FIELDWORK REPORT

GCRO QUALITY OF LIFE SURVEY 7 (2023/24)

OCTOBER 2024

Authors:
Etienne de Fortier and Hennie Loots

GCRO | Gauteng City-Region Observatory

The GCRO comprises a partnership of:

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DOI: https://doi.org/10.36634/EOSA3094

Written by: Etienne de Fortier and Hennie Loots

Design: Breinstorm Architects

Cover typesetting: Lumina Datamatics

Cover photographs: Tshepiso Seleka

Published by the Gauteng City-Region Observatory (GCRO), a partnership of the University of Johannesburg, the University of the Witwatersrand, Johannesburg, the Gauteng Provincial Government and organised local government in Gauteng (SALGA).

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Contents

PREFACE

The Gauteng City-Region Observatory (GCRO) is a partnership between the University of Johannesburg, the University of the Witwatersrand, Johannesburg, the Gauteng Provincial Government (GPG) and organised local government in Gauteng (SALGA-Gauteng).

The Quality of Life (QoL) Survey has become the flagship project of the GCRO. The QoL Survey is designed to provide a regular understanding of the quality of life, socio-economic circumstances, satisfaction with service delivery, psycho-social attitudes, values and other characteristics of residents in Gauteng. It serves as a tracking and diagnostic tool, affording a rich information resource for those people in policy-making, business, civil society and the public wanting to see where progress is being made, and where concerns remain.

The QoL Survey is a household-based survey with randomly selected adults (18+ years of age) as respondents. The GCRO has conducted seven QoL surveys since its inception in 2009:

- QoL I (2009) with 5 836 respondents in Gauteng and a total of 6 636 across the wider Gauteng City-Region (GCR).
- QoL II (2011) with 16 729 respondents in Gauteng.
- QoL III (2013/14) with 27 490 respondents in Gauteng.
- QoL IV (2015/16) with 30 002 respondents in Gauteng.
- QoL V (2017/18) with 24 889 respondents in Gauteng.
- QoL 6 (2020/21) with 13 616 respondents in Gauteng.
- QoL 7 (2023/24) with 13 795 respondents in Gauteng.

This publication is one of a series of technical reports about QoL 7 (2023/24). The reports include the Questionnaire, Fieldwork Report, Data Report, Sampling Report and the Weighting Report, as well as a generic guide to weighted analysis. These reports go hand in hand with the public dataset and should be consulted when analysing the QoL 7 (2023/24) data.

Additional information on the QoL Survey can be found on the GCRO website.

Photograph by Tshepiso Seleka

1. PURPOSE OF THE REPORT

The objective of the field data collection was to locate and interview at least 13 628 randomly selected adults, living in dwelling units randomly selected by the GCRO, within clusters randomly selected by the GCRO in all 529 wards within the Gauteng province.

GeoSpace International was appointed through an open tender in July 2023 to conduct the GCRO Quality of Life (QoL) Survey 7 (2023/24). The purpose of this report is to document the fieldwork roll-out, the methodology and implementation that was utilised, as well as the lessons learned from the QoL 7 (2023/24) experience.

1.1 Approach

GeoSpace International employed a systematic approach to the field data collection exercise, combining the latest technology with traditional survey methods to streamline and facilitate the field data collection exercise.

The Hexagon (HxGN) M.App Enterprise mobile application was used for field management to coordinate and direct the data collection process, efficiently providing tools for organising, analysing and visualising the geospatial component of the data.

Kobo Toolbox was used as the Computer-Assisted Personal Interviews (CAPI) software to digitise and facilitate the administration of the GCRO questionnaire. Extensive quality assurance (QA) procedures were implemented to ensure the accuracy and reliability of the collected data. This was a crucial part of the project for maintaining data integrity and validity.

GeoSpace International provided all the hardware and peripheral equipment required for data collection, including tablets for administering the questionnaire, along with chargers and power banks to ensure uninterrupted operation in the field. The tablets contained sim cards with pre-loaded data to upload interviews immediately after completion. The sampling methodology involved household visits at pre-sampled dwelling units, with questionnaires administered to randomly selected and suitable respondents.

On average, 26 interviews were required to be successfully completed for all of the 529 wards within Gauteng. In certain wards, a minimum of 20 interviews was required, while in others, a maximum of 48 interviews was needed. The table below provides a breakdown of the final QA approved and required number of interviews that needed to be completed within each metropolitan (metro) or district municipality.

Metro or local municipality	Minimum number of interviews required	Interviews completed
City of Johannesburg	3 886	3942
City of Tshwane	2 588	2 637
City of Ekurhuleni	2 708	2 718
Emfuleni	910	915
Lesedi	624	625
Merafong	672	678
Midvaal	720	726
Mogale City	790	824
Rand West	730	730
TOTAL	**13 628**	**13 795**

2. METHODOLOGY

2.1 Sample

The original sample selection was the responsibility of the GCRO, as outlined in the Sampling Report (Naidoo et al., 2024). The Global Positioning System (GPS) coordinates for each sample point to be visited were provided by the GCRO. Sample visiting points (VPs) were randomly selected from a building-based land-use dataset on a multistage cluster random basis for each ward. The sample was distributed across the entire Gauteng province, with interviews required in all 529 wards.

Additional replacement points (substitute VPs) were also provided for each visiting point for when an interview could not be completed at the original sampled VP. The sample distribution ensured that interviews were conducted in all settlement types (i.e. suburban areas, gated estates, blocks of flats, townhouse complexes, historical township areas, informal settlements, hostels, smallholdings and rural areas).

In-field sampling was the responsibility of the GeoSpace International fieldwork teams. The Hexagon (HxGN) M.App Enterprise mobile application was used to assist and guide the fieldworkers to first capture available dwellings at the sampled VP, select or sample a dwelling from the list, capture a household roster at the selected dwelling and then select or sample a household member for the required interview.

The in-field sampling methodology, including dwelling, household and respondent selection, were tested and refined during a pilot phase. The detailed methodology can be found in section 3.

2.2 Data collection

The digital technology used to implement data collection can be divided into two segments, namely Fieldwork Management and Computer-Assisted Personal Interview (CAPI) data administration components.

The CAPI solution, Kobo Toolbox, was used for questionnaire administration. The Kobo Toolbox CAPI solution integrated seamlessly with the field data management mobile application, the HxGN M.App Enterprise. All field management and data collection took place digitally using smart tablets.

Show cards with pictures were used to assist the fieldworkers and respondents with certain questions. The show cards are presented in Annexure A.

CAPI data administration

The questionnaire content was provided by the GCRO. GeoSpace International was responsible for converting the questionnaire into the CAPI solution.

The questionnaire was provided and developed in English and was translated into: Sepedi, Xitsonga, Tshivenda, isiZulu, isiXhosa, Afrikaans, Sesotho, Setswana, Ndebele and siSwati. The system allowed for the easy selection of the required language to conduct the interview. The questionnaire was tested and refined during and after the pilot. The questionnaire translations were further checked by the GCRO and refined during the final round of training by GeoSpace International.

The questionnaire also contained a confidential self-complete section that the respondents completed on their own. The questionnaire consisted of the following 15 modules:

1. Administrative information;
2. Basic services;
3. Migration;
4. Community attitudes;
5. Transport;
6. Economic;
7. Governance;
8. Social mobility;
9. Life satisfaction;
10. Crime and safety;
11. Social cohesion;
12. Health (including COVID-19 and vaccine hesitancy);
13. Environment/Sustainability;
14. Demographic details; and
15. Experiences of violence.

The GCRO QoL 7 (2023/24) questionnaire contained a total of 211 distinct questions. Of these, 14 questions consisted of multi-select responses that were administered as binary variables, thus yielding a total of 448 questionnaire items.

The questionnaire was designed with built-in validation rules and skip pattern logics, specific answer or number ranges, logic checks across sections and questions, and automatic mathematical calculations, which all assisted the fieldworker to complete the form accurately. If errors were detected by the software, the fieldworker was not allowed to move to the next question or to complete, save and upload the questionnaire. The skip pattern logic that allowed certain questions to be skipped based on previous answers assisted the fieldworkers in administering the questionnaire, saved time and ensured that the respondents were not asked questions that were not relevant to them. Moreover, where appropriate, the questionnaire contained drop-down list options, multi-select options, select one options, and number, date and text field options.

Fieldwork management

The HxGN M.App Enterprise application was used for the fieldwork management component. HxGN M.App Enterprise consists of a Headquarter (HQ) Rich Client data management and quality assurance (QA) application as well as a mobile field data management solution. The mobile solution was integrated with the CAPI data administration component.

The entire HxGN M.App Enterprise application is based on a geo-spatial platform, incorporating administrative boundaries, cluster boundaries, sampled VPs and substitute VPs, as well as digital imagery of all the three metros and six local municipalities in which data collection took place.

HQ field management processes were implemented through the HxGN M.App Enterprise application. The system allows for real-time allocation of work units, tracking and management of fieldworkers, right up to cluster and VP levels. Relevant staff members from the GCRO had access to the system, which allowed them to see, in near real-time, a first-view of the progress and work status.

The system is fully geographically enabled and supported by a high-function GIS. It has three main components:

1. The HQ Rich Client system, which contains the:
    a. Work assignment and scheduling system;
    b. Data management system;
    c. Data cleaning and QA component;
    d. Data integration, view and overlay component; and
    e. Data migration system.
2. The mobile field application, which is installed on the tablets.
3. The HQ Progress Dashboard system, which is housed on the operational server.

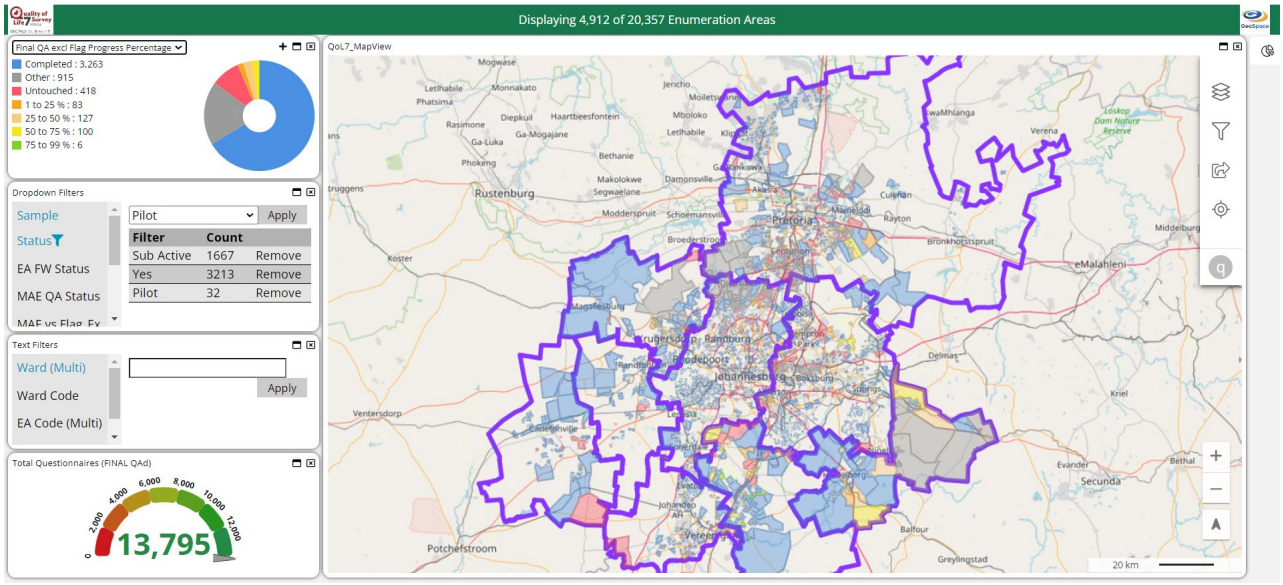
The system allowed for the live monitoring of the fieldworkers' movements in the field and used colour-coded and other progress functions to determine which clusters or VPs still needed to be completed or were in progress, and which ones had been completed.

