

## **ESAI Postgraduate Researcher of the Year 2014 Awarded – Richard Manton**

Congratulations to Richard Manton from the Ryan Institute at NUI Galway who was the inaugural winner of the ESAI Postgraduate Researcher of the Year Competition, 2014. Richard is in the write up stages of his PhD working on a multi-disciplinary project entitled '*Route Selection and Design of Greenways: Guidance for the Irish National Cycle Network*' which combines Civil Engineering and Social Science. Richard is a student of Dr. Eoghan Clifford, Civil Engineering and Ryan Institute at NUI Galway.

His application explained that in Ireland there is an over reliance on the private car and a shift to walking and cycling has the potential to dramatically improve the environmental, economic and health implications of Irish transport. The objectives of his research are the promotion of walking and cycling for commuting, leisure and tourism; the design of safe, accessible, environmentally-friendly, and cost-effective greenways; and encouraging community involvement in the design of greenways and other green public space. His work investigates the design methodology for greenways to ensure that they are safe, accessible, environmentally-friendly and cost-effective. He explains that a robust route selection process is required and needs to consider: life-cycle analysis and carbon savings of modal shift; cost-benefit analysis and tourism potential; safe and attractive route design; connectivity and accessibility; integration with policy and plans. The quantitative basis of the research is formed by an international greenway user survey ( $n=1,000$ ) and international best-practice; it is tested against an Irish case-study (Dublin-Galway). Currently, there is an absence of route selection and design guidelines for greenways in Ireland.

A route selection matrix will rate route options and recommend preferred routes and connections, under the headings:

- Environment (carbon footprint (LCA), habitats and designated sites, modal shift potential)
- Economy (costing, tourism potential, potential health and other benefits)
- Safety/Attractiveness (distance from traffic, surfacing, junctions, facilities)
- Connectivity/Accessibility (connection to residences and employment, user-friendly)
- Integration (inclusion in policies and plans, public transport networks)

According to Richard, "The route selection methodology and greenway design guidance will be a major asset to anyone involved in greenway planning, design or operation. It will be particularly useful for community campaign groups in designing and lobbying for greenways and for local authorities in assessing greenway proposals. An interactive website, [IrishGreenways.com](http://IrishGreenways.com), will promote this research and the use of greenways in Ireland."