

GREATER LONDON AUTHORITY

REQUEST FOR ASSISTANT DIRECTOR DECISION – ADD2345

Title: Purchase of population count data from a mobile phone company

Executive Summary:

The GLA wishes to purchase population count data from Citi Logik to understand variation in the population of small areas of London by different times of day and days of the week. This data will be used to develop new analytical outputs and improve existing ones in demography, air quality monitoring, economic and transport planning. Following the evaluation of a month's data, the GLA would explore the usefulness of accessing this data on a longer-term basis.

Decision:

That the Assistant Director of the City Intelligence Unit approves:

1. Expenditure of up to £45,000 for the purchase of population count data from Citi Logik to support demographic projections, air quality modelling, and a range of borough economic and transport planning projects; and
2. An exemption from the requirement in the Contracts and Funding Code to procure competitively and to purchase the data from Citi Logik without a formal tender process on the basis that a full research process has been completed identifying and examining all possible service providers with only one demonstrating the ability to fulfil the requirements.

AUTHORISING ASSISTANT DIRECTOR/HEAD OF UNIT

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities.

It has my approval.

Name: Jeremy Skinner

Position: Interim Assistant Director,
Intelligence and Analysis

Signature:



Date:

30.5.2019

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

- 1.1. The GLA needs data to understand variation in the population of small areas of London by different times of day and days of the week. The GLA has been exploring the potential of a data partnership with a major mobile phone company to make use of population count data derived from mobile phone signals. Signals defining location are transmitted by simply carrying a phone and are continually picked up by phone masts. Tracking these signals enables identification of geographical movement or non-movement of people. This can inform detailed estimates of population counts within small areas and origin/destination flows between areas. Modes of transport can be approximated by speed of movement and routes taken. The data is not linked to phone use or any identifiers – it is entirely anonymous – the output is purely statistical.
- 1.2. The detailed level of granularity and timeliness regarding population counts that this data can provide would enrich the value of the official statistics the GLA currently uses. The detail will be precise to location and time but is otherwise anonymous and does not involve personal data. With this, we would be able to improve our current population models and develop entirely new models that offer a type of analysis currently unavailable to the GLA.
- 1.3. Procuring new data sources such as these are a specific aim of the City Intelligence Unit data science project in order to improve our data modelling to produce required evidence in GLA policy. The proposed purchase would capture movement patterns for one month only (March 2019).
- 1.4. Section 9 of the GLA's Contracts and Funding Code ('Code') requires that contracts with an estimated value of over £25,000, are procured by a formal tender process.
- 1.5. However, section 10 of the Code provides that exemptions from that requirement may be approved where there is a complete absence of competition. The data requested are not available on the open market, so it is not possible to secure quotes for a specific product. Securing a dataset such as this requires considerable negotiation with individual organisations who may be prepared to develop and deliver a suitable data extract which meets our requirements.
- 1.6. The GLA have thoroughly investigated potential sources of data through extensive negotiations with mobile phone providers to discuss how they can meet the following criteria:
 - Be willing to share data to meet our requirements;
 - Have appropriate ethical arrangements in place regarding personal data management and compliance with Data Protection legislation;
 - Have a data platform which organises their data into appropriate statistical geography; and
 - Can make relevant data available at an affordable price.
- 1.7. Of the four mobile phone networks that serve London, only two confirmed the ability to make data available. The GLA has held extensive negotiations with both companies. On discussing the above criteria one company confirmed it would not be able to provide a suitable service and was not able to consider the matter further.
- 1.8. Citi Logik is able to provide data by a mobile phone company that has the infrastructure to support this project and has already put time and resources into a similar product therefore has demonstrable ability to meet the needs of this product within a reasonable budget. The GLA prepared a document in 2018, setting out detailed specifications based on the above criteria. Citi Logik has responded to this with a proposal explaining how the criteria could be met. The GLA is satisfied that Citi Logik is the only organisation currently able and willing to provide the specific data required.

