



**BILL AND BARBARA LEONARD
TRANSPORTATION CENTER
2017 Annual Activities Report**

2017

This year was a highly productive year for the LTC. It established the base for new initiatives, research, community outreach and support, and education. It was a turning point year for the center – reestablishing CSUSB within the transportation research and policy conversation.



www.csusb.edu/ltc



A Note from the Executive Director:

It is my pleasure to present the 2017 Annual Activities Report of the key activities and overall performance of the Leonard Transportation Center (LTC). This report reflects the LTC's performance on the various projects undertaken during 2017 – which in large part resulted from the Center's interaction with the transportation community and the support provided by key stakeholders.

The LTC has been most fortunate to receive the continued support from CSUSB President Tomás Morales and Provost Sherri McMahan, and Dean Lawrence Rose of the Jack H. Brown College of Business and Public Administration. Each of whom has demonstrated their personal commitment to the realization of the vision set forth by Bill Leonard in founding the LTC more than 10 years ago.

The transportation related issues facing the Inland Empire, and all of Southern California, are both complex and daunting. But, I believe that the progress made during 2017 – which is chronicled in this report – makes it clear that the leadership and staff of the LTC are committed to addressing the transportation related issues that will improve the quality of life for all citizens. I sincerely hope that all who read this will come to share both the pride in our performance and our optimism for the future of the LTC.

*Dr. Kimberly Collins
Executive Director, Leonard Transportation Center
California State University, San Bernardino*

December 2017

TABLE OF CONTENTS

	Page
A Note from the Director	
Overview of 2017 Performance.....	1
• LTC’s 2017 Strategic Initiatives.....	1
• Community Outreach Activities.....	4
2018 Expectations.....	8
2017 Advisory Council Members	9

Overview of 2017 Performance

During 2017, the LTC's new Director, Dr. Kimberly Collins, assumed firm programmatic control of the Center's agenda and undertook a wide range of projects and initiatives that sought to reinforce the vision of LTC founder Bill Leonard and his family – that CSUSB could greatly contribute to the planning, the policies, and the programs undertaken by the Inland Empire's (IE) transportation community. In support of this vision, the LTC set forth an agenda in 2017 that reconnected with the Leonard's vision by ensuring that our work products are focused on the unique contribution to academic research and a commitment to its practical application that can be only provided by a dedicated university transportation center.

By every measure, our 2017 efforts reflected a great leap forward and our wide range of initiatives demonstrated our ability to maintain a multi-faceted agenda that can focus on the issues – especially those related to the region's quality of life. These issues are also of great interest to IE transportation stakeholders.

In consultation with its key stakeholders, the LTC began to develop the framework for its multi-year Strategic Plan. The planning framework, which will be completed in early 2018, will provide the LTC with a logical approach for addressing strategic, operational, and tactical priorities in the region. The strategic framework will also align LTC's programs and activities with ongoing initiatives in the region, with the ultimate goal of ensuring that our transportation portfolio contributes to improving the quality of life for the area's residents.

From a purely "numbers" perspective, the LTC initiated more than a dozen new activities during 2017. As is evident in our list of "LTC 2017 Strategic Initiatives", our 2017 performance conveys a broad reach and exciting potential as every project on the list is a continuing initiative. The programming provides the LTC with an exceptionally strong foundation to move forward in its goals of community development and leadership; education of students and the community; and a strong record of research that will help local decision makers in their work.

A. LTC 2017 Strategic Initiatives

- Department of Transportation (DOT) Designation. In January 2017, the outgoing Secretary of Transportation Anthony Foxx designated the LTC as one of 18 University "Centers of Innovation" in the country. The designation was made in recognition of the LTC's continued emphasis on regional collaboration and strategic planning for the Inland Empire and all of Southern California. The designation provided significant visibility for the LTC and has set the stage for many of our initiatives.
- Continued engagement with and growth of our Advisory Council. During 2017, the LTC Advisory Board expanded to 21 members. The Board, which includes members from business, government, academia, and civic associations, has played an invaluable role in advising and assisting on LTC projects. Assistance ranges from providing candid advice on future direction to attendance at LTC functions to sponsoring and funding LTC

priority initiatives. The Advisory Council is now a well-established part of the LTC environment and is expected to grow in size and support. A roster of LTC's Advisory Council members is included in the appendix.

