center is a member of the Council of University Transportation Centers (CUTC) and regularly meets with other California UTC directors.

G.C. "Rusty" Thornton is the program coordinator and is responsible for the day-to-day operation of the center. Rusty is the primary coordinator for several activities including student outreach efforts, research proposal review, Advisory Board meetings and maintaining the center's Web site among many other duties.



Norm King and Rusty Thornton



Chazzney Russell, Student Assistant

ADVISORY BOARD

Judith Battey

Advisory Board – Leonard Transportation Center
California State University, San Bernardino

Dan Beal

Advisory Board – Leonard Transportation Center
California State University, San Bernardino

Robert Brenda

Director of Facility Development – BNSF Railway

Monica Brule

Director – Integrated Technology
Transfer Network
California State University, San Bernardino

Donald P. Coduto

Chair/Professor – Department of Civil Engineering
California State Polytechnic University, Pomona

Karen Dill-Bowerman

Dean – College of Business and
Public Administration
California State University, San Bernardino

Malcolm Driggs

Coordinator – Operating Engineers Training Trust

Eric Haley

Executive Director – Riverside County
Transportation Commission

Steve Harrington

Business Development Manager –
Department of Economic Development
County of San Bernardino

Frederick Hebein

Professor – Department of Marketing, College
of Business and Public Administration
California State University, San Bernardino

John Husing

Vice President – Economics & Politics, Inc.

Hasan Ikhrata

Director of Planning & Policy – Southern
California Association of Governments

Albert K. Karnig

President – California State
University, San Bernardino

William Leonard, Sr.

Chair, Advisory Board – Leonard
University Transportation Center
California State University, San Bernardino

Michael Miles

Deputy Director – Maintenance and Operations,
California Department of Transportation

April Morris

President – Associated Engineers, Inc.

Henry A. Nejako, Jr.

Program Management Officer – Office of
Technology, Federal Transit Administration

Craig Neustaedter

Principal Engineer – Transportation
Engineering & Planning Inc.

Mary Jane Olhasso

Economic Development Director – City of Ontario

Michael Perovich

District Director – District 8, California
Department of Transportation

Steve PonTell

Senior Fellow and President – La Jolla Institute

Lisa Reece

Marketing Manager – HDR Engineering Inc.

Don Rogers

Executive Director – Inland Valley
Development Agency

William "Ty" Schuiling

Director of Planning and Programming – San
Bernardino Associated Governments

Larry Sharp

President and CEO – Arrowhead Credit Union

Cliff Simental

Senior Vice President – David
Evans and Associates

Edward Sullivan

Interim Associate Dean of Engineering for
Research and Graduate Studies/Professor
- Civil & Environmental Engineering, California
State Polytechnic University, San Luis Obispo

Matthew Webb

President – Albert A. Webb Associates

Robert Wolf

President – Germania Corporation

EDUCATION PROGRAM

The rapid increase of logistics employment in the Inland Empire requires the development of a transportation curriculum that is responsive to this increased demand for logistics and transportation skills from the public and private sectors. Reflecting the center's theme the courses emphasize a management approach to transportation. Such emphasis is in context of multidisciplinary course work, including economics, public finance, environmental analysis, urban planning and information systems.

A sample of degrees offered by CSUSB:

College of Business and Public Administration

B.A. in Administration with Transportation and Logistics Concentration

B.A. in Administration with Public Administration Concentration

B.A. in Administration with Environmental Management Concentration

B.S. in Administration with Information Assurance and Security Management Concentration

B.S. in Administration with Information Management Concentration

M.P.A. – Master of Public Administration

College of Social and Behavioral Sciences

Certificate in Geographic Information Systems (GIS)

Certificate in Urban Planning

B.A. in Anthropology

B.A. in Economics

B.A. in Geography

B.A. in Environmental Studies

B.A. in Political Science

M.S. in Environmental Sciences

College of Natural Sciences

B.A. in Biology

B.S. in Biology

B.A. in Physics

B.S. in Physics

M.S. in Biology

RESEARCH PROGRAM

In this first year at the Leonard Transportation Center funded thirteen seed grants totaling \$64,888. The center contracted with Cal Poly Pomona and Cal Poly San Luis Obispo to help prepare and evaluate the request for proposals. Additional evaluations were performed by the California Department of Transportation and select individuals with expertise in local transportation matters.

