



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Assistant in Transformative Transport Modelling, Faculty of Environment



Salary: Grade 6 (£32,296 – £37,999 p.a. depending on experience)

Reporting to: Sheridan Few

Reference: ENVEE1772

Part time: 70% FTE (24.5 hours per week)

Fixed term for 12 months to complete specific time limited work

Location: University of Leeds (with scope for hybrid working)

We are open to discussing flexible working arrangements

Research Assistant in Transformative Transport Modelling, Faculty of Environment

Overview of the Role

Are you an ambitious researcher looking for your next challenge? Do you have a background in transport modelling and/or organisational change? Do you want to further your career in one of the UK's leading research-intensive Universities?

Transport for Greater Manchester (TfGM) will be revising their Local Transport Plan and contributing to Greater Manchester's Five-Year Environment plan within the next 12 months. Both plans require transformative change of complex systems, which are subject to uncertainty in both external conditions, and in their response to interventions. The University of Leeds (UoL) team have critical expertise in techniques for decision making for system transformation under deep uncertainty. This role will help to embed UoL expertise in TfGM's organisational context through development of these plans, allowing direct support of a just transition to a sustainable transport system, and providing experience of a University research context, alongside an implementation context.

In this role, you would work with a team with diverse knowledge to enhance the ability of transport models to deliver sustainability objectives under uncertain future conditions. You would work closely with Transport for Greater Manchester to deliver impact from the EPSRC-funded Multi Actor Adaptive Decision Making project (<https://maadm.leeds.ac.uk/>), building on an existing collaboration between the two organisations.

You would address three main objectives:

- **Assessing uncertainty in quantitative pathways at a strategic level** TfGM use a specific model to inform strategic plans to achieve decarbonisation and other objectives across the region. The postholder will develop expertise in this model, identify the key underlying assumptions which are subject to uncertainty, document the evidence underlying these assumptions, and explore the ways in which uncertainties surrounding these assumptions could be explored within



models. This would be informed by literature on, and team members' expertise in techniques for decision making under deep uncertainty.

- **Connecting strategic and intervention level models** TfGM use separate models to develop strategic plans and to inform individual interventions. The postholder would develop expertise in an intervention level model (the metro fare elasticity model), and explore ways in which this model could be used to make the case for interventions which support strategic objectives, whilst taking into account uncertainties considered at a strategic level.
- **Targeting deep leverage points for transformative change** You would explore ways in which models could be adapted to target transformative change in the transport system. This would be informed by literature on, and team members' expertise in systems transformation.

Through these activities, the postholder would contribute to the development of TfGM's local transport plan, and their revised five-year environment plan.

Early stages of the secondment would focus on the research assistant developing skills in using strategic and intervention models, whilst in parallel exploring their underlying assumptions. This would be directly supported by Dr Sheridan Few (UoL), and Andrew Walmsley (TfGM). Other members of the support team would join regular meetings to support the development of the project.

Main duties and responsibilities

- Developing expertise in, and critically assessing, TfGM's strategic and intervention level transport modelling tools;
- Using and adapting transport models to address uncertainty;
- Exploring key stakeholder perspectives on ways of embedding leverage points for transformative change into models;
- Developing a policy report detailing key insights around transport modelling for transformative change under uncertainty;
- Coordinating a dissemination and feedback workshop;
- Working both independently and as part of a larger team of researchers and stakeholders;
- Supporting research activities, including contributing to research results and outputs and to the generation of independent and original ideas, ensuring a successful programme of investigation;



- Collating and analysing data to inform the direction and progression of the research project;
- Participating in the research group and presenting research output where appropriate;
- Contributing to the research culture of the School, where appropriate;
- Continually updating your knowledge, understanding and skills in the research field.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

Qualifications and skills

Essential

- An undergraduate or masters degree in transport planning, organisational change, or a related field, or an equivalent level of professional qualification and experience;
- Ability to work as part of a team involving different tasks towards the same objective;
- Advanced use of MS Excel, or demonstrated ability to develop this knowledge rapidly;
- Experience in writing concise and clear reports;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Well-developed analytical skills;
- Ability to plan work towards specified deadlines and deliver on time;
- Ability to produce research results for publication in policy reports, peer-reviewed journals and conferences;
- A proven ability to work well both individually and in a team;
- The ability to work unsupervised and to use your own initiative;
- Discipline and regard for confidentiality and security at all times;
- Willingness to undertake any necessary training for the role.

Desirable

- Experience of transport modelling, or of numerical modelling in other contexts with an equivalent level of complexity;



- Ability to develop, apply, maintain, and synthesize outputs from quantitative models;
- Familiarity with methods for decision making under deep uncertainty, and literature on systems thinking approaches to societal transformation;
- Ability to appropriately and clearly communicate scientific and technology concepts to both expert and lay audiences;
- Ability to conduct qualitative research, such as research interviews and workshops;
- Experience of contributing to the writing of papers for publication.

Additional information

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Please note that due to Home Office visa requirements, this role is not suitable for first-time Skilled Worker visa applicants.

Information on other visa options is available at: <https://www.gov.uk/browse/visas-immigration/work-visas>

Find out more about the [Faculty of Environment](#).

Find out more about the [School of Earth and Environment](#).

Find out more about our [Research and associated facilities](#).

Find out more about Equality and Inclusion in the [faculty](#).

Working at Leeds

We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our [Working at Leeds](#) information page.



Our University

As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Environment we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at hr@leeds.ac.uk

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

