Quality of Life Survey 6 2020/21

QUALITY OF LIFE SURVEY 6 (2020/21)

FIELDWORK REPORT

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Gauteng City-Region Observatory (GCRO)
Quality of Life 6 (2020/21) Survey

Field Report

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1. Overview

The Gauteng City-Region Observatory ("GCRO") was established in 2008 as a partnership between the Gauteng Provincial Government (GPG), the University of the Witwatersrand (Wits), the University of Johannesburg (UJ) and organised local government (South African Local Government Association – SALGA) in Gauteng.

The first Quality of Life (QoL) survey was conducted in 2009, and a new survey is conducted approximately every two years. The GCRO's QoL survey measures the quality of life, socio-economic circumstances, attitudes to service delivery, psycho-social attitudes, value-base and other characteristics of the Gauteng City Region (GCR). The survey is a household-based survey with randomly selected adults (18+) across Gauteng as respondents. It serves as a tracking and diagnostic tool, affording a rich information resource for policy makers, business, civil society and the public wanting to see where progress is being made and where concerns remain, and enabling evidence-based planning.

1.1 Objective

GeoSpace International was appointed through an open tender process in May 2020 to conduct the fieldwork for the Quality of Life 6 (2020/21) survey.

The objective of the field data collection was to interview 13 500 randomly selected adults, living in dwelling units randomly selected by the GCRO, within Enumeration Areas (EAs) randomly selected by the GCRO, across all 529 wards within the Gauteng province. This needed to be done in line with strict quality control principles and measures.

The purpose of this report is to document the fieldwork roll-out, the methodology and implementation that was utilized, as well as the lessons learned for the GCRO Quality of Life 6 (2020/21) survey, hereafter referred to as QoL 2020/21.

1.2 Approach

GeoSpace utilised the Hexagon Smart Census (HxGN Smart Census) field management software system to manage and direct the field data collection process. The GCRO questionnaire was administered on the Kobo Tools CAPI software and digital field application. Digital data collected in the field was uploaded to a central server and extensive Quality Assurance (QA) procedures were implemented.

The methodology for data collection included household visits at pre-sampled dwelling units (DUs), random selection of a suitable adult household member, and questionnaire administration. Data was collected using tablets, chargers and power banks provided by GeoSpace. On average, 4 interviews per EA and 26 interviews per ward needed to be successfully completed. An average of 6 EAs per ward were randomly selected by the GCRO. Table 1 provides a breakdown of the minimum number of interviews that needed to be conducted within each Metropolitan or District Municipality in Gauteng.

Table 1: The number of required and achieved interviews in Gauteng for QoL 2020/21 (unweighted)

Municipality	Number of required interviews	Number of achieved interviews
City of Ekurhuleni	2 912	2 963
City of Johannesburg	3 508	3 545
City of Tshwane	2 782	2 810
Sedibeng	2 119	2 160
West Rand	2 095	2 138
TOTAL	**13 416**	**13 616**

1.3 Fieldwork roll-out plan and implementation timelines

The Project start date was originally set for 25 March 2020, however the COVID-19 pandemic, and the lockdown regulations implemented in March 2020 significantly delayed the original start date. The contract was signed on 07 May 2020. The revised timelines meant that fieldwork started in October 2020 and finished at the end of May 2021.

1.4 Resources

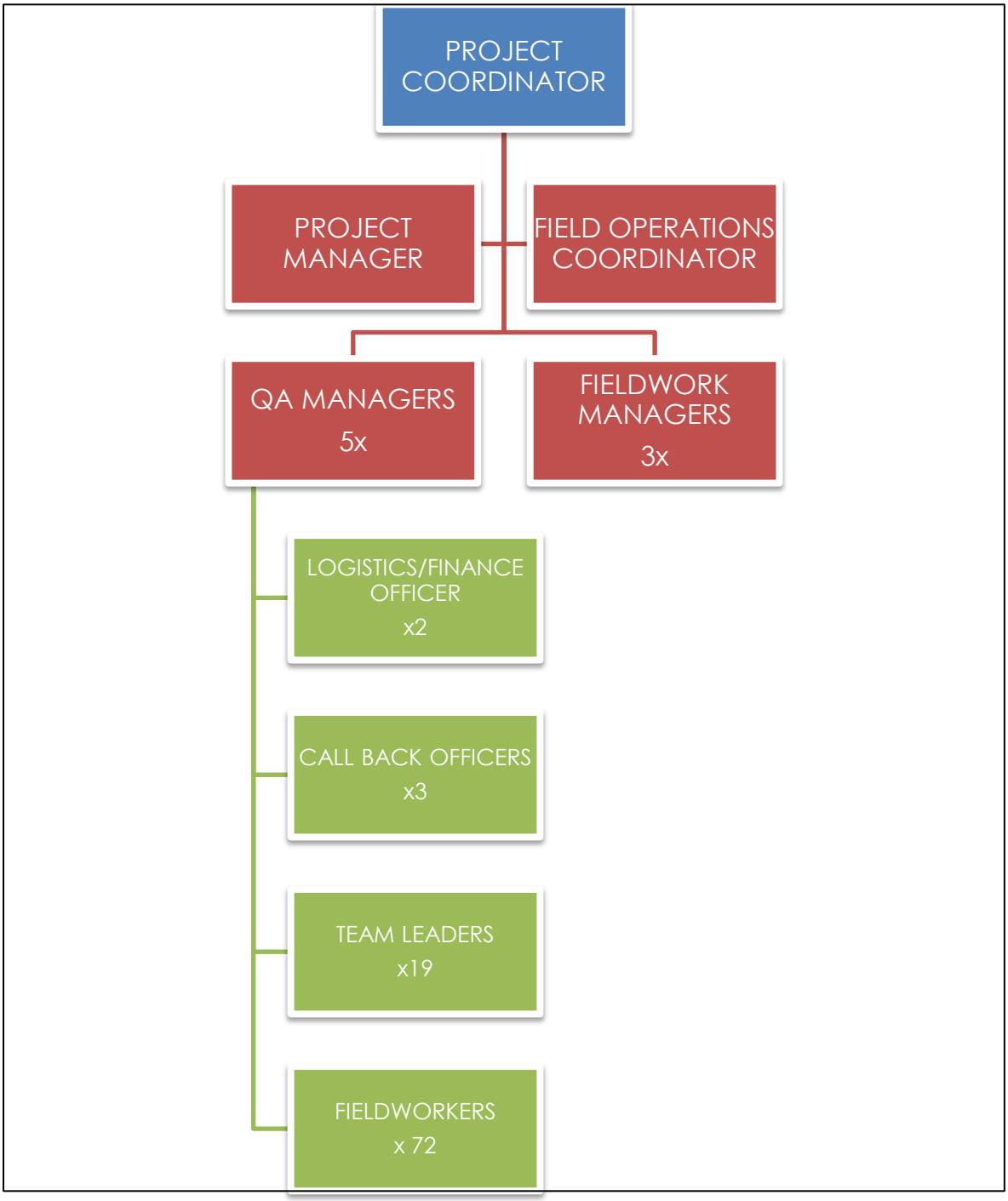
The following estimates and assumptions were used to determine the resources needed for completion of the project:

- DU completion rate of 1.7 DUs per day per fieldworker which included:
  - Travel time between Wards, EAs and DUs
  - Location of DUs
  - Community and gatekeeper liaison
  - Setup and manning of gazebo awareness sites
  - Handing out of leaflets
  - Initial HH contact and roster completion
  - Making contact with the correct respondent
  - Time spent on returning to DUs to honour appointments made
  - Time spent on returning to non-contact DUs
  - Time spent on attempting substitute EAs and DUs
  - Completion of actual questionnaires

- A data collection period of 5 months
- Resource planning was based on a target of 13500 successful interviews.

According to the above, the following HQ/ field staff structure was established:

Figure 1: GeoSpace QoL 2020/21 fieldwork staff structure



Key responsibilities were allocated as follow:

Table 2: Key responsibility allocation across GeoSpace project team

Project Designation	Main Tasks
Project Coordinator	High level project coordination and management Data management Steering committee meetings
Project Coordinator Backup and support	Backup and support to the Project Coordinator
Project Manager	Overall project coordination and management, financial management, client communication and reporting, work plan, quality assurance management, Data Management QA supervision Steering committee meetings Working Group Meetings
Project Manager Backup and support	Support and backup to the Project manager, Overall project coordination, client communication and reporting, work plan implementation and field team scheduling, quality assurance management, digital data collection tool creation Code book creation Data Management QA supervision Head Trainer Working Group Meetings
Fieldwork Operations Coordinator	Human resource manager, field team scheduling, work plan implementation, field quality assurance, training support Working Group Meetings
Fieldwork Operations Coordinator Backup/Assistant/Support	Support and backup to Fieldwork operations coordinator, Human resource management, field team scheduling, work plan implementation, field quality assurance, training support, administrative and logistical support
Financial manager/payroll	Fieldworker salary and per diem payments. Logistics payments (vehicles, equipment etc.)
GIS officer	Technical support, quality assurance support, GIS management and GPS quality tracking and resolution, training and support Working Group Meetings where necessary
GIS officer Backup/ Support	Support to GIS Officer, Technical support, quality assurance support, GIS management and GPS quality tracking and resolution, training and support
Field Logistics/ Technical Officer	Field logistics management, scheduling and monitoring, field IT support, gatekeeper liaison
Fieldwork managers	Field QA and team management, gatekeeper liaison, logistics and technical support, training
Fieldwork Manager backup/support	Support to Field QA and team management when needed, gatekeeper liaison, logistics and technical support, training

QA Managers	HQ Quality assurance implementation and field team management and scheduling, call back support and reporting Working Group Meetings where necessary. Responsible for respondent calls from the field. QA managers take turns over weekends and evenings regarding respondent calls.
QA Manager backup/support	Additional QA Manager support when needed. HQ Quality assurance implementation and field team management and scheduling, call back support and reporting.
Call Back Officers	Respondent call backs of flagged interviews and reporting. Support QA managers with respondent calls from the field.
Team Leaders	Team management In Field QA Driver Implementation and oversight of in-field sampling processes Questionnaire administration
Field workers	Implementation of in-field sampling process Questionnaire administration

1.5 COVID-19

From a field survey implementation perspective, the lockdown and alert level regulations caused great uncertainty in terms of what would be possible, both legally and ethically. Especially taking into account that the survey involved fairly extended face to face interviews, historically mostly done indoors. A great deal of additional planning took place and additional measures had to be implemented to safely manage and implement the project, within the limits imposed by regulations, and while ensuring the health and safety of both field team members and members of the public.

A COVID-19 contingency plan as well as COVID-19 training and fieldwork protocols were developed and implemented. The fieldwork roll-out and project time-frame was adjusted and fieldwork teams were limited to four people per team instead of the originally planned five people per team.

The following COVID-19 protocols were put in place:

- Training protocols
    - Training venue COVID-19 suitability inspection
    - Training venue COVID-19 preparation (socially distanced seating, ventilation, sanitising and screening systems, and isolation room)
    - Personal Protection Equipment distribution and use (mask, visors and sanitiser)
    - Regular hand washing and sanitising
    - Self-screening and completion of daily self-screening form

    - Social distancing during training
    - Ventilation of training venue
    - Daily venue sanitising and cleaning
- Fieldwork protocols
    - Personal Protection Equipment distribution and use
        - Face masks – fieldworkers and respondents
        - Face shields - fieldworkers
        - Sanitizer – fieldworkers and respondents
    - Self-screening and completion of daily self-screening form
    - Social distancing when conducting interviews
    - Ventilation in vehicle and when conducting interviews
    - Outside interviews

The COVID-19 protocols put in place were extremely effective. Only one fieldworker tested positive for COVID-19 during the entire fieldwork phase, and this was an infection acquired during personal travel. Team members who had interacted with this individual all tested negative, and also completed an isolation period prior to returning to work. The Covid-19 protocols protected the fieldworkers as well as the respondents. Masks and visors provided the fieldworkers with a professional appearance, which assisted with reducing respondent concerns about participation.

The fieldwork protocols were adapted when necessary and according to the COVID-19 levels. During the second wave early in 2021 it was decided that all interviews had to be conducted outside where possible or in an extremely well-ventilated room. Sampled points in old age homes and retirement villages were substituted for the entire fieldwork project and a number of potential respondents had to be substituted due to them being in isolation.

The original COVID-19 Training and Data Collection Standard Operating Procedure (SOP), from August 2020, is attached as Annexure 1. The Addendum to the SOP is attached as Annexure 2.

1.6 Initial training and field pilot

Training for the pilot commenced on 28 September 2020, with strict COVID-19 protocols in place. The initial plan was to train all the fieldworkers at the same time and place and for everyone to be part of a field pilot. However, COVID-19 regulations limited the number of people allowed at indoor venues at the time, necessitating a staggered approach to training. In the first training session, 28 fieldworkers were trained, as well as the QA and fieldwork managers.

Thereafter, the pilot project started on 5 October 2020 and pilot fieldwork was completed on 7 October 2020. Just over 100 successful interviews were conducted

as part of the pilot project. All aspects of the fieldwork exercise i.e., QA, questionnaire translations, COVID-19 fieldwork protocols, in-field sampling and questionnaire administration were tested during the pilot.

All the personnel involved in the pilot assembled on 12 October 2020 for a debrief session to discuss lessons learned and to provide recommendations and changes to the questionnaire and systems before the main training and fieldwork commenced.

1.7 Main training and fieldwork

Main training started on 19 October 2020 after very minor updates to the questionnaire and changes to the mobile field management application were implemented. The fieldworkers who were trained during the initial training mostly continued with fieldwork during this period, while a selected few assisted during the main training to act as mentors during practical exercises. A further 79 fieldworkers were trained during this main training session, which ran from 19 to 24 October 2020.

Main fieldwork began on 26 October 2020. A December holiday break was implemented from 16 December 2020 to 12 January 2021. In total, main fieldwork took place over a period of 188 days, and fieldwork was completed on 27 May 2021.

During this period, a total of 14 178 interviews were completed, of which 13 616 were QA approved and included in the final dataset. A minimum of least 20

successful QA approved interviews per ward was realised in all of the wards except for Ward 74201030 in Emfuleni, with only 19 interviews. A list of final number of interviews per Ward can be found in Annexure 3.

2. Challenges

Numerous challenges were encountered during the QoL 2020/21 fieldwork. COVID-19 was one of the biggest, and completely novel. Other well-known challenges such as gaining access to estates and adapting to inclement weather also needed to be managed. Challenges that emerged during the QoL 2020/21 survey are summarised below.

2.1 COVID-19 Related challenges

2.1.1 Respondent refusals

Although respondent refusals are a well-known challenge of any fieldwork project, COVID-19 added an additional burden to this challenge. In some instances, respondents were reluctant to allow fieldworkers into their homes because they were afraid that they might be infected with COVID-19. Fieldworkers were encouraged to conduct the interviews outside whenever possible and had to adhere to strict COVID-19 protocols, as described previously. They were also provided with additional disposable masks that could be offered to the respondents. In quite a few instances, even with the additional measures in place, respondents nonetheless provided COVID-19 as a reason not to participate in the survey. While these concerns are understandable, it is also possible that some of these respondents might have refused for other reasons in the absence of COVID-19, but found it easier to attribute their refusal to COVID-19. Moreover, in certain

instances, sampled households and potential respondents had to be substituted as they were in isolation due to being COVID-19 positive or having been in close contact with a positive person.

As mentioned earlier, the COVID-19 PPE and protocols that were put in place did reduce the anxiety of some respondents in conducting the interviews during the epidemic.

2.1.2 Old age homes and hostels

Interviews at sampled old age homes were put on hold with the hope that the COVID-19 situation might improve and these could then be attempted at a later stage of fieldwork. While a few interviews were conducted at specific old age homes or retirement villages, where risk could be very carefully managed, the large majority of these interviews were substituted.

The managers of certain mine hostels also explained that COVID-19 was the main reason for denying access to the hostels. The exact impact of COVID-19 is hard to measure though, because as with the normal residential sampled households it is possible that some of these managers would have refused in any case even if COVID-19 did not exist.

2.1.3 Security complexes

Gaining access to security complexes is a well-known problem for survey work in South Africa. Although this was anticipated, COVID-19 restrictions on visitors in estates meant that estate managers had an extra excuse to deny fieldworkers access to an estate. Again, it is not possible to measure exactly how much COVID—19 exacerbated this challenge.

2.2 Non-COVID-19 Related Challenges

2.2.1 Security complexes and sampling

As mentioned, security complexes and golf estates are always difficult to gain access to for survey work. The QoL 2020/21 Survey was no exception. Estate managers play a crucial role in gaining access to these estates and complexes and in order to notify and request access from these managers, numerous meetings, emails and phone calls were necessary. This proved fruitful in some estates but not so in others. The DUs and substitute DUs in these estates had to be substituted and in certain cases a whole EA had to be substituted when the EA consisted only of a particular estate. Some larger estates constituted more than one EA which resulted in these estates sometimes being re-selected after a request for EA substitution due to refusal of access. Until this was resolved, it was a major frustration for the fieldworkers as they had to go back to the estate and attempt to gain access again.

It must be noted that certain estate and complex managers did assist tremendously in allowing the fieldworkers to conduct the interviews outside the complex and in some cases even assisted with accompanying the fieldworkers within the estate and making first contact. In a few extreme cases, and to ensure that we at least got some interviews in these hard-to-get estates, the sampling protocol was modified to enable estate managers to direct the field team to particular DUs where they knew respondents would be more inclined to participate in the survey.

2.2.2 Team composition and EA and Ward progress

The QoL 2020/21 survey is spread over the entire Gauteng province, and the sampled EAs contain farms, small holdings, hostels, normal residential areas, high rise buildings, informal areas, security complexes and estates. Each one of these areas do have their own dynamics and challenges in conducting fieldwork, and team composition was adjusted to account for this. In certain areas it is better to have a male only team of fieldworkers and in others it is better to allow female fieldworkers to conduct the interviews. The respondent language preference also plays a major role in the fieldwork team composition. Some of these challenges are of course anticipated and planned for, however it is impossible to accurately gage the exact team composition and required fieldwork numbers per area beforehand. Some areas are also just easier to work in and are therefore completed faster than others.

Consequently, progress across EAs and wards could not progress at the same pace in all areas. Although fieldwork in the hard-to-get high wall areas did start from the beginning of the project, it did not progress at the required and expected pace. This caused some delays in the finalisation of data collection, and additional resources had to be deployed to these areas.

Certain EAs had to be substituted in hard-to-get areas, and some of these requests were only sent to GCRO at the tail end of the fieldwork project, which further delayed completion. It is recommended that dedicated and experienced fieldwork personnel are deployed to the hard-to-get areas to try and negotiate access early during data collection. This team would probably have greater success in gaining access. Where access could not be obtained, the requests to substitute EAs could be sent to GCRO earlier in course of the project, as and when required.

2.2.3 Safety and fieldworker well being

As with any survey the safety and security of the fieldworkers and respondents are paramount. In certain informal areas and hostels where safety concerns were established, police escorts were organised, and fieldworkers were encouraged not to work or travel alone. Community police forums and councillors were contacted

and provided additional support and information on areas where it might be dangerous to work in.

In order to ensure the safety of respondents and fieldworkers, team leaders were instructed to try and match the gender of the fieldworker with that of the respondent as much as possible.

Debrief sessions run by an experienced social worker were held with the fieldworkers, to provide support in managing challenging or stressful experiences in field. Additional individual sessions were also offered to the fieldworkers if required.

2.2.4 Interviews per Ward

As part of the sample requirements provided by the GCRO, each ward was allocated a target number of interviews to be attained. In all but 24 of the 529 wards in Gauteng, 100% or more of the target sample was obtained. Difficulty in reaching the target sample was especially prevalent in wards with many security estates. In these wards a very high refusal rate and refusals to grant access to estates necessitated using a large amount of substitute EAs and substitute VPs. In some cases all possible substitute EAs and points were exhausted before the desired target interviews were attained. Due to timeline pressure, a decision was made to accept slightly fewer interviews than the target. These cases are shown in Table 3 below. In most cases, attained interviews were only 1 less than the target. Final ward-level sample size is provided in Annexure 3.