LIST OF NEW PROJECTS

LTC APPROVED RESEARCH PROPOSALS FY 06/07

2007-SGP-1001 CSUSB
2006-7 AMT/Total: 5000

An Evaluation of the Efficacy of Various Permutations of the Short Fast Train Concept to the Traffic Issues of the Inland Empire

Short Fast Train is a concept developed by the applicant in the early 1990s. Originally conceived as a hybrid between Longer Combination Vehicles (LCVs) and traditional rail modes for long haul traffic, it has since been reconfigured first as a method to relieve port congestion and, in its current state, to take trucks off congested southern California freeways. The concept is simple: load 6-10 containers on a lightweight, high-power mini-train and move them to an area inland from the port where they can be loaded on long haul trains or restuffed onto long haul trucks (5 ocean containers can be reduced to three 53 foot trailers). The proposed study will seek to put hard numbers to the costs and benefits of such a concept. First, the potential benefits in terms of traffic mitigation compared to HOV lanes, subways/light rail, increased bus services, etc. must be determined. Second, if the concept is viable (preliminary work finds it to be highly advantageous in the Inland Empire), the cost of various options to achieve such a project must be determined: below ground rail such as the Alameda corridor; improved grade crossings as are being pursued in the Alameda East projects; or an elevated project as was recently suggested by economist John Husing for truckonly lanes. This project will address both of those concerns.

Baker, Jace A.: jaceb@csusb.edu

2007-SGP-1002 CSUSB
2006-7 AMT/Total: 5000

Assessment & Development of Biodiesel instructional Techniques

Biodiesel is an emerging renewable fuel whose potential is not well known or understood by the general public. Little prior work has been done to evaluate the effectiveness of biodiesel instructional demonstrations using different feedstock oils and at various scales. Similarly, there is little hands-on biodiesel educational opportunity in the Inland Empire. In this study, it is proposed to: 1) quantify the clarity and color contrast of biodiesel and glycerin products of the biodiesel chemical reaction using different types of vegetable oil, and 2) take video and photographs of small-batch biodiesel production steps, and industrial-scale biodiesel operations in order to produce new and original PowerPoint presentations and lectures for both student courses and general public education. Results will be used in the course NSCI 320 - Energy, in preparing fee workshops offered jointly through the College of Extended Education and

the Transportation Center, and all video will be archived with the Transportation Center.

Melchiorre, Erik: emelch@csusb.edu

2007-SGP-1003 CSUSB
2006-7 AMT/Total: 5000

Degradation process in hydrogen fuel cells

We propose to extend our NASA funded research to study the basic chemistry and physical processes involved in degradation mechanisms within proton exchange membrane (PEM) fuel cells. These studies will help determine relative fuel cell lifetimes, information necessary to maximize them, and the identification of degradation processes. We further propose to continue to involve students in meaningful research, thereby better preparing them for future careers in the rapidly changing transportation industry.

Usher, Timothy D.: tusher@csusb.edu

2007-SGP-1004 CSUSB
2006-7 AMT/Total: 5000

Tertiary Disaster Response in the Inland Empire: Operationalizing Supply Chain Restoration, Phase 1

This proposal focuses on the aftermath of catastrophic events that may be of natural or human origin. The concept of Tertiary Disaster Response (TDR) focuses on the systematic, planned restoration of key services following a disaster. As evidenced by the follies and failures following Hurricane Katrina, the need to revitalize the supply chain is of critical importance to re-establishing a city's or region's economic vitality. A key component of the restoration process is the development of a planned response program that effectively prioritizes the needs of the region and the logistics and supply chains that efficiently meet the identified priorities.