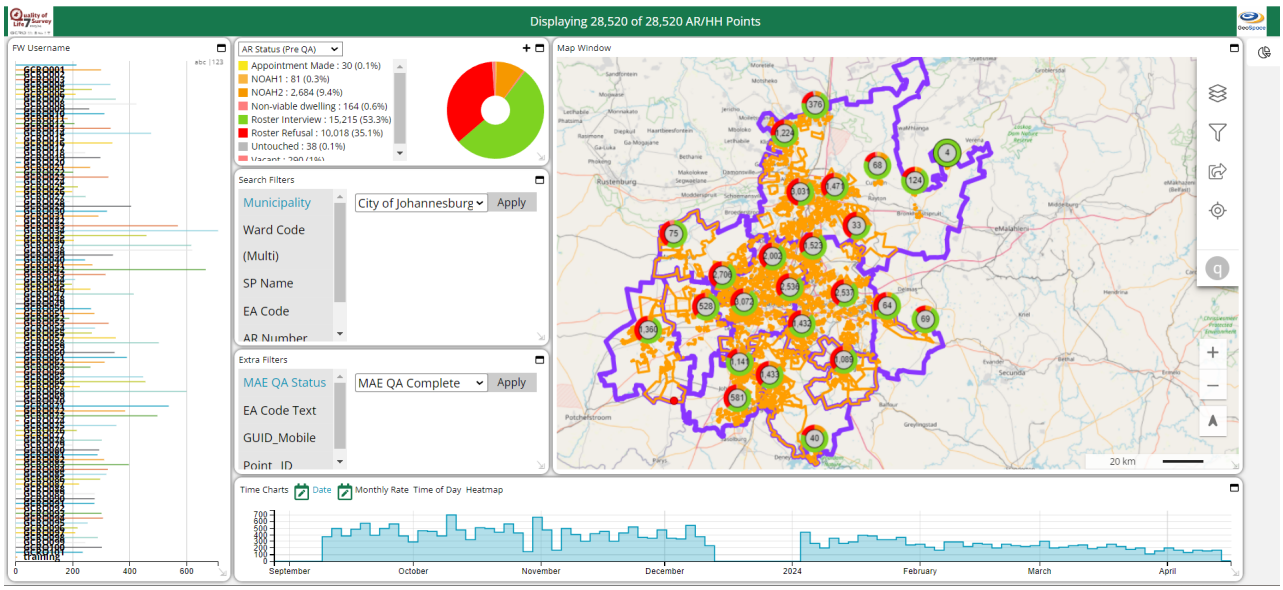
Progress was tracked live per VP in a spatial setting on the GIS at HQ. The system also allowed for the following HQ operations:

- GeoSpace International QA personnel could view and quality assure the data that was captured. Where appropriate, back-to-field operations were implemented where fieldworker errors needed to be fixed.
- The cluster polygons were used as a unit of work and progress measurement, with one cluster being assigned to a fieldworker or fieldwork team for completion.

The system architecture worked in such a way that the collected data was uploaded to the secure operational server. The raw CAPI data was then populated through an Application Programming Interface (API) into a secure Postgres database where it was quality assured. In some instances, callbacks and back-to-field operations necessitated corrections on the data. Therefore, no corrections and/or changes were made on the raw captured data.

Weekly exports were sent to the GCRO via Nextcloud. All data exports that were transferred via Nextcloud were encrypted with the symmetric key algorithm AES-256 using a strong pre-shared key. On top of the encryption, the dataset was only accessible through a username and password to ensure only relevant parties (i.e. the GCRO) had access.





The HxGN M.App Enterprise application was also used during a preparatory phase where recent colour digital imagery was loaded into the system as backdrop for all the subsequent fieldwork management processes. Sampled clusters, VPs, sampled replacement VPs and other administrative backdrop data were also loaded into the system.

Fieldworkers used the assigned tablets not only for questionnaire administration but also for navigation purposes. As specific clusters were assigned to a fieldworker, the tablet synced with the data server, where the cluster data, VP data and backdrop data for that assigned cluster was loaded onto the tablet. This included the replacement VPs. In order to minimise uploads and downloads through mobile data, and depending on the tablet specifications, the aerial imagery backdrop for the entire Gauteng, or at least an entire municipality, was pre-loaded onto the tablet. More than one cluster was assigned to a fieldworker, and it was also possible to assign a cluster to more than one fieldworker. In these instances, the team leader had the extra responsibility of ensuring that there were no duplicate visits at the same VPs.

In an effort to assist the fieldworkers, the HxGN M.App Enterprise Rich Client component was used to manually scrutinise and group each cluster and sampled VP into different categories based on the perceived difficulty in gaining access to the VP. Contact details for estate managers, rental agencies and ward councillors were captured into the system for the fieldworkers and team leaders to use.

The mobile component of the application was set up in such a way that the fieldworker used the sampled VPs to navigate to each VP within the sampled cluster. The VP was then verified on the basis of whether it was a viable dwelling unit (i.e. was there a household (HH) present or not?). Some VPs were deemed non-viable as they contained commercial, office, institutional, recreational or other types of structures that did not house any dwelling units. All VPs had to be visited and could only be substituted once a viable outcome was reached. The following constituted viable outcomes:

- No access – Access to the VP was denied or could not be gained at security estates, high-rise buildings or hostels.
- Roster refusal – First respondent refused to participate in the survey and no roster was captured.
- Sampled member refusal – A roster was captured but the sampled member refused to participate in the survey.
- Questionnaire refusal – A roster was captured; the sampled member of the household agreed to participate but later refused during the actual questionnaire administration (i.e. could not give consent).
- Non-viable dwelling – A child-headed household, industrial, commercial, etc.
- No one at home second visit (NOAH 2) – A second visit to a household or dwelling with a no-one-at-home outcome more than six hours apart from the first visit.
- Successful interview – A successful interview with the sampled respondent.

The HxGN mobile application allowed for the creation of an appointment to conduct an interview at a later date and also to capture no one at home outcomes. A GPS point was captured at every VP for each visit – no matter the outcome.

The HxGN mobile application was further used for in-field sampling at the sampled VPs and guided the fieldworkers during the in-field sampling process, whereby dwellings and households were captured and then sampled.

Once contact was made at the sampled dwelling and household, the fieldworker captured a household roster using the HxGN mobile application. The application then randomly selected a household member to be interviewed from the eligible roster.

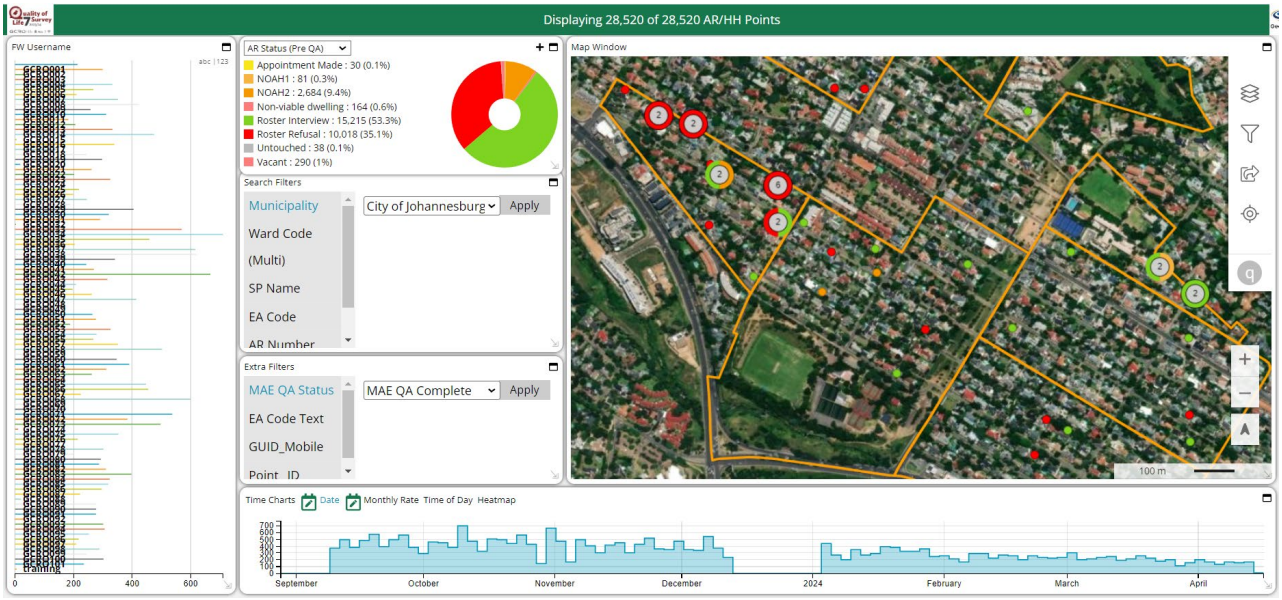
First, the randomly selected household member had to provide consent before the interview could commence using the Kobo Toolbox application. The Kobo Toolbox questionnaire was opened directly from the SmartCensus mobile application.

After the fieldworker-administered questionnaire was completed, it was saved and the tablet was then handed over to the respondent to complete the confidential self-complete section. The self-completed confidential questionnaire was also saved and uploaded to the server and deleted from the tablet.

The fieldworker manually changed the status on the HxGN M.App Enterprise field management system depending on the outcome of the visit. The change in outcome for the VP then reflected on the online dashboards for progress tracking.

For the field data collection, the following statuses were applicable for the VPs and are indicated in different point colours on the map, depending on the status of each visiting point:

- Untouched (all points will start with Untouched as default).
- Refusal.
- Interviewed.
- Visiting point appointment made.
- NOAH 1.
- NOAH 2.
- Non-viable dwelling.
- Substitute VP.



The following statuses were applicable for the household roster creation:

- Sampled household (HH) member refusal.
- Interviewed.
- Sampled HH member appointment made.
- NOAH 1.
- NOAH 2.

Data upload functionality

Collected data was uploaded to the secure operational server hosted at GeoSpace International and synced automatically on completion as soon as network coverage was available. The system enabled the uploaded data to be viewed and quality assured as soon as it was uploaded. Fieldworkers were

required to upload the completed questionnaire after each interview, and after each day if this was not possible.

The HxGN M.App Enterprise system contained all the spatial and attribute information collected and uploaded. It was therefore possible for the GeoSpace International QA team as well as the GCRO to accurately monitor the quality and progress of the work done by the field teams and each individual fieldworker. Moreover, GeoSpace International was able to view the progress of fieldworkers, allocate and assign work, and manage the work schedules remotely.

Team leaders had limited access to the system, where they were able to view the progress and coverage within all the clusters assigned to their team members. This assisted the team leader with fieldwork scheduling and physical quality assurance.

Role-based access control was implemented whereby each user had a unique username and password for their associated roles. This controlled what and how the system was accessed by each user.

Management system and quality assurance

By implementing the main HQ system, data and workflow quality assurance procedures were already in place. The system was designed in such a way as to force a step-by-step QA workflow:

- Accuracy (have all the VPs/dwelling units (DUs) been visited within a reasonable distance?).
- Coverage (were all the VPs covered in a cluster and do all viable dwellings have an acceptable outcome?).
- Logical consistency (was the questionnaire completed accurately?).
- Individual fieldworker behavioural checks (specific interviewer outcome checks).

A detailed QA workflow can be found in section 4.

GPS, date and time stamps, and audit trail

The start and end time of each questionnaire completed (interview duration) was automatically logged and could not be edited in the field. GPS coordinates were also automatically captured at the beginning of the questionnaire, at certain sections within the questionnaire and again at the end of the questionnaire during questionnaire administration. The GPS coordinates contained the coordinates, date and time stamps which allowed for a detailed audit trail to be established.

Security

All applications used on the tablets were password protected. The file system and folders where data was stored, including any images that might have been captured, were password protected.

Respondents who consented to the confidential section completed it on their own. Once the self-complete section was finished, the questionnaire was saved, uploaded and then deleted from the tablet. This meant that the fieldworker was unable to open or access the self-completed questionnaire again.