Table 3: Wards where the original target was not achieved

Municipality	Ward	Attained interviews	Target
Emfuleni	74201030	19	20
Lesedi	74203013	47	48
City of Ekurhuleni	79700025	25	26
City of Ekurhuleni	79700026	25	26
City of Ekurhuleni	79700056	25	26
City of Johannesburg	79800033	25	26
City of Johannesburg	79800060	25	26
City of Johannesburg	79800079	25	26
City of Johannesburg	79800081	25	26
City of Johannesburg	79800083	25	26
City of Johannesburg	79800086	25	26
City of Johannesburg	79800093	24	26
City of Johannesburg	79800101	24	26
City of Johannesburg	79800102	25	26
City of Johannesburg	79800105	25	26

City of Johannesburg	79800106	25	26
City of Johannesburg	79800109	25	26
City of Johannesburg	79800112	22	26
City of Tshwane	79900074	25	26
City of Tshwane	79900077	25	26
City of Tshwane	79900092	25	26
City of Tshwane	79900101	25	26
City of Tshwane	79900105	25	26
City of Tshwane	79900107	25	26

2.3 Respondent sex distribution per Ward

Monitoring the sampled respondent sex distribution by EA and Ward formed part of the automatic queries the QA managers used to ensure in-field sample compliance. In certain wards, the split between male and female is skewed towards one of the sexes. Twenty wards have a sex distribution of more than 70% female respondents and 6 wards have a sex distribution of more than 70% male respondents. These highly skewed wards are show in Table 4, below, and a full list of sex distribution per ward is provided in Annexure 4. The skewness should have minimal impact on analysis, as it is managed to a large extent through weighting.

Most wards with highly uneven sex distributions can be explained by the following:

- The wards with a higher-than-normal percentage of male respondents are mainly situated in mining and rural farm areas. In many instances the EAs that were sampled within these wards consisted of mining hostels with only male residents. In the rural farm areas, farm workers staying on the farm were also sampled and for the wards in question this resulted in mainly male respondents.
- The wards with a higher-than-normal percentage of female respondents are mainly in difficult or hard to reach areas e.g., high wall areas and estates. In these wards, males were often less likely to agree to participate. Males sometime permitted fieldworkers to complete the household roster, but indicated that they would not be willing to participate if sampled, or refused to participate when sampled. Females in contrast were more often more inclined to participate in the survey, resulting in some sample bias towards female respondents.

Table 4: Wards with a sample consisting of more than 70% of one particular sex

Municipality	Ward	Female	Male	Total	Female %	Male %
Merafong	74804011	2	20	22	9%	91%
City of Ekurhuleni	79700039	6	24	30	20%	80%
City of Tshwane	79900038	6	20	26	23%	77%
Emfuleni	74201004	5	15	20	25%	75%
Midvaal	74202001	10	30	40	25%	75%
Emfuleni	74201015	6	15	21	29%	71%
Lesedi	74203002	34	14	48	71%	29%
City of Johannesburg	79800059	17	7	24	71%	29%
Emfuleni	74201032	15	6	21	71%	29%
City of Johannesburg	79800013	20	8	28	71%	29%
Merafong	74804016	16	6	22	73%	27%
City of Ekurhuleni	79700065	19	7	26	73%	27%
City of Johannesburg	79800042	19	7	26	73%	27%
City of Johannesburg	79800047	19	7	26	73%	27%
City of Tshwane	79900037	19	7	26	73%	27%
City of Tshwane	79900103	19	7	26	73%	27%
Emfuleni	74201030	14	5	19	74%	26%
Rand West	74205028	17	6	23	74%	26%
Emfuleni	74201035	15	5	20	75%	25%
Emfuleni	74201037	15	5	20	75%	25%
Rand West	74205018	15	5	20	75%	25%
City of Johannesburg	79800022	20	6	26	77%	23%
Merafong	74804001	17	5	22	77%	23%
Emfuleni	74201002	16	4	20	80%	20%
Mogale City	74801033	16	4	20	80%	20%
City of Ekurhuleni	79700047	21	5	26	81%	19%

3. Methodology and process

3.1 Technology overview and general workflow

The digital technology used to implement data collection for QoL 2020/21 can be divided into two segments, namely: Fieldwork Management and CAPI data administration components

Hexagon (HxGN) Smart Census was used for the fieldwork management component. HxGN Smart Census consist of a rich-client HQ data management

and QA application as well as a mobile field data management solution. The mobile solution is integrated with the Computer Assisted Personal Interview (CAPI) data administration component (detailed below), allowing the fieldworkers to administer the questionnaires and capture responses on a tablet.

The entire HxGN Smart Census application is based on a geo-spatial platform, incorporating the administrative boundaries, Enumeration Area boundaries, Sampled VP Points and digital imagery of the 3 metros and 2 district municipalities in which data collection were to take place in.

The CAPI solution used is called KoboToolbox, which wass seamlessly integrated with the field data management application. All field management and data collection took place digitally using Samsung Galaxy Tab A 8.0 LTE tablets. The tablets were equipped with built-in GPS chipsets and were protected with hard covers and screen protectors.

The following sections provide an overview of the technologies.

3.1.1 HxGn SmartCensus HQ data management, QA application and mobile application overview

- Management and QA of all spatial data collected.
- Management and assignment of data packets to individual fieldworkers.
    - A data packet was EA based and contained the following:
        - The EA boundary
        - The digital imagery backdrop
        - Sampled visiting points (VPs – each one a DU)
        - Indication of number of interviews at each sampled VP
- Uploading of data from the operational server to each individual fieldworker's tablet.
- Downloading of collected data from fieldworker tablets back to the operational server
- Management and tracking of field progress:
    - Receiving and QA of downloaded data
    - Progress and outcome tracking
    - Work scheduling
- The Mobile component was used to:
    - Navigate to the EA, DUs and substitute DUs.
    - Capture location of where interview was conducted
    - Capture records for household outcomes, contacts, household rosters and respondent selection.

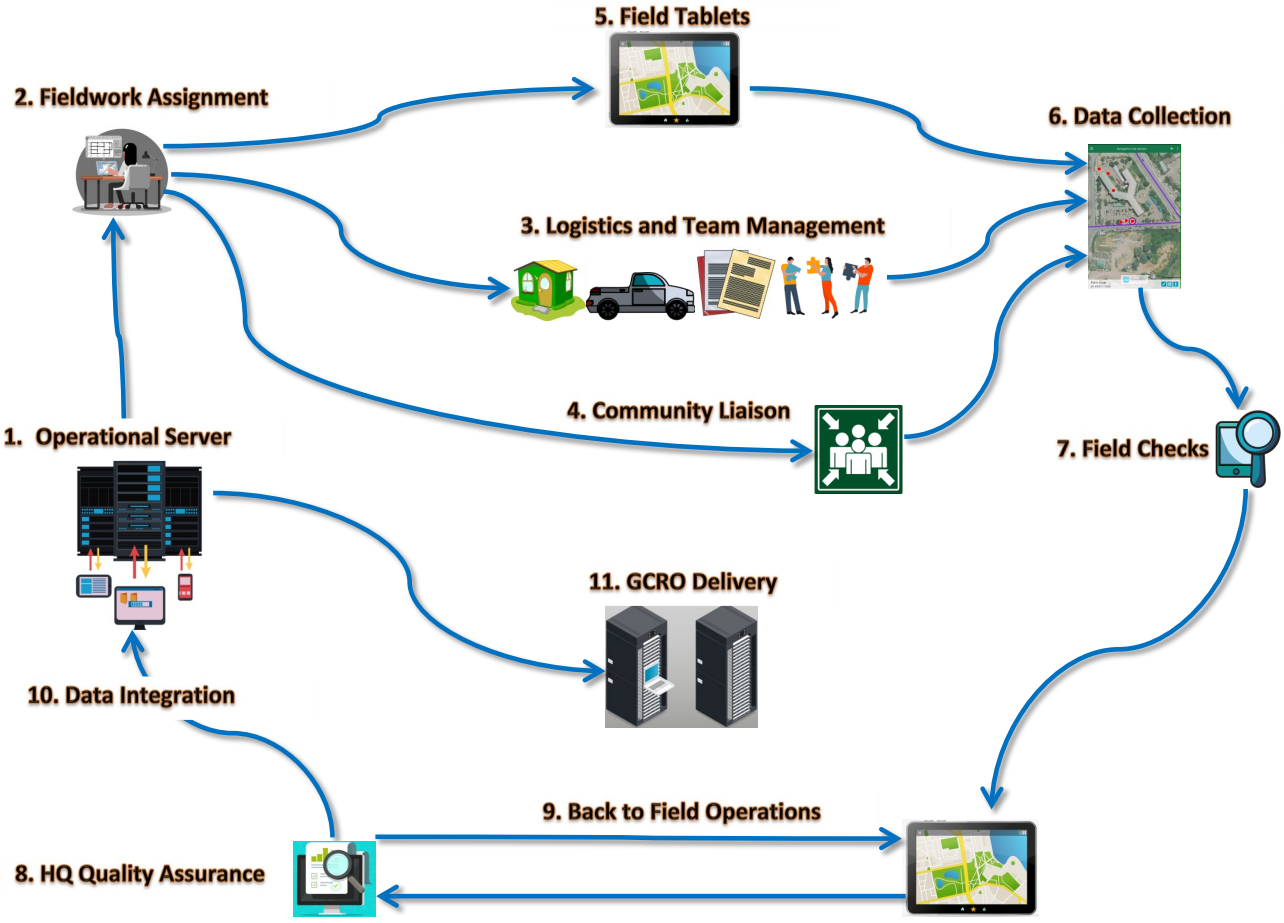
3.1.2 KoboToolBox (CAPI) data administration application overview

- Contains the actual GCRO QoL 2020/21 questionnaires
- Administration of the CAPI Questionnaires:
    - Respondent questionnaires
        - Main Questionnaire (including GPS location)
        - Self-Complete Questionnaire
    - Quality assurance questionnaires
        - Call back questionnaire
    - Operational questionnaires
        - COVID-19 self-screening form
        - Logistic form for vehicle
        - Data and per diem form
- Edit, save and upload features

3.1.3 General workflow:

The following diagram depicts the general workflow that was followed using the above technology:

Figure 2: QoL 2020/21 data collection workflow



1. **Operational server:** Constitutes the RichClient server housed at GeoSpace International, on which all base data is stored, from which all data packets were managed and assigned, and through which all QA and progress management took place

2. **Fieldwork Assignment:** Data packets were created and assigned by the QA Managers, each of whom were responsible for specific teams and fieldworkers. These QA managers were also responsible for team movement and progress tracking, and quality assurance of uploaded data.

3. **Logistics and Team Management:** Refers to the logistics management regarding vehicles, field material and equipment, and team management regarding work scheduling and transport. This responsibility was shared between the team supervisor (Team Leader) and the QA Managers. The Team Leader was required to use the Kobo Toolbox online logistics forms to enter and track logistics elements such as vehicles, expenses etc.

4. **Community Liaison:** Arrange meetings and information sessions with gate keepers (Chiefs, Councillors, Estate Managers) before moving into an area and/or when necessary.

5. **Field Tablets:** The fieldworkers downloaded the individually assigned data packets to their tablets throughout the course of the field data collection exercise. Fieldworkers were only allowed to work in the EAs assigned to them. An EA could be assigned to more than one fieldworker, and team leaders then needed to ensure that different fieldworkers did not attempt the same VP in an EA.

6. **Data Collection:** Refers to the actual respondent selection and questionnaire administration that took place. All VPs as downloaded within an EA packet had to be visited. Substitution VPs were provided as part of the EA data packet and were only used when a Visiting Point needed to be replaced i.e., refusals, no one at home after two or more visits, or non-viable dwellings.

7. **Field checks:** The field management system was developed in such a way that each fieldworker was able to check the status of each VP within the assigned EA, the outcome of each visit, appointments made and the progress made within the packets received. The data collection application itself included several data validation checks to ensure correct completion. However, it was still the responsibility of each fieldworker to ensure the accuracy of data and coverage of their work. Moreover, the Team Leader was required to direct and verify team member movements and ensure

each team member adhered to the specified field data collection methodology.

8. **HQ Quality Assurance:** All uploaded data was quality assured by the QA Managers as it was uploaded, on a daily basis. Apart from data quality, team movements, accuracy and coverage of completion was also verified daily.

9. **Back to field operations:** All issues/errors identified through the HQ QA process, were referred back to field, to the relevant Team Leader and/or Fieldwork Manager for verification or correction. Issues were logged and resolution tracked through the HQ management system.

10. **Data Integration:** Once all the collected data had been quality assured and signed off on an EA packet basis, the data was integrated into the main database. Integration was done at the VP level, and not per EA. In addition to interview data, this database also included all data logs, covering appointments made, refusals, VPs with nobody at home, and so on. All raw data was delivered to the GCRO server.

11. **GCRO final data set:** The final dataset was delivered to the GCRO in SPSS format.

3.2 Preparatory work

Prior to the start of data collection, the HxGN Smart Census application was loaded with the most recent satellite imagery, to be used as backdrop for all the subsequent fieldwork management processes. Sampled Enumeration Areas (EAs), sampled visiting points (VPs), sampled replacement VPs and other administrative backdrop data was also loaded into the system.

In an effort to support smooth data collection and assist fieldworkers, the HxGN Smart Census rich client component was used to manually scrutinise and group each sampled EA and 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 obtained as far as possible and captured into the system for use in the field.

3.2.1 Sample frame

The original selection of EAs and VPs was the responsibility of the GCRO. GPS coordinates for each sample point to be visited was provided by GCRO. Sample points (VPs) were randomly selected from a building-based dataset on a stratified 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 visiting points) were also provided for each visiting point (VP) for in the case when an interview could not be completed at the original sampled VP. The sample distribution ensured that interviews were conducted in various types of settlements, including suburban areas, gated estates, blocks of flats, townhouse complexes, historical 'township' areas, informal settlements, hostels, smallholdings, and rural areas. Further detail on the sample design is provided in the *Sample Report* (Hamann and de Kadt, 2021).

Each sampled VP provided to GeoSpace constituted one interview. In situations where more than one interview was required at a high rise building, town house complex or hostel, multiple VPs were placed at these points. GeoSpace merged these points into 1 spatial point and updated the attribute to indicate the number of interviews required at each visiting point.

3.3 Data collection Process

3.3.1 HXGN Smart Census Application

As mentioned, HxGN Smart Census was used for fieldwork management, and consisted of a rich-client headquarter (HQ) 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 Smart Census application is based on a geo-spatial platform, incorporating the administrative boundaries, Enumeration Area boundaries, Sampled VP and substitute VP points and digital imagery of all the 9 municipalities in which data collection took place.

The HQ field management processes were implemented through the HxGN Smart Census application. The system allowed for real time allocation of work units, and tracking and management of fieldworkers, right up to the EA and VP levels. Relevant staff members from GCRO had access to the system, which allowed them to see progress and work status in near real time.

The system was fully geographically enabled, and had three main components.

1. The HQ rich client system, which contains:
    a. The work assignment and scheduling system
    b. The data management system
    c. Data cleaning and QA component
    d. Data integration, view and overlay component
    e. Data migration system.
2. The mobile field application which is installed on the tablets.

3. The HQ progress dashboard system housed on the operational server.

The system allowed for the live monitoring of the fieldworker movements in the field and used colour coding and other progress functions to determine which EAs or VPs still needed to be completed, which were still 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 QA personnel could view and QA the data that was captured. Where appropriate, back-to-field operations were implemented where fieldwork errors needed to be fixed.
- The EA polygons were used as a unit of work and progress measurement, with one EA 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 API into a secure postgres database where it underwent QA. In some instances, call-back and back-to-field operations necessitated corrections on the data. No corrections or changes were made on the raw captured data.

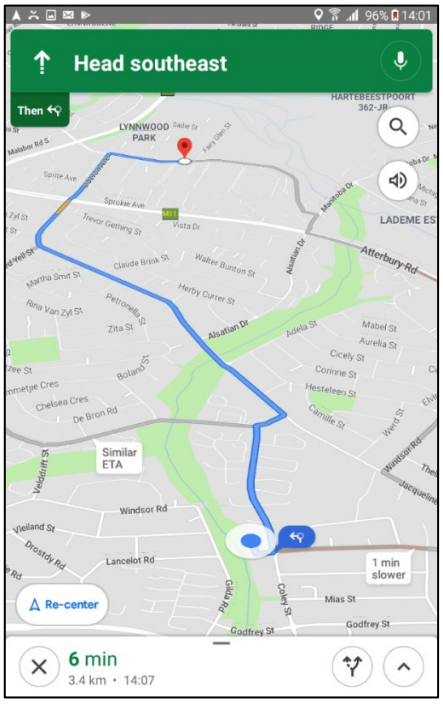
Fieldworkers used the assigned tablets not only for questionnaire administration but also for navigation purposes. As specific EAs were assigned to a fieldworker, the tablet synced with the data server, where the EA data, VP data and backdrop data, for that assigned EA alone, was loaded onto the tablet. This included the replacement VPs. In order to minimize uploads and downloads through mobile data, and depending on the tablet specifications, the satellite imagery backdrop for the entire Gauteng, or at least an entire municipality was pre-loaded onto the tablet. In instances where more than one EA was assigned to a fieldworker or more than one fieldworker worked in one EA, the team leader had the extra responsibility of ensuring that fieldworkers did not visit the same VP more than once.

As the data was loaded onto the tablet fieldworkers were also able to work offline when required and only sync when online again. Team leaders then had the additional responsibility to ensure that no duplicate VPs were visited.

3.3.2 Navigation and outcomes

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 EA. Navigation could be done using Google Maps or using a straight line from the fieldworker location to the VP, as shown in Figure 3.

Figure 3: Screenshots of navigation system



Google Maps Navigation

Straight line navigation

On reaching a VP, the fieldworker verified this on the basis of whether it was a viable dwelling unit or not (is there an inhabited dwelling present). Some VPS were deemed non-viable as they contained commercial, office, institutional, recreational or other non-residential land uses or structures. All VPs had to be visited and could only be substituted once a viable outcome was reached.

The following constituted viable outcomes:

- No Access – no access could be gained, for example, at a security estate, high rise building or hostel.
- Roster Refusal – The 1st 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 and the sampled member of the household agreed to participate but later refused during the actual questionnaire administration.
- Non-viable dwelling.
- No one at home (NOAH) at the second visit.
- Full successful interview.

3.3.2.1 No one at home

Fieldworkers were required the revisit the VP at least once if no one was at home on the first visit. The revisits needed to take place on a different day and/or at a different time.

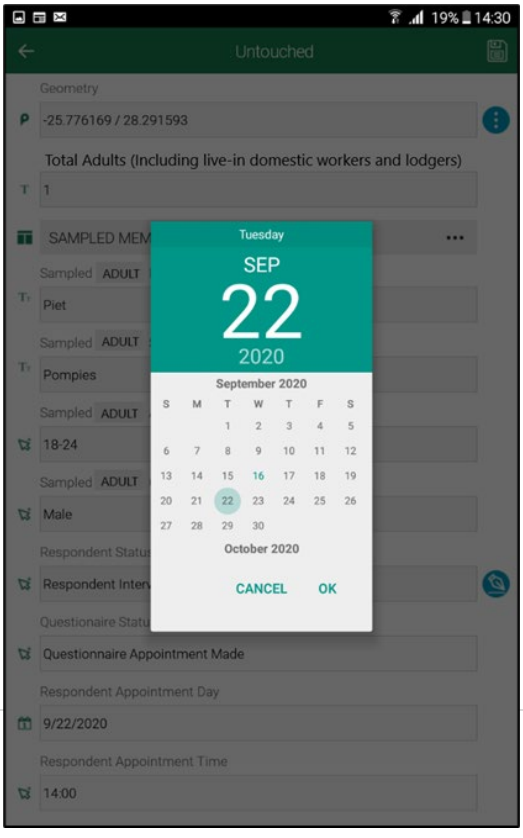
3.3.2.2 Sampled member and questionnaire refusal

Fieldworkers and team leaders always attempted to overturn refusals through the provision of additional information, without placing undue pressure on potential participants. In some instances this proved to be successful.

3.3.3 Appointments and GPS

The 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 system gave a warning when the captured GPS point were further than the required 50 meters from the VP. In some instances, it was not possible to get closer to the VP and the fieldworkers were then required to give a detailed explanation in the comments field for QA to approve.

Figure 4: Appointment interface on data collection device



3.3.4 In-field Sampling

In-field sampling was the responsibility of the GeoSpace fieldwork teams. The HxGN Smart Census 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 randomly select an individual adult household member for the required interview.

The in-field sampling methodology, including dwelling, household and respondent selection, were tested and refined during a pilot.