McInturff, Pat: mcinturff@earthlink.net

2007-SGP-1005 CSUSB
2006-7 AMT/Total: 5000

Paving the Way for Best Management Practices of Fugitive Water on Pavement Surfaces

Various Best Management Practices (BMP) used for both storm water and irrigation management may have a negative impact on the life expectancies of pavements. This study will review the current state-of-the-art on BMPs and catalogue these for potential impacts. It will develop templates of typical scenarios found in the field that incorporate these BMPs and using the templates, identify field locations that have the potential for conducting detailed field measurements on the physical impact these BMPs have. Field locations will be identified and various constraints will be addressed, including measuring equipment and techniques to be used in the research. The results will be available for publication and presentation, and will be used to seek addition funding to conduct the field studies.

Water Resource Institute; Mulvihill, Jim; Merrill, Lynn; slongvil@csusb.edu

2007-SGP-1007 CSUSB
2006-7 AMT/Total: 5000

Inland Empire Logistics GIS Mapping Project

The Inland Empire has experienced exponential growth in the area of warehousing and distribution facilities within the last decade. Where are these facilities located? How large are the facilities? Can identification and location of these facilities be used by strategic decision makers at the commercial, governmental and military level? This pilot project would be used to identify the elements for a database and the identification of elements for a GIS mapping project. Obviously, the project is too large to be completed in a short period of time; however, the identification of the resources available, the elementary structure of the database and the development of a plan for the GIS map would be useful when completed to strategic decision makers in the area.

Rohm, Tapie C.E: trohm@csusb.edu

2007-SGP-1009 Cal Poly Pomona / CSUSB
2006-7 AMT/Total: 5000

Applicability of Adaptive Traffic Signal Control Systems to Arterials in the Inland Empire

The proposed project is intended to study the ability to apply adaptive traffic signal control systems, i.e. those which analyze and respond to shifts in traffic patterns in "real-time", on arterials in the Inland Empire. This would be considered, in terms of the focus areas of the Leonard University Transportation Center, a mobility improvement measure aimed at minimizing traffic delay. The project at this stage will essentially consist of determining the geometric and traffic patterns of one or more sample arterials in the Inland Empire, determining the basic effectiveness of the current traffic signal control systems, and considering methods of application that might improve the state of traffic of the sample arterials.

Shenoda, Michael: shenoda@csupomona.edu

2007-SGP-1010 Cal Poly Pomona / CSUSB
2006-7 AMT/Total: 5000

California's 2050 Transportation Context: A Response to Global Warming and Executive Order #S-3-05

Reducing greenhouse gas (GHG) emissions from the transportation sector is a vital part of a coherent global warming response. In order to develop sensible responses, California policy-makers need to understand how the conditions affecting the movement of people and goods will change in the long-term future. Executive Order #S-3-05 calls for California GHG emissions in 2050 to be 80% below 1990 levels. This is a tremendous challenge to the transportation sector. California's responses are made difficult by the lack of information about likely market conditions, technological innovation, and the Federal regulatory conditions in the 2050 time frame. This project will provide research that begins to address these questions and leads to a second proposed phase for a Delphi panel that will provide the best predictions of the transportation sector's future carbon footprint. The project will examine trends in (i) transportation economics (e.g., carbon based fuel costs, vehicle technology, congestion impacts, trade), (ii) technological innovation that affect the vehicle fleet and travel demand, and (iii) the evolving Federal and international regulatory framework (e.g., possible carbon based fuel taxes, transportation pricing, investment strategies, etc). For this seed grant, information would be developed through a preliminary literature review that will frame the issues and the focus of the proposed subsequent Delphi panel. A Delphi panel is an iterative

prediction process that will help transportation, energy, and policy experts converge on consensus predictions about the future. The Delphi panel is the best technique for generating predictions of future events where there is a great uncertainty. Although specific technical assessments may exist concerning specific trends, no comprehensive assessment is available. The development of California policies to achieve compliance with the Executive Order requires the best available predictions of the context for future GHG emissions reduction strategies.