1.9. To this end, the GLA and TfL Procurement are satisfied that the above negotiations have been robust and have served the purpose of a competitive process, negating the need for a further tender exercise. The GLA will work with TfL Procurement to put an appropriate contract in place with Citi Logik and will seek advice from the GLA's Information Governance Manager & Data Protection Officer and Legal as required.

2. Objectives and expected outcomes

2.1. The objectives of this work are to evaluate the ability of population count data provided by a mobile phone company to develop new outputs in the following areas:

- **GLA-wide:**

- to undertake analysis and reporting of the population counts and population flows across small areas of London by time of day, day of the week for use by boroughs for a variety of planning purposes and to support service provision.
- to produce night time population estimates for London.
- to understand the relationship between the night-time population and crime.

- **Situational Awareness:**

- to develop short-term population projections for small areas of London - Lower Layer Super Output Areas (LSOAs) by different times of day and night, to support economic planning.

- **Regeneration and Economic Development**

- to support programmes to design interventions to improve and protect High Streets.
- to evaluate impact of crowdfunding and the Good Growth fund e.g. use of public realm.
- data will help us better understand how town centres are used, who visits and from where, the mode of transport used, how long they stay, and whether they visit during the day or night.

- **Culture:**

- to evaluate the impact of major cultural events and regeneration programmes.

- **Environment:**

- to provide inputs to models of air quality being developed by the Alan Turing Institute.

- **Borough Services:**

- to allow Boroughs to better understand the origins and destinations of their visitors (having ensured contractual and legal compliance before sharing data with boroughs).
- to develop a classification/typology of different types of areas across London based on their day and night time populations for use by boroughs and GLA functional bodies.

- **Transport:**

- to evaluate the impact of major road closures and improve transport planning.

2.2 Following the evaluation of this current data purchase, which is for one month only, the GLA would explore the value of accessing this type of data on a more long-term basis, which would then also enable the understanding of annual cycles. If evaluation proved favourable, a further project would be developed involving investigating options for longer-term funding and working with TfL Procurement to explore procuring the data in accordance with the GLA's Contracts and Funding Code.

3. Equality comments

- 3.1. The Equality Act 2010 provides that in exercising its functions, the Mayor and the GLA (as a public authority) shall have due regard to the need to a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Act; b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it; and c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 3.2. As the data itself is anonymous, in line with Public Sector Equality Duty it can only be managed without prejudice or discrimination. The value of statistical analysis at a granular level has far-reaching impact that can benefit good relations; the understanding of occupation density and movements across London will give insight into the comparison of mobility and density trends in areas where differing social criteria such as affluence or ethnicity have already been identified. This data can be used to underpin works supporting the Mayor's Equality, Diversity and Inclusion Strategy as well as other strategies. In particular, better and more detailed data on population variance and movement will support and improve ongoing work into area such as:
- Encouraging a fairer and more inclusive Night Time Economy;
 - Regenerating deprived parts of London;
 - Monitoring air quality - notably for more deprived groups who are mostly likely to experience it;
 - Reducing crime on groups/communities who are disproportionately affected by it; and
 - Enhancing our understanding of the impact of cultural events/spaces.

4. Other considerations

GDPR

- 4.1. The data is fully anonymised and aggregated. The mobile phone company ensures that it is compliant with UK privacy guidelines (consent-based data capture), to ICO protocols and compliant with EU GDPR regulations, all managed within an ISO 27001 accredited environment.

Risks

- 4.2. The data extract will be managed in line with standard GLA Group contract procedures, drawing on advice from TfL procurement officers where required. Procuring new data sources such as these are a specific aim of the City Intelligence Unit data science project. If we do not purchase these data, this planned work will not be able to go ahead, and we will be unable improve our data modelling to produce required evidence in the policy areas listed above.
- 4.3. Though this manner of data sourcing is expected to enrich the GLA's data pool, this purchase will be treated as a low-cost pilot in order to assess the overall benefits before any larger investment is considered, minimising the financial risk.