3. IN-FIELD SAMPLING

Sampled VPs were provided by the GCRO for each ward. The VPs were randomly selected from a building-based land-use dataset on a multistage cluster random basis. The sample was distributed across the entire Gauteng province, with an interview required at each sampled VP within all 529 wards. In situations where the VP represented high-rise buildings, townhouse complexes and hostels and more than one interview was required at the VP, more than one point were spatially placed on top of one another. GeoSpace International merged these points into a single spatial point and updated the attribute to indicate the number of interviews required at each VP. The average number of primary sample points per cluster was four, with a minimum of 20 interviews required in each ward of the province.

Additional replacement clusters (secondary) and points (substitute VPs) were also sampled for instances where an interview could not be completed at the original sampled VP or where the required number of interviews per cluster could not be completed.

The secondary cluster and substitution VP contained a rank number that had to be followed according to the numerical order when selecting the next substitution point or secondary cluster.

In-field sampling of households as well as sampling of the respondent from the household roster was conducted using the HxGN M.App Enterprise application.

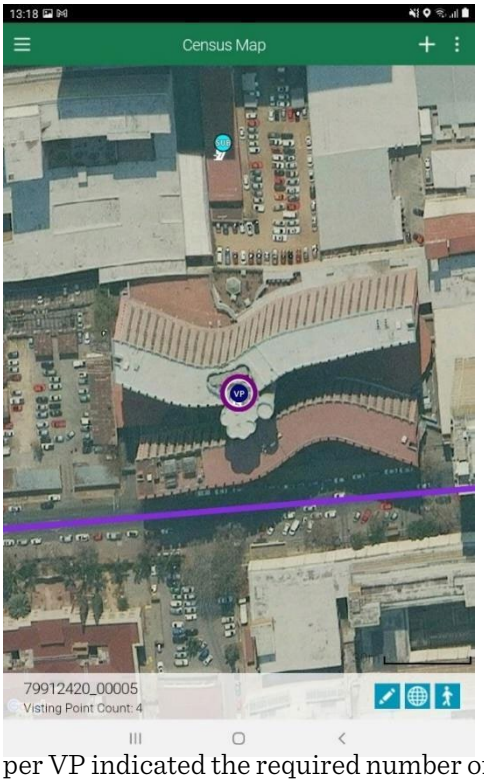
3.1 Process

QA managers assigned work to the fieldworkers and team leaders. VPs together with the relevant clusters, administration boundaries and digital aerial photography were downloaded to the device per work packet (cluster). Fieldworkers navigated to a selected cluster and VP with the aim of administering the GCRO QoL 7 (2023/24) questionnaire.

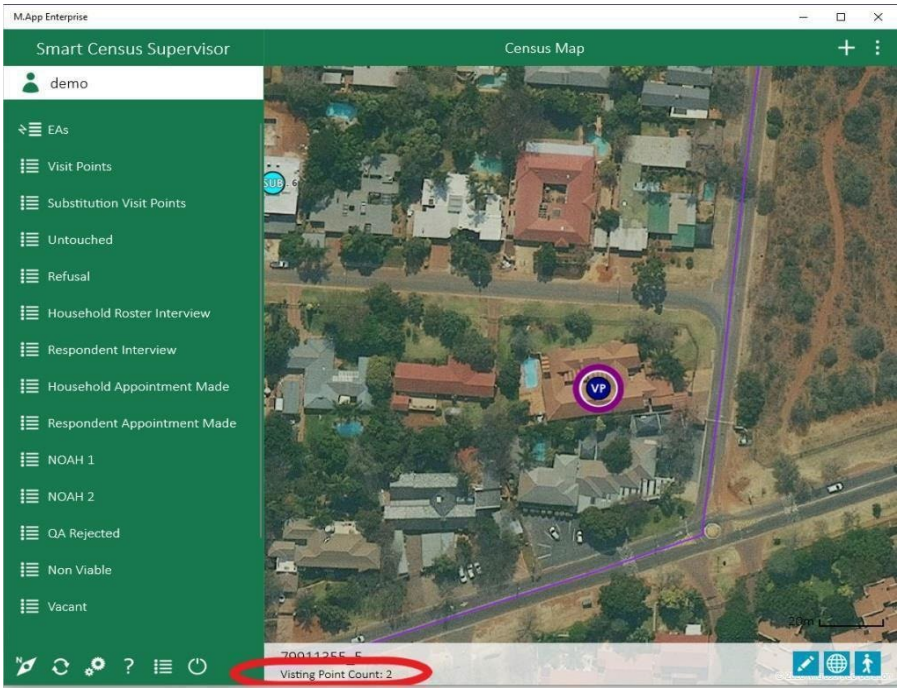
At each VP, a certain number of interviews were required. The HxGN M.App Enterprise system indicated the number of interviews that were required per VP. The sampled VP represented different building types. For example:

- Normal residential dwellings (formal and informal).
- Normal residential dwellings within a complex.
- Townhouses.
- Simplexes.
- Apartments/high-rise flats.
- Collective living quarters/hostels.

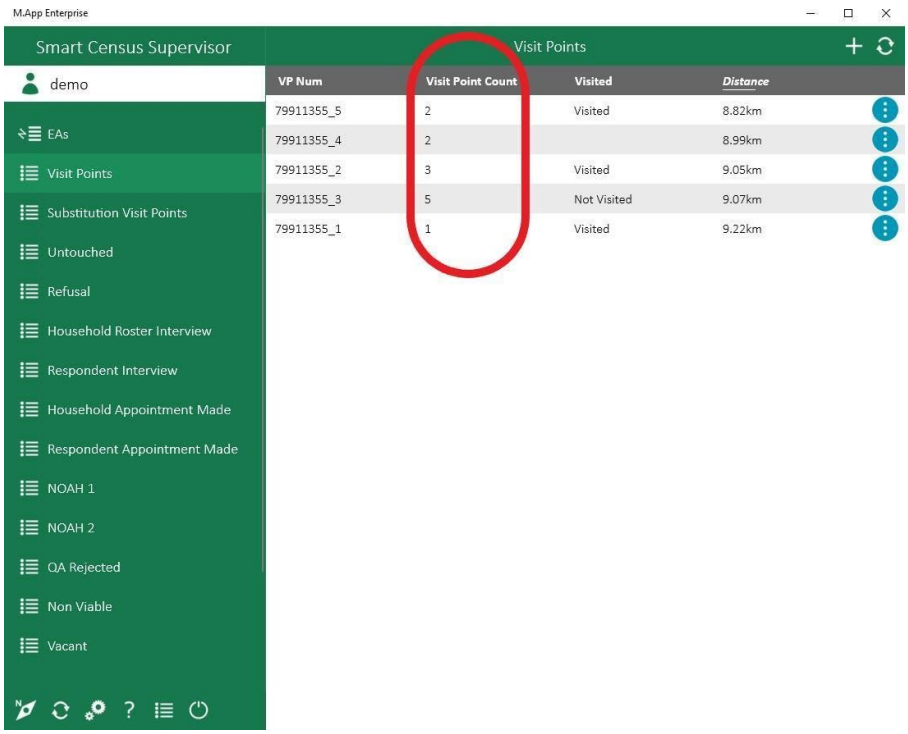
Each VP had a unique number within a cluster. These numbers were generated by concatenating the enumeration area (EA) code and a sequential number. In the example below, the VP number is 79912420_00005.



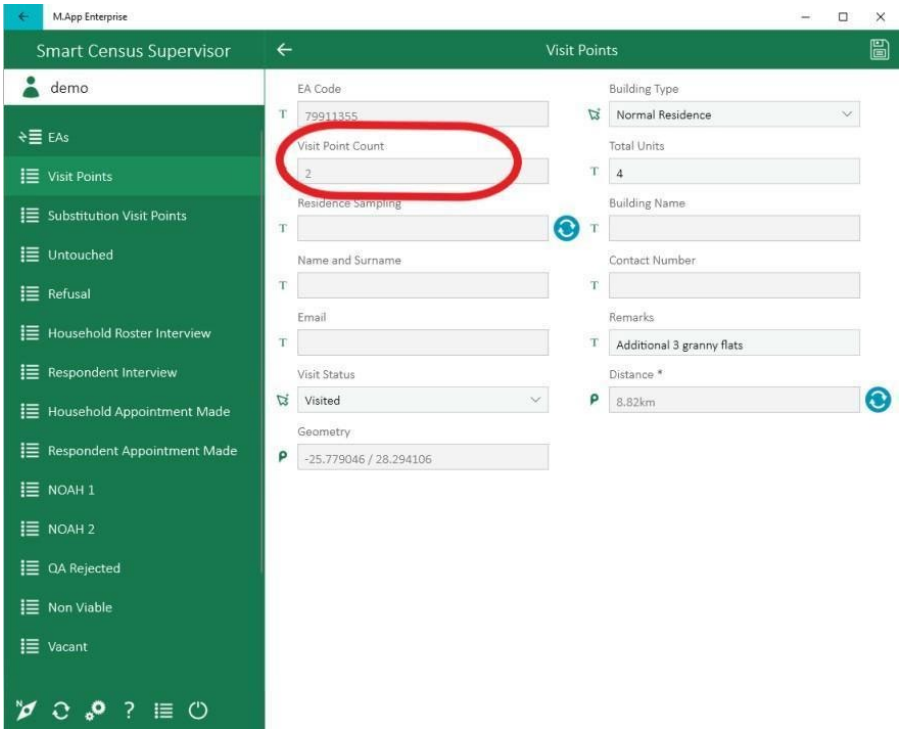
A visit point count (VP count) per VP indicated the required number of questionnaires that had to be completed at a particular point. In the example above, it is four. The required number of interviews per VP was also indicated on the HxGN Smart Census application's Map Window, Navigation Page and Visiting Point attribute boxes.



Map window



Navigation page



Visiting point attribute box

When a fieldworker navigated and arrived at a VP where more than one household was present, an in-field sampling exercise needed to be implemented before a questionnaire could be administered. Different sampling methodologies applied for different structures or building types:

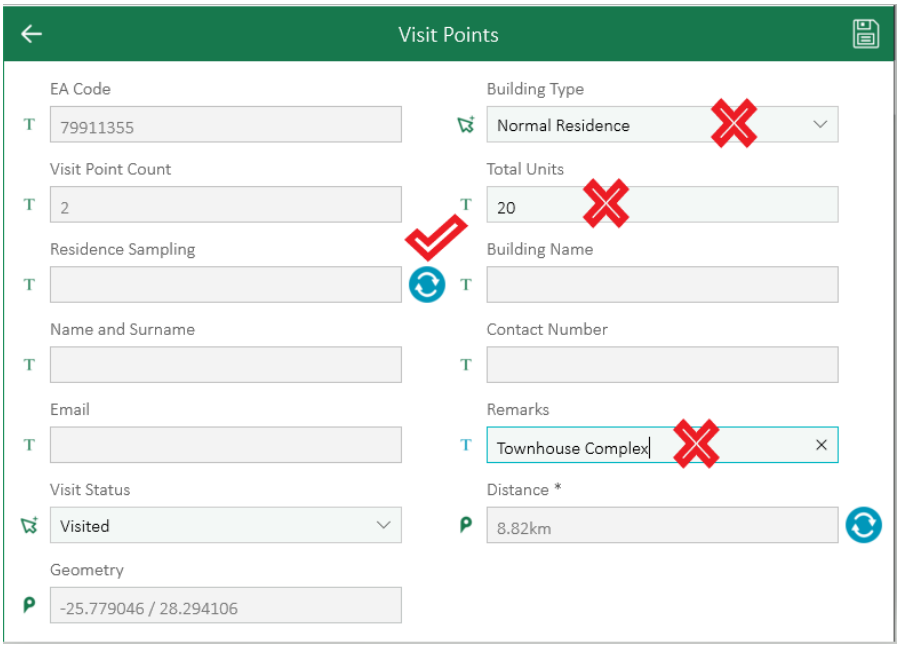
- Normal residence.
- Apartments (flats) / collective living quarters (hostels).

In certain cases, more than one interview needed to be completed per VP. This was indicated on the HxGN M.App Enterprise application's Map Window, Navigation Page and Visiting Point attribute form.

The following basic in-field sampling methodology was applied. When arriving at the VP, the edit button was used to open the VP attribute form and the building type was selected from the drop-down menu. Depending on which building type that was selected, the application guided the fieldworker through the next steps.

