Appendix 1:

Deliverable components of the proposed 2021 Census Information Scheme

1. Summary

- 1.1 This note sets out the areas of activity that will comprise the Census Information Scheme for 2021. Full details will be given in the Information Scheme Schedule to be approved by the Executive Director of Strategy and Communication under delegated powers and presented to London Local Authorities (LLAs) at the end of 2020.
- 1.2 Total expenditure is proposed at £750,000 over the Scheme's ten-year duration, 2021 to 2031 this will be met by receipt of income of £750,000 from LLAs and functional bodies.

2. Components of the Scheme

2.1 Training

We will recruit a trainer to develop training materials and deliver training over the period 2021 to 2023. Training is expected to include:

- Introduction to census including census topics and geographies, sources of census data, and discussion of results
- Interpreting 2021 data, and how to compare it to other sources and to 2011 census
- More specific products including migration and travel to work flows data, that were little used by local authorities in 2011
- Themed training to specific audiences such as health analysts or education

Volumes of training and modes of delivery are yet to finalised (In 2011 the commitment was 3 days training per borough per year for the initial three years)

2.2 Support and advice including user group

- At least three user group meetings a year
- Seminars and workshops as required, typically two or three a year in the initial years of the Scheme
- Email updates on outputs from census at least quarterly
- Advice and assistance to members by email and phone

2.3 Briefings

- Short briefings on census topics, linked to borough data for each topic. We anticipate producing no more than 20 to 25 reports over 2022 to 2024. Around 50 reports were produced following 2011 census
- No more than 6 to 8 more detailed reports covering migration, diversity and technical detail about the census

2.4 Comparison of 2021 with 2011 and 2001 data

- Production of comparisons at borough and 2021 ward levels, and LSOAs
- We will also produce consistent figures for 2001and will document comparability of data between censuses

2.5 **Dashboards and atlases**

- These will cover key topics: ethnic group, country of birth, language spoken but fewer other topics than in 2011
- Data will also be made available as raw data and GIS formats

2.6 Further Analyses

- Construction of the small area classifications for London as in 2011
- Analysis of migration and travel to work in London
- Further work to be agreed with partners

2.7 **Commissioned Tables**

- As in previous censuses we will commission additional census tables from ONS giving additional detail on the characteristics of London's populations
- The 2011 Scheme commissioned around 80 tables at a cost of £22,000. We expect to commission at least as many tables from 2021 census and that costs will be higher than in 2011
- We will make available details of tables that have been commissioned for London both by the Scheme and by others

2021 Census Information Scheme

Background

Following the 2001 and 2011 censuses, the GLA organised consortia comprising the GLA, the London Local Authorities and the GLA functional bodies to acquire, disseminate and analyse information from the censuses. The GLA believes such an arrangement would again be beneficial to partners following the 2021 census.

Initial thoughts and a timeline for setting up a 2021 information scheme were presented to boroughs in December 2018. We then had detailed conversations between GLA and boroughs over March and April 2019. Discussions were also held with the functional bodies comprising the Metropolitan Police, London Fire Brigade, and Transport for London; and the two Development Corporations the London Legacy Development Corporation and the Old Oak and Park Royal Development Corporation. These discussions were completed in early 2020.

These final proposals for a 2021 Census Information Scheme (CIS) are informed by these conversations.

Coverage of 2021 CIS As with the 2001 and 2011 schemes, we propose the 2021 CIS should include:

- 1 Training and Support
 - a. Training on Census and how to use it
 - b. Help and advice to users
 - c. User group, seminars and workshops
 - d. Advocacy for London
- 2 Briefings and Analysis
 - a. Reports covering main topics as they are published
 - b. Presentation of data in atlases, data tools
 - c. Further analysis such as additional historical data, London OAC
- 3 Access to data
 - a. Regular outputs and comparisons with previous
 - b. Commissioned outputs
 - c. Flows and microdata
 - d. Historical series

In summary, we want the CIS to produce outputs that boroughs and partners do not have the resources and expertise to produce for themselves, and that ONS won't produce.

Training and Support

Training

Our discussions showed that boroughs and functional bodies want the 2021 scheme to have more emphasis on training and information than earlier schemes, delivering information about the census and related data sources to both census specialist and wider non-specialist audiences.

Boroughs showed a strong preference for traditional face-to-face learning, either at City Hall or at boroughs. Some saw scope for online learning via videos, webinars, and teleconferencing. Functional bodies with larger numbers of analysts, the Metropolitan Police and Transport for London, saw value in delivering training at their premises.