Willson, Richard: rwwillson@csupomona.edu

2007-SGP-1011 Cal Poly Pomona / CSUSB
2006-7 AMT/Total: 4893

Performance Metrics Used by Freight Transport Providers

The newly-established National Cooperative Freight Research Program (NCFRP) has allocated funding to a project entitled "Performance Metrics for Freight Transportation Productivity." According to the project's background discussion, "public and private decisions related to the freight industry should be based on a thorough analysis of the impacts of those decisions. These analyses are routinely made in the private sector but less commonly in the public sector. As the demand for freight movements outstrips the capacity of the nation's highway, rail, waterway, air, and port systems, the effects are felt as congestion, upward pressure on freight prices, and longer and less reliable transit times. These indicators of distress in the freight transportation system result in increased supply costs for manufacturers, higher import prices, and higher inventory levels. Ultimately, these costs add up to a higher cost of doing business for firms, a higher cost of living for consumers, and a less productive and competitive economy. Such indicators need to be quantified to be useful to decision makers as well as for public education on freight issues. Establishing consistent performance metrics for the freight system will be very helpful in conducting and comparing analyses of the freight system, particularly by identifying the critical data that are needed to assess system performance."

Cottrell, Wayne D.: wdcottrell@csupomona.edu

2007-SGP-1013 Cal Poly Pomona / CSUSB
2006-7 AMT/Total: 5000

Use of GIS Technology to Facilitate the Transportation Project Programming Process

Transportation project programming in a transportation agency is a process of matching potential projects with available funds to accomplish the agency's mission and goals of a given period of time. Result of this process is normally a transportation improvement program (TIP) that sets up the financial plan as well as the scope and schedule of transportation improvement projects to be implemented by a transportation agency. Many transportation agencies (including SCAG and the Orange County Transportation Authority (OCTA)) recently have employed GIS technology to facilitate their project programming process. The geographical representation of transportation projects greatly helps decision-makers prioritize transportation projects visually. It also helps notify the public of transportation improvement projects in an easy-to-read, graphic format on the Web. This project is aimed at assessing the potential use of GIS technology to facilitate the transportation project programming activities within the Inland Empire transportation agencies. Based on the assessment, the project will provide recommendations and methodologies for incorporating GIS and project programming tools in the development of transportation improvement programs. Also the project will develop a conceptual

framework and a work plan whose purpose is to implement the programming methodologies for cities, counties, and regional transportation agencies within the Inland Empire region.

Jia, Xudong: xjia@csupomona.edu

2007-SGP-1014 Cal Poly Pomona / CSUSB

2006-7 AMT/Total: 5000

Electrification of the Freight Train Network from the Ports of Los Angeles and Long Beach to the Inland Empire

The proposed project evaluates the benefits of electrifying the freight railroads connecting the Ports of Los Angeles and Long Beach with the Inland Empire. These benefits include significant reduction in air pollution, and improvements in energy efficiency. The project also includes developing a scope of work for a much more detailed study, along with identifying potential funding sources for such a study.

Smith, R. Frank- rfsmith@csupomona.edu

Jia, Xudong- xjia@csupomona.edu

Jawaharlal, Mariappan -jmariappan@csupomona.edu

2007-SGP-1017 Cal Poly SLO / CSUSB

2006-7 AMT/Total: 4995

Caltrans TMC Coordination

Caltrans districts utilize data and video to manage traffic within district boundaries. Districts utilize networks of vehicle detection stations to generate roadway data and closed-circuit television cameras to allow visual surveillance of district highways. TMC personnel utilize this data in conjunction with information from external sources such as the California Highway Patrol to log, track, and respond to traffic anomalies through incident logging systems. Caltrans TMCs do not currently have a seamless mechanism for sharing collected roadway loop data, video, and incident logs between districts. Caltrans districts are all linked by the Caltrans WAN, which has the potential to facilitate the sharing of such data and video between districts. Leveraging this data, video, and wide-area networking capacity has the potential aid traffic management on a larger scale. Caltrans District 8, which encompasses San Bernardino and Riverside counties, has several transportation corridors entering/leaving it from neighboring Caltrans Districts. This project will identify these critical transportation corridors, key traffic management personnel within them, and data/video that could be shared across boundaries to effect improvements in traffic management. It is anticipated that this project will result in an initial framework for data and video sharing between key Southern California Caltrans Districts.