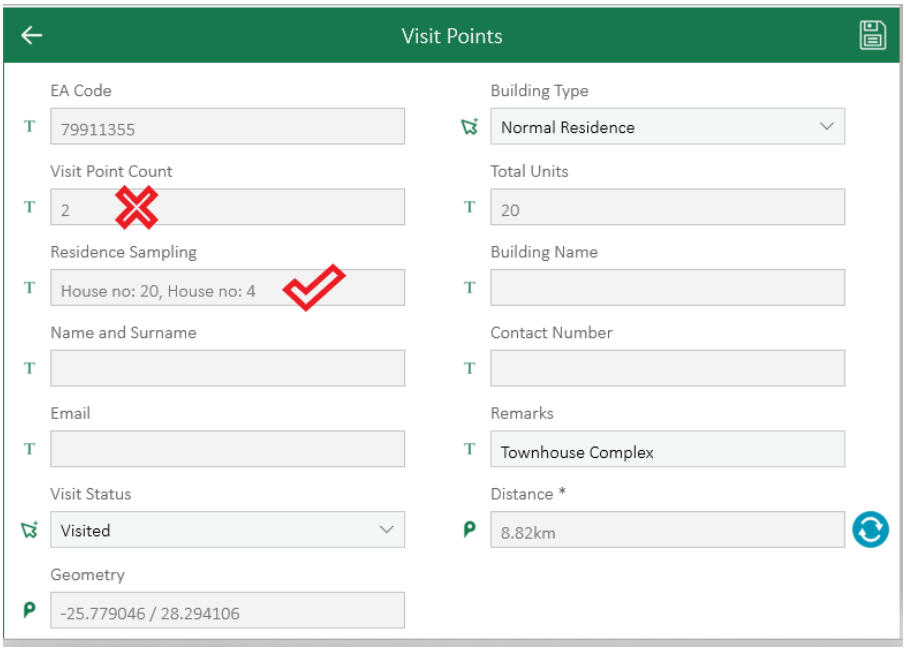
'Normal Residence' selection

Fieldworkers came across situations where VPs consisted of multiple households (i.e. back-yard dwellings, granny flats or townhouse complexes). In these instances, the Normal Residence was selected and the fieldworker had to capture the total number of units at the VP.



The system then randomly selected the unit(s) or house(s) that should be visited when the fieldworker selected the Residence Sampling button. Once the sample selection was made, the fieldworker was not allowed to navigate back and try to redo the sample selection.

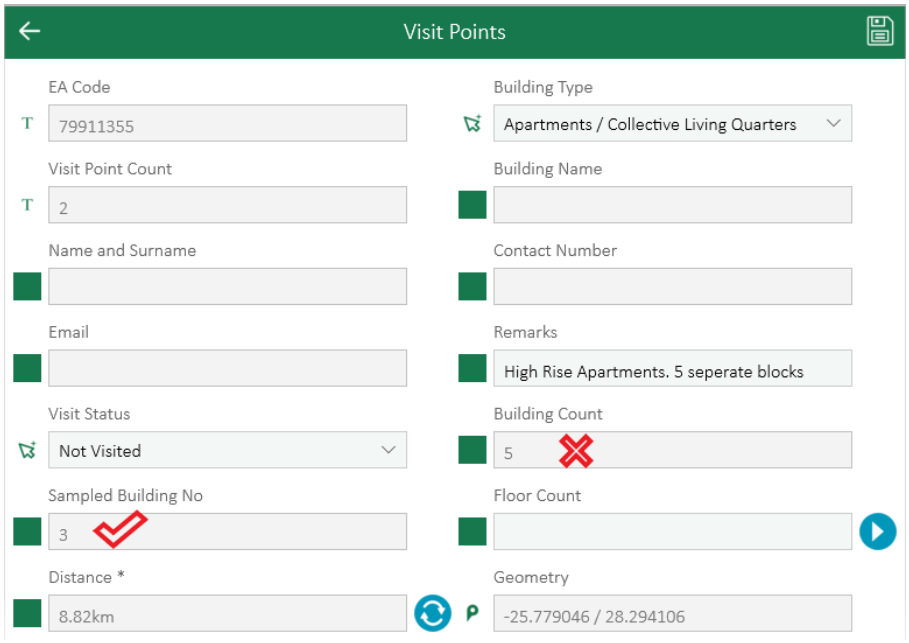
In the example below, the VP count was '2', therefore two interviews needed to be completed at that VP. House no. 20 and House no. 4 were randomly selected by the system.



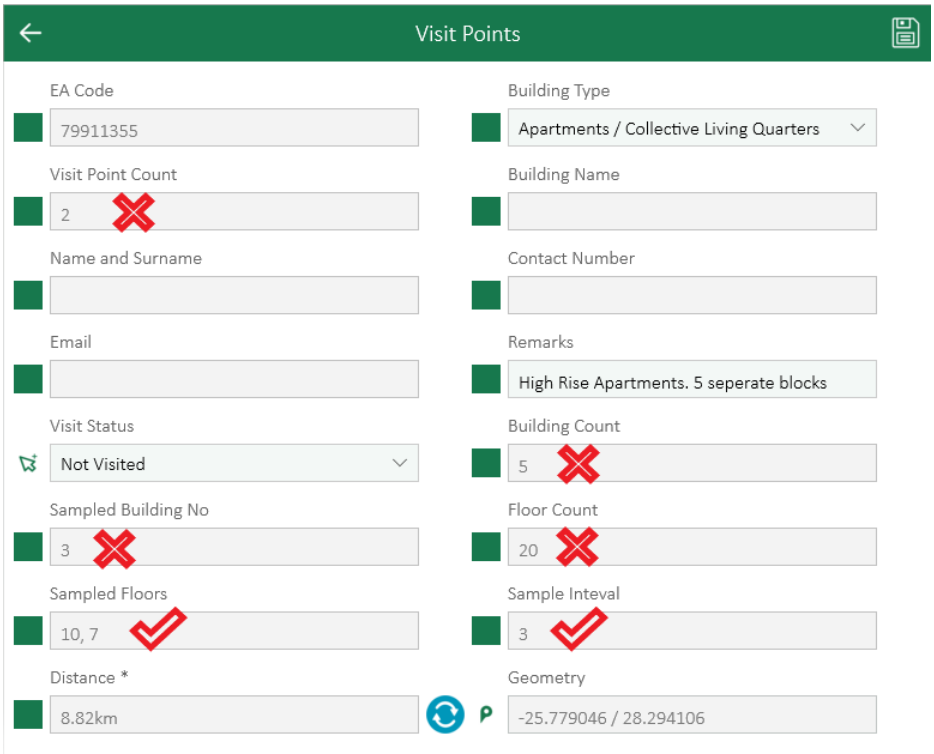
'Apartments / Collective Living Quarters' selection

Visiting points were also located at apartments or collective living quarters where there were more than one building, block or complex. In this instance, the methodology was slightly different in that the building count was first entered and the remarks field filled in. By selecting the Building Count button, the system randomly selected the building that needed to be visited.

In the example below, the sampled building that needed to be visited was Building no. 3 and the number of floors within Building no. 3 had to be entered. When the fieldworker selected the Floor Count button, the system randomly selected the floors that had to be visited and also provided a random interval number.



In the example below, the VP count was '2'. Floors 10 and 7 had been randomly selected by the system and an interval number 7 was also randomly allocated. The interval number meant that the fieldworker had to visit every seventh flat on floors 10 and 7.

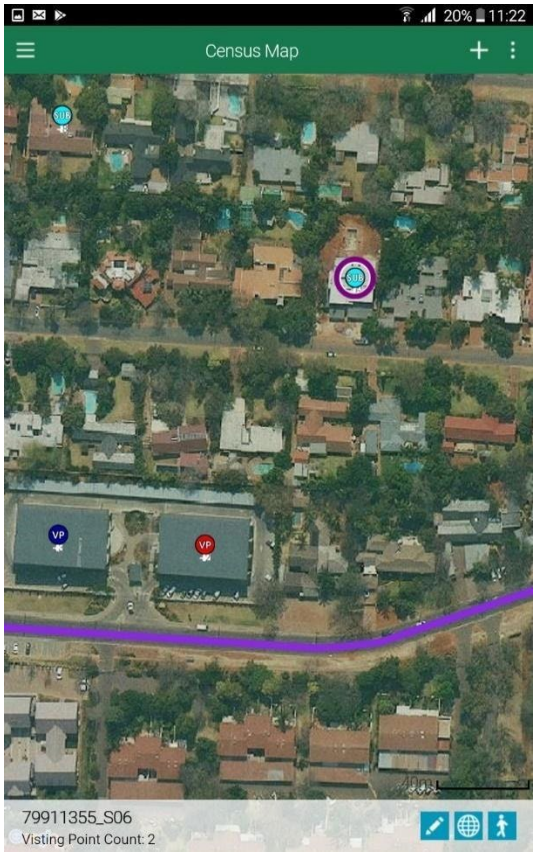


3.2 Substitution visiting point

Substitution VPs were also sampled for instances when an interview could not be completed at a primary VP. One of the following conditions had to be met before a substitution VP could be used to replace a primary VP:

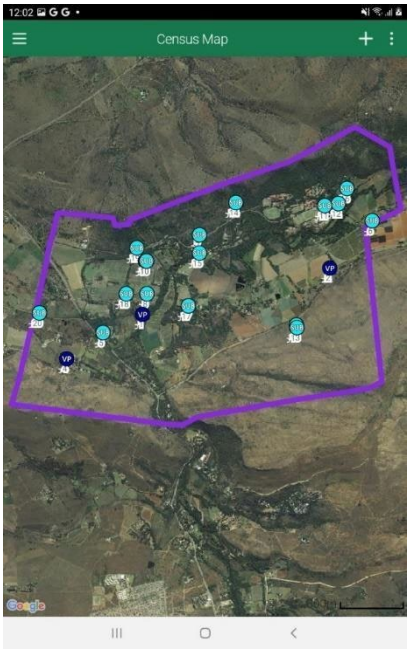
- Non-viable dwelling (i.e. child-headed household, industrial, commercial, etc.).
- Vacant.
- Refusal.
- HH roster refusal.
- No one at home (only after second visit).
- Questionnaire refusal.

The secondary cluster and substitution VP contained a rank number that had to be followed according to the numerical order when selecting the next substitution point or secondary cluster. A rank number was assigned to each VP. The rank number was used according to the numerical order when selecting the next substitution point. In the HxGN M.App Enterprise application, the substitution VPs had an 'S' in front of the unique number, for example 79911355_S06.



3.3 Alternative methodology for large farm clusters

In certain clusters, the distances between the substitution points were extremely long and it would not have made sense to follow the rank sequence going back and forth between these points. These clusters were typically small holdings or farms. The cluster names were tagged with a suffix of ' – Dist', indicating that a different methodology may be followed when substituting a VP. In this instance, the fieldworker did not need to follow the sequence of substitution VPs but could choose the closest substitution VP from the list.



4. QUALITY ASSURANCE AND CALLBACK PROCEDURES

The quality assurance (QA) procedures that were implemented can be divided into two main sections: HxGN M.App Enterprise QA activities and Kobo Toolbox QA activities. The following is a summary of the QA procedures that were implemented.

4.1 HxGN M.App Enterprise QA activities

Required no. of interviews per cluster

A query per cluster was implemented to check and verify that the total number of interviews required in a cluster were achieved.

Resolution

Fieldworkers were sent back to a cluster to finalise the assigned cluster. Where all the VPs and substitute VPs within the cluster were exhausted, a new cluster with VPs and substitute VPs was requested.

Substitute VPs

A query per cluster was implemented to query and confirm the appropriate use of substitute VPs. For each substitute VP, there would have been a second NOAH, roster refusal, questionnaire refusal, non-viable dwelling or vacant outcome at the original VP.

Substitute VPs 2

A query per VP was implemented on the visit record time stamp. Substitute VPs could not be captured before an acceptable outcome was achieved and recorded at the original VP. Where this was not achieved, the team leader was sent back to capture the original VP. Invalid substitute VP interviews were flagged but not deleted, and the fieldworker was reprimanded.