Before a questionnaire could be administered, the in-field sampling methodology needed to take place in cases where there were more than one household at the VP. Different sampling methodologies applied for different structures or building types:

- Normal residence
- Apartments (Flats) / Collective Living Quarters (Hostels)

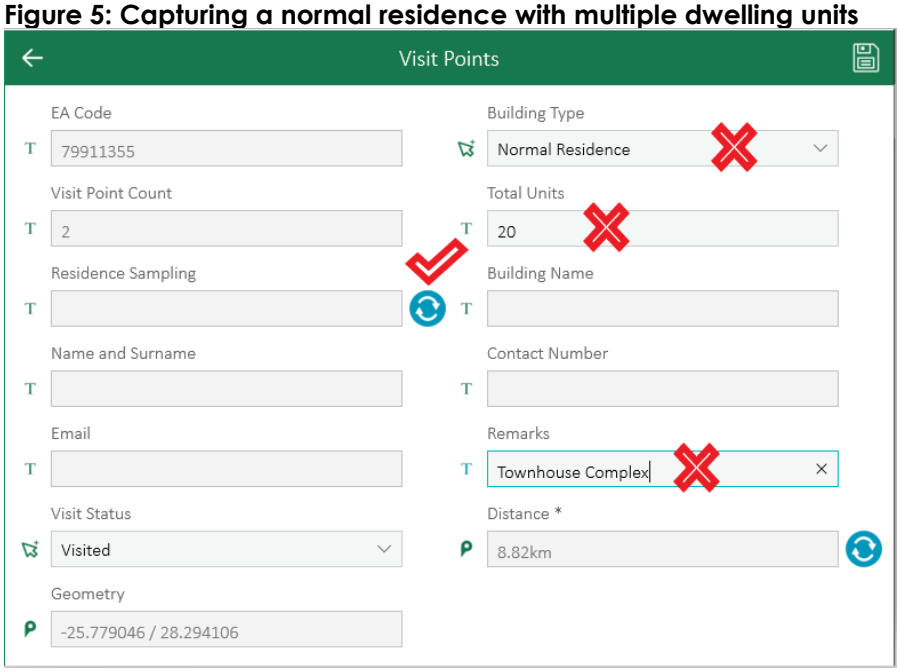
In certain cases, more than one interview needed to be completed per VP. This was indicated on the HxGN Smart Census mobile application map window, navigation page and VP attribute form. The following basic in-field sampling methodology applied:

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 the building type selected, the application guided the fieldworker through the rest of the in-field sampling steps.

3.3.4.1 "Normal Residence" selection

Fieldworkers came across situations where VPs consisted of multiple households e.g.: back-yard dwellings, granny flats or the VP represented an entire townhouse complex. In these instances, the 'normal residence' was selected and the fieldworker had to capture the total number of units at the VP (Figure 5).

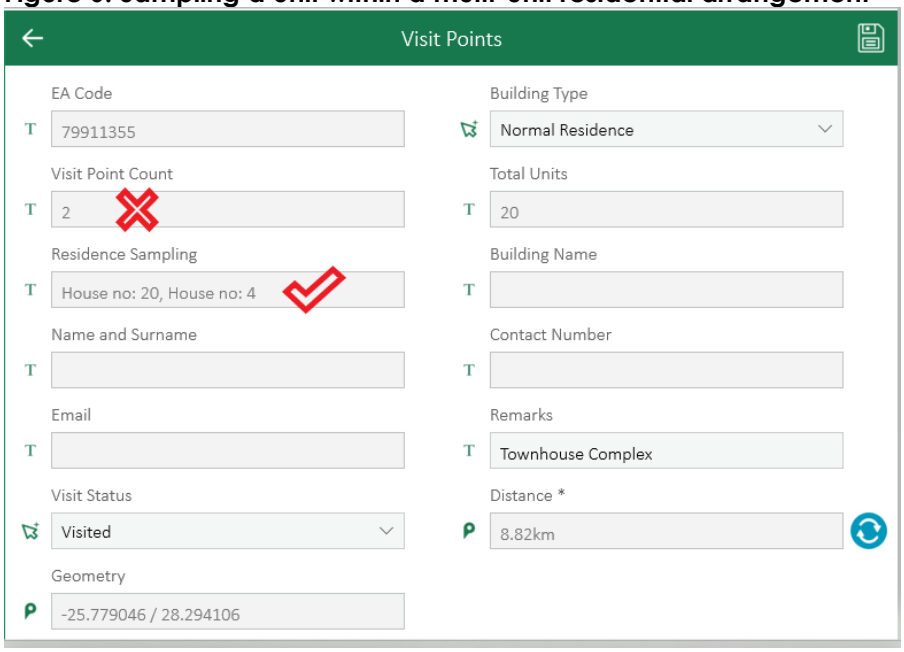
Figure 5: Capturing a normal residence with multiple dwelling units



Note: the ✗ cross in the figures above and below indicates where the fieldworker needed to enter information or pick from a dropdown list and the ✓ tick indicates where the fieldworker could view the final result.

The system then randomly selected the unit(s) or house(s) that should be visited when the fieldworker selected the 'residence sampling' button (Figure 6). Once the sampling was done the fieldworker was not allowed to navigate back and try to redo the sample selection. In this example, the VP count was 2, therefore 2 interviews needed to be completed at the VP. House no. 20 and House no. 4 was randomly selected by the system.

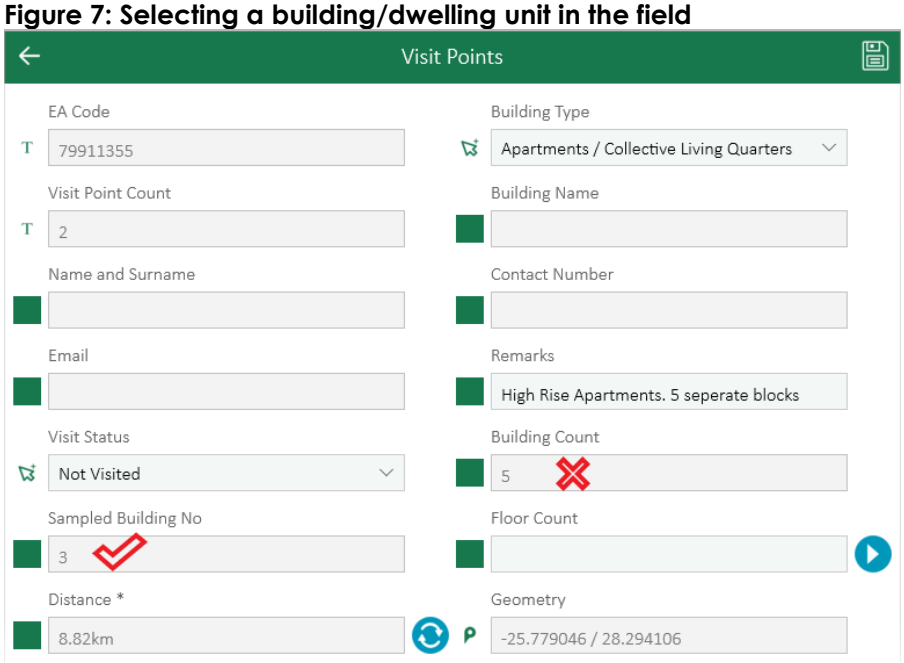
Figure 6: Sampling a unit within a multi-unit residential arrangement



3.3.4.2 "Apartments / Collective Living Quarters" selection

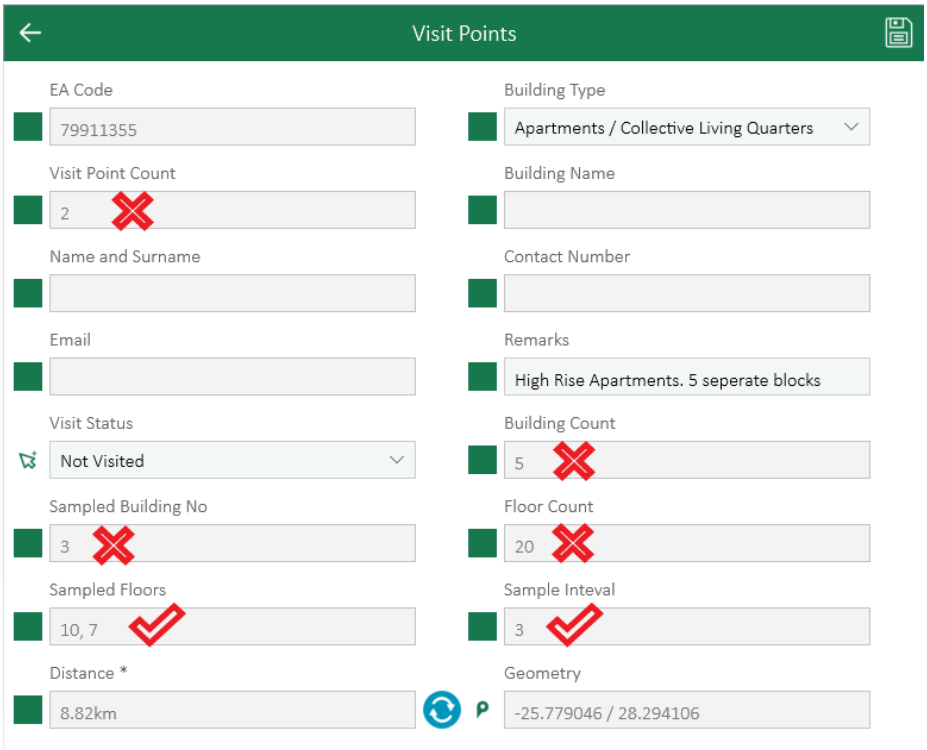
Visiting points were also located at apartments or collective living quarters (like hostels) and there were more than one building, block or complex. In this instance the methodology was slightly different in that the building count was first entered and the remarks field filled in. By selecting the 'building count' button, the system randomly selected the building that needed to be visited (Figure 7).

Figure 7: Selecting a building/dwelling unit in the field



In the example above, 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 then selected the 'floor count' button, the system randomly selected the floors that had to be visited and also provided a random interval number (Figure 8). In this example, the VP count was 2. Floors 10 and 7 was randomly selected by the system and an interval number 3 was also randomly allocated. The interval number meant that the fieldworker had to visit the 3rd dwelling unit on floor 10 and 7.

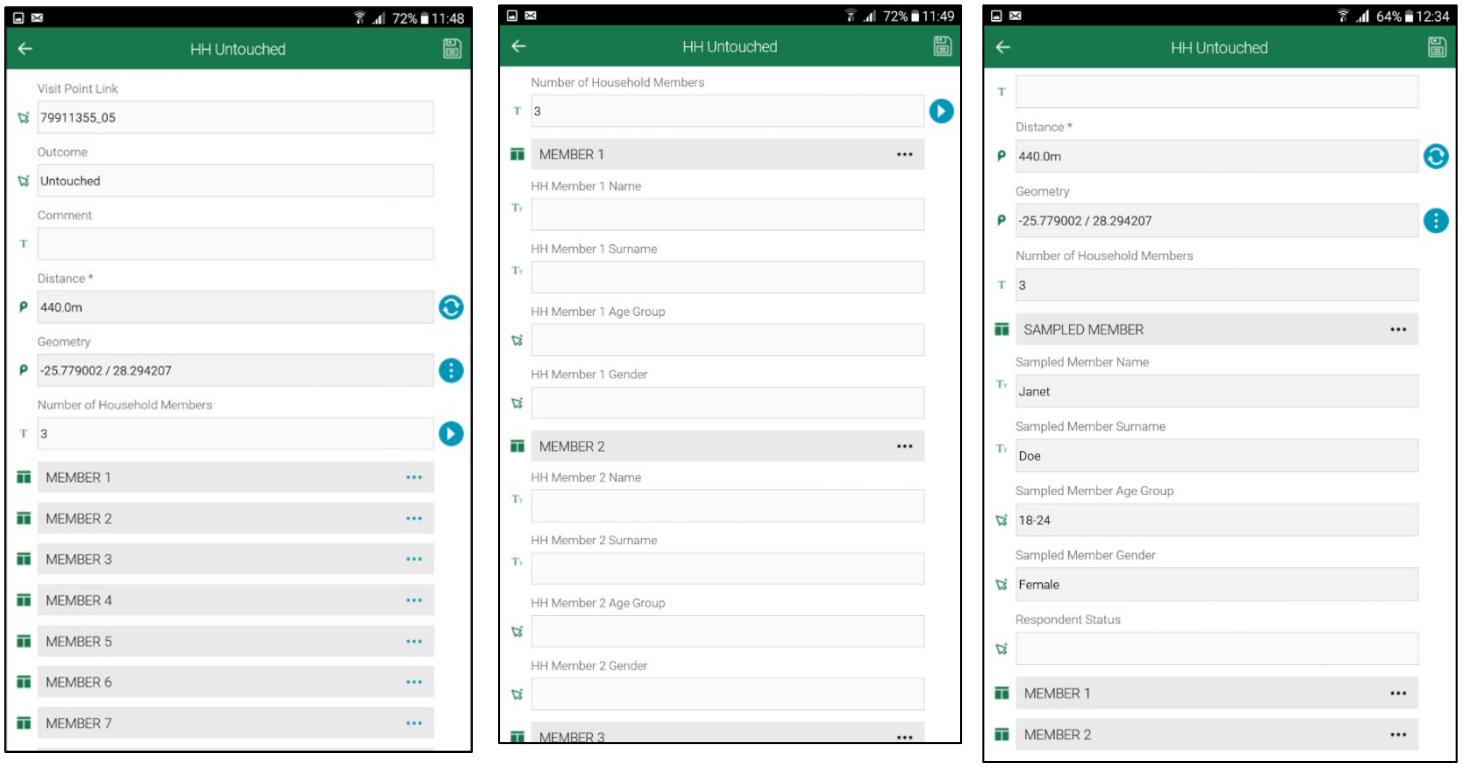
Figure 8: Selecting a floor of a multi-story building to be interviewed



3.3.5 Household member sampling

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

Figure 9: Household roster



3.4 Informed consent

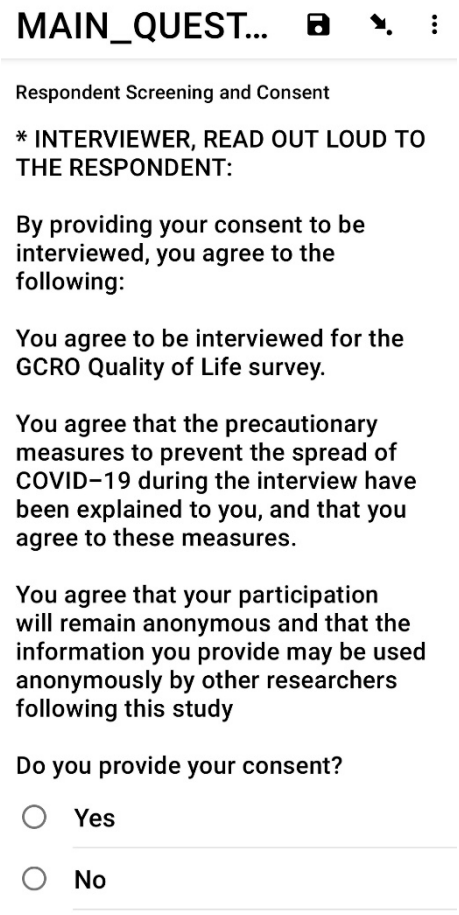
The randomly selected household member was only interviewed if they were willing and able to provide informed consent. Potential participants were provided with a brochure about the study, and a participant information sheet, both of which they could keep, before being invited to participate. Fieldworkers also had copies of a letter from the Gauteng Premier, and the study ethics clearance certificate, which were provided when they might be found useful. These materials are included in Annexures 5 to 8.

In addition to a verbal informed consent process, as detailed below, participants were also asked to sign a small hard copy receipt (see example in the Annexure 9), confirming their participation in the study. A picture of the signed receipt was uploaded as part of the main questionnaire, and used for quality control purposes.

The receipt itself was left with the participant. This enabled verification of the interview, and also ensured that the participant had the name of the fieldworker, and easy access to study contact information, should any issues arise.

Informed consent was obtained verbally, and captured using the Kobo Toolbox CAPI system described above. The Kobo Toolbox questionnaire was opened directly from the HxGN Smart Census mobile application. Figure 10 shows the interface used in recording informed consent.

Figure 10: Kobo Toolbox interface for capturing respondent consent prior to interview



3.5 Main questionnaire administration

The Computer-Assisted Personal Interview (CAPI) solution, Kobo Toolbox, was used for questionnaire administration. The Kobo Toolbox CAPI solution integrated seamlessly with the field data management application called HxGN SmartCensus. 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 can be found in Annexure 10.

The questionnaire content was provided by GCRO. The questionnaire consisted of two parts, the main content section that was completed by all respondents, and a self-complete section that was optional and confidential (see Section 3.6). The GCRO QoL 2020/21 questionnaire contained a total of 203 questions. More information about the questionnaire is provided in the *Data Report* (de Kadt, Mkhize & Hamann, 2021). The questionnaire is also available for download on the GCRO website.

The questionnaire was developed in English, and was translated into eight languages (Afrikaans, isiZulu, isiXhosa, Sepedi, Setswana, Sesotho, Tshivenda and Xitsonga), as were the participant information sheets and informed consent text. GeoSpace was responsible for converting the questionnaire into the CAPI solution. The CAPI system allowed for easy selection of the preferred interview language to conduct the interview. The questionnaire was tested before and during the pilot, and subsequently refined. Translations were also further refined during the training period.

The QoL 2020/21 questionnaire consisted of the following sections:

Main Content section

- Administrative Information
  - Respondent Consent GPS
  - Respondent Screening and Consent
- Respondent Administrative Information
  - Fieldworker observation
- Section 1
  - Dwelling Information
  - Basic services
  - Electricity
  - Events
- Section 2
  - Satisfaction with services
- Section 3
  - Migration
- Section 4
  - Neighbourhood or Community
- Section 5
  - Transport
- Section 6
  - Household
- Section 7
  - Lifestyle
  - Food

- Section 8
  - Participation and government
  - Opinions
- Section 9
  - Life Satisfaction
- Section 10
  - Business and work opportunities
- Section 11
  - Crime
- Section 12
  - Community & participation
- Section 13
  - Health
  - COVID-19 module
- Section 14
  - Personal

Self-complete Section

- Administrative Information
  - Introduction and consent
- Section 15
  - Gender identity
  - Sexual Orientation
  - Household income
  - Experiences of childhood abuse
  - Recent experiences of violence
  - Perceptions of support for those leaving harmful relationships.

The questionnaire was designed to include various validation rules and skip pattern logics, specific answer or number ranges, logic checks across sections and questions and automatic mathematical calculations, which assisted the fieldworker to complete the form accurately. If any errors were detected, the fieldworker was not allowed to proceed to the next question, or complete, save and upload the questionnaire until the errors were fixed. The skip pattern logic that skipped certain questions and or sections based on previous answers assisted the fieldworkers in administering the questionnaire, save time and ensured that the respondent were not asked questions that were irrelevant to the respondent. Moreover, the questionnaire contained drop-down list options, multi select options, single select options as well as number, date and text fields options where appropriate. At the end of each section and after certain selected questions in the questionnaire, fieldworkers had the option to add notes for clarification purposes during QA. Further information is available in the *Data Report (*de Kadt, Mkhize & Hamann, 2021). After the main questionnaire was completed, it was saved, and as soon as

network connectivity permitted it was automatically uploaded to the server and deleted from the tablet.

3.6 Self-complete section

After completion of the main questionnaire, participants were invited to complete the self-complete section of the survey, which was implemented as a separate questionnaire form. They were given a brief explanation of the types of questions asked in this section. If participants declined to participate, fieldworkers recorded this in the device, and submitted the uncompleted questionnaire.

If the participant agreed to complete this section, the following protocol was applied:

1. The fieldworker sanitized the tablet and handed the tablet over to the respondent for self-completion.
2. The fieldworker remained available to answer any questions the respondent might have, but allowed the respondent to complete the questionnaire privately.
3. Fieldworkers were trained to provide assistance in completing this module, but only on request of the participant, and if the participant had a good understanding of the nature of the content.
4. At the end of this section, instructions for saving and submitting this questionnaire were displayed on the screen, so that the respondent could complete these processes. This ensured that fieldworkers were not able to see respondent answers at a later time. If the respondent struggled with this process, the fieldworker would assist.

All participants were offered a referral sheet at the end of the interview, whether or not they participated in the self-complete section. The referral sheet provided information of local and provincial/national organisations providing assistance to individuals struggling with of psycho-social challenges, as well as gender based violence. The referral sheet is provided in Annexure 11.

