

The Value of Research



■ Trade and Transportation

By Thomas O'Brien

While Labor Day marks the traditional end of the summer season and the start of the academic year, the fact is that the university is a year round business. More and more students use the summer to complete needed coursework; and in the world of continuing education and professional development, which is central to the mission of a state university like CSULB, academic calendars don't matter. When, where and how we deliver programs is dictated by the needs of the customer.

Research is also a year-round business. And the contributions of your home town university in this area are significant. This is particularly the case with regard to trade and transportation. I'm proud to say that over the past two years, CSULB's Center for International Trade and Transportation (CITT) has added three new affiliated research centers and secured \$500,000 in new funding opportunities for faculty research and student employment opportunities on our campus.

Since 1998, CITT has partnered with the University of Southern California to run the METRANS University Transportation Center (UTC), which is a U.S. Department of Transportation (DOT) designated university transportation center with a mission to undertake research, education, and outreach in the area of metropolitan-wide transportation. Caltrans also provides research support to the Center.

In 2013, CITT became the Long Beach home for two new research centers: the U.C. Davis-led National Center for Sustainable Transportation which produces research that directly supports the efforts of policy makers and professionals to improve the sustainability of the transportation system; and MetroFreight, a Volvo Research and Education Foundations Center of Excellence in Urban Freight based at the University of Southern California. MetroFreight's focus is on the "last mile" of service delivery, a topic of key concern to our region which is a gateway for international trade.

In 2014, CITT was awarded a fourth center, the Federal Highway Administration's Southwest Transportation Workforce Center (SWTWC) covering eight states—California, Arizona, Nevada, New Mexico, Utah, Colorado, Oklahoma and Texas. SWTWC is undertaking research in transportation labor market analysis.

The criticism of university-based research is that it is conducted in the "ivory tower" with, at best, little real world implication. At worst, critics fear that research conducted in a vacuum can be used to support the development of policy and regulatory measures that result in unintended – and negative – consequences for residents and businesses alike.

But university research does play an important role in areas like policy analysis and technology advancement in part because of the peer review process which is designed to protect the integrity of the research in the first place. This often results in a slower process than many would like. Many would argue that research is rarely timely enough to do any good. But a well-designed research program with fully vetted findings can help to inform the discussion that occurs outside of the walls of the university.

This fall and winter, some of the newly funded research projects on our campus will address topics of vital importance to the local trade and transportation community. These include optimization methods for chassis processing, transportation network resiliency, and truck route characteristics. While some of this work is what is referred to as pure basic research designed to further our knowledge, much of it is applied to real world problems. Policy analysis for example that investigates the development and outcomes –often unintended– of policies, programs and legislative measures can help provide lessons for those interested in designing similar measures.

This can include agencies like Caltrans and USDOT which fund research in part to allow them to perform at a higher level. Their return on investment is realized, for example, through tests on the strength of pavement materials and by research-driven data on freight mobility patterns that make statewide infrastructure investments easier to justify. Economic cost-benefit analyses are another useful tool. And we shouldn't forget the value of historical research that provides insight into long-term transportation trends. All of this knowledge benefits industry too.

A successful research agenda pays off in the classroom as well. It provides opportunities for our students to learn and to apply their knowledge in ways that prepares them for the workplace. It also develops critical thinking skills and writing skills that pay dividends for employers later on. So while criticisms of university-based research are often valid, the research process contributes much to our understanding of how society, including industry, works. The support of our partners in gathering data and reviewing our findings helps ensure that the work we do has value outside the ivory tower.

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