In some instances, a substitute VP was captured correctly but the HxGN M.App Enterprise server did not sync correctly with the mobile. In these cases, the correction was done on the HxGN M.App Enterprise Rich Client component and a note was added.

Locational accuracy

If a fieldworker completed an interview more than 50 meters (50m) from the original VP or substitute VP, a valid reason had to be provided. A query per VP was implemented to check if the interview had been conducted within 50m from the original VP/substitute VP. If the interview had been completed more than 50m away without a valid reason, the interview was flagged for a follow-up via a callback or physical revisit. If the location was correct, a note was made in the appropriate field and the QA field was updated. If the location was incorrect, but the interview was correct and it was established that it had been a normal fieldworker error (e.g. fieldworkers might not close the GPS point at the correct the location), a correction was made on the M.App Enterprise Rich Client component and the QA field was updated. Where applicable, the fieldworker was reprimanded, and if it was established that the fieldworker error had been deliberate, the fieldworker received a written warning.

Appointment

A query per VP was implemented to check if appointments were kept. The date and time of the appointment was checked against the date and time of the revisit. Fieldworkers were reprimanded if an appointment had not been kept or if they had been late for an appointment. Where this occurred, fieldworkers and team leaders received additional training.

4.2 HxGN M.App Enterprise and Kobo Toolbox QA activities

A query per interview was implemented to check that the Kobo questionnaire and the VP in the HxGN M.App Enterprise application were linked correctly with the UNIQUE ID. The link was manually corrected when a discrepancy was identified.

Roster information against the questionnaire

A query per interview was implemented to check the sampled household roster member against the questionnaire information. The query included a check that the gender and age information matched in both. If a discrepancy was identified, a callback or fieldworker revisit was initiated to correct the QA field.

4.3 Kobo Toolbox QA activities

GPS, date and time stamps, and audit trail

The start and end time and location of each questionnaire was automatically logged. Time and GPS location stamps were also captured at regular intervals within the questionnaire. These GPS stamps meant that an automatic GPS location was recorded without the knowledge of the fieldworker. If the device did not locate enough satellites to record an accurate GPS fix, data from the last valid GPS fix was used. Queries were implemented to confirm that the full interview had been conducted in the same location. Background GPS locations were taken in 'Balanced' mode, meaning block-level accuracy was maintained (~100 metres), to save battery life. GPS locations were taken in time-block periods of 120–240 seconds.

Time stamps were automatically logged throughout the questionnaire and were used to quality assure the questionnaire's duration. Minimum time limits (20 minutes) were set and automatic back-end checks were run on the database to identify questionnaires or question sections that had been completed suspiciously quickly, with QA managers doing the necessary follow-up.

The fieldworker was required to take at least one manual GPS coordinate as part of the questionnaire completion process. Where fieldworkers struggled with erratic GPS signals, they were required to provide an explanation in the comments field. Interviews with appropriate explanations were accepted.

Automatic checks were initiated to verify the distances between the automatic GPS location stamps taken and the manual GPS readings.

Interviewer comments

A query per interview was implemented to check if the interview and home languages matched. Fieldworkers were required to make notes if they were different. The QA team could approve interviews based on these notes or flag them for a callback.

Dwelling section

A query per interview was implemented to check question A3 (Which type of dwelling does this household occupy?) against Q1.3.1 (How is the dwelling owned?). This was done to ensure that fieldworkers did not capture both 'informal dwelling not in backyard' and 'free RDP house'. Any issues triggered a callback.

Dwelling

A query per interview was implemented to check Q1.2.7 (How many rooms does your household occupy?) against Q1.2.8 (How many households does this household share this room with?). If only one room was selected in Q1.2.7 and more than zero in Q1.2.8, the interview was flagged for a callback.

Transport

A query per interview was implemented to check Q5.5 (Last time you made this trip, how many minutes did it take you to reach your destination?) against Q5.6 (Last time you made this trip, what mode of transport did you use to cover the longest distance?). When the query identified an anomaly, the fieldworker was contacted and a callback was initiated to verify and correct this information.

Quick questionnaire

A query per interview was implemented to check the total duration of the questionnaire. All questionnaires under 20 minutes were flagged for additional checks. Questionnaires under 15 minutes were flagged for follow-up callbacks and revisits to try and establish the validity of the interview. Where contact with the original respondent was made and, based on the information received from the respondent, a decision was made to either QA-accept or QA-reject the interview. Interviews where follow-up contact could not be made were rejected.

Quick questionnaire with a travel status of going nowhere

A query per interview was implemented to check the total duration of the questionnaire and also when the fieldworkers selected 'going nowhere' in Q5.2.

Open text field and 'Other (specify)'

All open text fields where comments were made by the fieldworker were checked individually to ensure that only correct information was captured. QA corrections and follow-ups were made where necessary.

All fields where the option 'Other' was selected and which required a 'Specify' response were checked for accuracy and consistency, specifically to determine if the 'Other' option was indeed accurate and, depending on the response, to determine whether an existing drop-down or picklist option should have been selected. QA corrections were made where necessary.

Section 3 year checks

The years selected for Q3.4 (What year did you move into Gauteng?) and Q3.7 (In what year did you move into this neighbourhood?') were compared to ensure that the year captured in Q3.7 was not earlier than in Q3.4. QA callbacks and corrections were initiated where necessary.

Year moved to Gauteng

Question 3.4 (What year did you move into Gauteng?') was checked to ensure the year supplied was not before the respondent's birth date (Q14.2). QA s and corrections were initiated where necessary.

Health check

The following questions were checked for consistency in the captured data as well as during the actual data capturing in Kobo: Q13.6 (Would you describe the state of your own health in the past 4 weeks as = 'EXCELLENT') against Q13.7 (How often, if ever, does the state of your health prevent you from doing daily work? = 'ALWAYS') and Q13.8 (How often, if ever, does the state of your health prevent you from taking part in your usual social activities? = 'ALWAYS'). QA callbacks and corrections were initiated where necessary to confirm the consistency of the responses.

Water and dwelling

The following responses were checked for consistency in the captured data as well as during the data capturing in Kobo.

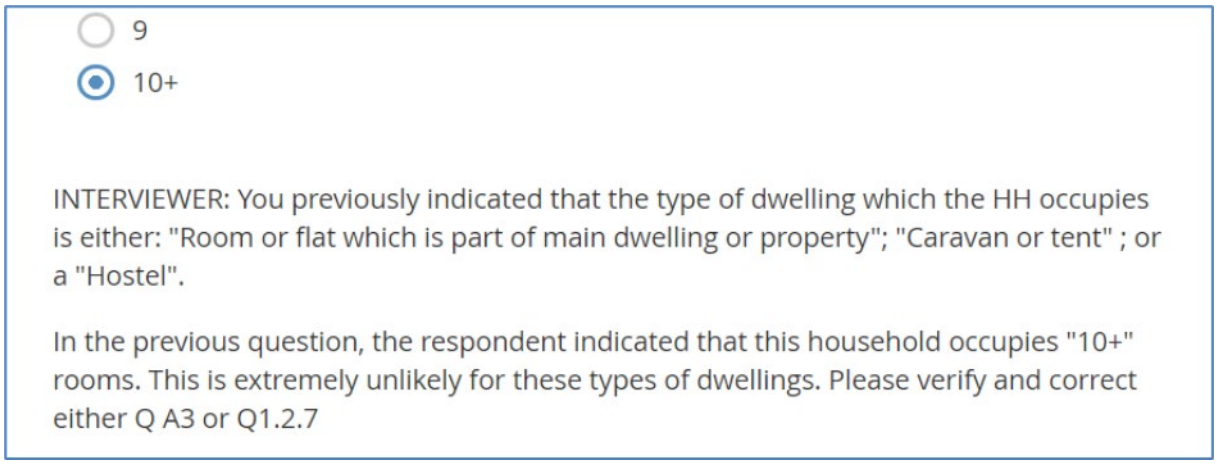
INTERVIEWER: You previously indicated that this household occupies one of the following dwelling types:

- House, brick or concrete structure on a separate stand.
- Flat or apartment in a block of flats.
- Cluster house in a complex.
- Townhouse (semi-detached house in a complex).
- Semi-detached house not in a complex.
- House, flat or room separate from main dwelling in backyard.
- Room or flat which is part of main dwelling or property.
- Unit in a retirement home or barracks, etc.
- Hostel.

INTERVIEWER: You just indicated that the household gets their water from one of the following two options: 'Flowing river or stream; Dam, pool or standing water'. This is very unusual. Please confirm that this is indeed the case. If it is, please acknowledge by ticking the confirmation box. If not, please correct either A3 (dwelling type) or 1.4. Make a comment if necessary.

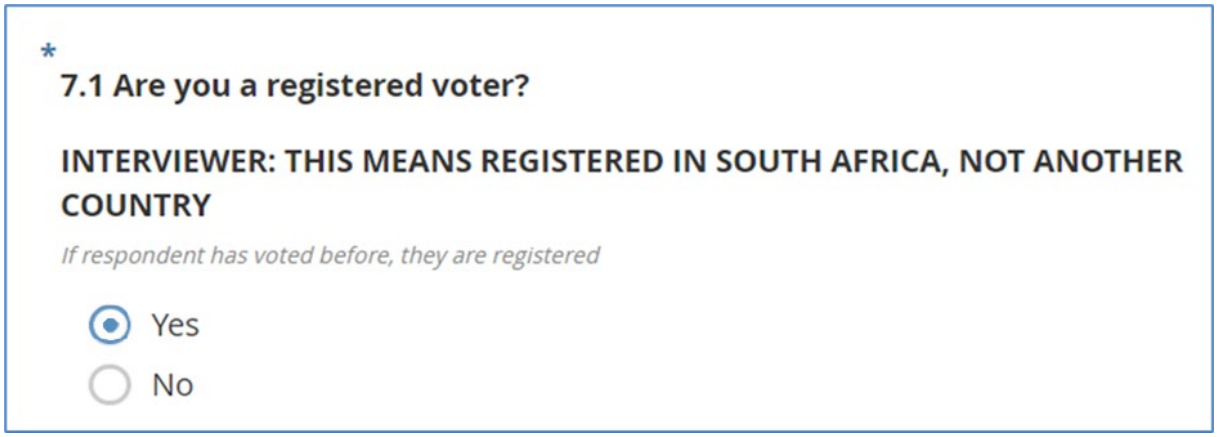
Households

The following checks were built into the CAPI questionnaire after Q1.2.7 (How many rooms does your household occupy? Excluding bathroom, toilet or kitchen.).



Voting

With respect to voting, the following checks were built into the CAPI questionnaire:



- (●) No ID
- ( ) Do not like politics, broken promises, waste of time
- ( ) Am not registered in my current voting district
- ( ) Not allowed to vote (not a citizen, etc)
- ( ) Will be out of the province or country
- ( ) Other (specify)

*

INTERVIEWER: The respondent previously indicated in Q3.1 that they were born outside South Africa. The respondent did indicate here that he/she is registered to vote (the person might be a naturalised citizen), but that they are not going to vote or are unsure about voting. Please make sure the person is actually a naturalised citizen, and did not misunderstand the registered voter question, thinking you might have asked whether they are registered in their country of birth.

IF THE RESPONDENT IS A NATURALISED CITIZEN, PLEASE ACKNOWLEDGE BY TICKING THE CONFIRMATION BOX.

IF NOT A NATURALISED CITIZEN, PLEASE CHOOSE " NO" UNDER QUESTION 7.1. THIS CHECK BOX WILL THEN NOT REAPPEAR.