3.7 Data upload and progress monitoring functionality

The system enabled the uploaded data to be viewed and quality assured as soon as it was uploaded. Fieldworkers were required to ensure questionnaires were uploaded after each interview, and if there were any difficulties, for example due to network connectivity, ensure that all content was uploaded at the end of the day.

Once an interview was completed, the fieldworker manually changed the status on the HxGN Smart Census mobile field management system depending on the outcome of the visit. The change in the outcome for the VP then reflected on the

online dashboards for progress tracking. These updated were reviewed and validated by team leaders and the QA team.

3.8 Quality Assurance and Call Back procedures

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 (were records for each VP within a reasonable distance of the sample point).
- Coverage (were all VPs in a given EA visited, and did each VP have an acceptable outcome).
- Questionnaire content (was the questionnaire completed accurately, with plausible response patterns).
- Individual field worker behavioural checks (specific interviewer outcome checks, such as average duration, number of adults listed, and frequency of various QA flags).

QA processes are detailed in the following sections. Throughout data collection, QA procedures were continuously refined and improved in collaboration with GCRO. Ad-hoc queries received from GCRO were investigated separately.

Where the QA process flagged a particular questionnaire, this was followed up with a call back or in-field visit to the original respondent. If a correction was possible this was recorded, and updated on the final dataset.

Where data could not be corrected, the questionnaire was rejected and a new questionnaire had to be administered.

The QA procedures that were implemented can be divided into three main categories: HxGN Smart Census QA activities, joint HxGN Smart Census and Kobo Toolbox QA activities, and Kobo Toolbox QA activities.

3.8.1 HxGN Smart Census QA Activities

Required number of interviews per EA

A query per EA was implemented to query if the total number of interviews required in an EA were achieved. If an EA was not complete, the fieldworkers were sent back to the EA to finalise it. Where all potential VPs and Substitute VPs within the EA were exhausted, a new EA with VPs and Substitute VPs was requested from GCRO.

Substitute VPs
A query per EA was implemented to confirm appropriate use of the substitute VPs. For each substitute VP there must have been a NOAH2, 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 should not have been visited before an acceptable outcome was achieved and recorded at an original VP.

Where this was not achieved, the fieldwork team leader was sent back to capture the original VP. In some instances, apparent issues with the timing of visits to substitute VPs were explained by difficulties with syncing data on a live basis. In these cases, the correction was done on HxGN Smart Census rich client and a note was added. Invalid substitute VP interviews were generally not deleted, only flagged and the FW was reprimanded.

Locational Accuracy
A query per VP was implemented to check if the interview was conducted within 50m from the relevant sample point. If not, a reason was required, and if no acceptable reason was provided the interview was flagged for a follow-up.

When interviews were flagged for locational inaccuracy, the fieldwork team leader, Manager or Call back officer followed-up. Call backs or physical visits were done. If the location was correct a note was made in the correct field and the QA field updated. If the location was incorrect but the interview was correct and it was established that it was a fieldworker error (fieldworkers did not close the GPS point at correct location) a correction was made on the rich client and the QA field was updated. Where applicable, the fieldworker was reprimanded, and where it was established that the fieldworker cheated the fieldworker received a final 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 was not kept or if they were late for an appointment. Where this occurred regularly, fieldworkers and team leaders were retrained.

3.8.2 Joint HxGN Smart Census and Kobo Toolbox QA activities

HxGN Smart Census and Kobo Questionnaire link
A query per interview was implemented to check that the questionnaire and the VP in HxGN Smart census linked correctly with the UNIQUE ID. Any inconsistencies were manually correctly linked and the QA field was updated.

Roster Info vs Questionnaire
A query per interview was implemented to check the sampled household roster member against the questionnaire info. The query included a check that the sex and age info match in both. If there were inconsistencies, a call back was made and corrections were implemented. Team leaders also made revisits and corrections. Where this occurred regularly, fieldworkers and team leaders were retrained.

HxGN Smart Census Location vs Questionnaire Location
A query per interview was implemented to check that the location captured in HxGN Smart Census Mobile and the Questionnaire were within an acceptable range of each other. This was to confirm that the interview was actually conducted at the sample point.

Major discrepancies meant that the entire questionnaire was redone at the appropriate location if the respondent agreed to be interviewed again, or alternatively a new interview was conducted at a substitute VP. Other inconsistencies triggered a call back or revisit by the team leader. Where this occurred regularly, fieldworkers and team leaders were retrained. Where it was established that the fieldworker cheated, the fieldworker received a final written warning.

3.8.3 Kobo Toolbox QA Activities

GPS, Date and time stamps and Audit Trail
The start, duration and end time of each questionnaire completed was automatically logged and could not be edited in the field. Time and GPS stamps were also captured at regular intervals within the questionnaire. These enabled checks to confirm that interviews moved at a steady pace, and that the full interview was conducted in the same location.

Kobo Toolbox receipt number captured vs receipt photo.
As mentioned earlier a hard copy receipt was filled in by the fieldworker and signed by the respondent for each interview completed. The unique receipt number was captured in the questionnaire, and a picture was taken and uploaded as part of the questionnaire. The receipt was then handed over to the respondent.

A query per interview was implemented to check that the receipt number captured in kobo and on the actual photo match. Any mistakes were corrected and where this occurred regularly, fieldworkers were retrained.

HxGN Smart Census Location vs Questionnaire Location
A query per interview was implemented to check that individual fieldworker ID and the team ID were captured correctly. Any mistakes were corrected and where this occurred regularly, fieldworkers were retrained.

Respondent Consent GPS location
A query per interview was implemented to check that the consent GPS location was within acceptable distance of the previously captured GPS locations. Where fieldworkers struggled with GPS signals, fieldworker were required to provide an in the interview comments field. Interviews with appropriate explanations were accepted. Any mistakes were corrected and where this occurred regularly, fieldworkers were retrained.

Interviewer comments
A query per interview was implemented to check if the interview language and home language matched. Fieldworkers were required to make notes if these did not match. QA could approve these interviews based on these notes or it was flagged for a call back.

Interviews with appropriate explanations were accepted. Any mistakes were corrected and where this occurred regularly, fieldworkers were retrained.

Respondent name
A query per interview was implemented to check if the respondent's name was the same as on the receipt. Any explanations were also assessed where applicable.

Interviews with appropriate explanations were accepted while other were flagged for call back. Acceptable explanations included spelling mistakes, the respondent used a nickname in the questionnaire but his/her real name on the receipt or vice versa, or a household member assisted the respondent in completing the receipt and used his/her own name instead. Any mistakes were corrected and where this occurred regularly, fieldworkers were retrained.

Dwelling section
A query per interview was implemented to check question A3: Which type of dwelling does this household occupy? vs question 1.3a: How is the dwelling owned? This was to ensure that fieldworkers did not capture both 'informal dwelling not in backyard' in A3 and 'free RDP house' in 1.3a. Any issues triggered call back, since it could have been caused by finger trouble on the part of the fieldworker.

Address
A query per interview was implemented to check question 1.2a: Please can you provide the address for this dwelling to ensure fieldworkers captured the flat and apartment correctly, and also check whether they had captured street number instead of unit number.

The QA Manager looked at area and settlement type and made any necessary corrections or accepted the interview.

Rooms in a dwelling
A query per interview was implemented to check question 1.2.7 - How many rooms are in the dwelling vs question 1.2.8 - How many other households are in the dwelling. If only one room was selected in 1.2.7 and more than zero in 1.2.8, the interview was flagged. Although it is possible for more than one household to live in only one room in a dwelling, these instances were all followed-up and verified, as in some instances respondents provided the number of household residents here instead of the number of households.

Transport
A query per interview was implemented to check question 5.6: Last time you made this trip, how many minutes did it take you to reach your destination? vs question 5.7 Last time you made this trip, what mode of transport did you use to cover the longest distance? The query flagged oddities and these were checked with the fieldworker or a call back was done to get the correct information.

Quick questionnaire
A query per interview was implemented to check the total time of the questionnaire. A decision was made to discard all questionnaires under 15 minutes and to constantly monitor this per fieldworker throughout the fieldwork period. Questionnaires with a total time between 15 and 20 minutes were flagged for additional checks. If any oddities were identified the questionnaire were disregarded.

Quick questionnaire with a travel status of going nowhere
A query per interview was implemented to check the total time of the questionnaire and also where the fieldworkers selected 'going nowhere' at the beginning of the transport section. This would have triggered the application to skip a number of questions which can substantially shorten the questionnaire. Fieldworkers were monitored and call backs were made where necessary.

Discrepancy between feeling safe at night but unsafe in day
A query per interview was implemented to check where respondents selected that they feel safe at night but not during the day. Call backs and corrections were implemented where necessary.

3.8.4 Call back activities

As part of the contract and to ensure an additional fieldwork QA level throughout the survey, call backs were instituted for a minimum of 25% of the QA approved interviews. Call back were also implemented whenever an interview was flagged by the QA personnel. In the end a total of 3 627 successful call backs (including all QA flagged call backs) were made (26.6% of the full sample).

During a routine call-back, after making successful contact with the respondent and after a brief introduction the following questions were asked:

- If the household was indeed visited by an interviewer to take part in the Quality of Life survey?
- Were you interviewed for the GCRO Quality of Life Survey?
- Name
- Surname
- Interview date?
- Did the interview take place at home?
- In which language was the interview conducted?
- Did the interviewer provide you with a receipt to sign?
- Approximate number of minutes the interview took to complete
- Address
    - Municipality
    - Area or Suburb
    - Street number
    - Street name
    - Unit Number
    - Building/Complex Name
- Were you asked about any of the following?
    .1. How many people live in your household
    .2. How your dwelling is owned
    .3. The water used by your HH
    .4. The electricity used by your HH
    .5. The transport you use and trips you take
    .6. Items the HH might own, such as televisions, cellphones etc.
    .7. If you recently voted or not
    .8. Local government performance
    .9. Employment
    .10. COVID-19 related questions
- How many members are there in your HH?
- How old are you?
- Are you currently employed or unemployed?
- Has your employment status changed since you were interviewed?
- Did you vote in the 2019 National elections?

- Have you always lived in Gauteng?
- Do you own or rent this dwelling?
- Do you use a pre-paid or post-paid meter for electricity?
- Were you happy with the professionalism and knowledge displayed by the person who interviewed you?
- Were you happy with the COVID-19 prevention precautions taken during the interview, and was it explained sufficiently by the interviewer?
- Did you complete the separate confidential questionnaire?
- Any other comments?

Call backs were also introduced where it became apparent that fieldworkers misunderstood certain questions, to double check certain data and correct any data errors.

The following dedicated call backs to address specific issues were instituted:

Adult count
A query to calculate the adult count captured in the questionnaire vs the number of adults captured in the household roster. Discrepancies were flagged for call-backs and corrections were made where possible.

Age
A query and call-backs were made where the respondent age was above 95 years of age. No corrections were

Transport
Question 5.1 generated an automatic skip for subsequent questions for a number of records in a particular version of the questionnaire. Call backs for the entire section of transport were initiated for the 171 cases. 138 out of the 171 were successfully followed up and corrected

3.8.5 QA rejected

Each interview had to be QA accepted in both the HxGN Smart Census and Kobo QA processes in order to pass the final QA accepted. In the end 488 questionnaires were not accepted and were dropped from the analytical dataset, although they remained in the database.

3.9 Security

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

Respondents were required to self-complete a section of the questionnaire. Once the section was completed the questionnaire was saved, uploaded and deleted from the tablet and the fieldworker was not able to open or access the self-complete questionnaire again.

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

3.10 Coding and recodes

GeoSpace was responsible for coding a number of free-text questions, as well as for coding responses to 'other (specify)' questions. Further details are available in the data report (de Kadt, Mkhize and Hamann, 2021).

3.11 Alternative in field sampling strategies

An alternative in field strategy was utilised at the back-end of the project. This was necessitated by the fact that additional VPs and substitute VPs were requested from GCRO in EAs with high refusal rates. This resulted in a back-and-forth situation between GeoSpace and GCRO every time all the VPs and Substitute VPs were exhausted through refusals in a particular EA. In order to better manage time and effort an alternative sampling strategy was used for these EAs. A list of the EAs where this approach was applied, and the number of QA approved interviews completed in each, is provided in Annexure 12.

The alternative sampling approach only came into effect after all the existing pre-selected VPs and substitute VPs were attempted and a viable outcome was recorded. Additional QA checks were implemented to ensure this was the case.

In these instances, all remaining VPs for the incomplete high refusal rate EAs were made available to GeoSpace, and loaded into the HxGN Smart Census application. The original sampled VPs and substitute VPs were deleted from the new additional VPs so that the same buildings or units (especially where access was previously denied) were not visited again. In order to avoid convenience sampling, a random number was assigned to each VP which was used as a priority ranking. In each of these EAs, the starting point was the VP with the lowest random value. The fieldworker moved to the next lowest random value for the next interview until all the required interviews were completed for the EA. The random ranking numbers were visible on the mobile maps for easy navigation purposes.

In instances where an EA consisted of more than one type of residential unit (normal residential houses and complexes) all the remaining required interviews in that EA

were first attempted at the normal residential units before moving to the VPs that represented complexes. This was due to the additional difficulties of negotiating access to complexes.

4. References

Hamann, C. and de Kadt, J. (2021). *GCRO Quality of Life Survey 6: Sample design (2020/21)*. Johannesburg: Gauteng City-Region Observatory. Available at https://gcro.ac.za/research/project/detail/quality-life-survey-vi-202021/

Mkhize, S. P., de Kadt, J. and Hamann, C. (2021). *GCRO Quality of Life Survey 6: Data report (2020/21)*. Johannesburg: Gauteng City-Region Observatory. Available at https://gcro.ac.za/research/project/detail/quality-life-survey-vi-202021/

5. Annexures

5.1 Annexure 1: COVID training and data collection SOP (August 2020)

COVID-19

TRAINING AND FIELD DATA COLLLECTION SOP

August 2020

ACRONYMS

GCRO – Gauteng City Region Observatory
QoL – Quality of Life
SOP – Standard Operating Procedure
WHO – World Health Organisation
CDC – Centres of Disease Control

1. Introduction

Coronavirus Disease 2019 (COVID-19) is a respiratory disease caused by the SARS-CoV-2 virus. It has spread from China to many other countries around the world, including South Africa.

Depending on the severity of COVID-19 's international impacts, outbreak conditions—including those rising to the level of a pandemic—can affect all aspects of daily life, including travel, trade, tourism, food supplies, financial markets and social research activities.

This document serves to provide details on the COVID-19 prevention protocol to be implemented when conducting training in enclosed training venues for the GCRO QoL 2020/21 survey project, as well the provision and implementation of a COVID-19 prevention protocol when dealing with the public and respondents during data collection. The document addresses different individuals who will be responsible

for implementing different preventions protocols, some of the protocols will therefore be listed more than once in the different sections.

1.1 Symptoms of COVID-19

COVID-19 , can cause illness ranging from mild to severe and, in some cases, can be fatal. Symptoms typically include fever, cough, and shortness of breath. However, some people experience no symptoms at all, referred to as asymptomatic.

According to the CDC, symptoms of COVID-19 may appear in as few as 2 days or as long as 10 days after exposure.

(https://bhekisisa.org/resources/general-resource/2020-07-17-can-you-be-forced-to-quarantinein-a-state-facility/)

1.2 How COVID-19 Spreads

Although the first human cases of COVID-19 likely resulted from exposure to infected animals, infected people can spread SARS-CoV-2 to other people.

The virus is thought to spread mainly from person- to-person, including:

- Between people who are in close contact with one another (within about 2 meters).
- Through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled.
- It may be possible that a person can get COVID-19 by touching a surface or object that has SARS-CoV-2 on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the primary way the virus spreads.

The GCRO QoL 2020/21 data collection training and field data collection exercise is considered to be a medium exposure risk job, which include those that require frequent and/or close contact with of other people (i.e., within 2 meters) who may be infected with SARS-CoV-2. (https://www.osha.gov/Publications/OSHA3990.pdf) As such, employees will be required to wear both face masks and face shields. Emphasis will be placed on the maintenance of social distance of at least 2 meters, along with the regular sanitisation and washing of hands, maintaining correct respiratory hygiene when coughing or sneezing, and avoidance of touching high risk surfaces.

2. Training

South African is currently in Alert Level 3 of the COVID-19 lockdown regulations, which include a stipulation that no more than 50 persons are allowed to congregate at any given time.

For training purposes, this limitation on the number of people would need to include all trainees, trainers, observers and mentors.

According to our resource requirement calculations, 20 Team leaders and 80 Fieldworkers will be required to complete all data collection for the QoL 2020/21 survey.

> Two training sessions will therefore be needed. The 1st training sessions will only consist of team leaders and additional fieldworkers who will also be responsible to conduct the pilot. The 2nd training sessions will consist of the remaining fieldworkers. Additional fieldworkers will be trained to cater for fieldworker attrition.

2.1 Training venue

2.1.1 Venue inspection

Before a training venue can be prepared for training, it needs to be inspected to determine the following:

Infrastructure requirements

- Number of entry/exit points
- The best areas to set up screening stations
- Which of these points can be used as entry/exit only
- The size of the dining/break room - can 50 people fit in there at minimum 1.5 meters apart? If not, the training schedule will be amended in such a way to implement staggered breaks and lunch periods. Identify an outside dining/break rooms if possible
- Size of the bathrooms (how many people can fit into a bathroom at one time while being 1.5 meters apart and ample space for people to safely queue)
- Areas where social distancing markers (floor tape, wall markers) will be required to enforce correct social distancing
- The best areas to put hand sanitation stations and single use tissues and the maintenance thereof
- Which regularly touched surfaces (door knobs, tables, chairs, door frames, taps, light switches etc.) needs to be cleaned daily (each morning and evening)
- The venue also needs to provide bins where tissues can be disposed of.
- How many bars of soap/liquid soap and disposable towels to place in each bathroom during training and ensuring the maintenance thereof
- Identify a room or area where someone who is feeling unwell or has symptoms can be safely isolated **Legal requirements**
- Does the venue have a COVID-19 prevention policy? If so, does it meet the relevant requirements?
- Does the venue staff wear Personal Protective Equipment (PPE) at all times? **Other requirements**

- Identify the most appropriate areas where various posters can be displayed regarding: ○ COVID-19 symptoms ○ Screening procedures
    - ○ Correct hand washing methods ○ What to do if you display symptoms ○ What to do if you test positive ○ Correct wearing of masks ○ Respiratory hygiene ○ Quarantine vs Isolation ○ Social distancing
    - ○ Identification of high risk individuals

2.1.2 Venue preparation

The following must be done every day

- Clean all regularly touched surfaces (door knobs, tables, chairs, door frames, taps, light switches etc.) starting the evening before the first day of training.
- Set up all sanitation stations
- Display posters – posters created by the WHO on various COVID-19 related issues, such as symptoms, proper hand washing techniques, general preventative measures and other topics will be displayed in various different areas inside and outside the training venue
- Lay out social distancing markers
- Lay out seating and workstation arrangements
- Put bars of soap and disposable tissues at identified areas
- Ensure bins are placed at all sanitation stations and areas where disposable tissues will be used
- Clearly identify entry and exit points
- Set up screening stations
- Prepare areas where trainees will be provided with their PPE
- Identify and mark the isolation room
- Open doors and windows

2.2 Procedures to be followed before GCRO QoL 2020/21 training commences

- Sets of PPE (face mask and face shield) will be laid out on the outside of the venue where trainees, on arrival at the venue, one by one, will pick up their PPE
- 2 Masks and 1 face shield will be provided. Trainees will be required to wash masks every day
- Trainees will then sanitise their hands and don their face masks only, before moving to the screening station
- Proper screening needs to take place before trainees can enter the venue. This will consist of the completion of a self-screening form, where the trainee's temperature will also be taken using a digital thermometer

- The trainee will complete the self-screening form, write down his/her temperature as taken by the trainer, and sign the form. Trainees will be provided their own pens at first registration, which they will use throughout
- The completed registration form will be deposited into a separate box
- When trainees receive their digital devices and are allowed to take them with them after each day's training, the self-screening will be completed before being picked up
- All trainees will be given directions to the isolation room before they can enter the venue
- After a successful screening, trainees will sanitise their hands again, and don their faceshields with their masks, and enter the venue
- Trainees will enter the venue one by one, and will be shown to their respective work stations by one of the trainers
- As trainees enter the venue, various videos regarding the COVID-19 prevention protocol, one specifically made for training, covering social-distancing protocol, symptoms, promoting hand sanitisation and washing of hands and what to do when certain symptoms displays, and other general COVID-19 related videos as created by the WHO, will be played on loop, so that trainees have a chance to familiarise themselves with the protocol.
- Selected windows and doors within the venue will be open at all times to ensure proper ventilation. No air conditioning system will be activated. Limited research suggests the use of air-conditioning units might spread respiratory droplets further, hence we should err on the side of caution. (See European Centre for Disease Prevention and Control – ECDC – document on ventilation in the context of COVID-19 .)

https://www.ecdc.europa.eu/sites/default/files/documents/Ventilation-in-the-context-ofCOVID-19.pdf https://www.theatlantic.com/ideas/archive/2020/07/scourge-hygiene-theater/614599/

NOTE: All Geospace and GCRO staff that attends the training for that day, will also have to go through the screening process before entering the venue, no matter what time of day they arrive. The same applies to any venue staff that might come into contact with trainees or training staff during any time of the day. In general, all interaction with venue staff will be limited to Geospace training staff.