We therefore propose the following:

- 'Introduction to census' one day course. This will include census topics and geography, sources of census data, and some results.
- It is likely that 2021 data like 2011 will be delivered through more than one channel. We will therefore provide more detailed instruction on how to find and extract 2021 data, and how to interpret it, including comparing it to other sources and to 2011 census. This could include 'enhanced census outputs' – see below.
- Encourage the use of the detailed flows data the migration and travel to work flows that were underused in 2011. It is unclear how these data will be provided for 2021 but ONS intend to make more datasets available with unrestricted access. This will probably mean suppressing individual flows and table detail. Whatever the formats, we intend to offer training in analysing the data as we did in 2011.
- Tailored training to specific audiences such as transport and health analysts or education.

A significant minority of boroughs suggested workshops or seminars on census results, and how to use census data alongside other sources. ONS' intention is to integrate census outputs with other sources – so-called 'enhanced census outputs'. If this integration is not fully achieved with the release of the census, the training would follow on.

We think we will need a dedicated census trainer to develop materials (probably in first half of 2022), and conduct training (rest of 2022 and into 2023). This would of course depend on how quickly ONS produce outputs. The trainer would lead with other members of the team also contributing to this.

Regular census updates

Up to 2010 the GLA published regular Census Information Notes (CINs) detailing data releases and CIS outputs from the 2001 census and progress towards the 2011 census. After 2010 these were replaced by regular emails. There was no support amongst boroughs for a return to the formal CINs, but many said that some form of more regular communication would be useful. CINs were produced quarterly so we propose that the GLA will email members at least as frequently. We will need to monitor our census mailing list carefully as it has grown significantly since the 2011 census, and now numbers over 110 named individuals.

User group and workshops

We propose that the user group should continue as currently. All the boroughs supported the arrangement of meetings at City Hall three or four times a year with census and demography combined. Many liked the opportunity for networking and sharing experience, and there was (surprisingly) little enthusiasm for webinars or virtual meetings. A few felt there could be too much material at some meetings and suggested more could be circulated by email.

After our discussions, the spring 2020 PSUG meeting scheduled for March was postponed by a week and held as a Teams webinar on 6 April due to the lockdown conditions caused by the Corona Virus pandemic. The webinar was well-attended and feedback from attenders was positive. This suggests we could choose this format for some meetings in the future, despite the previous views of boroughs expressed above.

Virtual meetings or webinars could be more frequent but shorter than full user group meetings and we could hold them for specific audiences. Several boroughs had suggested workshops or seminars to discuss specific topics around the 2021 Census. The GLA hosted several workshops after the 2011 census that covering new census topics, commissioning tables and possible research areas. It could be appropriate to hold workshops like these online. An alternative might be to hold 'Census only' User group meetings as was the practise up to 2014.

Other support and advice to users

It is proposed that this continues as in 2011. Boroughs can contact GLA via the census inbox, and we also have personal emails and phone numbers. We propose to continue to offer advice and assistance as currently. In practise, most of the traffic to the census inbox is from external enquiries with CIS members contacting us directly by phone or personal email.

Advocacy for London

We propose that this continues as currently. A Scheme allows the GLA to lobby on behalf of London to ensure that the 2021 Census provides the statistics for our operational and development needs. As well as liaising directly with ONS, GLA are a member of various planning and working groups including the Central and Local Information Partnership (CLIP) Population group; Census Advisory Group; the Ethnic Group Assurance Panel; and the Origin-Destination Working Group.

We will continue to lobby on behalf of London in the lead-up to the Government's decision on the future of census-like statistics in 2023.

Briefings and Analysis

Regular reports

The GLA produced over fifty reports and summaries of census data following publication of the 2011 data. Discussions revealed that boroughs held divergent views on the usefulness of these. Around half of boroughs found the reports useful, while as many as a third did not. Functional bodies were generally positive. Shorter reports were preferred, TfL commented that reports had most impact if they were produced very soon after data was released. Many boroughs said they would be more useful if they included borough level results. We need to find ways to accommodate these conflicting preferences.

We propose the following:

- Overall, less emphasis on writing reports than in 2011.
- Reports should generally be short and produced soon after data become available: "Snapshots", reports of typically four to six pages that were produced in 2011 were suggested as a model.
- A lot of the 2021 data are expected to be delivered via a table generator system so there will not be phased release of data as in 2011. Information on many topics will likely become available at the same time: we propose consulting with partners to decide the order in which topics should be analysed.
- Borough level figures will be supplied in spreadsheets linked to reports.
- Some boroughs highlighted topics that justified longer reports such as migration, diversity indices and technical reports.

Dashboards, tools and mapping

There were considerable differences in views on the utility of these.