- ( ) OK

***7.3 Why do you plan not to vote, or are unsure?**

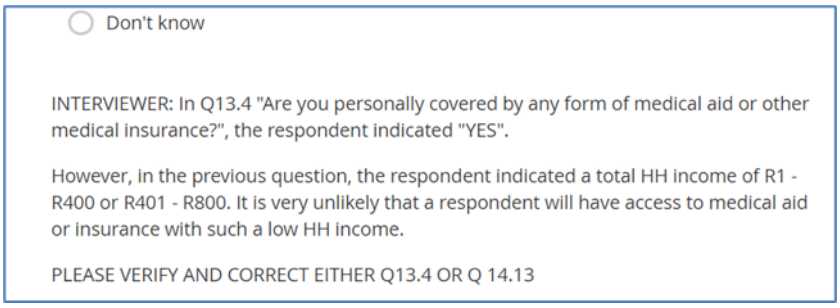
Do not read out

- ( ) Do not know who to vote for
- ( ) Do not think his/her vote will make any difference
- ( ) Do not care
- ( ) No ID
- ( ) Do not like politics, broken promises, waste of time
- ( ) Am not registered in my current voting district
- (●) Not allowed to vote (not a citizen, etc)
- ( ) Will be out of the province or country
- ( ) Other (specify)

INTERVIEWER: The respondent previously indicated in Q3.1 that they were born in a province in South Africa, however, now indicated that the reason they do not plan to vote, is because they are not allowed to vote due to not being a citizen. Both of these statements cannot be true at the same time. Please verify and correct either Q3.1 or Q7.3

Medical insurance and household income

The following checks were built into the CAPI questionnaire with respect to medical insurance and household income.



4.4 Callback activities

As part of the contract and to ensure an additional fieldwork QA level throughout the survey, callbacks were instituted for a minimum of 25% of the QA-approved interviews. Callbacks were also implemented whenever an interview was flagged by the QA personnel. By the end, a total of 4 013 successful callbacks had been made.

4.5 Recodes

The questionnaire contained a number of open-ended questions (those that included 'Other (specify)' that had to be recoded. The question topic and number of interviews that had to be recoded are provided in the table below.

Question	Total
Occupation major	13 795
Occupation sub-major	13 795
Dwelling type	13
Arrears	30
Previous neighbourhood	54
Reason moved	109
Biggest problem	41
Frequent trip	52
Not voting	22
Community participation	41
Reason protest	55
Petitioning	30
Healthcare	13
Household	52
Race	7

5. FIELDWORK IMPLEMENTATION TIMELINE

5.1 Training and pilot

Training for the pilot commenced on 21 August 2023 and continued for six days. Ninety-six (96) fieldworkers were trained in total, and the QA and fieldwork managers were also part of the training. The fieldwork for the pilot project started on 28 August 2023 and was completed on 01 September 2023. A variety of areas with different characteristics were selected near the training site in central Pretoria to conduct the pilot interviews. One hundred and seven (107) successful interviews were conducted as part of the pilot project, and these interviews were included in the final dataset after rigorous checking. All aspects of the fieldwork exercise (i.e. QA, questionnaire translations and questionnaire administration) were tested during the pilot.

All the personnel involved in the pilot assembled on 01 September 2023 for a pilot debrief to discuss lessons learned and to provide recommendations and changes to the questionnaire and/or systems before the main training and fieldwork commenced.

5.2 Main training and fieldwork

A refresher training session took place on 08 September 2023 to implement any changes to the questionnaire and the lessons learned during the pilot.

Actual fieldwork commenced on 11 September 2023. A holiday break was implemented from 20 December 2023 to 08 January 2024 and field data collection was completed on 19 April 2024.

A total of 13 881 interviews were completed, of which 13 795 were approved by the QA teams. In total, 28 159 visit attempts were made to primary and substitute VPs (49.3% success rate). Valid attempts constituted valid interviews, roster refusals, respondent refusals, questionnaire refusals, non-viable dwellings, NOAH and access refusals.

A minimum of at least 20 successful QA-approved interviews per ward was realised in all of the wards. A list of the number of interviews per ward can be found in Annexure B.

6. CHALLENGES

Numerous challenges emerged during the QoL 7 (2023/24) fieldwork, and these are summarised below.

6.1 Safety and security problems

The safety and security of our fieldworkers was paramount. Unfortunately, in certain areas such as Soshanguve and Winterveld, we initially had to withdraw our field teams due to safety concerns. When it was safe to return, police and security escorts were arranged to accompany field teams where possible, and the safety situation on the ground was re-evaluated on a daily basis. The police, local security companies and ward councillors assisted us in making informed decisions as to when to return to the field to conduct the interviews. All the interviews in these areas were successfully finalised.

6.2 Access problems

Information sessions and meetings with local leaders were always performed before entering an area. The fieldwork teams experienced resistance from local leaders and ward councillors in the Lesedi Local Municipality and were refused access to certain wards. Additional meetings, together with the Lesedi municipal manager, were held with the ward councillors to again explain the purpose of the survey and gain access. All the interviews in these areas were successfully finalised.

6.3 Respondent refusals

In some instances, respondents were reluctant to allow fieldworkers into their homes. Whenever possible, fieldworkers were encouraged to conduct the interviews outside.

6.4 Security complexes and substitutes

Access to security complexes and estates is always a problem. The VPs in these estates had been substituted, and in certain cases a whole cluster had to be substituted.

6.5 Cluster and ward progress

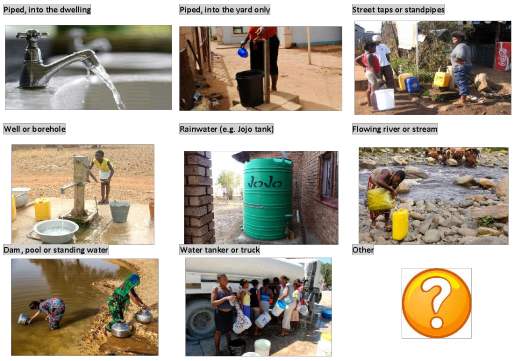
Unfortunately, the nature of a project such as this means that fieldworkers will work in the same area at a given time. This was especially evident when areas were finished off. Therefore, additional interviews were captured in certain clusters and wards. Although this is not a 'loss', since these interviews are part of the final dataset, it did put additional strain on the fieldworkers to finish on time.

References

Naidoo, L., Hamann, C. and Naidoo, Y. (2024). *Sampling report: GCRO Quality of Life Survey 7 (2023/24).* Johannesburg: Gauteng City-Region Observatory. https://doi.org/10.36634/EOSA3096

ANNEXURE A: Show cards

Showcard A – Used for question 1.4



A

Showcard B – Used for question 1.8

1. Always
2. Usually
3. Sometimes
4. Hardly ever
5. Never

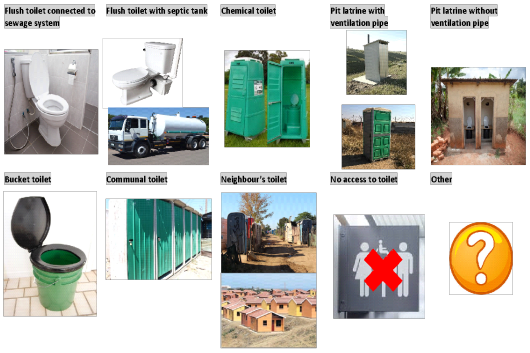
B

Showcard C – Used for question 1.9 and 5.12

1. Most days
2. At least once a week
3. A couple of times a month
4. Once a month
5. A couple of times a year
6. Never

C

Showcard D – Used for question 1.10



D

Showcard E – Used for question 1.12

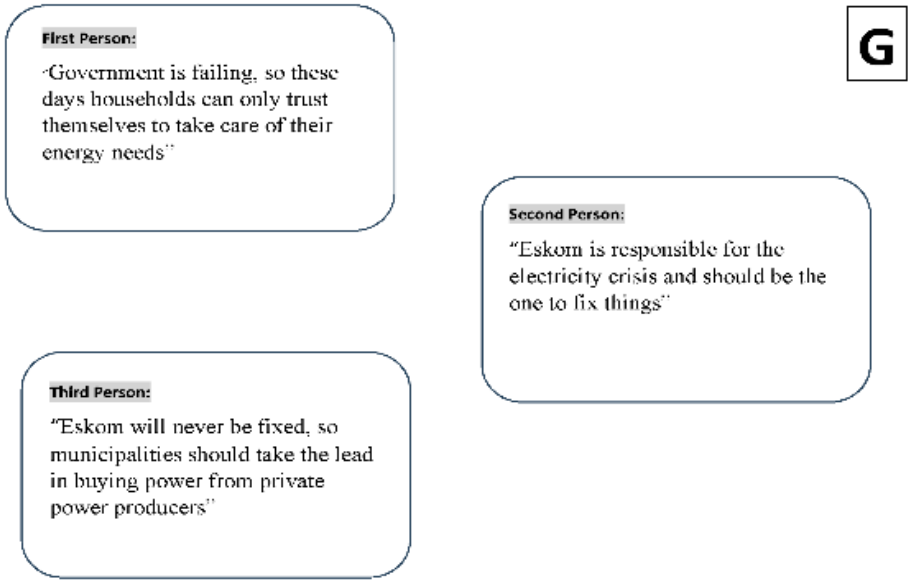
E

Showcard F – Used for question 1.12a

1. Within the last 6 months
2. 6-12 months ago
3. 1 year ago
4. 2-5 years ago
5. More than 5 years ago
6. System already installed when moved in

F

Showcard G – Used for question 1.13g



Showcard H – Used for question 1.13a

H

1. Significant impact
2. Moderate impact
3. Very limited impact
4. No impact at all
5. Not applicable, no scholars or students in household

Showcard I – Used for question 1.13b and 1.13d

I

1. Significant impact
2. Moderate impact
3. Very limited impact
4. No impact at all

Showcard J – Used for question 1.13c

J

1. Significant impact
2. Moderate impact
3. Very limited impact
4. No impact at all
5. Not applicable, this household hasn't previously used electricity for cooking here

Showcard K – Used for question 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.11, 2.12, 7.4, 7.5, 7.6, 7.14, 9.2, 9.3, 9.5, 9.6, 9.7, 9.8, 9.9, 10.9, 11.6

K

1. Very satisfied
2. Satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied

Showcard L – Used for question 2.7

L

1. Very satisfied
2. Satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied
6. I do not get a bill for municipal services

Showcard M – Used for question 2.9, 2.10 and 2.13

M

1. Very satisfied
2. Satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied
6. There are none

Showcard N – Used for question 3.9a

N

1. No
2. Yes, to another city
3. Yes, to another province
4. Yes, to another country

Showcard O – Used for question 6.1a, 7.15, 7.16, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8, 8.9, 8.10, 8.11, 8.16, 8.17, 8.18, 8.19, 8.20, 8.23, 9.10, 9.11, 9.12, 9.13, 9.17, 9.18, 9.19, 9.20

O

1. Strongly agree
2. Agree
3. Neither agree nor disagree
4. Disagree
5. Strongly disagree

Showcard P – Used for question 7.7

P

1. Very satisfied
2. Satisfied
3. Neither satisfied nor dissatisfied
4. Dissatisfied
5. Very dissatisfied
6. Don't know who my councillor is

Showcard Q – Used for question 7.11

Q

1. Strongly trust
2. Trust
3. Neither trust nor distrust
4. Distrust
5. Strongly distrust

Showcard R – Used for question 8.12

R

First Person:

"Gauteng should be for South Africans only. They must send the foreigners back to their countries."

Second Person:

"A lot of foreigners came to work in South Africa for poor wages under apartheid. We all suffered under the same system. They should be allowed to stay."

Third Person:

"Foreign people living in Gauteng are alright, but only if they have legal permission from the government."