- **Transportation Leadership, Performance, and Planning Institute (TLPPi)**. In 2016, the LTC received funding from the UTC program to assist with professional development opportunities for Caltrans planners. As part of this project, LTC and Caltrans staff developed the Transportation Leadership, Planning, and Performance Institute (TLPPi). This institute is a fully online, 26 module certificate program that will provide entry-level and mid-level planners with the skills and applied information needed to work in the complex arena of California transportation planning. Each module has a basic lecture, expert lectures, readings, quiz, and short writing assignment. The first cohort was initiated in December 2017 and is expected to finish in February 2018. Two more Caltrans' employee cohorts are planned for 2018, with a scholarship available for the first 100 Caltrans employees. It is expected the institute will be open for enrollment by the general public in summer 2018. A detailed description of the course is provided in the education section of the LTC website.
- **University Collaboration**. In March of 2017, the LTC Executive Director, working with transportation faculty leaders at the University of California Riverside and California State Polytechnic Pomona, successfully negotiated the signing of a Memorandum of Understanding by the presidents/chancellor of each institution. The main goals of the MOU are to share research on transportation matters, apply for joint funding, and develop programs to educate the future transportation leaders.
- **Congestion Pricing - City of Rialto**. Consistent with the strategic plan of CSUSB's Jack H. Brown College of Business and Public Administration, the LTC is working with the City of Rialto to provide an analysis of congestion pricing in the movement of freight as a means to manage traffic patterns. This issue is a complex problem for many local communities as they work to balance the growth of logistics firms and quality of life factors for residents. This effort will be the first of its kind in the region and will provide insight to measure the extent that congestion pricing programs can be applied to the movement of freight in smaller cities.
- **Safe Routes to School - City of Rialto**. The LTC is working to support the City of Rialto in their development of a strong Safe Route to School (SRTS) program in the city. The main factors being addressed in this portion of the program are equity, environment, and sustainability. LTC staff are researching and analyzing possible challenges for community participation, building a community of researchers to assist in research and analysis, and developing a plan to maintain the program after state funding has dissipated. The project calls for several deliverables during the first two months of 2018.
- **Fontana Leadership Intern Program - Fontana Unified School District Police**. The Chief of the Fontana Unified School District Police has sought support and assistance from the

LTC to expand an innovative program designed to redirect at-risk high school students. The program, entitled "Fontana Leadership Intern Program" (FLIP), has had great success over the past five years and the school district is seeking a significant expansion through grant funding. The LTC has been asked to assist in the development of a strategic plan and to facilitate the application to the US DOJ for grant funds in early 2018. If the grant funds are awarded, CSUSB will serve as the project manager for the duration of this multiyear project that will focus on systematic data collection, rigorous analysis of performance, and providing employment training in new transportation fields for at-risk young people living in the region.

- Transportation Dialogue Series. Based in large part upon the generous support and active engagement from HNTB Corporation, the LTC staff has worked to develop a series of breakfast meetings will take place every other month in 2018. The series will cover key transportation concerns related to tolling, autonomous vehicles, movement of freight, infrastructure financing, new technologies, and difficult choices concerning growth and its impact. It will seek to broaden the dialogue by presenting both sides of these complex issues, engaging the audience, and preparing a public report of each proceeding. The Transportation Dialogue Series is expected to build on the region's transportation policy conversation by outreaching to groups who might be disenfranchised, obtaining feedback from important stakeholders in the region, and educating students and community members alike.
- Certificate in Transportation Technology and Governance. Faculty and students from CSUSB's Computer Science and Public Administration Departments worked together during the summer of 2017 to develop a certificate program in transportation technology and governance. This certificate program will provide opportunities for students in technical fields to interact with classmates working in the transportation management jobs. The course content has been designed to help emerging leaders and managers in both the public and private sectors to better communicate regarding transportation technology and policy. The Transportation Certificate courses and material are designed to follow a progressive pedagogy, each building on the previous course, and ending in the development of a project that can be applied to the current work of the attendees. It is planned for the first cohort to enroll in the summer of 2018.
- Racing the Elephants – Promoting Safe Driving with Truck Simulation. "Elephants racing" is a German term that describes two trucks trying to overtake one and another on freeways (a big back up of cars piles up in the time it takes for the truck to complete the pass). In this project, we let students sit on our truck simulators as if they are playing a video game. Our objective was to promote safe/defensive driving, by give students a hands-on experience of driving trucks. With experience on truck's turning behavior, acceleration/deceleration, viewing angles etc., the students learned to be more cautious when driving around trucks on the road, i.e., be aware of their wide turning angles, and keep a safe distance. A pilot study was finished in summer 2017, and it is now open to the public.