Dashboards

Some boroughs said that they would still want data as excel workbooks/dashboards while others preferred access to the raw data, possibly via an API. TfL saw needs for both dashboards and raw data. This is clearly an area where things could change and so we need to keep up to date with boroughs' information systems, software and hence what boroughs want from GLA and what they can do themselves.

At present the balance is in favour of workbooks/dashboards although there is no majority view. We hence propose that data be made available in spreadsheets, but that we investigate making raw data files available either as csv or via an API. See also next paragraph.

Maps and visualisations

This was the single area with most varied views from boroughs. Many boroughs found the 2011 Instant Atlas and Tableau visualisations useful, but some said they would prefer to produce their own. Software in use included Instant Atlas and Tableau but also Arc GIS and PowerBI, so it would be difficult to accommodate all these.

We therefore propose that the CIS produce some atlases of 2021 and comparable data but also provide access to the source data, preferably in GIS format. We will decide the most appropriate format(s) after 2021.

Further analysis including commissioned analyses such as classifications for London and additional historical data

Boroughs agreed that construction of the small area classifications for London, LOAC and LWZC, had been successful in 2011 and should be repeated for 2021. Functional bodies also said that they found these products useful. It would also be possible to produce other classifications (for example for wards) if there was demand.

We therefore propose that the CIS commission the construction of 2021 Output Area and Workplace Zone classifications for London and consult members on any other classifications.

For 2011 we commissioned University of Portsmouth to produce a time series of the employment by industry series for the boroughs. This cost \pounds 14,000. We could commission further series after 2021. However, most boroughs said they would not use any census data from before 2001, and so there was little interest in such data and no support for commissioning any long term historical data.

We hence propose that we will not commission any further long term historical data in 2021.

Boroughs also suggested various analyses of census and other data that could conducted or commissioned by the CIS. Topics included

- Comparing census travel to work flows with TfL data
- Further analysis of migration in London
- Impact of Crossrail across London
- Characteristics of migrants

Unsurprisingly, TfL were very interested in the travel to work data, particularly the characteristics of commuters from outside London, they were also interested in migration and its influence on travel behaviour. Some boroughs commented that the areas of interest would evolve over time, so we should decide priorities after 2021.

We propose that the 2021 Scheme should include provision for additional analyses, to be decided after 2021.

Access to data

Regular outputs and comparisons with previous census

ONS intend that most outputs from the 2021 census will be accessed by an interactive Table Builder rather than static tables. Static tables are likely to be produced where the detail won't be available from the Table Builder (most notably the equivalent of the detailed 2011 Quick Statistics tables). Some of the most widely used multivariate tables will also be produced.

For the medium term at least, 2011 data will continue to be available via NOMIS (and via other means including SASPAC). Irrespective of how data are suppled in 2021, we don't expect that ONS will produce comparisons between 2011 and 2021 data and think it would be efficient for CIS to produce comparisons across London.

All boroughs and functional bodies agreed this would be a useful output. All want comparisons of borough level and (new) ward level data; most boroughs and functional bodies would also find comparisons of LSOA data useful. Some functional bodies and a significant minority, around a dozen boroughs, would like comparisons of Output Areas too.

We propose that the CIS produce consistent comparisons of 2011 tables at borough, ward and LSOA including estimating 2011 tables for 2021 wards. Desirable but lower priority will be comparisons of OA data. Boroughs did not consider consistent 2001 data to be a priority, but Metropolitan Police and to a lesser extent TfL would find this useful. Since we think that including estimates of 2001 ward data will incur relatively little additional effort we propose including 2001 ward data and, if possible, lower geographies at the same time as 2011.

As part of the process of producing 2011 and 2021 comparisons we will also produce metadata on the comparability of data from the censuses.

Commissioned Outputs

The CIS has so far commissioned around 80 tables from the 2011 census at a cost of \pounds 22,000. We do not know what we will need to commission from 2021, nor the pricing structure for 2021 but since the prices for 2011 tables were increased in 2016 we anticipate that costs in 2021 will be somewhat higher 2011.

It is open to boroughs and functional bodies to request tables via the GLA who usually commission tables for all of London so that the cost to each member is very low. Some boroughs commented that the commissioned tables service has not been widely advertised to boroughs which could dissuade them from requesting tables. Additionally, on a few occasions, boroughs had commissioned tables independently of the CIS. The functional bodies too wanted to make more use of the service for 2021.

Many boroughs and functional bodies mentioned that the lack of documentation for commissioned tables made it difficult for them to know what was already available. After 2011, ONS did initially maintain a searchable database of all census tables including commissioned tables but it was never widely advertised and ONS stopped updating the database after March 2015. GLA have ensured that all CIS-funded commissioned tables are documented on the Census pages of the GLA datastore but there is no comprehensive list of all commissioned tables available to partners.