Showcard S – Used for question 8.15

S

1. Always
2. Often
3. Sometimes
4. Not at all
5. Do not know

Showcard T – Used for question 8.15a

1. Easier **T**
2. No change
3. Harder
4. Don't know

Showcard U – Used for question 9.14 and 9.15

1. Very Easy **U**
2. Easy
3. Difficult
4. Impossible

Showcard V – Used for question 9.16

1. All are **V**
2. Most are
3. Some are
4. None are

Showcard W – Used for question 10.5a

W

1. Less than a month
2. 1 month to less than 6 months
3. 6 months to less than 1 year
4. 1 year to less than 3 years
5. 3 years or more
6. Never worked before
7. Don't know

Showcard X – Used for question 11.3, 11.4 and 11.5

X

1. Very safe
2. Fairly safe
3. Neither safe nor unsafe
4. Bit unsafe
5. Very unsafe

Showcard Y – Used for question 13.7 and 13.8

Y

1. Always
2. Some of the time
3. Hardly ever
4. Never

Showcard Z – Used for question 13.9 and 13.10

1. Not at all **Z**
2. A few days
3. More than half the days
4. Nearly every day

Showcard AA – Used for question 3.11

0. No **AA**
1. Yes, in the past 12 months
2. Yes, prior to 12 months

Showcard AB – Used for question 13.26

1. Yes, up to date **AB**
2. Not sure
3. No – I don't want my children to have vaccines
4. No – But I intend to get up to date
5. I am not responsible for children

Showcard AC – Used for question 14.13

AC

1. Nuclear family (mother, father, children - biological, step, foster & adopted, living together)
2. Nuclear family (same-sex parents with children)
3. Single-person household / only me
4. Couple/partners living together but no children
5. Extended family (grandparents, grandchildren, other family members living here)
6. Split family (parent or parents living elsewhere)
7. Empty nesters (Children have left the household)
8. Skipped generation (grandparents and grandchildren only)
9. Single-parent family (single parent and child/children)
10. Stay with people outside of my family, such as friends
11. Stay with siblings
12. Other

Showcard AD – Used for question 15.3

AD

1. R1 - R400
2. R401 - R800
3. R801 - R1 600
4. R1 601 - R3 200
5. R3 201 - R6 400
6. R6 401 - R12 800
7. R12 801 - R19 200
8. R19 201 - R25 600
9. R25 601 - R38 400
10. R38 401 - R51 200
11. R51 201 - R76 800
12. R76 801 - R102 400
13. R102 401 - R153 600
14. R153 601 - R204 800
15. R204 801 - R500 000
16. More than R500 000
17. No income
18. Prefer not to answer
19. Don't know

ANNEXURE B: List of QA-approved and required interviews per ward

Wards with a higher number of QA-approved interviews than the required number of interviews are highlighted in light green. Oversampling was conducted in a few wards where Coloured and Indian respondents were thought to reside in order to prevent an underrepresentation of these population groups (Naidoo et al., 2024).

Municipality	Ward code	Interviews required	Interviews completed
City of Johannesburg	79800001	28	28
City of Johannesburg	79800002	28	28
City of Johannesburg	79800003	28	28
City of Johannesburg	79800004	28	28
City of Johannesburg	79800005	28	28
City of Johannesburg	79800006	28	28
City of Johannesburg	79800007	38	38
City of Johannesburg	79800008	28	29
City of Johannesburg	79800009	38	40
City of Johannesburg	79800010	38	38
City of Johannesburg	79800011	28	28
City of Johannesburg	79800012	28	28
City of Johannesburg	79800013	28	28
City of Johannesburg	79800014	28	28
City of Johannesburg	79800015	28	28
City of Johannesburg	79800016	28	28
City of Johannesburg	79800017	38	41
City of Johannesburg	79800018	38	41
City of Johannesburg	79800019	28	28
City of Johannesburg	79800020	28	28
City of Johannesburg	79800021	28	28
City of Johannesburg	79800022	28	28
City of Johannesburg	79800023	28	30
City of Johannesburg	79800024	28	28
City of Johannesburg	79800025	28	28
City of Johannesburg	79800026	28	28
City of Johannesburg	79800027	28	28
City of Johannesburg	79800028	28	28
City of Johannesburg	79800029	28	28
City of Johannesburg	79800030	28	28
City of Johannesburg	79800031	28	28
City of Johannesburg	79800032	28	28
City of Johannesburg	79800033	28	28
City of Johannesburg	79800034	28	29
City of Johannesburg	79800035	28	28
City of Johannesburg	79800036	28	28
City of Johannesburg	79800037	28	29

Municipality	Ward code	Interviews required	Interviews completed
City of Johannesburg	79800038	28	28
City of Johannesburg	79800039	28	28
City of Johannesburg	79800040	28	28
City of Johannesburg	79800041	28	28
City of Johannesburg	79800042	28	28
City of Johannesburg	79800043	28	28
City of Johannesburg	79800044	28	28
City of Johannesburg	79800045	28	28
City of Johannesburg	79800046	28	28
City of Johannesburg	79800047	28	28
City of Johannesburg	79800048	28	28
City of Johannesburg	79800049	28	28
City of Johannesburg	79800050	28	28
City of Johannesburg	79800051	28	28
City of Johannesburg	79800052	28	28
City of Johannesburg	79800053	28	28
City of Johannesburg	79800054	28	28
City of Johannesburg	79800055	28	28
City of Johannesburg	79800056	28	28
City of Johannesburg	79800057	38	44
City of Johannesburg	79800058	38	41
City of Johannesburg	79800059	28	28
City of Johannesburg	79800060	28	28
City of Johannesburg	79800061	28	28
City of Johannesburg	79800062	28	28
City of Johannesburg	79800063	28	28
City of Johannesburg	79800064	28	28
City of Johannesburg	79800065	28	28
City of Johannesburg	79800066	24	24
City of Johannesburg	79800067	28	28
City of Johannesburg	79800068	38	38
City of Johannesburg	79800069	38	41
City of Johannesburg	79800070	28	28
City of Johannesburg	79800071	28	28
City of Johannesburg	79800072	28	29
City of Johannesburg	79800073	28	29
City of Johannesburg	79800074	28	28
City of Johannesburg	79800075	28	28
City of Johannesburg	79800076	28	28
City of Johannesburg	79800077	28	28
City of Johannesburg	79800078	28	28
City of Johannesburg	79800079	28	28
City of Johannesburg	79800080	28	28

Municipality	Ward code	Interviews required	Interviews completed
City of Johannesburg	79800081	28	28
City of Johannesburg	79800082	38	38
City of Johannesburg	79800083	28	28
City of Johannesburg	79800084	28	28
City of Johannesburg	79800085	28	28
City of Johannesburg	79800086	28	28
City of Johannesburg	79800087	28	29
City of Johannesburg	79800088	28	28
City of Johannesburg	79800089	28	28
City of Johannesburg	79800090	28	28
City of Johannesburg	79800091	28	29
City of Johannesburg	79800092	28	28
City of Johannesburg	79800093	28	28
City of Johannesburg	79800094	28	28
City of Johannesburg	79800095	28	28
City of Johannesburg	79800096	28	28
City of Johannesburg	79800097	28	29
City of Johannesburg	79800098	28	28
City of Johannesburg	79800099	28	28
City of Johannesburg	79800100	28	28
City of Johannesburg	79800101	28	36
City of Johannesburg	79800102	28	28
City of Johannesburg	79800103	28	31
City of Johannesburg	79800104	28	32
City of Johannesburg	79800105	28	28
City of Johannesburg	79800106	28	28
City of Johannesburg	79800107	28	28
City of Johannesburg	79800108	28	28
City of Johannesburg	79800109	28	29
City of Johannesburg	79800110	28	28
City of Johannesburg	79800111	28	29
City of Johannesburg	79800112	28	28
City of Johannesburg	79800113	28	28
City of Johannesburg	79800114	28	28
City of Johannesburg	79800115	28	28
City of Johannesburg	79800116	28	28
City of Johannesburg	79800117	28	28
City of Johannesburg	79800118	28	28
City of Johannesburg	79800119	28	28
City of Johannesburg	79800120	28	28
City of Johannesburg	79800121	38	42
City of Johannesburg	79800122	28	28
City of Johannesburg	79800123	28	29

Municipality	Ward code	Interviews required	Interviews completed
City of Johannesburg	79800124	28	28
City of Johannesburg	79800125	28	28
City of Johannesburg	79800126	28	29
City of Johannesburg	79800127	28	28
City of Johannesburg	79800128	28	28
City of Johannesburg	79800129	28	28
City of Johannesburg	79800130	28	28
City of Johannesburg	79800131	28	28
City of Johannesburg	79800132	28	29
City of Johannesburg	79800133	28	28
City of Johannesburg	79800134	28	30
City of Johannesburg	79800135	28	28
City of Tshwane	79900001	24	24
City of Tshwane	79900002	24	24
City of Tshwane	79900003	24	24
City of Tshwane	79900004	24	24
City of Tshwane	79900005	33	35
City of Tshwane	79900006	24	24
City of Tshwane	79900007	24	24
City of Tshwane	79900008	24	24
City of Tshwane	79900009	24	24
City of Tshwane	79900010	24	24
City of Tshwane	79900011	24	24
City of Tshwane	79900012	24	24
City of Tshwane	79900013	24	24
City of Tshwane	79900014	24	24
City of Tshwane	79900015	24	24
City of Tshwane	79900016	24	24
City of Tshwane	79900017	24	24
City of Tshwane	79900018	24	24
City of Tshwane	79900019	24	24
City of Tshwane	79900020	24	24
City of Tshwane	79900021	24	24
City of Tshwane	79900022	24	24
City of Tshwane	79900023	24	24
City of Tshwane	79900024	24	24
City of Tshwane	79900025	24	24
City of Tshwane	79900026	24	24
City of Tshwane	79900027	24	24
City of Tshwane	79900028	24	24
City of Tshwane	79900029	24	24
City of Tshwane	79900030	24	24
City of Tshwane	79900031	24	24

Municipality	Ward code	Interviews required	Interviews completed
City of Tshwane	79900032	24	24
City of Tshwane	79900033	24	24
City of Tshwane	79900034	24	24
City of Tshwane	79900035	24	24
City of Tshwane	79900036	24	24
City of Tshwane	79900037	24	24
City of Tshwane	79900038	24	24
City of Tshwane	79900039	24	24
City of Tshwane	79900040	24	24
City of Tshwane	79900041	24	24
City of Tshwane	79900042	24	24
City of Tshwane	79900043	25	26
City of Tshwane	79900044	24	24
City of Tshwane	79900045	24	24
City of Tshwane	79900046	24	24
City of Tshwane	79900047	24	26
City of Tshwane	79900048	24	24
City of Tshwane	79900049	24	24
City of Tshwane	79900050	24	26
City of Tshwane	79900051	24	24
City of Tshwane	79900052	24	25
City of Tshwane	79900053	24	24
City of Tshwane	79900054	24	24
City of Tshwane	79900055	24	24
City of Tshwane	79900056	24	26
City of Tshwane	79900057	24	24
City of Tshwane	79900058	24	25
City of Tshwane	79900059	24	24
City of Tshwane	79900060	24	24
City of Tshwane	79900061	34	66
City of Tshwane	79900062	24	24
City of Tshwane	79900063	24	24
City of Tshwane	79900064	24	24
City of Tshwane	79900065	24	24
City of Tshwane	79900066	24	24
City of Tshwane	79900067	24	24
City of Tshwane	79900068	24	24
City of Tshwane	79900069	24	24
City of Tshwane	79900070	24	24
City of Tshwane	79900071	24	24
City of Tshwane	79900072	24	24
City of Tshwane	79900073	24	24
City of Tshwane	79900074	24	24

Municipality	Ward code	Interviews required	Interviews completed
City of Tshwane	79900075	24	24
City of Tshwane	79900076	24	24
City of Tshwane	79900077	24	24
City of Tshwane	79900078	24	24
City of Tshwane	79900079	24	24
City of Tshwane	79900080	24	24
City of Tshwane	79900081	24	25
City of Tshwane	79900082	24	24
City of Tshwane	79900083	24	24
City of Tshwane	79900084	24	24
City of Tshwane	79900085	24	24
City of Tshwane	79900086	24	25
City of Tshwane	79900087	24	25
City of Tshwane	79900088	24	24
City of Tshwane	79900089	24	24
City of Tshwane	79900090	24	24
City of Tshwane	79900091	24	24
City of Tshwane	79900092	24	24
City of Tshwane	79900093	24	24
City of Tshwane	79900094	24	24
City of Tshwane	79900095	24	24
City of Tshwane	79900096	24	24
City of Tshwane	79900097	24	24
City of Tshwane	79900098	24	26
City of Tshwane	79900099	24	24
City of Tshwane	79900100	24	24
City of Tshwane	79900101	24	25
City of Tshwane	79900102	24	24
City of Tshwane	79900103	24	24
City of Tshwane	79900104	24	24
City of Tshwane	79900105	24	24
City of Tshwane	79900106	24	24
City of Tshwane	79900107	24	24
City of Ekurhuleni	79700001	24	24
City of Ekurhuleni	79700002	24	24
City of Ekurhuleni	79700003	24	24
City of Ekurhuleni	79700004	24	24
City of Ekurhuleni	79700005	24	24
City of Ekurhuleni	79700006	24	24
City of Ekurhuleni	79700007	24	24
City of Ekurhuleni	79700008	24	24
City of Ekurhuleni	79700009	24	24
City of Ekurhuleni	79700010	24	24