- Palm Desert Office. In September 2017, the LTC opened a satellite office at CSUSB’s Palm Desert Campus (PDC). The office is strongly supported by the PDC Dean, with dedicated office space and administrative support. The LTC Associate Director, Dr. Thomas McWeeney is working at the PDC on a part-time basis to extend the reach of the LTC’s programs to the eastern end of the Inland Empire in Coachella Valley. The initial efforts include discussions on a Coachella Valley transportation strategy and the identification of under-addressed transportation issues. At least one of the transportation dialogue series breakfast meetings will be held in the Coachella Valley early 2018.
- Redesign of Website. In the spring of 2017, the LTC website was redesigned and outreach materials were developed. LTC staff are in the process of developing an online searchable database of Bill Leonard’s papers, and a transportation indicator dashboard for the IE. Both will provide additional resources for those studying and working on transportation issues in Southern California.

B. Community Outreach Activities

In addition to our priority strategic initiatives, the LTC staff engaged in numerous community outreach activities during 2017. These included presentations and attendance at conferences, participation in stakeholder meetings, and many meetings with university colleagues. These activities were invaluable in the development of strong and reliable associations and promoting current and future strategic initiatives. Despite the incipient nature of the new LTC, key staff members met the demands of a very rigorous monthly schedule:

2017 LTC Activities (by Month)			
Month	Activity	Participants	Comments
January	Transportation Resources Board Annual Conference, Washington, DC	Kimberly Collins Tom McWeeney	Received DOT designation of SoCal Innovation Center
	Meetings with Caltrans and SPUR leaders in Northern California	Kimberly Collins	Transportation Experts Interviews
	Caltrans and LTC meetings on TLPPi	Kimberly Collins	
	Invited talk at Cal Poly Pomona, Institute of Transportation Engineers	Yunfei Hou	Research talk

<p>February</p>	<p>Advisory Council Meeting</p> <p>Transportation Roundtable meetings held by Congressional members Pete Aguilar and Norma Torres</p> <p>Meetings with Caltrans and academic leaders in Southern California</p> <p>Caltrans and LTC meetings on TLPI</p> <p>Strategic planning interviews with LTC Advisory Board Members</p> <p>Strategic Planning Briefing to Hasan Ikhata, SCAG</p> <p>UC Berkeley, PATH, conference calls</p> <p>Federal Highway Administration (FHWA) Strategic Highway Research Program (SHRP2) Webinar Series</p>	<p>LTC Staff</p> <p>Kimberly Collins</p> <p>Kimberly Collins</p> <p>Kimberly Collins</p> <p>Tom McWeeney</p> <p>Tom McWeeney</p> <p>Kimberly Collins Tom McWeeney</p> <p>Yunfei Hou</p>	<p>Transportation Experts Interviews</p> <p>Input for LTC Strategic Direction</p> <p>Collaboration meetings between USDOT Innovation Center designees in California</p> <p>Funding opportunities</p>
<p>March</p>	<p>Caltrans and LTC meetings on TLPI</p> <p>UC Berkeley, PATH, conference calls</p> <p>Drucker Supply Chain Forum</p> <p>Autodromo representatives at Agua Caliente, Palm Springs</p>	<p>Kimberly Collins</p> <p>Kimberly Collins Tom McWeeney</p> <p>Kimberly Collins</p> <p>Kimberly Collins Tom McWeeney</p>	<p>Collaboration meetings between USDOT Innovation Center designees in California</p> <p>Smart City briefing</p>

	National Science Foundation, Cyber Physical System Program	Yunfei Hou	Submitted research proposal
April	Caltrans and LTC meetings on TLPP UC Berkeley, PATH, conference calls	Kimberly Collins Kimberly Collins Tom McWeeney	Collaboration meetings between USDOT Innovation Center designees in California
May	Attended SCAG Annual Conference in Palm Desert LTC Advisory Board Meeting in Palm Desert, CA Caltrans, District 8 Innovation Faire WTC Conference, SB Airport CSUSB Fast Pitch Contestant and Runner Up	Kimberly Collins Tom McWeeney Kimberly Collins Tom McWeeney LTC staff and students LTC staff and students Kimberly Collins and Yunfei Hou	Development of an entrepreneurial program attached to the LTC
June	Travel to Sacramento to meet with Rialto Mayor, key legislators, and Caltrans Executives Vital and Expanded Technology Initiative Grant	Kimberly Collins Tom McWeeney Yunfei Hou	Developed support for LTC agenda. Developed Rialto Project CSUSB internal grant on Virtual Reality
July	Transportation Roundtable meeting held by Congressional Member Norma Torres Meeting with Doran Barnes, Foothill Transit	Tom McWeeney Kimberly Collins Tom McWeeney	Joined the Advisory Council Committed to support LTC