Gerfen, Jeff B.: jgerfen@calpoly.edu

2007-SGP-1018 Cal Poly SLO / CSUSB

2006-7 AMT/Total: 5000

Enhancing Road Traffic Safety in Inland Empire: A GIS Based Methodology to Identify Potential Areas of Improvement

It is well known that the major goal of transportation system is to enhance mobility and crashes are unwanted by-products which have to be minimized while achieving the primary goal. Although general people value travel time more than any other outcome of transportation system, traffic

accidents impose huge economic burden on the society. A detail investigation of the State of California crash statistics showed overrepresentation of fatal, injury, alcohol related crashes, road departure crashes, speeding related crashes in Inland Empire (http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/STSI/6_CA/2005/6_CA_2005.htm) and identified as one of the major transportation issues affecting this region. This seed-grant proposal aims to investigate the reason behind the high crash statistics in Inland Empire and develop methodologies to identify potential areas of safety improvements using Geographic Information System (GIS). Researchers have shown that (Kim et al, 2006; Mitra et al, 2007) land use, economic activities, spatial traffic generators such as schools, universities, bars and pubs have strong influence in traffic crashes. Consequently identification of these spatial factors in relation to high crash location is important in enhancing traffic safety of a region as many aspects of roadway safety management may suffer from omitting spatial variables that have possible impact on road traffic crashes. To ensure a comprehensive safety analysis of Inland Empire, this researcher would like to form a partnership with experts in GIS and traffic safety from Cal State San Bernardino and Cal Poly Pomona to develop road-safety research program in new transportation center. This seed-grant also seeks to gather crash information, land use and socioeconomic data from local agencies and develop GIS databases for further and in depth analysis of traffic safety in Inland Empire.

Mitra, Sudeshna: smitra@calpoly.edu

TECHNOLOGY TRANSFER PROGRAM

On May 4, 2007, the center held its first forum on transportation. The event opened with an expert panel discussing “The Future of Goods Distribution and Inland Ports in the Inland Empire.” The presentations explored the effect of goods moving through the Inland Empire by truck and rail, inland port development, container fees and new modes of moving goods.



William Leonard Sr.

The second panel included the directors of transportation for the Inland Empire: Michael Perovich, district director for the California Department of Transportation, District 8 (Riverside and San Bernardino counties); Tony Grasso, executive director of the San Bernardino County Associated Governments; and Eric Haley, executive director of the Riverside County Transportation Commission. The presentations covered current transportation projects — planned and under construction — and funding from the state and local points of view, including Gov. Schwarzenegger’s voter-approved statewide transportation measure.

California state Sen. Bob Dutton spoke on the importance of transportation, including the affect of goods movement, for the Inland Empire.

The final presentation of the day was on the “Changing Demographics of the Inland Empire” by Hans Johnson, Ph.D., a research fellow at the Public Policy Institute of California. Johnson highlighted data from a soon-to-be-released report on the area’s demographics.