We propose that the GLA continue to commission tables for London in 2021 as in previous censuses, but that this service is promoted more prominently on the Census website and in Census training. We will also investigate co-ordinating our requests with local authorities outside London. The CIS will maintain a searchable list of all commissioned tables, as was produced for the 2001 census but not 2011.

Flows and microdata

Few boroughs made use of 2011 travel to work and migration flows data. This was because these data are difficult to access and difficult to analyse. Some boroughs no longer had access to SASPAC that was the principle analysis tool for analysing flows data.

TfL had sporadic interest in using flows data, whereas the Development Corporations expressed interest in migration and travel flows into their areas. ONS' initial proposal for 2021 is that many more flows tables will be publicly available than in 2011 but that some attributes or complete records will be suppressed. We also have no information yet on how these data will be delivered. Publication of more data is supported but the complicated suppression may still discourage use, and training and advice will be needed. Some boroughs stated that they would prefer the GLA to analyse these data on their behalf.

We propose that the GLA include two strands of work around flows data: we will include information and training on the analysis of flows data in our offer to partners, so that they will be able analyse flows data for themselves. We will also conduct more detailed analyses of the data on behalf of London.

Microdata

After each census, ONS create samples of person-level data for researchers to use for analysis and modelling. For 2011, two distinct samples each of 5% of the population were created, one with local authority geography, the other with regions only. These datasets each with around 400,000 records for London can be downloaded by researchers and used with few restrictions.

Possible analyses are constrained by the lack of household variables, and limited detail on some variables, but GLA found these data useful for rapid analysis of census data, for example to estimate populations covered by the Windrush scheme. We will encourage partners to acquire census microdata following the 2021 census and advise on its use.

Historical data

Since the 1991 census, the GLA (and predecessors) have maintained a set of comparable borough-level figures for census series back as far as was practical, typically 1981. These data are taken entirely from published figures but are presented The CIS could extend the scope of these series.

Consultations showed that most boroughs now see census data before 2001 as interesting but not immediately useful to their work. (Only) six boroughs said it could add context to briefings but even for these boroughs it was still not a priority. Amongst the functional bodies, TfL said these data were useful to their planning.

In view of this muted interest, we propose to maintain and update the existing historical time series spreadsheet to include figures for 2021, but we won't investigate extending the comparisons back to earlier censuses, nor include new time series.

Summary of components of a 2021 Census Information Scheme

Training

- Introduction to census including census topics and geography, sources of census data, and some results
- More detailed instruction on how to extract and interpret 2021 data, and how to compare it to other sources and to 2011 census
- Use of other more detailed data such as migration and travel to work flows data, that were little used by local authorities in 2011
- Themed training to specific audiences such as health analysts or education

User group

• At least three user group meetings a year, plus seminars and workshops when these would be useful

Support and advice

- Email updates on outputs from census at least quarterly
- Advice and assistance to members by email and phone

Advocacy for London

- Membership of various census oversight and working groups to make case for London
- In collaboration with boroughs, respond to consultation on future of census statistics after 2023

Briefings

- Short briefings on census topics, linked to borough data for each topic
- A small number of more detailed briefings covering migration, diversity and technical

Dashboards and atlases

- Fewer dashboards and atlases than produced in 2011
- Data also made available as raw data and GIS formats

Further Analyses

- Construction of the small area classifications for London, LOAC and LWZC
- Analysis of migration and travel to work in London
- Further work as agreed with boroughs

Comparison of 2021 with 2011 and 2001 data

- Produce comparisons at borough and 2021 wards and LSOAs
- Also produce consistent figures for 2001
- Document comparability of data between censuses

Historical data

• Update borough figures to 2021

Projected costs of the proposed 2021 Information Scheme

	All figures are E thousands
Total value of the 2021 CIS	£900
Income:	
Contributions @ £18,000 per organisation: London Local Authorities Functional Bodies GLA contribution in staff time	£594 £90 -
Total income for scheme	£684
Expenditure:	
Non-staff costs Projects Classifications Other	£50 £40
Software Commissioned Tables	£40 £40
Total non-staff expenditure	£170
Staff costs Trainer for three years Census support for ten years Expertise (Rachel for two years @ 1 day a week) Total staff expenditure	£160 £390 £27 £577
Total expenditure of Scheme	£747
Funding gap: expenditure less income	£63
This assumes all the functional bodies sign up for the It is likely that LLDC will not, bringing the gap to:	e scheme: £81

We propose to meet this gap by rolling over 2011 CIS surplus to 2021. This has to be agreed by London Local Authorities. The surplus is projected to be around £95,000.