	Meeting with Hasan Ikhata at SCAG offices regarding funding of strategic initiatives		
August	LTC Advisory Board Meeting	Entire LTC Staff	
	Meeting with City of Rialto planning officials	Kimberly Collins	
	Invited talk at CSU Tech Innovation, Education & Exchange Conference	Yunfei Hou	Invited panelist
September	Caltrans and LTC meetings on TLPI	Kimberly Collins	
	Tom Kirk, head of Coachella Valley Association of Governments re CV Strategic Plan	Tom McWeeney	
	Attended CV Mayors Conference	Tom McWeeney	
	Travel to DC with Fontana School District Policy Chief Martin Sissac to gain support for multi-year grant	Tom McWeeney	Received strong statement of support from DOJ officials concerning multi-year funding for Fontana school project
	Rialto SRTS Meeting	Kimberly Collins	
	Presentation at Emerging Topics in Computing Symposium, Buffalo, NY	Yunfei Hou	Research presentation
October	Attended Mobility 21 Conference in Anaheim, CA	Kimberly Collins Tom McWeeney	
	Meeting with Supervisor Manuel Perez (staff)	Tom McWeeney	
	Attended SBCTA Conference Retreat, Lake Arrowhead, CA	Tom McWeeney	
	ITS OktoberTech Event		

		Yunfei Hou	Demonstration on teaching innovations
November	LTC Quarterly Advisory Board Mtg	Entire LTC Staff	Developed 2018 agenda
	Caltrans District 8, Strategic Planning meeting	Tom McWeeney	
December	Meeting with Rialto City Mayor and staff	Kimberly Collins	
	Met with Exec Council GCVCC	Tom McWeeney	

2018 Expectations. The LTC has scheduled a strategic planning meeting for the Advisory Council in February 2018 at which time the complete 2018 strategic plan and agenda will be developed. We expect to continue our initiatives in new community and student education programs, leadership development in the transportation field, and research to assist decision making. The coming year is expected to see additional growth on the strategic initiatives of the Leonard Transportation Center – work being developed to support transportation decision making and planning to improve the quality of life in the Inland Empire.

Advisory Council Members

<p>Doran J. Barnes Executive Director, Foothill Transit</p>
<p>Matthew (Matt) Barth, Ph.D. Professor of Electrical and Computer Eng. Director CE-CERT, UCR</p>
<p>Rick Bishop Executive Director, WRCOG</p>
<p>John Bulinski District Director, Caltrans District 8</p>
<p>Mike Burrows Executive Director, San Bernardino Airport Authority</p>
<p>Kimberly Collins, Ph.D. Executive Director, LTC Associate Professor of PA, CSUSB</p>
<p>Thomas Davis Chief Planning & Development Officer, Agua Caliente Band of Cahuilla Indians</p>
<p>Claudia Davis, Ph.D. Associate Professor, College of Natural Sciences, Nursing Department, CSUSB</p>
<p>Paul Granillo CEO and President, IEEP</p>
<p>Christopher Gray Director of Trans., WRCOG</p>
<p>Yunfei Hou, Ph.D. Director, LTC Innovation Lab Assistant Professor of Computer Science & Eng., CSUSB</p>
<p>Hasan M. Ikhrata Executive Director, SCAG</p>
<p>Xudong Jia, Ph.D., P.E. Professor and Chair of Civil Engineering CalPoly Pomona</p>
<p>Jake Zhu, Ph.D. Associate Dean, Jack H. Brown College of Business and Public Administration Professor of IDS, CSUSB</p>
<p>William "Bill" R. Leonard</p>

<p>Capitol Commission Volunteer State Legislator 1978-2002 Board of Equalization 2003-2010 Secretary State and Consumer Services 2010</p>
<p>Frank M. Lin, Ph.D. Professor and Chair of IDS, CSUSB</p>
<p>Thomas McWeeney, Ph.D. Associate Director, LTC Lecturer of PA, CSUSB</p>
<p>Steven PonTell President and Chief Executive Officer National Community Renaissance</p>
<p>Alternate for Doran Barnes: David Reyno Director of Gov. Rel., Foothill Transit</p>
<p>Deborah Robertson Mayor City of Rialto</p>
<p>Lawrence C. Rose, Ph.D. Dean, Jack H. Brown College of Business and Public Administration CSUSB</p>
<p>Khalil Saba Vice President HNTB</p>
<p>Liza Wilson Territory Representative Forest Pharmaceuticals, Inc.</p>
<p>Xinkai Wu, Ph.D. Assistant Professor of Civil Engineering California State Polytechnic University, Pomona</p>
<p>Jun Wang, Ph.D. Director of Student Development and International Initiatives, Bourns College of Engineering UCR</p>