Once all the trainees and trainers have entered the building, a 30 minute theoretical training session will be provided regarding what protocol to follow during the rest of the training period. Specific consideration will be given to observing the 7 golden rules:

- Avoid touching your mouth, eyes, and nose with unwashed (or gloved) hands.
- General hand hygiene - Clean your hands thoroughly for at least 20 seconds using soap and water, or alcohol-based hand rub (video on proper hand washing techniques will be displayed)
- Respiratory hygiene - Cover your nose and mouth when coughing and sneezing with a tissue or a flexed elbow
- Avoid close contact with anyone with cold or flu-like symptoms
- Social distancing - maintain a 2 meter distance to others (two arm's length).
- Stay home if you are sick.

- Seek medical advice if you display any COVID-19 symptoms.

The location of hand sanitising stations, disposable tissues, bins, areas where soap and water is available, will be indicated to all trainees.

The relevant COVID-19 protocol videos will be played on loop each morning as trainees enter the venue for the rest of the training period.

The South Africa COVID-19 hotline number will be provided to all participants, where anyone who believes they have symptoms of the coronavirus can call.

COVID-19 Public Hotline - 0800 029 999

Official WhatsApp Help Service Send HI to

0600 123 456 on WhatsApp.

or share this link: https://wa.me/27600123456?text=Hi

2.2.1 The QoL 2020/21 self-screening form

QoL VI TRAINING COVID-19 SELF SCREENING

Date	
Name & Surname	
ID/Passport no	
Contact number	

No.	CONDITION / SYMPTOM	YES	NO
A	**SYMPTOM CHECK**		
1	Are you suffering from fever / high temperature or temperature fluctuations?		
2	Do you have a dry cough?		
3	Do you have a sore throat?		
4	Do you have redness of eyes?		
5	Do you experience shortness of breath / difficulty in breathing?		
6	Have you got unusual body aches / muscle pain?		
7	Do you experience a loss of smell / taste?		
8	Are you nauseous and/or do you experience unusual vomiting?		
9	Have you got diarrhea?		
10	Do you suffer from fatigue / physical weakness / tiredness?		
B	**CONTACT / EXPOSURE RISK**		
1	Have you been exposed to someone diagnosed with Covid-19 or had recent contact with someone who is self-isolating whilst waiting for a Covid-19 test result in the last 14 days?		
C	**OTHER RISK FACTORS**		
1	Do you suffer from any pre-existing medical condition / chronic illness that may have compromised your immune system, i.e. respiratory disease, diabetes, heart disease, or any other chronic illness that could compromise one's immune system?		
2	Are you 65 years of age or older?		
Actual Temperature – Record your temperature as taken by the training screener, using the digital thermometer			

COVID-19 SAFETY IMPLEMENTATION GUIDELINES

- If you experience any symptoms mentioned in questions **A1** to **A10** then this does not mean that you definitely have Covid-19. This screening questionnaire is used as precautionary indicator to establish whether you should be quarantined and if tests are required to make a definite diagnosis.
- If you experience a combination of symptoms mentioned in questions **A1** to **A10** then you will immediately be quarantined in the designated area, the nearest health authority, health worker or Ministry of Health office contacted, and safely transported to either your home or a health facility
- If you experience any symptoms mentioned in questions **A1 to A10**, you will be allowed to come to a subsequent training session after 10 days of self-quarantine, depending on a review by the employer regarding:
  - Allowed number of trainees
  - Available number of training sessions left
- Notify Geospace training staff IMMEDIATELY if your status in Sections **A** or **B** changes at any time.
- If you answered "**YES**" to any of the questions in **B1** and **C2** (but have none of the symptoms mentioned in **A1** to **A10**), then this does not mean that you will not be permitted entry into the training venue (a decision may be necessary whether your response requires any further intervention).
- If you are tested positive for Covid-19 isolate for 10 days. Follow your Healthcare Worker's advice.
- If you tested positive for Covid-19 and are hospitalised, you will not be allowed to take part in the QoL VI field data collection
- All trainees will wear their respective Personal Protective Equipment at all times and will observe and adhere to the training Covid-19 safety protocol

DECLARATION

I hereby declare to the best of my knowledge that the information disclosed is correct at the time of completion. I further undertake to inform the Geospace training staff should I be diagnosed with COVID-19 within the next 14 days so as to facilitate contact tracing. I further declare that I understand and agree to the COVID-19 SAFETY IMPLEMENTATION GUIDELINES

_____

Trainee signature

GeoSpace
measure it. manage it.

2.2.2 Use of the isolation room

The isolation room might be used in two instances:

- When a person becomes feverish and ill during training, even after passing the screening process that morning
- When a person is obviously ill during the screening process, or has a temperature of 37.8 degrees Celsius or more (the WHO indicated maximum temperature threshold when taking a person's temperature is 37.8C or greater)

Should any of these circumstances occur, the person will be moved to the pre-identified isolation room immediately, taking care that this person does not come into close contact with any of the training staff, trainees or venue staff.

The person escorting the individual to the isolation room will never come within a distance of more than 2 meters from the individual.

Geospace management and GCRO will immediately be notified of the case.

The training venue will be ventilated cleaned and everything the sick person came into contact with will be cleaned.

The isolation room will also be cleaned and disinfected.

The person will not be allowed to take any further part in the training session, and will be required to self-isolate for 10 days before being considered to take part in subsequent training sessions.

Geospace will provide a driver and vehicle to transport the individual to his/her home. Only the driver and trainee will be allowed in the vehicle. All windows will be opened; the trainee will sit in the back of the vehicle.

Masks and face shields will be donned at all times.

The same procedure will be followed should the trainee be required to be dropped off at home.

Upon returning, the driver will clean and sanitise the vehicle, focusing on:

- The steering wheel
- Dashboard
- Hand brake
- Door handles, inside and outside
- Safety belts
- Inside driver and passenger windows

2.3 Procedures to be implemented while training takes place

- Social distancing of 1.5 meters will be maintained throughout training and all work stations will be 1.5 meters apart
- Depending on the size of the bathrooms, not more than 3 persons will be allowed into a bathroom at all times. If, upon inspection, more, or less persons can be allowed at one time, this figure will be adjusted.

- Toilets must be closed at all times prior to flushing
- Whenever using the bathroom, hands will be washed using the soap provided
- At ANY point during the day, whenever exiting or entering the training room, hands will be sanitised
- Face shields and masks will be worn at all times, however, face masks may be removed while eating or drinking
- Should there be a need, rest breaks and lunch breaks will be staggered, to ensure that not too many people congregate together without breaching the social distance parameters
- Geospace trainers will monitor the behaviour of all trainees at all times, to ensure they adhere to protocol, however, the trainees will be made aware that they themselves are also responsible for adhering to the training protocol
- Trainers who do not adhere to the protocols will not be allowed to further participate

Geospace will keep itself abreast of the COVID-19 situation in South Africa and Gauteng in particular, and will keep trainees informed. If any situation arises regarding a spike in cases or prospective lock-down measures, training will be postponed and an appropriate training period assessed.

2.4 Procedures to be implemented when training concludes

- Trainees will be required to wipe down and clean their own equipment, should they be required to take it home with them
- Trainees will leave the building one by one, and report to the nearest screening station, where they will be screened again, and complete the self-screening form again
- Trainees will then be transported with Geospace vehicles (not public transport) to various drop-off points close to their homes or place of accommodation, all while wearing their face shields and masks
- Trainees will be requested to refrain from making use of public transport
- Geospace trainers will clean the workstations and equipment on a daily basis
- Venue staff will clean the venue on a daily basis, wiping down, tables, chairs, light switches, door knobs, door frames, window frames and clips etc., as identified during the venue inspection
- The same will be done in the isolation room
- The venue cleaning staff will be responsible for the safe disposal of refuse bags
- The venue cleaning staff will be responsible for the cleaning of bathrooms each day
- Geospace trainers and GCRO observers will also do self-screening and adhere to the same transport protocol

2.4.1 Transport during training

Geospace will provide transport to trainees to and from specific pick-up and drop-off points in Gauteng. These points will be identified per training session, depending where the trainees for that specific session is staying.

When using the provided transport, the following will apply:

- Each vehicle will have a dedicated driver
- The driver is responsible for cleaning regularly touched surfaces in the vehicle (eg door handles ?) after dropping off passengers and before picking up passengers
- All the relevant cleaning/sanitation materials will be provided
- Each vehicle will have hygiene and sanitation products such as sanitizer, disinfectant and a refuse bag
- Before a passenger enters a vehicle, they must: ○ Wear their face mask and shield properly
  ○ Have disinfected their hands (sanitiser to be provided by the driver)
- When a passenger exits 11the vehicle, they must sanitise their hands
- All efforts will be made to maintain a distance of at least 1 meter between occupants
- Windows will remain open at all times
- When passengers have been dropped off, and before another batch of passengers are picked up, the driver will clean and sanitise the vehicle, focusing on: ○ The steering wheel ○ The gear shift ○ Dashboard ○ Hand brake ○ Door handles, inside and outside ○ Safety belts and buckles ○ Window, radio, air-conditioning and lights controls ○ Door frames

Maximum number of passengers per vehicle will be two per row for sedan vehicles.

Passengers and drivers must be sitting as far as possible from each other with windows open as far as possible.

In the unforeseen circumstance that a trainee needs to use public transport, the trainee will be required to wear their mask and face shield the entire time. Preferably sit next to an open window, and sanitise their hands before entering and after exiting the vehicle. Where cases like this might occur, the trainee will be provided their own hand sanitiser.

The trainee may only use public transport that adheres to the South African COVID-19 public transportation regulations.

2.4.2 General procedures and information on venue cleaning

The WHO primary guidelines for cleaning non-healthcare settings will be followed:

https://www.who.int/news-room/q-a-detail/q-a-considerations-for-the-cleaning-anddisinfection-of-environmental-surfaces-in-the-context-of-COVID-19 -in-non-health-care-settings

CLEANING VERSUS DISINFECTING

The difference between cleaning and disinfecting, according to the Centres for Disease Control and Prevention, is that cleaning removes germs and dirt, while disinfecting refers to the use of chemicals to kill germs.

Disposable gloves will be used by staff when cleaning and disinfecting surfaces. After removing and disposing of the gloves, they will wash/sanitise their hands.

Surfaces and objects will be cleaned using a detergent soap and water and wiped with a cloth. If needed, a bleach solution will also be used, according to the dilution measures provided by the WHO. Bleach solutions will not be mixed with household cleaning products. Disposable wiping cloths will be used throughout, since using the same cloth over and over will not be effective.

Cleaning hard (non-porous) surfaces

If surfaces are dirty, they will be cleaned using a detergent or soap and water prior to disinfection.

- For disinfection, common household disinfectants will be used, as long as the adhere to the WHO specifications
  - Follow the manufacturer's instructions for all cleaning and disinfection products for concentration, application method and contact time, etc.
  - Additionally, diluted household bleach solutions (at least 1000ppm sodium hypochlorite) can be used if appropriate for the surface. Follow manufacturer's instructions for application, ensuring a contact time of at least 1 minute, and allowing proper ventilation during and after application. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against Corona viruses when properly diluted.
  - Prepare a bleach solution by mixing:
    - 5 tablespoons (1/3 cup) bleach per 4 litres of water) or
    - 4 teaspoons bleach per 1 litre of water

Venue carpets, drapes and other soft or porous surfaces

It will be the venue's responsibility to clean all the non-porous surfaces at the end of each day. The Geospace trainers will ensure that the venue adheres to this task, and will also do an inspection each morning, to ensure carpets have been vacuumed.

3. Field data collection

3.1 The field data collection methodology in a nutshell

The gist of GCRO QoL 2020/21 field data collection is to do pre-identified (sampled) household visits across the Gauteng Province over a period of 5 months. At each household, a knowledgeable household member will be identified and interviewed to create a household roster, using a digital questionnaire administered on a tablet. A household member will be sampled and a separate questionnaire will be administered on the same tablet. Moreover, before moving into specific areas, fieldworkers will engage in various different meetings with gate keepers and citizens to gain access and inform them about the study and its goals. The field staff will therefore have daily contact with various members of the public, even in just going about general life. It is therefore our duty to put in place a protocol that will maximize the chances of both the field staff and the general public against contracting the virus, specifically when field staff is on duty.

3.2 Transport and vehicle protocol

The transport and vehicle protocol to be followed will be in line with the South African Government COVID-19 regulations.

Teams will be provided a combination of rental vehicles as transport during the time of data collection. Each team will always have at least one qualified driver (requiring not only a valid driver's license, but also proven driving experience), and this person will be responsible for driving the vehicle at all times, and hence, responsible for adhering to all the relevant precautionary procedures where COVID-19 is concerned.

The following will apply:

- Each vehicle will have a dedicated driver (ideally the Team Leader)
- The driver is responsible for cleaning regularly touched surfaces in the vehicle after each trip
- All the relevant cleaning/sanitation materials will be provided
- Each vehicle will have hygiene and sanitation products such as sanitizer, disinfectant and a refuse bag
- Before a team member enters a vehicle, they must:
    - Wear their face mask and shield properly (though face shields is not mandatory, it is encouraged)
    - Have disinfected their hands (sanitiser to be provided by the driver)
- When a team member exits the vehicle, they must sanitise their hands
- Where possible all efforts will be made to maintain a safe distance between occupants
- Windows will remain open at all times, depending on the weather conditions
- After each day, the driver will clean and sanitise the vehicle, focusing on: ○ The steering wheel ○ The gear shift ○ Dashboard ○ Hand brake ○ Door handles, inside and outside ○ Safety belts and buckles ○ Window, radio, air-conditioning and lights controls ○ Door frames ○ Seats
- In the context of field data collection, a trip will constitute any point where a new person is transported after another has been dropped off. If, for example, a team of three fieldworkers is picked up in the morning and dropped off at their various work locations, and then another fieldworker will be picked up and dropped off afterwards, that will constitute 1 trip, and the

vehicle needs to be cleaned before the other fieldworker is transported. As a rule, the vehicle will have to be cleaned each morning before fieldwork begins, or each evening, after fieldwork has ended.

During fieldwork the maximum number of persons per sedan vehicle will be five.

Passengers and drivers must be sitting as far as possible from each other;

A fieldworker may only use public transport that adheres to the South African Government's COVID-19 public transportation regulations, and only after having notified their QA Manager, so that all other options or alternatives can be investigated.

3.3 Awareness activities and meetings

There will be times where teams or team leaders need to arrange and have meetings with gate keepers, community leaders and/or community members. In cases such as these, it is important to ensure the safety of all attendees.

Geospace will constantly monitor, with assistance from GCRO, areas in the Province where possible outbreaks might have occurred. In areas such as these, having meetings of any sort will be discouraged.

When setting up a meeting the following need to be considered:

- Is a physical meeting really necessary, or can the relevant information be conveyed by other means, such as a virtual meeting, a telephone call or email communication?
- The attendance of people who have chronic respiratory diseases or diabetes should be strongly discouraged
- The minimum amount of people should attend
- The venue where the meeting is to be held should be able to be large enough where the minimum social distance of 2 meters between people can be adhered to, and should be well ventilated
- Having meetings in the open is encouraged
- Fieldworkers will request all prospective attendees to wear a mask
- Fieldworkers will wear both their face masks and face shields at all times
- Meetings should be as brief as possible
- Each team will be supplied with a number of COVID-19 related pamphlets that can be sanitized and distributed during the meeting
- The team will ensure that enough hand sanitiser, wiping cloth and bins is available at the meeting place
- Sanitiser will be offered to everyone attending the meeting
- Should any person become ill during the meeting, they should immediately leave and contact their local health authority or call the South African COVID-19 hotline number

3.4 Daily self-screening

The purpose of daily self-screening is as follow:

- Early and timeous identification and diagnosis of general and field staff at risk of COVID19 infection.
- Early referral for appropriate treatment, care and timeous return to work of affected workers.
- The protection of other unaffected workers and members of the public
- Minimizing risk that an infected person reports for work and exposes colleagues or members of the public.

Fieldworkers will be picked up from their place of residence by the team leader. Team Leaders will use a thermometer to perform a personal temperature check as well as on each fieldwoeker before picking them up .Each Geospace staff member and fieldworker will be required complete the digital self-screening form each morning, before leaving their home or interacting with the public.

This form will have the same structure and questions as that of the self-screening form used during training, without the temperature reading.

The form will be created on the Kobo digital data collection platform. After completion of the self-screening tool, the person will upload the form to the Geospace central server.

The completion and upload of these forms will be checked each morning at the Geospace HQ in Pretoria. If it becomes apparent that a fieldworker either did not complete, or completed but not uploaded the self-screening form that day, he/she (or the relevant Team Leader), will immediately be contacted. No individual fieldwork will be allowed without a correctly completed and uploaded form.

In general, the following will also apply:

A fieldworker will not come to work and will inform his/her team leader or QA Manager when:

- They present COVID-19-like symptoms. They must self-isolate at home for a minimum of 10 days from onset of symptoms, until their symptoms are completely resolved.
- They came into close contact for more than 15 minutes with a member of the public who displays COVID-19 like symptoms, or who tested positive. He/she will have to self-isolate immediately.

3.4.1 If a fieldworker tests positive

In the unfortunate event that a fieldworker tests positive, Geospace will draw up a list of:

- Team members the person have been in close contact with over a 10 day period prior to testing positive
- A list of all the households the person has visited for over 15 minutes, over a 10 day period prior to testing positive, including: ○ Location ○ HH member names ○ Respondent name

- Names and details of any attendees of meetings the person have been in contact with over a 14-day period prior to testing positive
- Names and details of any attendees of meetings the person have been in contact with over a 14-day period prior to testing positive

Since the personal safety of the fieldworker is of primary concern, the following will be observed

- That the employee is isolated and/or placed in quarantine as may be the requirement in terms of relevant Government Regulations.
- That the necessary reporting has been done in terms of a relevant Government Regulation (if appropriate or required).
- Fieldworkers will be entitled to normal South African Government Labour sick leave.
- A workman's compensation claim will be instituted should a fieldworker contract the virus while at work

3.5 Interacting with households and respondents

3.5.1 When approaching a household for the first time

During any interaction with the public, both face masks and face shields will be worn at all times. When making use of disposable face masks it must be disposed of according to manufacturer regulations, and, should cloth masks be worn, they must be washed daily by the fieldworker, using soap/detergent.

When making contact with a household, the following measures will be taken:

- When first contact is initiated to introduce the study, identify the most appropriate household respondent and capture the household roster, the fieldworker must always attempt it to be outside the home and avoid going into the home
- The fieldworker will carry with him/her their bottle of sanitiser and disposable wiping cloth
- When approaching a household resident, the fieldworker will introduce him/herself as well as the study following the methodology stated in the GCRO QoL 2020/21 Field Operational Manual
- The fieldworker will stress to the household resident/s the need for social distancing when approaching each other, especially if they are not wearing masks
- When interacting with household members, a distance of 2 meters must always be maintained
- The fieldworker will enquire from the household resident/s if they are aware of the COVID-19 virus, how it spreads and generally what measures can be taken to protect oneself from it, stating the 7 golden rules. This will be done in a conversational tone, so as to put the resident/s at ease that, from the resident's perspective, the necessary knowledge about the virus and its preventative measures has been taken into account by the fieldworker, and, from

the fieldworker's perspective, that the residents are informed about the virus and its preventative measures.

