The Planning and Transport Research Centre (PATREC) at UWA delivers integrated land use and transport planning research to extend the evidence-base in support of the effective planning and management of Western Australia's high and rapid growth future. Read more about PATREC here: http://www.patrec.uwa.edu.au/

This seminar highlights the research which was conducted by Associate Prof Christo Venter of the Department of Civil Engineering at the University of Pretoria, South Africa.

**LOCATION/DATE**
140 William Street, Perth CBD, meeting room 3.17
Please enter on level 2 and request assistance from Yi-Lin Ng (extension 6679)
Monday 8 June 2015, 11:00 – 11:45 AM

This is a FREE of charge event, but we appreciate your RSVP as seating is limited.

**Please forward this Research Seminar invitation to anyone who might be interested.**

**About Christo Venter**

Christo Venter is an Associate Professor in the Department of Civil Engineering at the University of Pretoria, South Africa. He completed his PhD at the University of California, Berkeley, in 1999, and has since been working in transportation consulting, research and teaching in South Africa. His research interests include travel behavior modeling, land use/transport interaction, planning for public transport, and the social and economic impacts of access and mobility. He has recently been involved in several studies exploring the use of mobile technologies for transport planning, especially under conditions of limited data in developing countries. Examples include the use of vehicle-based GPS tracking to assess the equity impacts of various road funding schemes; and using personal GPS devices to help understand walking behavior in poor communities.

**Title of Talk:** GPS-derived metrics for assessing the equity impacts of tax and toll road funding: Recent experience in Gauteng, South Africa

As user charging increasingly supplements taxation as a transport financing mechanism worldwide, the need to measure and understand its distributional impacts across affected groups grows more critical. The presentation reports on the novel use of GPS data from multiple sources to empirically assess the distribution of benefits and costs of electronic tolling across passenger and freight users. The 185-km Gauteng Freeway Improvement Project in the Johannesburg-Pretoria area of South Africa is used as a case study. GPS data from commercial truck fleets are combined with multiday GPS tracks from a panel of private vehicle drivers to derive measures of user benefit by class. The presentation draws conclusions on the suitability of implementing road pricing, or an alternative hypothecated fuel tax, in terms of equity across income groups and across passenger and freight users. The impact of time-of-day discounts is also considered.