

**Job Title: Senior Analyst – Predictive Modelling**

**Grade: 8 Post Number:**

**Directorate: Communities and Intelligence**

**Unit: Intelligence Unit**

**Job Purpose**

The role involves maintaining and updating the organisation’s existing suite of demographic modelling and analysis work, with a key responsibility to deliver the next round of population and household projections for London. These projections are a key part of the evidence for a wide range of policy and planning work in London. Critical stakeholders and applications include:

* Providing the demographic evidence base for the Mayor’s London Plan
* Use by local authorities for the planning of education provision, particularly through the GLA’s School Roll Projection Service
* Underpinning TfL’s strategic planning and demand modelling activities

In addition, the post holder is expected to play a key role in the development of new models and analytical products to better meet the needs of strategic and local planners within the city. The post holder will be involved at all stages of the development process, including:

* establishing stakeholder requirements
* undertaking background research
* methodological design
* implementation
* producing outputs and documentation

#### Principal accountabilities

1. Maintain and update the GLA’s suite of demographic projection models, including: Trend, Housing-led, Employment-led, and Small Area population models; as well as Household and Pupil Place Demand models.
2. Engage with a wide range of stakeholders, including strategic planners and policy makers across the GLA group, capturing requirements and priorities, and to develop a programme of analytical work to address these.
3. Undertake research and analysis of the drivers of population change to provide a basis for policy decisions and model development, particularly with regards to the relationships between population, housing, transport accessibility, and employment.
4. Develop and extend existing demographic models, to incorporate ongoing research into the drivers of population change, incorporating new data sources and linkages to external models as appropriate.
5. Work to ensure models and outputs conform to best practice in the use of open source modelling software and data management, applying these standards to new and existing models and tools.
6. Produce and publish the range of outputs and analyses comprising the GLA’s *2017-based Demographic Projections* in line with the Code of Practice for Official Statistics. Ensure that all work is undertaken in accordance with the team’s analytical assurance framework.
7. Produce and update documentation to accompany all models including technical papers and instructional materials for users, and provide training sessions and workshops to GLA group and local authority stakeholders.
8. Provide expert advice on the use of demographic models and projections, particularly in support of core strategic planning activities within the GLA and TfL, including the Examination in Public of the Mayor’s new London Plan, and as part of the GLA’s School Roll Projection Service offered to London local authorities.
9. To realise the benefits of London’s diversity by promoting and enabling equality of opportunities and promoting the diverse needs and aspirations of London’s communities.
10. To realise the benefits of a flexible approach to work in undertaking the duties and responsibilities of this job, and participating in multi-disciplinary, cross-department and cross-organisational groups and project teams
11. Manage staff and resources in allocated to the job in accordance with the Authority’s policies and Code of Ethics and Standards

#### Key contacts

**accountable to:** Demography Manager

**accountable for:**

**Person specification**

**Technical requirements/experience/qualifications**

1. A high level of numeracy, evidenced by a postgraduate qualification in a subject with a highly quantative content, or exceptionally, by at least two years’ experience in a similar role.
2. Able to select and apply a wide range of analytical and modelling techniques to real world problems.
3. Proficient in the R programming language, and comfortable with learning new languages as required.
4. Spatial analysis skills and experience in working with large, complex datasets.
5. Evidence of success in undertaking project-based work and preparing clear and concise reports, presentations and briefings on complex issues.
6. Able to convey complex technical information to a range of audiences via technical reports, instructional materials, and oral presentations.
7. Evidence of success in building and forming working relationships, and working flexibly, across professional and operational boundaries within an organisation, and with external organisations.
8. An understanding of the GLA’s commitment to equality of opportunity and valuing diversity, and the ability to translate this into action.

**Behavioural Competencies**

**Research and Analysis**

… is gathering intelligence (information, opinion and data) from varied sources, making sense of it, testing its validity and drawing conclusions that can lead to practical benefits.

Level 2 indicators of effective performance

* Proactively seeks new information sources to progress research agendas and address gaps in knowledge
* Grasps limitations of or assumptions behind data sources, disregarding those that lack quality
* Analyses and integrates qualitative and quantitative data to find new insights
* Translates research outcomes into concise, meaningful reports
* Identifies relevant and practical research questions for the future

**Stakeholder Focus**

Level 2 indicators of effective performance

… is consulting with, listening to and understanding the needs of those our work impacts and using this knowledge to shape what we do and manage others’ expectations.

* Seeks to understand requirements, gathering extra information when needs are not clear
* Presents the GLA positively by interacting effectively with stakeholders
* Delivers a timely and accurate service
* Understands the differing needs of stakeholders and adapts own service accordingly
* Seeks and uses feedback from a variety of sources to improve the GLA’s service to Londoners

**Communicating and Influencing**

… is presenting information and arguments clearly and convincingly so that others see us as credible and articulate, and engage with us.

Level 2 indicators of effective performance

* Communicates openly and inclusively with internal and external stakeholders
* Clearly articulates the key points of an argument, both in verbal and written communication
* Persuades others, using evidence based knowledge, modifying approach to deliver message effectively
* Challenges the views of others in an open and constructive way
* Presents a credible and positive image both internally and externally

**Planning and Organising**

Level 2 indicators of effective performance

… is thinking ahead, managing time, priorities and risk, and developing structured and efficient approaches to deliver work on time and to a high standard.

* Prioritises work in line with key team or project deliverables
* Makes contingency plans to account for changing work priorities, deadlines and milestones
* Identifies and consults with sponsors or stakeholders in planning work
* Pays close attention to detail, ensuring team’s work is delivered to a high standard
* Negotiates realistic timescales for work delivery, ensuring team deliverables can be met

**Decision Making**

…is forming sound, evidence-based judgements, making choices, assessing risks to delivery, and taking accountability for results.

Level 2 indicators of effective performance

* Takes decisions as necessary, on the basis of the information available
* Makes decisions without unnecessarily referring to others
* Involves and consults internal and external stakeholders early in decisions that impact them
* Identifies potential barriers to decision making and initiates action to move a situation forward
* Demonstrates awareness of the GLAs decision making processes and how to use them

**Problem Solving**

… is analysing and interpreting situations from a variety of viewpoints and finding creative, workable and timely solutions.

Level 2 indicators of effective performance

* Processes and distils a variety of information to understand a problem fully
* Proposes options for solutions to presented problems
* Builds on the ideas of others to encourage creative problem solving
* Thinks laterally about own work, considering different ways to approach problems
* Seeks the opinions and experiences of others to understand different approaches to problem solving

**Reasonable adjustment**

Reasonable adjustment will be made to working arrangements to accommodate a person with a disability who otherwise would be prevented from undertaking the work.