- Should the resident/s not have their masks on, the fieldworker will politely ask the main person they are conversing with to don a mask. Should they not have one, the fieldworker will ask to keep a 2 meter distance.
- The normal process will then be followed in determining the sampled household member and when the interview with that respondent might take place.
- Should the fieldworker enter the plot through a gate, the fieldworker will take care to wipe of the gate handle before entering and upon exiting

3.5.2 When interviewing the respondent

- Interview location ○ Where possible, the fieldworker will ask the respondent to conduct the interview outside the house, while maintaining a 2 meter distance.
    - A foldable chair will be provided to each fieldworker in order not to make use of the respondent chair or furniture
    - If the interview has to take place inside the house, for whatever reason, the fieldworker must ask the respondent that it should be a room large enough to maintain the 2 meter social distance, while also having good ventilation (open doors or windows)
    - The foldable chair must still be used whenever possible if an interview takes place indoors
    - The fieldworker must impress upon the respondent that it is essential that all household residents maintain a 2 meter social distance from the fieldworker
    - The fieldworker will always carry his/her hand sanitiser bottle and disposable cloth with when entering a plot or home
    - The fieldworker will sanitise his/her hands before opening the questionnaire, and wipe off the tablet
    - The fieldworker will also offer the respondent an opportunity to sanitise his/her hands before and after the interview
- Interview administration ○ The fieldworker will firstly provide the respondent with the South African

  Government COVID-19 hotline numbers ○ The tablet and stylus must be sanitized before and after the respondent has completed the self-complete section

  Note: A decision to provide every respondent with disposable face mask before the interview start will be taken before fieldwork start. In such a case the logistics form will need to be completed.

3.5.3 Upon leaving the household

- The fieldworker will ensure that all the areas he/she might have touched is wiped down. The fieldworker needs to reassure the respondent that it is a necessary precautionary measure
- The respondent should be offered hand sanitiser to sanitise their hands before leaving

- The fieldworker him/herself will always sanitise their hands upon leaving a household and moving onto the next one.
- Before and after each interview, the tablet will have to be wiped down in the appropriate manner

3.6 General public conduct measures

Field staff will be mindful of wearing their appropriate PPE at all times when moving about in public. Moreover, all field staff will be obligated to follow the South African Government COVID19 health regulations.

The 7 golden rules will be continuously enforced and applied:

- Avoid touching your mouth, eyes, and nose with unwashed (or gloved) hands.
- General hand hygiene - Clean your hands thoroughly for at least 20 seconds using soap and water, or alcohol-based hand rub
- Respiratory hygiene - Cover your nose and mouth when coughing and sneezing with a tissue or a flexed elbow
- Avoid close contact with anyone with cold or flu-like symptoms
- Social distancing - maintain a 2 meter distance to others (two arm's length).
- Stay home if you are sick.
- Seek medical advice if you have a fever, cough, sore throat or shortness of breath.

5.2 Annexure 2: Addendum to COVID SOP (January 2021)

Gauteng City Region Observatory (GCRO)
Quality of Life Survey VI (2020)

ADDENDUM TO COVID 19 PROTOCOL

JANUARY 2021

Introduction

The latest surge in COVID-19 cases and new lock-down regulations have necessitated the need to re-evaluate, strengthen and adapt the COVID-19 training and fieldwork protocols

Fieldwork re-start and refresher training

Fieldwork will restart with a refresher training scheduled for Monday 11 January 2021. The refresher training will be used to address fieldwork issues identified by the Fieldwork and QA Managers. The current and new COVID-19 fieldwork protocols will also be part of the training.

The following additional protocols will be implemented as part of training and fieldwork:

Screening

- All fieldworkers will be required to complete the digital screening form before commencement of the training.
- Double thermometer screening will be done at the training venue.
- All HQ staff will be screened on a daily basis
- Screening will be conducted whenever fieldworkers
- Whenever possible, screening of Fieldworkers and HQ staff after interprovincial travel and funerals

Teams

- Teams will operate in bubbles. Meetings and interaction with other teams will not be allowed

- Face to face interaction and meetings between fieldworkers and HQ staff will be limited
- Fieldworkers will operate in the same team as far as possible for the immediate future
- Wherever possible and practical, fieldworkers will be limited to 4 persons per team

Awareness and reminders

Fieldworkers will constantly be reminded of the following:

- Avoid interprovincial travel
- Avoid funerals
- Avoid any gatherings of people from multiple households
- Current COVID-19 Protocols to be adhered to at all times

Vehicles

- No eating or drinking in vehicles
- Masks must be worn at all times in vehicles
- Windows to remain open whenever possible
- No interviews to be conducted in vehicles
- Public transport to be limited as much as possible
- No gathering in vehicles
- Vehicles to be used purely for transportation
- All meetings and other activities to take place outdoors

Interviews

- No interviews at old age homes or retirement villages
- No attempt must be made to gain access to retirement villages
- No interviews at hostels
- Sampling for flats to be done outside and or remotely
- Interviews in flats to be done outside
- All indoor activities in flats and hostels to be suspended until further notice
- All interviews to be done outside or in a very well-ventilated area
- No interviews to be conducted in vehicles
- All meetings and other activities to take place outdoors
- No interview will be allowed if respondent refuse to wear a mask

Additional COVID-19 protocols will be communicated and implemented as and when necessary and others will be amended.

5.3 Annexure 3: Attained and targeted interviews per ward

- Wards with higher number of QA approved interviews than the required number of interviews, highlighted in light green.
- Wards with lower number of QA approved interviews than the required number of interviews highlighted in light red.

Municipality	Ward	Interviews per Ward	Required Interviews per Ward
City of Ekurhuleni	79700001	26	26
City of Ekurhuleni	79700002	26	26
City of Ekurhuleni	79700003	26	26
City of Ekurhuleni	79700004	26	26
City of Ekurhuleni	79700005	26	26
City of Ekurhuleni	79700006	26	26
City of Ekurhuleni	79700007	26	26
City of Ekurhuleni	79700008	26	26
City of Ekurhuleni	79700009	27	26
City of Ekurhuleni	79700010	26	26
City of Ekurhuleni	79700011	26	26
City of Ekurhuleni	79700012	26	26
City of Ekurhuleni	79700013	26	26
City of Ekurhuleni	79700014	26	26
City of Ekurhuleni	79700015	28	26
City of Ekurhuleni	79700016	35	26
City of Ekurhuleni	79700017	26	26
City of Ekurhuleni	79700018	26	26
City of Ekurhuleni	79700019	26	26
City of Ekurhuleni	79700020	32	26
City of Ekurhuleni	79700021	26	26
City of Ekurhuleni	79700022	26	26
City of Ekurhuleni	79700023	26	26
City of Ekurhuleni	79700024	26	26
City of Ekurhuleni	79700025	25	26
City of Ekurhuleni	79700026	25	26
City of Ekurhuleni	79700027	26	26
City of Ekurhuleni	79700028	26	26
City of Ekurhuleni	79700029	26	26
City of Ekurhuleni	79700030	26	26
City of Ekurhuleni	79700031	31	26

City of Ekurhuleni	79700032	26	26
City of Ekurhuleni	79700033	27	26
City of Ekurhuleni	79700034	26	26
City of Ekurhuleni	79700035	26	26
City of Ekurhuleni	79700036	26	26
City of Ekurhuleni	79700037	26	26
City of Ekurhuleni	79700038	26	26
City of Ekurhuleni	79700039	30	26
City of Ekurhuleni	79700040	26	26
City of Ekurhuleni	79700041	26	26
City of Ekurhuleni	79700042	26	26
City of Ekurhuleni	79700043	26	26
City of Ekurhuleni	79700044	26	26
City of Ekurhuleni	79700045	26	26
City of Ekurhuleni	79700046	26	26
City of Ekurhuleni	79700047	26	26
City of Ekurhuleni	79700048	26	26
City of Ekurhuleni	79700049	27	26
City of Ekurhuleni	79700050	26	26
City of Ekurhuleni	79700051	26	26
City of Ekurhuleni	79700052	26	26
City of Ekurhuleni	79700053	26	26
City of Ekurhuleni	79700054	30	26
City of Ekurhuleni	79700055	26	26
City of Ekurhuleni	79700056	25	26
City of Ekurhuleni	79700057	26	26
City of Ekurhuleni	79700058	26	26
City of Ekurhuleni	79700059	26	26
City of Ekurhuleni	79700060	26	26
City of Ekurhuleni	79700061	26	26
City of Ekurhuleni	79700062	27	26
City of Ekurhuleni	79700063	27	26
City of Ekurhuleni	79700064	26	26
City of Ekurhuleni	79700065	26	26
City of Ekurhuleni	79700066	27	26
City of Ekurhuleni	79700067	26	26
City of Ekurhuleni	79700068	26	26
City of Ekurhuleni	79700069	27	26
City of Ekurhuleni	79700070	26	26

City of Ekurhuleni	79700071	26	26
City of Ekurhuleni	79700072	26	26
City of Ekurhuleni	79700073	26	26
City of Ekurhuleni	79700074	26	26
City of Ekurhuleni	79700075	27	26
City of Ekurhuleni	79700076	26	26
City of Ekurhuleni	79700077	26	26
City of Ekurhuleni	79700078	26	26
City of Ekurhuleni	79700079	26	26
City of Ekurhuleni	79700080	27	26
City of Ekurhuleni	79700081	27	26
City of Ekurhuleni	79700082	26	26
City of Ekurhuleni	79700083	26	26
City of Ekurhuleni	79700084	26	26
City of Ekurhuleni	79700085	28	26
City of Ekurhuleni	79700086	26	26
City of Ekurhuleni	79700087	26	26
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City of Ekurhuleni	79700100	26	26
City of Ekurhuleni	79700101	26	26
City of Ekurhuleni	79700102	26	26
City of Ekurhuleni	79700103	26	26
City of Ekurhuleni	79700104	33	26
City of Ekurhuleni	79700105	26	26
City of Ekurhuleni	79700106	29	26
City of Ekurhuleni	79700107	26	26
City of Ekurhuleni	79700108	26	26
City of Ekurhuleni	79700109	27	26

City of Ekurhuleni	79700110	26	26
City of Ekurhuleni	79700111	26	26
City of Ekurhuleni	79700112	26	26
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City of Johannesburg	79800004	26	26
City of Johannesburg	79800005	26	26
City of Johannesburg	79800006	26	26
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City of Johannesburg	79800009	26	26
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City of Johannesburg	79800071	28	26
City of Johannesburg	79800072	28	26
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City of Johannesburg	79800111	26	26
City of Johannesburg	79800112	22	26
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City of Johannesburg	79800119	26	26
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City of Tshwane	79900105	25	26
City of Tshwane	79900106	26	26
City of Tshwane	79900107	25	26
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Lesedi	74203004	49	48
Lesedi	74203005	48	48
Lesedi	74203006	48	48
Lesedi	74203007	52	48
Lesedi	74203008	49	48
Lesedi	74203009	48	48
Lesedi	74203010	64	48
Lesedi	74203011	48	48
Lesedi	74203012	49	48
Lesedi	74203013	47	48
Merafong	74804001	22	22
Merafong	74804002	22	22
Merafong	74804003	22	22
Merafong	74804004	22	22
Merafong	74804005	22	22
Merafong	74804006	22	22
Merafong	74804007	22	22
Merafong	74804008	23	22
Merafong	74804009	22	22

Merafong	74804010	22	22
Merafong	74804011	22	22
Merafong	74804012	22	22
Merafong	74804013	22	22
Merafong	74804014	26	22
Merafong	74804015	22	22
Merafong	74804016	22	22
Merafong	74804017	22	22
Merafong	74804018	22	22
Merafong	74804019	21	21
Merafong	74804020	22	22
Merafong	74804021	30	22
Merafong	74804022	25	22
Merafong	74804023	22	22
Merafong	74804024	22	22
Merafong	74804025	22	22
Merafong	74804026	22	22
Merafong	74804027	22	22
Merafong	74804028	22	22
Midvaal	74202001	40	40
Midvaal	74202002	40	40
Midvaal	74202003	40	40
Midvaal	74202004	40	40
Midvaal	74202005	42	40
Midvaal	74202006	40	40
Midvaal	74202007	40	40
Midvaal	74202008	40	40
Midvaal	74202009	40	40
Midvaal	74202010	40	40
Midvaal	74202011	41	40
Midvaal	74202012	40	40
Midvaal	74202013	42	40
Midvaal	74202014	40	40
Midvaal	74202015	41	40
Mogale City	74801001	20	20
Mogale City	74801002	20	20
Mogale City	74801003	20	20
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	20
Mogale City	74801011	20	20
Mogale City	74801012	20	20
Mogale City	74801013	20	20
Mogale City	74801014	20	20
Mogale City	74801015	20	20
Mogale City	74801016	20	20
Mogale City	74801017	22	20
Mogale City	74801018	20	20
Mogale City	74801019	20	20
Mogale City	74801020	20	20
Mogale City	74801021	20	20
Mogale City	74801022	20	20
Mogale City	74801023	20	20
Mogale City	74801024	20	20
Mogale City	74801025	20	20
Mogale City	74801026	24	20
Mogale City	74801027	20	20
Mogale City	74801028	20	20
Mogale City	74801029	26	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	20
Rand West	74205001	22	20
Rand West	74205002	20	20
Rand West	74205003	20	20
Rand West	74205004	20	20
Rand West	74205005	20	20

Rand West	74205006	20	20
Rand West	74205007	20	20
Rand West	74205008	22	20
Rand West	74205009	20	20
Rand West	74205010	20	20
Rand West	74205011	20	20
Rand West	74205012	20	20
Rand West	74205013	21	20
Rand West	74205014	20	20
Rand West	74205015	20	20
Rand West	74205016	20	20
Rand West	74205017	20	20
Rand West	74205018	20	20
Rand West	74205019	20	20
Rand West	74205020	20	20
Rand West	74205021	21	20
Rand West	74205022	20	20
Rand West	74205023	22	20
Rand West	74205024	20	20
Rand West	74205025	20	20
Rand West	74205026	21	20
Rand West	74205027	20	20
Rand West	74205028	23	20
Rand West	74205029	20	20
Rand West	74205030	23	20
Rand West	74205031	20	20
Rand West	74205032	20	20
Rand West	74205033	20	20
Rand West	74205034	20	20
Rand West	74205035	20	20
TOTAL		**13616**	**13421**

5.4 Annexure 4: Sex distribution per ward

Municipality	Ward	Female	Male	Total	Female %	Male %
Emfuleni	74201001	7	13	20	35%	65%
Emfuleni	74201002	16	4	20	80%	20%
Emfuleni	74201003	9	11	20	45%	55%
Emfuleni	74201004	5	15	20	25%	75%
Emfuleni	74201005	13	11	24	54%	46%
Emfuleni	74201006	10	10	20	50%	50%
Emfuleni	74201007	11	11	22	50%	50%
Emfuleni	74201008	14	6	20	70%	30%
Emfuleni	74201009	8	12	20	40%	60%
Emfuleni	74201010	9	11	20	45%	55%
Emfuleni	74201011	12	8	20	60%	40%
Emfuleni	74201012	14	6	20	70%	30%
Emfuleni	74201013	14	6	20	70%	30%
Emfuleni	74201014	14	6	20	70%	30%
Emfuleni	74201015	6	15	21	29%	71%
Emfuleni	74201016	9	11	20	45%	55%
Emfuleni	74201017	13	7	20	65%	35%
Emfuleni	74201018	13	7	20	65%	35%
Emfuleni	74201019	10	10	20	50%	50%
Emfuleni	74201020	8	12	20	40%	60%
Emfuleni	74201021	12	8	20	60%	40%
Emfuleni	74201022	14	6	20	70%	30%
Emfuleni	74201023	13	7	20	65%	35%
Emfuleni	74201024	13	7	20	65%	35%
Emfuleni	74201025	9	11	20	45%	55%
Emfuleni	74201026	10	10	20	50%	50%
Emfuleni	74201027	9	11	20	45%	55%
Emfuleni	74201028	13	7	20	65%	35%
Emfuleni	74201029	12	8	20	60%	40%
Emfuleni	74201030	14	5	19	74%	26%
Emfuleni	74201031	13	7	20	65%	35%
Emfuleni	74201032	15	6	21	71%	29%
Emfuleni	74201033	10	10	20	50%	50%
Emfuleni	74201034	10	10	20	50%	50%
Emfuleni	74201035	15	5	20	75%	25%
Emfuleni	74201036	13	7	20	65%	35%

Emfuleni	74201037	15	5	20	75%	25%
Emfuleni	74201038	9	11	20	45%	55%
Emfuleni	74201039	11	9	20	55%	45%
Emfuleni	74201040	7	13	20	35%	65%
Emfuleni	74201041	9	11	20	45%	55%
Emfuleni	74201042	12	8	20	60%	40%
Emfuleni	74201043	10	10	20	50%	50%
Emfuleni	74201044	14	6	20	70%	30%
Emfuleni	74201045	12	8	20	60%	40%
Midvaal	74202001	10	30	40	25%	75%
Midvaal	74202002	20	20	40	50%	50%
Midvaal	74202003	20	20	40	50%	50%
Midvaal	74202004	15	25	40	38%	63%
Midvaal	74202005	18	24	42	43%	57%
Midvaal	74202006	22	18	40	55%	45%
Midvaal	74202007	20	20	40	50%	50%
Midvaal	74202008	20	20	40	50%	50%
Midvaal	74202009	24	16	40	60%	40%
Midvaal	74202010	15	25	40	38%	63%
Midvaal	74202011	22	19	41	54%	46%
Midvaal	74202012	12	28	40	30%	70%
Midvaal	74202013	22	20	42	52%	48%
Midvaal	74202014	22	18	40	55%	45%
Midvaal	74202015	21	20	41	51%	49%
Lesedi	74203001	32	17	49	65%	35%
Lesedi	74203002	34	14	48	71%	29%
Lesedi	74203003	27	21	48	56%	44%
Lesedi	74203004	22	27	49	45%	55%
Lesedi	74203005	30	18	48	63%	38%
Lesedi	74203006	18	30	48	38%	63%
Lesedi	74203007	30	22	52	58%	42%
Lesedi	74203008	27	22	49	55%	45%
Lesedi	74203009	28	20	48	58%	42%
Lesedi	74203010	39	25	64	61%	39%
Lesedi	74203011	27	21	48	56%	44%
Lesedi	74203012	24	25	49	49%	51%
Lesedi	74203013	25	22	47	53%	47%
Rand West	74205001	10	12	22	45%	55%

Rand West	74205002	12	8	20	60%	40%
Rand West	74205003	11	9	20	55%	45%
Rand West	74205004	12	8	20	60%	40%
Rand West	74205005	12	8	20	60%	40%
Rand West	74205006	12	8	20	60%	40%
Rand West	74205007	13	7	20	65%	35%
Rand West	74205008	9	13	22	41%	59%
Rand West	74205009	10	10	20	50%	50%
Rand West	74205010	10	10	20	50%	50%
Rand West	74205011	13	7	20	65%	35%
Rand West	74205012	8	12	20	40%	60%
Rand West	74205013	10	11	21	48%	52%
Rand West	74205014	13	7	20	65%	35%
Rand West	74205015	13	7	20	65%	35%
Rand West	74205016	14	6	20	70%	30%
Rand West	74205017	11	9	20	55%	45%
Rand West	74205018	15	5	20	75%	25%
Rand West	74205019	13	7	20	65%	35%
Rand West	74205020	12	8	20	60%	40%
Rand West	74205021	13	8	21	62%	38%
Rand West	74205022	13	7	20	65%	35%
Rand West	74205023	14	8	22	64%	36%
Rand West	74205024	13	7	20	65%	35%
Rand West	74205025	10	10	20	50%	50%
Rand West	74205026	8	13	21	38%	62%
Rand West	74205027	12	8	20	60%	40%
Rand West	74205028	17	6	23	74%	26%
Rand West	74205029	11	9	20	55%	45%
Rand West	74205030	7	16	23	30%	70%
Rand West	74205031	7	13	20	35%	65%
Rand West	74205032	10	10	20	50%	50%
Rand West	74205033	9	11	20	45%	55%
Rand West	74205034	12	8	20	60%	40%
Rand West	74205035	11	9	20	55%	45%
Mogale City	74801001	12	8	20	60%	40%
Mogale City	74801002	10	10	20	50%	50%
Mogale City	74801003	12	8	20	60%	40%
Mogale City	74801004	11	9	20	55%	45%