Links to strategies and Mayoral and corporate priorities

- 4.4. Outputs from these data will support GLA's work informed by the following Mayoral Strategies: Economic Development, Environment, Health Inequalities, Culture for London, Transport, Housing Strategy. It will also support the Mayor's work around the Night-time Economy.

5. Financial comments

- 5.1. Approval is being sought for expenditure of up to £45,000 for the purchase of population count data. This expenditure will be funded by the 2019-20 Demography and Policy Analysis Team's budget held within the Intelligence unit.

6. Legal comments

6.1 The foregoing sections of this report indicate that:

- The decisions requested of the director concern the exercise of the GLA's general powers, falling within the GLA's statutory powers to do such things considered to further or which are facilitative of, conducive or incidental to the promotion of economic development and wealth creation, social development or the promotion of the improvement of the environment in Greater London; and
- In formulating the proposals in respect of which a decision is sought officers have complied with the Authority's related statutory duties to:
 - pay due regard to the principle that there should be equality of opportunity for all people;
 - consider how the proposals will contribute towards the achievement of sustainable development in the United Kingdom; and
 - consult with appropriate bodies.

6.2 In taking the decisions requested, the assistant director must have due regard to the Public Sector Equality Duty; namely the need to eliminate discrimination, harassment, victimisation and any other conduct prohibited by the Equality Act 2010, and to advance equality of opportunity between persons who share a relevant protected characteristic (race, disability, gender, age, sexual orientation, religion or belief, pregnancy and maternity and gender reassignment) and persons who do not share it and foster good relations between persons who share a relevant protected characteristic and persons who do not share it (section 149 of the Equality Act 2010). To this end, the assistant director should have particular regard to section 3 (above) of this report.

6.3 Section 9.1 of the Contracts and Funding Code (the 'Code') requires the GLA to seek a call-off from a suitable framework, where possible, or if not, undertake a formal tender process managed by TfL Commercial. However, the assistant director may approve an exemption from this requirement under section 10 of the Code upon certain specified grounds. The officers have set out at paragraphs 1.4 – 1.9 of this report the reasons why they believe this meets the exemption. On this basis the assistant director may approve the proposed exemption if satisfied with the content of this report.

6.4 Officers must ensure that appropriate contract documentation is put in place with and executed by the GLA and Citi Logik before the purchase of the required data and should seek further advice from the GLA's Information Governance Manager & Data Protection Officer and Legal as required.

7. Planned delivery approach and next steps

7.1 The purchase, analysis, delivery and evaluation of this project should follow the schedule below:

Purchase of data	May/June 2019
Analysis	June-August 2019
Delivery	September 2019
Evaluation	October/November 2019

Appendices and supporting papers:

None.

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FoIA) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after it has been approved or on the defer date.

Part 1 - Deferral

Is the publication of Part 1 of this approval to be deferred? NO

If YES, for what reason:

Until what date: (a date is required if deferring)

Part 2 – Sensitive information

Only the facts or advice that would be exempt from disclosure under FoIA should be included in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a part 2 form – NO

ORIGINATING OFFICER DECLARATION:

Drafting officer to confirm the following (✓)

Drafting officer:

Vivienne Avery has drafted this report in accordance with GLA procedures and confirms the following:

Corporate Investment Board

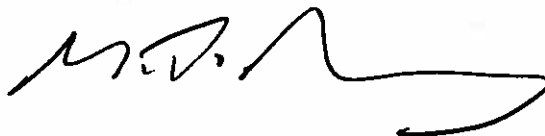
This decision was agreed by the Corporate Investment Board on 28 May 2019.

✓

ASSISTANT DIRECTOR OF FINANCE AND GOVERNANCE:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature



Date

30-05-19