Municipality	Ward code	Interviews required	Interviews completed
City of Ekurhuleni	79700011	24	24
City of Ekurhuleni	79700012	24	24
City of Ekurhuleni	79700013	24	24
City of Ekurhuleni	79700014	24	24
City of Ekurhuleni	79700015	24	24
City of Ekurhuleni	79700016	24	24
City of Ekurhuleni	79700017	24	24
City of Ekurhuleni	79700018	24	24
City of Ekurhuleni	79700019	24	24
City of Ekurhuleni	79700020	24	24
City of Ekurhuleni	79700021	24	24
City of Ekurhuleni	79700022	24	25
City of Ekurhuleni	79700023	24	24
City of Ekurhuleni	79700024	24	24
City of Ekurhuleni	79700025	24	25
City of Ekurhuleni	79700026	24	24
City of Ekurhuleni	79700027	24	24
City of Ekurhuleni	79700028	24	24
City of Ekurhuleni	79700029	24	24
City of Ekurhuleni	79700030	24	24
City of Ekurhuleni	79700031	24	24
City of Ekurhuleni	79700032	24	24
City of Ekurhuleni	79700033	24	24
City of Ekurhuleni	79700034	34	35
City of Ekurhuleni	79700035	24	25
City of Ekurhuleni	79700036	24	24
City of Ekurhuleni	79700037	24	24
City of Ekurhuleni	79700038	24	24
City of Ekurhuleni	79700039	24	24
City of Ekurhuleni	79700040	24	24
City of Ekurhuleni	79700041	24	24
City of Ekurhuleni	79700042	24	24
City of Ekurhuleni	79700043	24	24
City of Ekurhuleni	79700044	24	24
City of Ekurhuleni	79700045	24	24
City of Ekurhuleni	79700046	24	24
City of Ekurhuleni	79700047	24	24
City of Ekurhuleni	79700048	24	24
City of Ekurhuleni	79700049	24	24
City of Ekurhuleni	79700050	24	24
City of Ekurhuleni	79700051	24	24
City of Ekurhuleni	79700052	24	24
City of Ekurhuleni	79700053	24	24

Municipality	Ward code	Interviews required	Interviews completed
City of Ekurhuleni	79700054	24	24
City of Ekurhuleni	79700055	24	24
City of Ekurhuleni	79700056	24	24
City of Ekurhuleni	79700057	28	28
City of Ekurhuleni	79700058	24	24
City of Ekurhuleni	79700059	24	24
City of Ekurhuleni	79700060	24	24
City of Ekurhuleni	79700061	24	24
City of Ekurhuleni	79700062	24	24
City of Ekurhuleni	79700063	24	24
City of Ekurhuleni	79700064	24	24
City of Ekurhuleni	79700065	24	24
City of Ekurhuleni	79700066	24	24
City of Ekurhuleni	79700067	24	24
City of Ekurhuleni	79700068	24	24
City of Ekurhuleni	79700069	24	24
City of Ekurhuleni	79700070	24	24
City of Ekurhuleni	79700071	24	24
City of Ekurhuleni	79700072	24	24
City of Ekurhuleni	79700073	24	24
City of Ekurhuleni	79700074	24	24
City of Ekurhuleni	79700075	24	24
City of Ekurhuleni	79700076	24	24
City of Ekurhuleni	79700077	24	24
City of Ekurhuleni	79700078	24	24
City of Ekurhuleni	79700079	24	24
City of Ekurhuleni	79700080	24	24
City of Ekurhuleni	79700081	24	24
City of Ekurhuleni	79700082	24	24
City of Ekurhuleni	79700083	24	24
City of Ekurhuleni	79700084	24	24
City of Ekurhuleni	79700085	24	24
City of Ekurhuleni	79700086	24	24
City of Ekurhuleni	79700087	24	24
City of Ekurhuleni	79700088	30	34
City of Ekurhuleni	79700089	24	24
City of Ekurhuleni	79700090	24	24
City of Ekurhuleni	79700091	24	24
City of Ekurhuleni	79700092	24	24
City of Ekurhuleni	79700093	24	24
City of Ekurhuleni	79700094	24	24
City of Ekurhuleni	79700095	24	25
City of Ekurhuleni	79700096	24	25

Municipality	Ward code	Interviews required	Interviews completed
City of Ekurhuleni	79700097	24	24
City of Ekurhuleni	79700098	24	24
City of Ekurhuleni	79700099	24	24
City of Ekurhuleni	79700100	24	24
City of Ekurhuleni	79700101	24	24
City of Ekurhuleni	79700102	24	24
City of Ekurhuleni	79700103	24	24
City of Ekurhuleni	79700104	24	24
City of Ekurhuleni	79700105	24	24
City of Ekurhuleni	79700106	24	24
City of Ekurhuleni	79700107	24	24
City of Ekurhuleni	79700108	24	24
City of Ekurhuleni	79700109	24	24
City of Ekurhuleni	79700110	24	24
City of Ekurhuleni	79700111	24	24
City of Ekurhuleni	79700112	24	24
Emfuleni	74201001	20	21
Emfuleni	74201002	20	20
Emfuleni	74201003	20	20
Emfuleni	74201004	20	20
Emfuleni	74201005	20	20
Emfuleni	74201006	20	20
Emfuleni	74201007	20	20
Emfuleni	74201008	20	20
Emfuleni	74201009	20	20
Emfuleni	74201010	20	21
Emfuleni	74201011	20	20
Emfuleni	74201012	20	20
Emfuleni	74201013	20	20
Emfuleni	74201014	20	20
Emfuleni	74201015	20	20
Emfuleni	74201016	20	30
Emfuleni	74201017	20	20
Emfuleni	74201018	20	20
Emfuleni	74201019	20	21
Emfuleni	74201020	20	20
Emfuleni	74201021	20	20
Emfuleni	74201022	20	20
Emfuleni	74201023	20	20
Emfuleni	74201024	20	20
Emfuleni	74201025	20	20
Emfuleni	74201026	20	21
Emfuleni	74201027	20	20

Municipality	Ward code	Interviews required	Interviews completed
Emfuleni	74201028	20	20
Emfuleni	74201029	20	20
Emfuleni	74201030	20	20
Emfuleni	74201031	20	20
Emfuleni	74201032	20	21
Emfuleni	74201033	20	20
Emfuleni	74201034	20	20
Emfuleni	74201035	20	20
Emfuleni	74201036	20	20
Emfuleni	74201037	20	20
Emfuleni	74201038	20	20
Emfuleni	74201039	20	20
Emfuleni	74201040	20	20
Emfuleni	74201041	20	20
Emfuleni	74201042	20	20
Emfuleni	74201043	20	20
Emfuleni	74201044	20	20
Emfuleni	74201045	20	20
Lesedi	74203001	48	48
Lesedi	74203002	48	48
Lesedi	74203003	48	48
Lesedi	74203004	48	48
Lesedi	74203005	48	48
Lesedi	74203006	48	48
Lesedi	74203007	48	48
Lesedi	74203008	48	48
Lesedi	74203009	48	48
Lesedi	74203010	48	48
Lesedi	74203011	48	48
Lesedi	74203012	48	49
Lesedi	74203013	48	48
Merafong	74804001	24	24
Merafong	74804002	24	24
Merafong	74804003	24	24
Merafong	74804004	24	24
Merafong	74804005	24	24
Merafong	74804006	24	24
Merafong	74804007	24	24
Merafong	74804008	24	25
Merafong	74804009	24	24
Merafong	74804010	24	24
Merafong	74804011	24	24
Merafong	74804012	24	24

Municipality	Ward code	Interviews required	Interviews completed
Merafong	74804013	24	24
Merafong	74804014	24	27
Merafong	74804015	24	24
Merafong	74804016	24	24
Merafong	74804017	24	26
Merafong	74804018	24	24
Merafong	74804019	24	24
Merafong	74804020	24	24
Merafong	74804021	24	24
Merafong	74804022	24	24
Merafong	74804023	24	24
Merafong	74804024	24	24
Merafong	74804025	24	24
Merafong	74804026	24	24
Merafong	74804027	24	24
Merafong	74804028	24	24
Midvaal	74202001	48	48
Midvaal	74202002	48	48
Midvaal	74202003	48	48
Midvaal	74202004	48	50
Midvaal	74202005	48	48
Midvaal	74202006	48	48
Midvaal	74202007	48	48
Midvaal	74202008	48	48
Midvaal	74202009	48	49
Midvaal	74202010	48	48
Midvaal	74202011	48	48
Midvaal	74202012	48	49
Midvaal	74202013	48	49
Midvaal	74202014	48	49
Midvaal	74202015	48	48
Mogale City	74801001	20	20
Mogale City	74801002	20	20
Mogale City	74801003	30	57
Mogale City	74801004	20	20
Mogale City	74801005	20	20
Mogale City	74801006	20	20
Mogale City	74801007	20	20
Mogale City	74801008	20	20
Mogale City	74801009	20	20
Mogale City	74801010	20	21
Mogale City	74801011	20	20
Mogale City	74801012	20	20

Municipality	Ward code	Interviews required	Interviews completed
Mogale City	74801013	20	20
Mogale City	74801014	20	20
Mogale City	74801015	20	20
Mogale City	74801016	20	21
Mogale City	74801017	20	20
Mogale City	74801018	20	22
Mogale City	74801019	20	20
Mogale City	74801020	20	20
Mogale City	74801021	20	21
Mogale City	74801022	20	21
Mogale City	74801023	20	20
Mogale City	74801024	20	20
Mogale City	74801025	20	20
Mogale City	74801026	20	20
Mogale City	74801027	20	20
Mogale City	74801028	20	20
Mogale City	74801029	20	20
Mogale City	74801030	20	20
Mogale City	74801031	20	20
Mogale City	74801032	20	20
Mogale City	74801033	20	20
Mogale City	74801034	20	20
Mogale City	74801035	20	20
Mogale City	74801036	20	20
Mogale City	74801037	20	20
Mogale City	74801038	20	20
Mogale City	74801039	20	21
Rand West	74805001	20	20
Rand West	74805002	20	20
Rand West	74805003	20	20
Rand West	74805004	20	20
Rand West	74805005	20	20
Rand West	74805006	20	20
Rand West	74805007	20	20
Rand West	74805008	30	30
Rand West	74805009	20	20
Rand West	74805010	30	30
Rand West	74805011	20	20
Rand West	74805012	20	20
Rand West	74805013	20	20
Rand West	74805014	20	20
Rand West	74805015	20	20
Rand West	74805016	20	20

Municipality	Ward code	Interviews required	Interviews completed
Rand West	74805017	20	20
Rand West	74805018	20	20
Rand West	74805019	20	20
Rand West	74805020	30	30
Rand West	74805021	20	20
Rand West	74805022	20	20
Rand West	74805023	20	20
Rand West	74805024	20	20
Rand West	74805025	20	20
Rand West	74805026	20	20
Rand West	74805027	20	20
Rand West	74805028	20	20
Rand West	74805029	20	20
Rand West	74805030	20	20
Rand West	74805031	20	20
Rand West	74805032	20	20
Rand West	74805033	20	20
Rand West	74805034	20	20
Rand West	74805035	20	20
Total		13 628	13 795

GAUTENG CITY-REGION OBSERVATORY

6th Floor University Corner
11 Jorissen St (Cnr Jorissen and Jan Smuts)
Braamfontein
Johannesburg
Gauteng, South Africa

tel +27 11 717 7280
email info@gcro.ac.za
www.gcro.ac.za