

Institution: Newcastle University

Unit of Assessment: UoA16 Architecture, Built Environment and Planning

a. Context

Integral to Newcastle University's role as a world class civic university is a commitment to engagement with research users and to achieve impact particularly on public policy, professional practice and public discourse. Our three core areas for research impact are associated primarily with each of our three research centres: GURU (Global Urban Research Unit) for *spatial planning*; ARC (Architecture Research Centre) for *architecture* (both located in the School of Architecture, Planning and Landscape, APL); and CRE (Centre for Rural Economy, located in the School of Agriculture, Food and Rural Development) for *rural development*; although there are notable links between them which are detailed below.

For CRE and GURU our principal research beneficiaries lie within professional practice and public policy, concentrated on planning and rural policy and development but also a wide range of other areas related to these core themes including ageing, health and wellbeing; urban design; housing; transport; security; and environmental policy. For ARC, a core contribution to the profession of architecture and to its public discussion can also be identified and is supplemented by a range of other areas including: construction informatics; energy; and architectural technology. Across all centres ideas of co-production with user communities along with various forms of action research help maximise research impact on user audiences. Key policy and practice organisations benefitting from our research thus include professional and learned bodies (Royal Town Planning Institute (RTPI), Royal Institute of British Architects, Landscape Institute, Regional Studies Association etc.), government departments within the UK and elsewhere, local government associations, industry, and community organisations and civil society more broadly.

b. Approach to impact

Much of our research is underpinned by an orientation toward the professional disciplines of architecture and town planning and thus has a strong alignment to the needs of practice communities. We identified four key ways in which impact was to be achieved in the 2008-13 period which also informs our future thinking on maximising impact. Thus our *Leading and Enabling – Performing and Shaping (LEPS) impact strategy* comprises four elements with examples of achievement given below.

Our research helps us to *Lead* discussions with practice and learned communities and devise new ways for them to access knowledge and research findings. This relates closely to us **Enabling** research users to make sense of new conceptual understandings and to develop and extend their practices as a result. For example, in spatial planning, research work for ESPON on climate change (**Davoudi**) was heavily cited in the European Environment Agency report 'Climate change, impacts and vulnerability in Europe 2012' which underpins the European Commission Adaptation Strategy 2013. Locally research on environmental justice funded by the Institute for Local Governance informed the working, and is cited in the final report, of the Fairness Commission, set up by Newcastle City Council with subsequent impact on City budgeting. In relation to architecture. Hamza's work on a new headquarters for Northumbria Police resulted in the adoption of a doubleskin facade which will significantly improve user conditions; and **Calderon**'s energy modelling work of housing stock at the city-scale for Newcastle City Council has assisted in the formulation of new policy and user practices. In rural development, processes of knowledge exchange conducted through the ESRC-funded Science in the Field project (Phillipson, Lowe, Donaldson) improved the ways in which research is exchanged with field-level specialists and policy makers. It also made a marked contribution to professional practice e.g. in the veterinary profession (Lowe) leading to the establishment of the Veterinary Development Council in 2010.

We also **Perform** direct roles in policy formulation and knowledge exchange between research and policy/practice communities; and relatedly, **Shape** public debates through the media and directly to reach lay audiences, disseminating existing and emerging outcomes from research. Under *spatial planning*, the development of the spatial planning system in the UK was influenced by the Communities and Local Government/RTPI Effective Spatial Planning in Practice report and its subsequent dissemination within government, professional organisations and political parties

Impact template (REF3a)



(Tewdwr-Jones) through the reforms to planning set out in PPS1 2005, the Planning White Paper 2007 and Welsh Independent Planning Review Panel 2012; and the Foresight Land Use Futures report 2010 (Tewdwr-Jones) with influences on the Natural Environment White Paper 2011, NPPF 2012, RTPI Map for England 2012, and Town and Country Planning Association (TCPA) Reconstructing England 2012, while collaborative local planning research (Healey) is directly cited in UK Government statements on planning (Open Source Green Paper 2010). Locally action-research and advisory roles in neighbourhood planning and community development work (Gunn, Shucksmith, Vigar, Webb) have shaped civil society and local authority practices. Other projects have shaped public policy and civil society practice such as four initiatives funded through the SPINDUS project which had co-design and co-production built into its research design e.g. Leeds Guerrilla Gardening identified and occupied 37 derelict spaces for community gardening. This also led to an ESRC grant (Urban Food Justice), the FeedLeeds Initiative, a co-housing project and policy on urban agriculture in Leeds' Core Strategy planning document. Work for SPINDUS also included action-research with Somali women in Camden which led to policy change in the local authority and the adoption of new policy and practice by the Metropolitan Police.