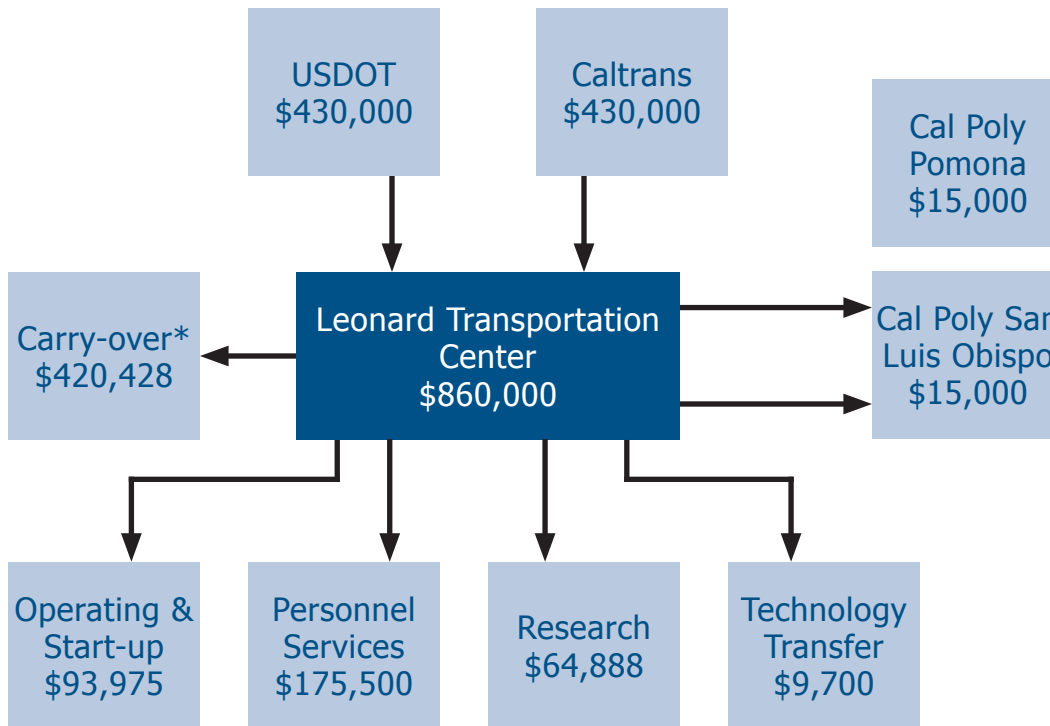
PowerPoint presentations are available on the center’s Web site at <http://leonard.csusb.edu>



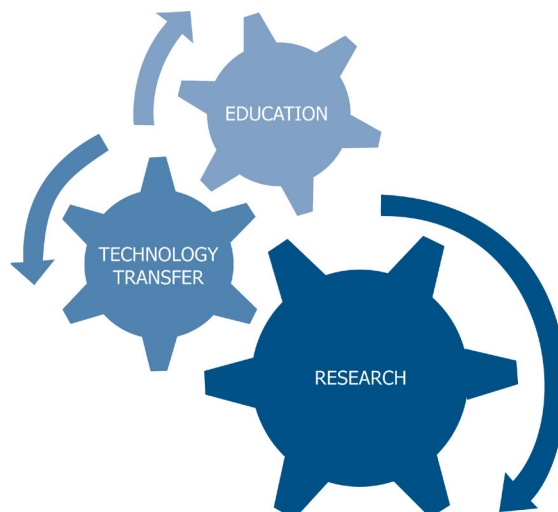
Top left, CSUSB President Al Karnig, top right, Daniel Smith, The Tioga Group, bottom left, Senator Bob Dutton, bottom right, Martin Webley and Dean Karen Bowerman

FUNDING SOURCES AND EXPENDITURES

The center's first-year budget covers 18-months, from January 2006 through June 2007 and includes one-time startup costs. Year one is not typical and the center will follow the standard 12-month fiscal year cycle.



* The contract between Caltrans and the center was approved in May 2007; thus, between January 2006 and May 2007 the center could only draw upon USDOT funding.



LOOKING BACK – LOOKING FORWARD

The 2006/2007 fiscal year was productive, temultous and a lot of fun. The Leonard Transportation Center began the year without a permanent home. Our gracious hosts, the Water Resource Institute, gave the center a home until mid March when we moved into our offices in Jack Brown Hall. The center's strategic plan was approved in November 2006 and we were on our way. Early in 2007 we funded 13 seed-grants and held the first of many transportation forums. And finally, late in the fiscal year we were able to go live with our Web site.

