VISION STATEMENT
To provide end user researchers with an electronic tool which will more closely reflect assumptions involved in using spatial statistics and regression modelling by more closely aligning the Functional Regions with the concept of a local labour market and where the demand for and supply of labour is matched.

PROJECT OVERVIEW
The project enhances previously developed infrastructure the CoffEE Functional Economic Regions (CFERs), which has helped to resolve the spatial autocorrelation problem in spatial modelling by replacing the Australian Bureau of Statistics (ABS) regions based on administrative boundaries with more meaningful labour market areas based on travel to work behaviour. This allows researchers to build datasets which more closely reflect the modelling assumptions involved in using a spatial statistics and regression modelling.

The project will provide end users, who are spatial researchers, with (a) mapping data (shapefiles); (b) Extensive datasets covering population, labour force, housing and other data for the CFERs (for all aggregations); (c) full technical and instruction manual including on-line video tutorials; (d) provision of concordant data sets for time-series data for the 1996, 2001 and 2006 Census by CFER aggregation to facilitate spatial pooling analysis; (e) provision of user-friendly, browser-based interfaces to facilitate interactive end-user manipulation of CFERs data; (f) Provision of the open-sourced infrastructure to serve the CFERs and related data to end-users, including the mySQL databases, map server (Geoserver) and all processing code; and (g) Flash visualisation tools for use in public presentations (PowerPoint etc) when Internet access is not available.

PROJECT TEAM OVERVIEW and CONTACT (s) FOR PROJECT
The Centre of Full Employment and Equity (CoffEE) is a research centre based at the University of Newcastle. Its’ membership is drawn from the disciplines of Economics, Politics, Geography, Sociology, Leisure and Tourism. CoffEE seeks to undertake and promote research into the goals of full employment, price stability and achieving an economy that delivers equitable outcomes for all. Its broad focus areas are: macroeconomics; labour economics; and financial analysis. In the last decade this focus has consolidated around spatial perspectives on urban and regional change and dynamics.

Prof. Scott Baum
07 3735 5430
Project Partner
s.baum@griffith.edu.au

Prof. Bill Mitchell
02 4921 5027
Team Leader
Bill.Mitchell@newcastle.edu.au
SUMMARY OF PROJECT DELIVERABLES

- Background Intellectual Property in Functional Economic Regions (FERs) conception, development and infrastructure. This will be made available from the past research done to create the CFERs.
- Create and provide digitised boundaries (GIS shapefiles) for all aggregations on a national basis. These being: Main FERs, Gender-based and Occupational-based FERs and Experimental mode of commuting FERs.
- Extensive datasets covering population, labour force, housing and other socio-economic spatial data for the FERs (for all aggregations).
- Provision of On-line technical and instruction user manuals, dendrograms and other visualisation data
- Video tutorial instruction of use of infrastructure and specific applications. (made available online)
- Generate computer code to allow browser-based interaction with the infrastructure including the on-the-fly creation of datasets to accord with FER aggregation chosen.
- Provision of the open-sourced infrastructure to serve the FERs and related data to end-users, including the mySQL databases, map server (Geoserver) and all processing code.
- Provide all essential network and infrastructure to serve the FERs and related data to end-users, including the open-sourced MySQL and Postgres databases, open-sourced map server (Geoserver) and all processing code. In addition to a dedicated map server we will work with AURIN technical staff to ensure connectivity with the AURIN portal is effective including the authentication protocols.
- The Project will provide concordant datasets across the 1996, 2001 and 2006 census. This will allow researchers to conduct spatial pooled-time series analysis and comparative analysis (with growth rates).
- CoffEE has developed a number of prototype cross-platform Flash visualisation tools which are ideally suited for use in teaching and public research presentations (PowerPoint etc.) and allow for interesting ways of examining the social and economic settlement.
- CoffEE will provide to all AURIN users a help desk service during business hours via telephone and E-mail.

LIST OF RELEVANT PUBLICATIONS/RESOURCES


