northumbria UNIVERSITY

Project Title
Provisional: **Modelling land value influences on NewcastleGateshead's economy using geoinformatics** **Nominated student: Efstathios Arapostathis, Greece (self-funded and willing to cover fees)**

Project Description [Approx 300 words]

The main purpose of this research is the investigation, analysis and management of the property and land values according to social, economical, geographical, environmental factors. The project will use open source spatial data and advanced geographical analysis tools and approaches.

At present there is not a scientific way to monitor changes in land values "despite the fact that they are changing the wealth of every individual and community owning and using land – usually undeservedly. In a finite planet, the more crowded and consumerised we become, the more valuable the land is as a proportion of the total economy." (Landvaluescape.org).

Global economic crises are also very likely to affect the present land value balance. As a result of the changing economic landscape, national and local governments try to modernize their economies in order to purge their finances. According to the presentation to British parliament by the secretary of state for business, known as "Local growth: realizing every place's potential", UK has set a new framework for the country's economic growth in which location has a leading role in local growth politics.

The main aim of this research is to develop methods of acquiring harmonizing, analyzing and mapping property market data of a representative transect of NewcastleGateshead, in order to assess the potential for using this data as a basis for administering land value taxation (LVT). The project will explore the influences on how land values change over time and space transparent to property market stakeholders, including the general public, business and residential taxpayers, local government officials and spatial planners. It will involve researching sources of data, conditions of using it (and barriers to its use) and devising methods of normalizing and analyzing it, including the separation of building and land values.

The output of this research project will be a coherent methodology and report on the robustness of these methods, including conclusions and recommendations of what needs to be done, in terms of geodata policy, to make necessary data sets available for use in LVT administration.

Note on Funding and additional support: The student is willing to cover PhD fees (EU) for the first year and apply for a Greek PhD scholarship to support the remaining part of his studies. Newcastle and Gateshead City Councils are likely to provide data for the project as we have secured political support from ex-leader Lord John Shipley, OBE and the Professional Land Reform Group (PLRG).

Supervisory Team & Research Environment
Principal Supervisor: Dr Seraphim Alvanides, Built Environment s.alvanides@gmail.com   **Second / other supervisor(s):** Dr Paul Greenhalgh, BNE & Dr Tony Vickers (volunteer from PLRG) **Non-academic contacts for research input:** Lord John Shipley & Andrew Duffield (Hexham libdem)

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Key criteria: please confirm (with a ✓) the following

1. University funds for these studentships will be a bursary of £10k per annum

2. There is external funding available to the amount of [**see above**] per annum, and the external funder(s) is/are:-

3. Fees will be paid by the external funder ☑ **(to be covered by student)** <u>OR</u>

   The project will require a fee-waiver by the School ☐

4. It will be feasible to appoint a suitable[1] student by the end of January 2011: ☑

   ### Mr E. Arapostathis (see research statement below)

5. Further resource implications

Eligibility (normally. Minimum 2:1 Honours or Masters,. IELTS score of 7 for non-UK/EU) Please add any other requirements

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Statement on research interests from **Efstathios Arapostathis** (Nominated student)

I hold a <u>First degree in Geography</u> from the University of the Aegean, Greece (February 2008) and a <u>MSc in Applied Geography and Area Management</u> (specialty in Geo-informatics) from Harokopio University of Athens, Greece (April 2010).

My research interests are in the broad fields of human geography and geo-informatics. My undergraduate dissertation focused on electoral geography with the title: "Spatial extension of the electoral systems in European Union Countries after 1995". During my postgraduate studies at Harokopio University of Athens, Greece, I completed a dissertation on the development of a web application that can visualize and associate geographic and historic information of the sculptures that are placed in the National Archaeological Museum of Athens. The title of the dissertation was: "A web map tool for National Archaeological Museum of Athens". During my MSc studies I have also completed a research project with the title: "Spatial analysis of the touristic distribution of Greek museums" which I presented at the recent 9th Pan-hellenic Geographical Conference in Athens, Greece (November 2010).

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[1] Suitable = in terms of entry level (2:1 Honours or better) and IELTS 7 (in the case of Non-EU)