Testimony Presented Before the House Committee on Transportation

January 29, 2007

by

Peter E. Crouch, Dean College of Engineering University of Hawai'i at Mānoa

HB 372 – RELATING TO THE DEPARTMENT OF TRANSPORTATION'S ENGINEERING SCHOLARSHIP PROGRAM

Chair Souki, Vice Chair Nishimoto, and Members of the Committee:

The UH Department of Civil and Environmental Engineering (CEE) and the College of Engineering have reviewed the proposed House Bill 372 regarding the establishment of a Hawai'i Department of Transportation's Civil Engineering Scholarship Program.

We support the broad intent of the proposed program, so long as it does not supplant the Board of Regents Biennium Budget Request:

"to establish a civil engineering scholarship program to be administered by the department of transportation and to appropriate moneys to promote the civil engineering profession, and offer financial assistance, on - the job training, employment opportunities to qualified students in Hawai'i."

The enrollment in CEE is approximately 75% of its peak enrollment in the early 1990's, despite continuing local recruiting efforts by both the department and the college. We understand that both the state government and private employers have difficulty finding qualified civil engineers to meet their demands.

Nationally, this shortage is projected to get worse as the baby boomers begin to retire. In general the number of engineers graduating of all disciplines in the US has stagnated and is woefully less than many Asian economies. Given the importance of design and construction to the local economy this is potentially a major problem for the state and the state's infrastructure. Hence, the proposal to increase the pipeline of graduating civil engineers is to be commended. Given the focus on engineering and technology in general as a component of diversification of Hawai'i's economy, and the overall lack of graduating engineers in the US, it would make good sense to also address the other engineering disciplines such as Mechanical and Electrical Engineering.

It is noted that the proposed program is focused at only students interested in taking employment in the Department of Transportation while the need for civil engineers in the construction industry is broader.

It is noted that the annual instate tuition at UH is \$4,320 in 2006-2007, \$5,136 in 2007-2008 and \$5,952 in 2008-2009. Thus at the proposed investment of \$100,000 annually the maximum throughput of fully funded students addressed by the bill would be 5 per year and probably less. It is not clear that this is a large enough number to make a significant improvement to the overall problem.

It is noted that the bill ties acceptance of a scholarship by a student to the acceptance of any offer of employment by the Department of Transportation for the same amount of time as the scholarship is awarded. This type of coupling between scholarship funding and commitment to future work is not typical in the civilian sector, since a student making a decision at the age of 18 is typically a very different person at the age of 22+ on leaving College.

The College and the CEE at UH has developed a good relationship with the HDOT. We look forward to continuing this relationship though constructive conversations on initiatives that will continue to improve the State's infrastructure in the years ahead.