Mogale City	74801005	13	7	20	65%	35%
Mogale City	74801006	12	8	20	60%	40%
Mogale City	74801007	6	14	20	30%	70%
Mogale City	74801008	10	10	20	50%	50%
Mogale City	74801009	9	11	20	45%	55%
Mogale City	74801010	12	8	20	60%	40%
Mogale City	74801011	12	8	20	60%	40%
Mogale City	74801012	14	6	20	70%	30%
Mogale City	74801013	9	11	20	45%	55%
Mogale City	74801014	10	10	20	50%	50%
Mogale City	74801015	7	13	20	35%	65%
Mogale City	74801016	8	12	20	40%	60%
Mogale City	74801017	8	14	22	36%	64%
Mogale City	74801018	9	11	20	45%	55%
Mogale City	74801019	12	8	20	60%	40%
Mogale City	74801020	13	7	20	65%	35%
Mogale City	74801021	12	8	20	60%	40%
Mogale City	74801022	7	13	20	35%	65%
Mogale City	74801023	11	9	20	55%	45%
Mogale City	74801024	13	7	20	65%	35%
Mogale City	74801025	11	9	20	55%	45%
Mogale City	74801026	9	15	24	38%	63%
Mogale City	74801027	14	6	20	70%	30%
Mogale City	74801028	10	10	20	50%	50%
Mogale City	74801029	9	17	26	35%	65%
Mogale City	74801030	10	10	20	50%	50%
Mogale City	74801031	11	9	20	55%	45%
Mogale City	74801032	13	7	20	65%	35%
Mogale City	74801033	16	4	20	80%	20%
Mogale City	74801034	11	9	20	55%	45%
Mogale City	74801035	10	10	20	50%	50%
Mogale City	74801036	9	11	20	45%	55%
Mogale City	74801037	12	8	20	60%	40%
Mogale City	74801038	9	11	20	45%	55%
Mogale City	74801039	8	12	20	40%	60%
Merafong	74804001	17	5	22	77%	23%
Merafong	74804002	9	13	22	41%	59%
Merafong	74804003	10	12	22	45%	55%

Merafong	74804004	13	9	22	59%	41%
Merafong	74804005	8	14	22	36%	64%
Merafong	74804006	15	7	22	68%	32%
Merafong	74804007	13	9	22	59%	41%
Merafong	74804008	14	9	23	61%	39%
Merafong	74804009	14	8	22	64%	36%
Merafong	74804010	12	10	22	55%	45%
Merafong	74804011	2	20	22	9%	91%
Merafong	74804012	14	8	22	64%	36%
Merafong	74804013	8	14	22	36%	64%
Merafong	74804014	11	15	26	42%	58%
Merafong	74804015	13	9	22	59%	41%
Merafong	74804016	16	6	22	73%	27%
Merafong	74804017	12	10	22	55%	45%
Merafong	74804018	13	9	22	59%	41%
Merafong	74804019	7	14	21	33%	67%
Merafong	74804020	10	12	22	45%	55%
Merafong	74804021	14	16	30	47%	53%
Merafong	74804022	16	9	25	64%	36%
Merafong	74804023	10	12	22	45%	55%
Merafong	74804024	12	10	22	55%	45%
Merafong	74804025	14	8	22	64%	36%
Merafong	74804026	14	8	22	64%	36%
Merafong	74804027	9	13	22	41%	59%
Merafong	74804028	7	15	22	32%	68%
City of Ekurhuleni	79700001	12	14	26	46%	54%
City of Ekurhuleni	79700002	13	13	26	50%	50%
City of Ekurhuleni	79700003	17	9	26	65%	35%
City of Ekurhuleni	79700004	16	10	26	62%	38%
City of Ekurhuleni	79700005	10	16	26	38%	62%
City of Ekurhuleni	79700006	13	13	26	50%	50%
City of Ekurhuleni	79700007	14	12	26	54%	46%
City of Ekurhuleni	79700008	18	8	26	69%	31%
City of Ekurhuleni	79700009	12	15	27	44%	56%
City of Ekurhuleni	79700010	15	11	26	58%	42%
City of Ekurhuleni	79700011	15	11	26	58%	42%
City of Ekurhuleni	79700012	14	12	26	54%	46%
City of Ekurhuleni	79700013	17	9	26	65%	35%

City of Ekurhuleni	79700014	15	11	26	58%	42%
City of Ekurhuleni	79700015	12	16	28	43%	57%
City of Ekurhuleni	79700016	18	17	35	51%	49%
City of Ekurhuleni	79700017	16	10	26	62%	38%
City of Ekurhuleni	79700018	14	12	26	54%	46%
City of Ekurhuleni	79700019	14	12	26	54%	46%
City of Ekurhuleni	79700020	18	14	32	56%	44%
City of Ekurhuleni	79700021	12	14	26	46%	54%
City of Ekurhuleni	79700022	15	11	26	58%	42%
City of Ekurhuleni	79700023	12	14	26	46%	54%
City of Ekurhuleni	79700024	13	13	26	50%	50%
City of Ekurhuleni	79700025	12	13	25	48%	52%
City of Ekurhuleni	79700026	13	12	25	52%	48%
City of Ekurhuleni	79700027	16	10	26	62%	38%
City of Ekurhuleni	79700028	10	16	26	38%	62%
City of Ekurhuleni	79700029	12	14	26	46%	54%
City of Ekurhuleni	79700030	17	9	26	65%	35%
City of Ekurhuleni	79700031	19	12	31	61%	39%
City of Ekurhuleni	79700032	16	10	26	62%	38%
City of Ekurhuleni	79700033	14	13	27	52%	48%
City of Ekurhuleni	79700034	17	9	26	65%	35%
City of Ekurhuleni	79700035	15	11	26	58%	42%
City of Ekurhuleni	79700036	15	11	26	58%	42%
City of Ekurhuleni	79700037	14	12	26	54%	46%
City of Ekurhuleni	79700038	11	15	26	42%	58%
City of Ekurhuleni	79700039	6	24	30	20%	80%
City of Ekurhuleni	79700040	14	12	26	54%	46%
City of Ekurhuleni	79700041	13	13	26	50%	50%
City of Ekurhuleni	79700042	16	10	26	62%	38%
City of Ekurhuleni	79700043	14	12	26	54%	46%
City of Ekurhuleni	79700044	11	15	26	42%	58%
City of Ekurhuleni	79700045	10	16	26	38%	62%
City of Ekurhuleni	79700046	12	14	26	46%	54%
City of Ekurhuleni	79700047	21	5	26	81%	19%
City of Ekurhuleni	79700048	17	9	26	65%	35%
City of Ekurhuleni	79700049	15	12	27	56%	44%
City of Ekurhuleni	79700050	14	12	26	54%	46%
City of Ekurhuleni	79700051	15	11	26	58%	42%

City of Ekurhuleni	79700052	8	18	26	31%	69%
City of Ekurhuleni	79700053	18	8	26	69%	31%
City of Ekurhuleni	79700054	17	13	30	57%	43%
City of Ekurhuleni	79700055	12	14	26	46%	54%
City of Ekurhuleni	79700056	17	8	25	68%	32%
City of Ekurhuleni	79700057	17	9	26	65%	35%
City of Ekurhuleni	79700058	16	10	26	62%	38%
City of Ekurhuleni	79700059	12	14	26	46%	54%
City of Ekurhuleni	79700060	15	11	26	58%	42%
City of Ekurhuleni	79700061	15	11	26	58%	42%
City of Ekurhuleni	79700062	17	10	27	63%	37%
City of Ekurhuleni	79700063	17	10	27	63%	37%
City of Ekurhuleni	79700064	14	12	26	54%	46%
City of Ekurhuleni	79700065	19	7	26	73%	27%
City of Ekurhuleni	79700066	19	8	27	70%	30%
City of Ekurhuleni	79700067	17	9	26	65%	35%
City of Ekurhuleni	79700068	15	11	26	58%	42%
City of Ekurhuleni	79700069	13	14	27	48%	52%
City of Ekurhuleni	79700070	13	13	26	50%	50%
City of Ekurhuleni	79700071	17	9	26	65%	35%
City of Ekurhuleni	79700072	11	15	26	42%	58%
City of Ekurhuleni	79700073	9	17	26	35%	65%
City of Ekurhuleni	79700074	11	15	26	42%	58%
City of Ekurhuleni	79700075	13	14	27	48%	52%
City of Ekurhuleni	79700076	16	10	26	62%	38%
City of Ekurhuleni	79700077	12	14	26	46%	54%
City of Ekurhuleni	79700078	18	8	26	69%	31%
City of Ekurhuleni	79700079	13	13	26	50%	50%
City of Ekurhuleni	79700080	16	11	27	59%	41%
City of Ekurhuleni	79700081	15	12	27	56%	44%
City of Ekurhuleni	79700082	16	10	26	62%	38%
City of Ekurhuleni	79700083	16	10	26	62%	38%
City of Ekurhuleni	79700084	16	10	26	62%	38%
City of Ekurhuleni	79700085	13	15	28	46%	54%
City of Ekurhuleni	79700086	16	10	26	62%	38%
City of Ekurhuleni	79700087	15	11	26	58%	42%
City of Ekurhuleni	79700088	13	13	26	50%	50%
City of Ekurhuleni	79700089	13	13	26	50%	50%

City of Ekurhuleni	79700090	11	15	26	42%	58%
City of Ekurhuleni	79700091	12	14	26	46%	54%
City of Ekurhuleni	79700092	12	15	27	44%	56%
City of Ekurhuleni	79700093	9	17	26	35%	65%
City of Ekurhuleni	79700094	14	12	26	54%	46%
City of Ekurhuleni	79700095	17	9	26	65%	35%
City of Ekurhuleni	79700096	12	14	26	46%	54%
City of Ekurhuleni	79700097	16	10	26	62%	38%
City of Ekurhuleni	79700098	12	14	26	46%	54%
City of Ekurhuleni	79700099	17	9	26	65%	35%
City of Ekurhuleni	79700100	8	18	26	31%	69%
City of Ekurhuleni	79700101	12	14	26	46%	54%
City of Ekurhuleni	79700102	16	10	26	62%	38%
City of Ekurhuleni	79700103	13	13	26	50%	50%
City of Ekurhuleni	79700104	16	17	33	48%	52%
City of Ekurhuleni	79700105	13	13	26	50%	50%
City of Ekurhuleni	79700106	11	18	29	38%	62%
City of Ekurhuleni	79700107	13	13	26	50%	50%
City of Ekurhuleni	79700108	15	11	26	58%	42%
City of Ekurhuleni	79700109	12	15	27	44%	56%
City of Ekurhuleni	79700110	13	13	26	50%	50%
City of Ekurhuleni	79700111	15	11	26	58%	42%
City of Ekurhuleni	79700112	10	16	26	38%	62%
City of Johannesburg	79800001	16	10	26	62%	38%
City of Johannesburg	79800002	15	11	26	58%	42%
City of Johannesburg	79800003	13	13	26	50%	50%
City of Johannesburg	79800004	16	10	26	62%	38%
City of Johannesburg	79800005	17	9	26	65%	35%
City of Johannesburg	79800006	13	13	26	50%	50%
City of Johannesburg	79800007	11	15	26	42%	58%
City of Johannesburg	79800008	17	9	26	65%	35%
City of Johannesburg	79800009	12	14	26	46%	54%
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City of Johannesburg	79800013	20	8	28	71%	29%
City of Johannesburg	79800014	13	13	26	50%	50%
City of Johannesburg	79800015	12	14	26	46%	54%

City of Johannesburg	79800016	13	13	26	50%	50%
City of Johannesburg	79800017	10	16	26	38%	62%
City of Johannesburg	79800018	16	10	26	62%	38%
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City of Johannesburg	79800021	13	13	26	50%	50%
City of Johannesburg	79800022	20	6	26	77%	23%
City of Johannesburg	79800023	11	15	26	42%	58%
City of Johannesburg	79800024	8	18	26	31%	69%
City of Johannesburg	79800025	16	10	26	62%	38%
City of Johannesburg	79800026	18	9	27	67%	33%
City of Johannesburg	79800027	11	15	26	42%	58%
City of Johannesburg	79800028	16	10	26	62%	38%
City of Johannesburg	79800029	17	9	26	65%	35%
City of Johannesburg	79800030	14	12	26	54%	46%
City of Johannesburg	79800031	11	15	26	42%	58%
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City of Johannesburg	79800033	15	10	25	60%	40%
City of Johannesburg	79800034	13	13	26	50%	50%
City of Johannesburg	79800035	14	12	26	54%	46%
City of Johannesburg	79800036	13	13	26	50%	50%
City of Johannesburg	79800037	16	10	26	62%	38%
City of Johannesburg	79800038	19	10	29	66%	34%
City of Johannesburg	79800039	16	11	27	59%	41%
City of Johannesburg	79800040	12	14	26	46%	54%
City of Johannesburg	79800041	15	12	27	56%	44%
City of Johannesburg	79800042	19	7	26	73%	27%
City of Johannesburg	79800043	13	13	26	50%	50%
City of Johannesburg	79800044	16	10	26	62%	38%
City of Johannesburg	79800045	15	14	29	52%	48%
City of Johannesburg	79800046	14	12	26	54%	46%
City of Johannesburg	79800047	19	7	26	73%	27%
City of Johannesburg	79800048	19	8	27	70%	30%
City of Johannesburg	79800049	12	14	26	46%	54%
City of Johannesburg	79800050	16	10	26	62%	38%
City of Johannesburg	79800051	19	8	27	70%	30%
City of Johannesburg	79800052	15	11	26	58%	42%
City of Johannesburg	79800053	15	11	26	58%	42%

City of Johannesburg	79800054	18	14	32	56%	44%
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City of Johannesburg	79800056	16	10	26	62%	38%
City of Johannesburg	79800057	12	14	26	46%	54%
City of Johannesburg	79800058	14	12	26	54%	46%
City of Johannesburg	79800059	17	7	24	71%	29%
City of Johannesburg	79800060	17	8	25	68%	32%
City of Johannesburg	79800061	13	13	26	50%	50%
City of Johannesburg	79800062	15	11	26	58%	42%
City of Johannesburg	79800063	12	16	28	43%	57%
City of Johannesburg	79800064	14	12	26	54%	46%
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City of Johannesburg	79800067	8	18	26	31%	69%
City of Johannesburg	79800068	15	11	26	58%	42%
City of Johannesburg	79800069	14	12	26	54%	46%
City of Johannesburg	79800070	13	13	26	50%	50%
City of Johannesburg	79800071	17	11	28	61%	39%
City of Johannesburg	79800072	14	14	28	50%	50%
City of Johannesburg	79800073	17	9	26	65%	35%
City of Johannesburg	79800074	14	12	26	54%	46%
City of Johannesburg	79800075	11	15	26	42%	58%
City of Johannesburg	79800076	18	9	27	67%	33%
City of Johannesburg	79800077	17	9	26	65%	35%
City of Johannesburg	79800078	15	11	26	58%	42%
City of Johannesburg	79800079	13	12	25	52%	48%
City of Johannesburg	79800080	11	15	26	42%	58%
City of Johannesburg	79800081	12	13	25	48%	52%
City of Johannesburg	79800082	17	10	27	63%	37%
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City of Johannesburg	79800089	18	9	27	67%	33%
City of Johannesburg	79800090	9	17	26	35%	65%
City of Johannesburg	79800091	15	11	26	58%	42%

City of Johannesburg	79800092	15	11	26	58%	42%
City of Johannesburg	79800093	12	12	24	50%	50%
City of Johannesburg	79800094	17	19	36	47%	53%
City of Johannesburg	79800095	16	10	26	62%	38%
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City of Johannesburg	79800098	13	13	26	50%	50%
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City of Johannesburg	79800127	17	9	26	65%	35%
City of Johannesburg	79800128	18	8	26	69%	31%
City of Johannesburg	79800129	16	10	26	62%	38%

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City of Johannesburg	79800131	13	13	26	50%	50%
City of Johannesburg	79800132	16	11	27	59%	41%
City of Johannesburg	79800133	11	15	26	42%	58%
City of Johannesburg	79800134	11	15	26	42%	58%
City of Johannesburg	79800135	13	13	26	50%	50%
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City of Tshwane	79900003	11	16	27	41%	59%
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City of Tshwane	79900005	11	18	29	38%	62%
City of Tshwane	79900006	15	11	26	58%	42%
City of Tshwane	79900007	18	9	27	67%	33%
City of Tshwane	79900008	18	10	28	64%	36%
City of Tshwane	79900009	13	13	26	50%	50%
City of Tshwane	79900010	13	13	26	50%	50%
City of Tshwane	79900011	11	15	26	42%	58%
City of Tshwane	79900012	17	9	26	65%	35%
City of Tshwane	79900013	16	10	26	62%	38%
City of Tshwane	79900014	12	15	27	44%	56%
City of Tshwane	79900015	16	10	26	62%	38%
City of Tshwane	79900016	17	9	26	65%	35%
City of Tshwane	79900017	19	8	27	70%	30%
City of Tshwane	79900018	12	14	26	46%	54%
City of Tshwane	79900019	13	13	26	50%	50%
City of Tshwane	79900020	11	15	26	42%	58%
City of Tshwane	79900021	17	9	26	65%	35%
City of Tshwane	79900022	18	8	26	69%	31%
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City of Tshwane	79900026	16	10	26	62%	38%
City of Tshwane	79900027	14	12	26	54%	46%
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City of Tshwane	79900030	12	14	26	46%	54%
City of Tshwane	79900031	14	12	26	54%	46%
City of Tshwane	79900032	16	10	26	62%	38%

City of Tshwane	79900033	16	11	27	59%	41%
City of Tshwane	79900034	15	11	26	58%	42%
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City of Tshwane	79900036	12	14	26	46%	54%
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City of Tshwane	79900041	10	16	26	38%	62%
City of Tshwane	79900042	13	13	26	50%	50%
City of Tshwane	79900043	14	12	26	54%	46%
City of Tshwane	79900044	15	11	26	58%	42%
City of Tshwane	79900045	15	11	26	58%	42%
City of Tshwane	79900046	8	18	26	31%	69%
City of Tshwane	79900047	14	12	26	54%	46%
City of Tshwane	79900048	16	16	32	50%	50%
City of Tshwane	79900049	14	12	26	54%	46%
City of Tshwane	79900050	17	9	26	65%	35%
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City of Tshwane	79900069	15	11	26	58%	42%
City of Tshwane	79900070	9	17	26	35%	65%

City of Tshwane	79900071	16	10	26	62%	38%
City of Tshwane	79900072	12	15	27	44%	56%
City of Tshwane	79900073	12	14	26	46%	54%
City of Tshwane	79900074	14	11	25	56%	44%
City of Tshwane	79900075	16	10	26	62%	38%
City of Tshwane	79900076	16	10	26	62%	38%
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City of Tshwane	79900079	14	12	26	54%	46%
City of Tshwane	79900080	13	13	26	50%	50%
City of Tshwane	79900081	14	12	26	54%	46%
City of Tshwane	79900082	11	17	28	39%	61%
City of Tshwane	79900083	16	10	26	62%	38%
City of Tshwane	79900084	15	11	26	58%	42%
City of Tshwane	79900085	13	13	26	50%	50%
City of Tshwane	79900086	10	16	26	38%	62%
City of Tshwane	79900087	13	13	26	50%	50%
City of Tshwane	79900088	15	11	26	58%	42%
City of Tshwane	79900089	15	11	26	58%	42%
City of Tshwane	79900090	11	15	26	42%	58%
City of Tshwane	79900091	8	18	26	31%	69%
City of Tshwane	79900092	11	14	25	44%	56%
City of Tshwane	79900093	13	13	26	50%	50%
City of Tshwane	79900094	13	13	26	50%	50%
City of Tshwane	79900095	17	10	27	63%	37%
City of Tshwane	79900096	16	10	26	62%	38%
City of Tshwane	79900097	13	13	26	50%	50%
City of Tshwane	79900098	9	17	26	35%	65%
City of Tshwane	79900099	13	13	26	50%	50%
City of Tshwane	79900100	14	13	27	52%	48%
City of Tshwane	79900101	9	16	25	36%	64%
City of Tshwane	79900102	13	13	26	50%	50%
City of Tshwane	79900103	19	7	26	73%	27%
City of Tshwane	79900104	12	14	26	46%	54%
City of Tshwane	79900105	12	13	25	48%	52%
City of Tshwane	79900106	17	9	26	65%	35%
City of Tshwane	79900107	14	11	25	56%	44%
TOTAL		**7276**	**6340**	**13616**	**53%**	**47%**

5.5 Annexure 5: Study brochure provided to gatekeepers and potential participants

COVID-19 info box

All data collection is being conducted with strict COVID-19 prevention protocols in place.