2007/2008 is already shaping up to be an excellent year. We have \$24,000 in scholarship funds to give out. We are assembling a new student organization, Networks in Transportation, with a mission to bring together students and transportation professionals who share an interest in understanding and improving various transportation issues. Also on the docket are two requests for proposals (RFP); the first will be for needs-based grants and the second will fund another round of seed grants. To top off the year we are planning for another exciting transportation forum next spring. All and all the 2007/2008 fiscal year is shaping up to be a great year for the center.

ABOUT CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO

California State University, San Bernardino (CSUSB) is the sole public, comprehensive, regional university serving the Riverside-San Bernardino counties of Southern California. The campus offers more than 70 traditional baccalaureate and masters degree programs along with a wide variety of education credential and certificate programs to a student body exceeding 17,000. The university's service area is vast, extending from the Arizona border in the east to the Los Angeles county line in the west. The service area of 29,000 square miles is greater than many states. The two counties served by CSUSB continue to have a population that is among the fastest-growing in the nation. Over the last decade it experienced a population increase of 62 percent, and conservative projections are that it will continue that pace into the next decade and beyond. To meet the needs of so vast a population the university has established a satellite Palm Desert Campus to serve the burgeoning desert population and is developing and expanding its distance learning capacity to reach site bound students throughout the Inland Empire.



MISSION AND GOALS

In 1997, shortly after Dr. Albert K. Karnig assumed his place as the third president of the university, Cal State San Bernardino began a strategic planning process that achieved significant success in 1998 with the adoption of a visionary mission statement and strategic goals and objectives carefully framed to insure success in accomplishing that mission. Dr. Karnig's arrival was key to the success of this process. He brought an expanded vision and dynamic leadership to the university at a time of dramatic change and explosive growth. Under his leadership the university developed a strategic plan emphasizing the importance of connecting every component of the institution's academic mission to the people and needs of the community it serves. Dr. Karnig's personal commitment to expanding the university's outreach to the community and especially to discovering and meeting the needs of the minority community in the Inland Empire has inspired faculty, students and staff at CSUSB to reach higher and go further than ever before to make this university a success in everything it does.

The vision of California State University, San Bernardino is to become one of the leading comprehensive universities in the nation, distinctive for its contributions to the understanding of learning and for the creation and study of innovative partnerships to promote educational, social, economic and cultural advancement in the region. To accomplish this vision the university has adopted three strategic goals; to become a learning community that excels in creating, applying and exchanging knowledge; to ensure a welcoming and safe intellectual, social and physical environment that engages campus members in the life of the university; to adopt a long-term strategy for university engagement in community partnerships.

Each of these strategic goals contributes to the ultimate goal of the university to prepare students to assume leadership roles in the 21st century. To foster excellence and anticipate the needs of our service region, the university has identified six programmatic areas beyond its traditional liberal arts curricula for continued emphasis and expansion: education programs to prepare teachers to serve a multicultural society, applied science and engineering programs to support technology development in Southern California, management and administration programs to graduate future business and public agency leaders, health and helping professions to support the burgeoning population in our service area, international studies to prepare graduates to function in a truly global community, and fine and performing arts to enrich our lives.





Founded in 2006, the center was created through a multi-year grant from the U.S. Department of Transportation and the California Department of Transportation. The center's national and regional objectives are threefold research, education and technology transfer. The theme of the center is "Decision-Making and Management of Transportation Systems," with particular focus on policies and practices that impact effective movements of people and goods within and through the Inland Empire.

Norm King
 Director
 Phone: 909-537-5087
 nking@csusb.edu

G.C. "Rusty" Thornton
 Program Coordinator
 Phone: 909-537-3686
 gthornto@csusb.edu

Chazney Russell
 Student Assistant



“Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius – and a lot of courage – to move in the opposite direction.”

Albert Einstein: physicist, 1921 Nobel Prize in physics (1879-1955)



Leonard Transportation Center

California State University, San Bernardino
Jack Brown Hall, Room 283
5500 University Parkway, San Bernardino, CA 92407-2397
Phone: (909)-537-5094 Fax: (909)-537-5087
<http://leonard.csusb.edu>