In architecture, research impacts are evidenced through interaction in design projects especially. For example, design work by the in-house Design Office led by Sharr has redesigned a number of buildings on the university campus and (together with Hamza and Pendlebury) advised on energy efficiency measures for Hexham Abbey to reduce its carbon footprint. In addition, innovative participatory methodologies are in evidence in the project Action Research Gateshead (Mallo, Tardiveau, Vigar) with the residents of three social housing blocks, which led to the creation of a Tenants and Residents Association and changed management practices within the Gateshead Housing Company; and also in community engagement in Gosforth Park Nature Reserve with the Natural History Society of Northumbria, to develop a brief for a demand-led learning facility (Mallo, Tardiveau). This project involved working with schools to articulate the need, the location and spatial requirements of the facility. Other work with schools includes the creation of a 'Learning Den' at Pennington Primary School, Cumbria (Mallo, Tardiveau); and Strachan's 'NE6Voice' project which involved school pupils from a disadvantaged area creating a photographic exhibition for the Great North Museum inspired by George Shaw's Turner Prize nominated exhibition at the Baltic Gallery. Also, This is For You involved research into maternal practices and learning in the neonatal unit of Homerton Hospital, involving staff and mothers (Lloyd Thomas), with the resultant art now installed in the ward and viewed by 3500 hospital users per year.

Finally in *rural development* CRE's Northern Rural Network and LandBridge (see section c) and the RELU programme (Impact case 4) all have ideas of knowledge co-production at their heart with subsequent impacts on policy and practice as does **Shucksmith's** work, in particular that for the Commission for Rural Communities and Scotland's Crofting Commission (see Impact case 3). The impact of CRE's research was recognised with the award of a Queen's Anniversary Prize 2012-14.

Infrastructure

We will use the LEPS strategy to inform how future impact can be maximised. In terms of organisational infrastructure, we use school research committees, APL's Engagement Committee and dedicated engagement officers in APL and CRE to shape and enact strategy. Schools also support impact by allocating staff a minimum of 700 hours per annum to pursue research and engagement. APL also recycles overheads into personal research accounts/ research groups, often then used for maximising impact by individuals and research centres.

The APL Engagement Committee (APL-EC) was established in 2009 to maximise the impact of research and promote greater engagement with actual and potential user communities. The Committee is supported by a Communications Officer, **Fry** (0.6FTE), has user representation (presently through a Newcastle City councillor), and deploys a significant budget which levers in additional outside funding e.g. from Grainger plc. for panel debates on younger people's access to housing. Some APL-EC work is teaching related e.g. helping students work with groups on projects that have social value e.g. **Farmer** with Kielder Art and Architecture. Other work supports network building and dissemination so that it might impact on policy thinking, e.g. Beacon North East developed **Gilroy**'s work on elders co-housing with the Elders Council leading to direct influence on practitioner approaches to housing policy among Your Homes Newcastle, Four Housing Group and Gentoo, and to a new strategy, 'Housing for Everyone's Tomorrow' (Newcastle City Council

Impact template (REF3a)



2011). Finally, APL-EC funds are deployed to promote understanding on and off campus of the importance of the built and managed environment e.g. *The Great North Build* at the Great North Museum which attracted 9800 people, 972 of whom were school group visitors, to construct their ideal city using Lego, guided by APL postgraduate students.

In 2012, CRE also initiated an Engagement Committee to continue the success in impact terms of their RELU programme and similar initiatives. The Committee enhances communications and relationship management with a wide range of external partners and actively promotes a culture where good practice in impact is shared and celebrated. Critical to the role is the sustained auditing of impact. This relies on the Committee's members who have direct experience of working with beneficiaries to develop approaches suited to these specific groups. CRE also convenes an Industrial Advisory Board which provides input into the direction of research and engagement activity across the Centre. This has led directly to the development of a staff secondment scheme within CRE that now forms part of the future strategy and plans for supporting impact.

c. Strategy and plans

Research impact is to be achieved in the future through five key mechanisms underpinned by the support of Schools, research centres and institutes:

- 1. funding initiatives from University, school, societal challenge institutes and centres. These are often used to attend and speak at practitioner conferences, to broadcast research through public lecture series and for a variety of events both directly and through the underwriting of conferences (see REF5). We have also provided in-kind resources to others such as the TCPA to develop events to further research agendas and maximise impact. A specific APL fund for symposia was established in 2013 to bridge to practice communities e.g. a debate on alternative housing models in June 2013. Research centres take the lead on many other such symposia: e.g. the Northern Rural Network in CRE typically hosts well over a dozen events per year and GURU has funded a number of workshops with practitioners, such as three Localism workshops in 2011 with follow-ups in 2012 and 2013; and a workshop in 2013 on the role of private firms in public sector planning (Gunn, Tewdwr-Jones, Vigar, Webb). We will continue to use internal and external funds to maximise research impact with attention to partnering with others, such as professional bodies, to maximise research impact.
- 2. sabbatical policy: staff are encouraged to use sabbaticals to further research impact. Among those with a specific impact orientation are: Shucksmith's which included producing the report "High Ground, High Potential: a future for upland communities" for the Commission for Rural Communities, later endorsed by the House of Commons EFRA Select Committee and led to the announcement of an uplands policy by government in March 2011; Roe's 2010 dissemination of work on the European Landscape Convention to practitioner audiences at the Council for Europe Florence +10 conference and at the UK Landscape Conference; and Kellett's period in Ethiopia assisting government officials on social renewal policy (2013). Sabbatical policy continues into the next REF cycle but we will use the above successes to further promote using sabbaticals to generate non-academic impacts.
- 3. communications: APL and CRE have employed dedicated communications managers since 2008. Fry (APL) works to disseminate research findings and organise public events, while Liddon (CRE) works with beneficiaries including landowners/managers and government departments/agencies to produce publications which draw out key messages from research. In a recent evaluative survey 81% of external stakeholders were of the opinion that the CRE communications manager had heightened the likelihood of non-academic impact. We see communications as a vital element of our research impact work and will maintain this resource.
- 4. **networking**: CRE employed a rural network manager (2008-11) focused on developing relations with rural development practitioners centred on the organisation of events and applied research activity through the 1400 member Northern Rural Network. In an evaluation of the Network carried out in 2011 36% of the respondents said that they had accessed expert advice from the Unit with a further 17% stating that they had been directly involved in research. The unit also runs Landbridge, a knowledge exchange network for researchers and rural professionals who advise farming and land businesses which has over 200 members. The CRE Engagement Committee takes up this networking role. We will use CRE best practice with networking to inform ARC and GURU practice in the next REF cycle.

Impact template (REF3a)



5. societal challenges: members of the UoA are actively involved in implementing Newcastle University's societal challenges through the Newcastle Institute for Research into Sustainability (NIReS), the Newcastle Institute of Social Renewal (NISR) and the Newcastle Initiative on Changing Age. The institutes support a programme of public events which members of the Unit support, in part through their linkages with external stakeholders. NISR is directed by Shucksmith with Scott and Tewdwr-Jones as theme champions, while Davoudi and Garrod are theme leaders in NIReS. We now link the societal challenges to school plans through focusing substantively on one thematic in each institute (energy; community engagement; ageing and mobility, see REF5) and will continue to utilise available finance and the possibilities of inter-disciplinary networking and engagement that are central to the mission of each of the institutes.

d. Relationship to case studies

Our five impact case studies correspond directly to the approach taken in the *Leading and Enabling – Performing and Shaping* impact strategy. We will continue to generate public debate and affect policy translation within the substantive research priorities outlined in the REF5 Environment document as well through the non-thematic priority of 'Expertise and Knowledge Exchange' which provides a clear focus for further developing the impact of our work.

The **Collaborative Planning Impact Case Study** is a strong example of impact focused on *leading* policy and practice debates. The case is underpinned by grant funding which emphasised close collaboration with research users at every stage. Close links between researchers, and APL as a practice-facing school with professionally accredited planning teaching programmes, with policy and practitioner communities and associated government and professional bodies helped develop the arguments over time and facilitated their transition to the worlds of policy and practice. Research continues to pursue the potentials and limits to collaborative planning using our extensive links to the planning profession.

The **Crofting Reform Impact Case Study** is an example of *enabling* a more direct role in developing policy and legislation. **Shucksmith** was given leave from the University to both deliver the Crofting Commission and to promote its findings amongst policy, professional and lay audiences across Scotland and beyond. A subsequent sabbatical enabled him to build on this work and apply its findings with his other research into influencing English uplands policy. Shucksmith's directorship of the Institute for Social Renewal further positions him and the UoA in debates about rural futures.

The **RELU Programme: Closing the Gap Impact Case Study** illustrates how the findings from funded research into a particular issue (foot and mouth disease) can spawn a much broader, award-winning programme on questions of inter-disciplinarity and knowledge exchange, which takes these matters seriously in its own design. Lessons learnt from its implementation have informed our approach to impact more generally and we will continue to *lead and perform* direct roles in policy formulation and knowledge exchange to assist those in rural areas to shape their own futures informed by our expertise gained through the Programme.

The **Cities, Infrastructure and Security Impact Case Study** provides an example of how *shaping* public discourse can be achieved through scholarship of the highest calibre. It provides lessons for us in how the provision of space and funds to both develop a body of research over a long timeframe, and to use specific publications to promote the findings amongst a wide range of media technologies, can be very powerful in shaping the impact of academic research.

The Information Modelling and Application Development Impact Case Study shows staff *performing* a central role in product development derived from cutting-edge research with direct influence on industry practices. It shows how research was enabled by providing dedicated laboratory facilities along with space and time to develop prototypes. Then, close relationships with the RIBA and its subsidiary National Building Specifications, enabled the product to become commercially marketable. ARC's on-going relationships are in evidence throughout this document and we will use activities such as the 2014 Architectural Humanities Research Association conference to explore co-production possibilities with industry partners into areas such as materials specifications and information architecture.