For more information on COVID-19, and how you can help stop the spread

Visit www.sacoronavirus.co.za

Send 'Hi' to 0600 123 456 for WhatsApp support

Call the 24-hour toll-free hotline on 0800 029 999

GAUTENG CITY-REGION OBSERVATORY

2020/21 QUALITY OF LIFE SURVEY

Every two years, the Gauteng City-Region Observatory (GCRO) – a partnership of Wits University and the University of Johannesburg – carries out a 'Quality of Life' survey. We ask questions about a wide range of issues affecting us all, such as transport, education, social attitudes and health. This year, we are conducting our sixth survey, and will be interviewing over 13 000 adults across all wards of Gauteng Province. We have contracted GeoSpace International to conduct the interviews on our behalf.

We would love to hear from you!

Your interview was conducted by:

Name: _____

Please contact us to let us know how your interview went. If you have any comments or concerns, all calls to our office or call centre agents are confidential and your call will assist us to improve the survey.

GeoSpace call centre
081 073 2446 or 071 041 0033

GeoSpace numbers (**office hours only**)
012 3484586 or 012 3484587

Email address: info@geospace.co.za

Scan here for more info about participating in the Quality of Life Survey

"The Quality of Life surveys provide invaluable data to provincial government and all municipalities in the province, on a wide range of critical issues, from progress in meeting basic needs, to citizen satisfaction, social cohesion, health, employment, entrepreneurship and transport, amongst others. The results of the survey are utilised intensively, especially where service delivery is weak."

- Mr Rashid Seedat,
Head: Delivery Support Unit, Gauteng Provincial Government

The Gauteng city-region has over 15 million residents, contributes 34% to the national GDP, and is the beating heart of the national and regional economy. This survey provides valuable information to ensure that provincial and local governments can plan and deliver services effectively in the region. It also provides researchers and the public with insight into the lives, experiences and attitudes of Gauteng residents.

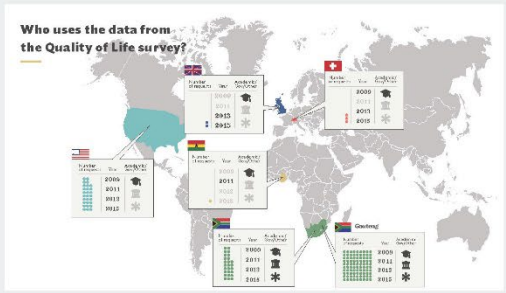
The first Quality of Life survey was conducted in 2009, and over time it has developed into one of the largest social surveys in South Africa. Subsequent surveys took place in 2011, 2013/14, 2015/16 and 2017/18. This year, the survey is more important than ever, as it will also help us to understand the impacts of the COVID-19 pandemic.

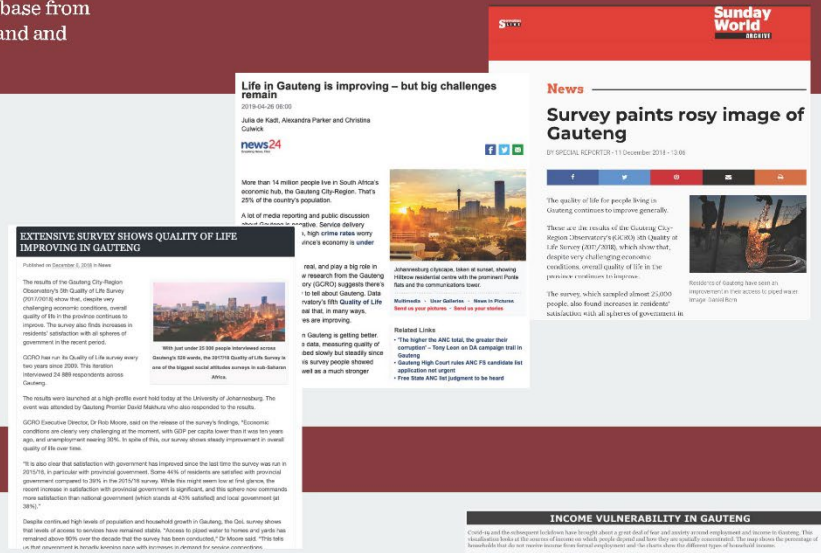
The survey questions were prepared by a range of experts, and try to understand key challenges for people in Gauteng. Once all interviews are completed, the GCRO will release results publicly, and make the anonymised and aggregated data and information available to policymakers and researchers.

All data collection is taking place in line with the strictest COVID-19 protocols.

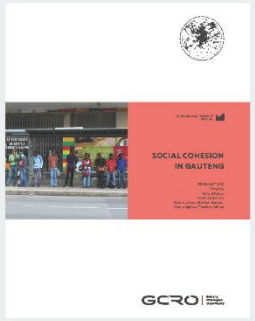
GeoSpace GCRO Gauteng City-Region Observatory GeoSpace GCRO Gauteng City-Region Observatory

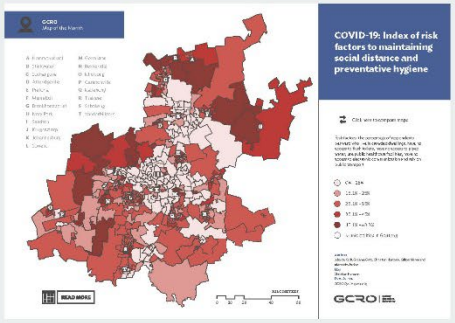
The GCRO uses data from its Quality of Life Surveys to create a base from which academia, government and the public can better understand and the Gauteng City-Region.

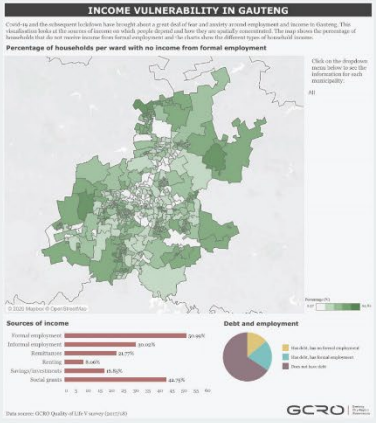




Results are published in academic articles, newspapers, and online.







For more information visit www.gcro.ac.za.

Complex datasets are made easily accessible as data visualisations, which explore a variety of different thematic areas, challenges and opportunities.

5.6 Annexure 6: Participant information sheet (English)

GCRO Gauteng City-Region Observatory

2 October 2020

Quality of Life Survey VI (2020/21)

Dear fellow resident of Gauteng,

Every two years, the Gauteng City-Region Observatory – a partnership of Wits and the University of Johannesburg – carries out a 'Quality of Life' survey. We ask questions about a very wide range of issues affecting us all, from transport to education to social attitudes to pollution – we try to cover as much ground as possible. This year, we are conducting our sixth survey, and will be interviewing over 13 000 adults across the Gauteng City-Region. GeoSpace International is conducting the interviews on GCRO's behalf. All interviews are being conducted in compliance with strict COVID-19 protocols.

You have been randomly selected to ensure that the survey provides an accurate image of life in Gauteng and we invite you to answer a questionnaire that will take approximately 45 minutes of your time, though possibly up to an hour. We will ask you for some identifying information, such as your name and address, which will only be used for quality control purposes. We will also record the GPS coordinates of the interview location. All information you share with us will be treated with complete confidentiality. After completion of all interviews, responses will be collated in a completely anonymous way. You will not receive any direct benefits from participating in this research, and there are no disadvantages or penalties for not participating. You can choose not to answer any question, and can withdraw from the study at any time. We will ask some personal and potentially sensitive questions, and if you experience any distress or discomfort we will stop or pause the interview, or skip these questions. We are also providing you with a list of organisations that offer free counselling and other services.

The anonymised results will be publicly available, and will be shared with government to help them better plan for and manage the Gauteng City-Region. This survey is funded by provincial and local government, but the GCRO is an independent university research centre, and we say what needs to be said, based on the information from the survey. Our previous surveys have made substantial contributions to understanding the issues in our city-region and we have used the information to produce research reports, data briefs and maps. Attached to this letter are some examples and you can go to our website at www.gcro.ac.za and view the previous Quality of Life survey results (www.gcro.ac.za/qolviewer). Your participation is extremely valuable.

If you have any queries whatsoever about the survey, please feel free to contact the GeoSpace call centre, (081 073 2446; 071 041 0033) or to contact me directly on (011) 717 7280 or julia.dekadt@gcro.ac.za. If you have any concerns or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email Shaun.Schoeman@wits.ac.za.

Yours sincerely,

Dr Julia de Kadt
Quality of Life Survey Project Lead, Gauteng City-Region Observatory

6th Floor University Corner
11 Jorissen Street
Braamfontein

+27(0)11 717 7280
www.gcro.ac.za

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5.7 Annexure 7: Letter from Gauteng Premier

GAUTENG PROVINCE
OFFICE OF THE PREMIER
REPUBLIC OF SOUTH AFRICA

Enquiries: Phumla Sekhonyane
Branch: Premier's Private Office
Tel: +27 (0)11 355 6000

To whom it may concern:

Gauteng City-Region Observatory's Quality of Life VI survey (2020/21)

The Gauteng Provincial Government is pleased to announce that the Gauteng City-Region Observatory (GCRO) is implementing its Quality of Life VI survey (2020/21) in communities across Gauteng from October 2020 until June 2021. The GCRO has appointed GeoSpace to conduct the data collection for the project.

The Gauteng City-Region Observatory (GCRO) is a research partnership between the Gauteng Provincial Government, municipalities in Gauteng, the University of the Witwatersrand and the University of Johannesburg, and organised local government in Gauteng (SALGA). The survey is conducted to academic standards, with no interference from government. The results are used extensively by government to monitor performance, and for planning and development purposes. This will be the sixth iteration of the survey, which was first implemented in 2009.

The Gauteng Provincial Government urges community members and stakeholders to assist fieldworkers in implementing the survey, by ensuring that they are able to access communities and residential areas. Fieldworker identity can be verified with GeoSpace, through the phone numbers provided in the information brochure. Stringent COVID-19 prevention protocols are in place, to ensure the safety of respondents and fieldworkers.

Yours faithfully

Mr David Makhura
PREMIER
Date: 10/09/2020

Tel: (011) 355 6000 | Fax: (011) 355 6211
30 Simmonds Street, Johannesburg, 2001 | Private Bag X61, Marshalltown, 2107
www.gauteng.gov.za | Hotline: 08600 11000

5.8 Annexure 8: Ethics Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 De Kadt

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H19/11/09**
PROJECT TITLE	Quality of Life survey VI (2020/2021)
INVESTIGATOR(S)	Dr J De Kadt
SCHOOL/DEPARTMENT	Gauteng City-Region Observatory/
DATE CONSIDERED	15 November 2019
DECISION OF THE COMMITTEE	Approved
EXPIRY DATE	04 February 2023

DATE 05 February 2020 **CHAIRPERSON** (Professor J Knight)

cc: Supervisor : N/A

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

Julia de Kadt
Signature

28 / 08 / 2020
Date

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES

5.9 Annexure 9: Participant receipt

	GCRO 2020: Quality of Life Survey Interview Receipt	Receipt No 000001
	Place:	Date:
	Respondent Name and Surname: Signature:	GeoSpace GCRO
	Fieldworker Name and Surname: Signature:	Call Centre no: 081 073 2446 or 071 041 0033 Email Address: info@geospace.co.za

5.10 Annexure 10: Show cards

A

Piped, into the dwelling 	Piped, into the yard only 	Street taps or standpipes 
Well or borehole 	Rainwater (e.g. Jojo tank) 	Flowing river or stream 
Dam, pool or standing water 	Water tanker or truck 	Other 

B

Always

Usually

Sometimes

Hardly ever

Never

C

Every week

A couple of times a month

Once a month

A couple of times a year

Never

D

Flush toilet connected to sewage system 	Flush toilet with septic tank  	Chemical toilet 	Pit latrine with ventilation pipe  	Pit latrine without ventilation pipe 
Bucket toilet 	Communal toilet 	Neighbour's toilet  	No access to toilet 	Other 

E

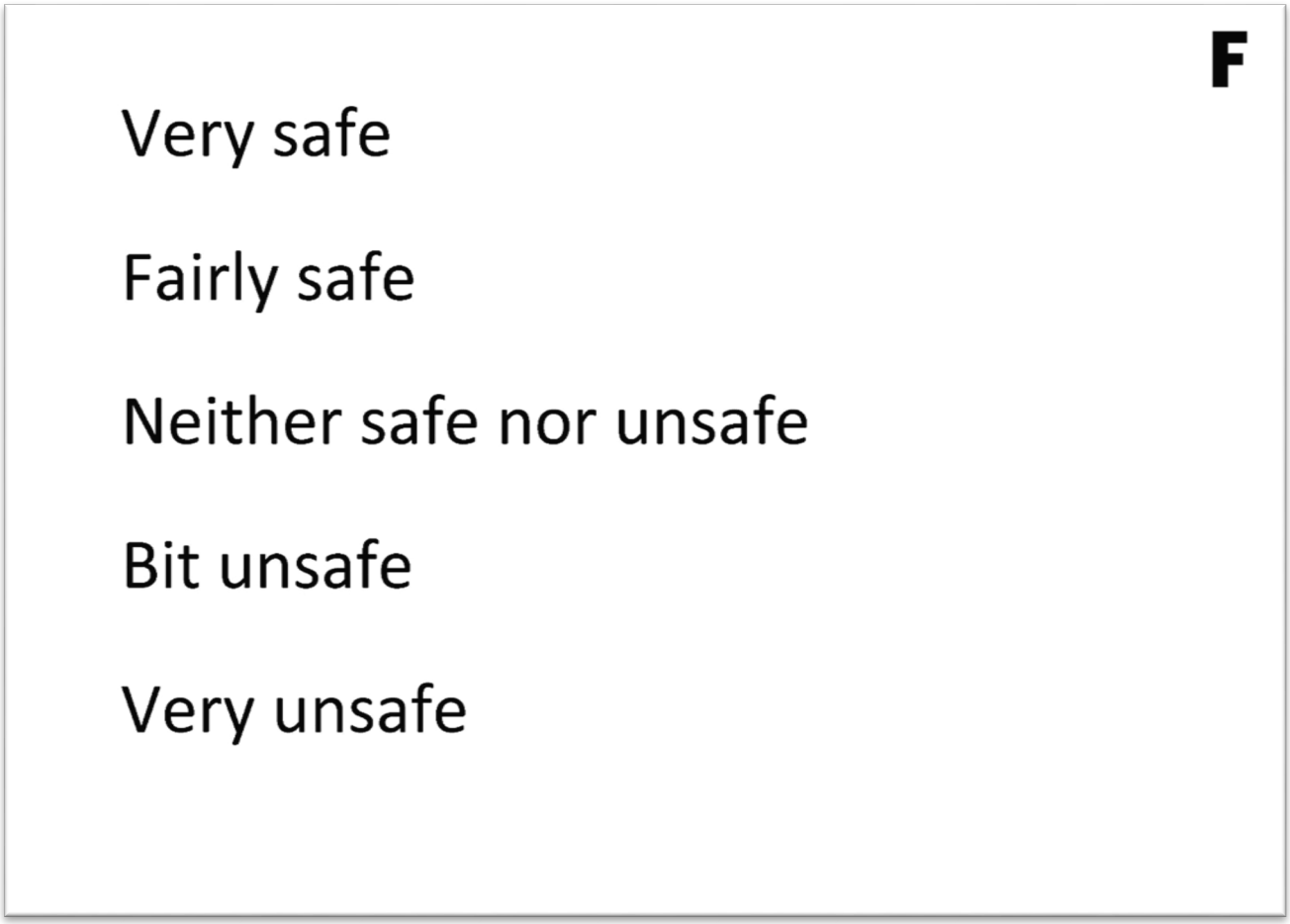
Very satisfied

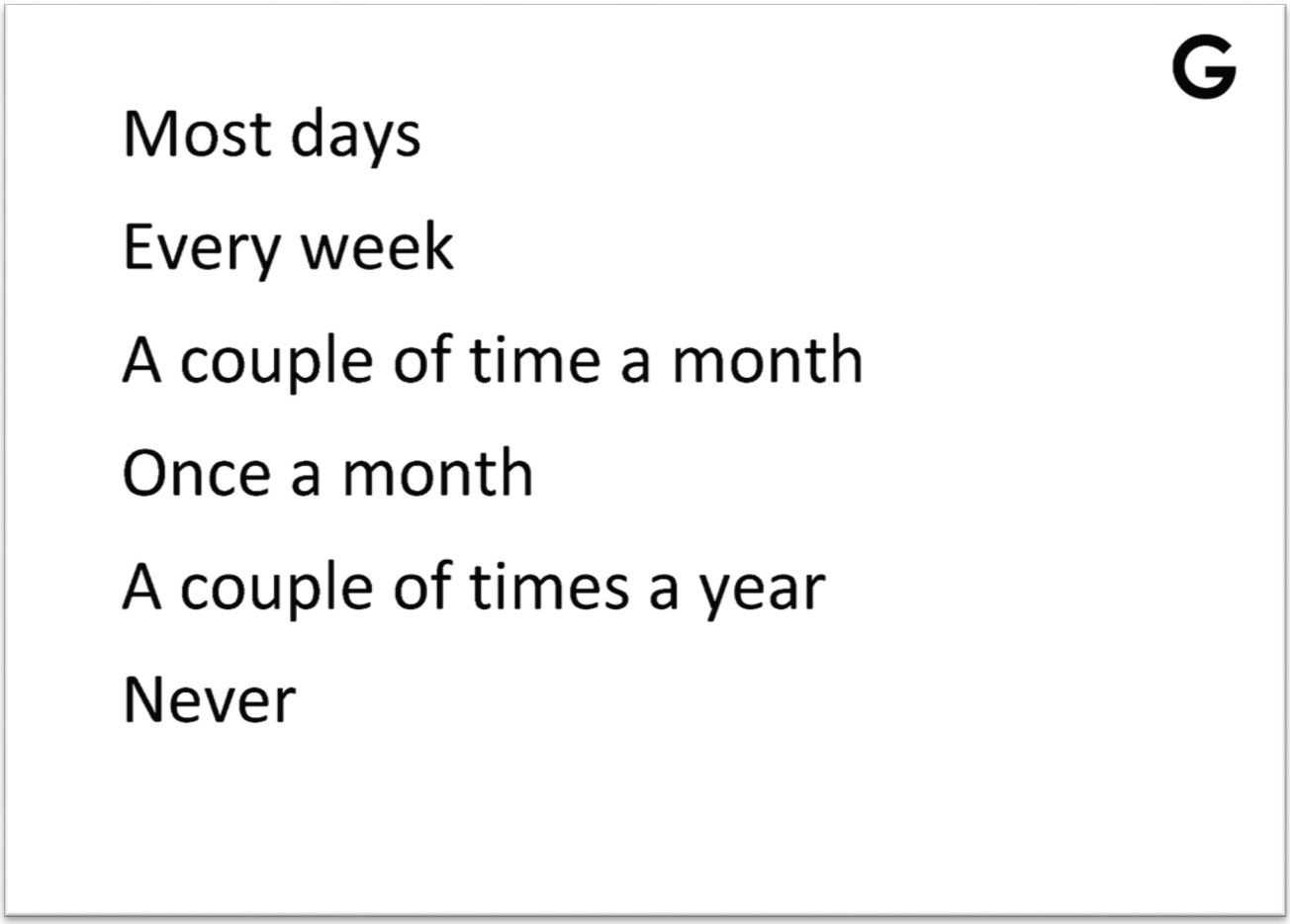
Satisfied

Neither satisfied nor dissatisfied

Dissatisfied

Very dissatisfied


F
Very safe
Fairly safe
Neither safe nor unsafe
Bit unsafe
Very unsafe


G
Most days
Every week
A couple of time a month
Once a month
A couple of times a year
Never

H

Work 	Place of religious worship 	School 	Clinic/ Hospital/ Other healthcare 	
Creche/ Daycare 	Spaza shop 	Supermarket/ mall/ shopping centre 	Restaurant/ Takeaway 	Homes of family or friends 
Financial services/ banks 	Internet café 	Bars/Taverns/ Shebeens or Liquor store 	Park/ Green public space 	Library 
Sport/Recreation facility 	Nowhere 	Other 		

I

Dry or tinned beans 	**Processed meat (polony/viennas/bully beef, etc)** 	**Frozen chicken portions** 
Eggs 	**Tinned fish (pilchards/sardines)** 	**Fresh meat (beef/chicken/fish, etc)** 
Chicken feet/gizzards/off cuts/offal 	**Dairy** 	**Nuts and seeds (including soya products** 

J

Strongly trust

Trust

Neither trust nor distrust

Distrust

Strongly distrust

K

Strongly agree

Agree

Neither agree nor disagree

Disagree

Strongly disagree

L

Coming from a wealthy family

Having a good education

Knowing the right people

Living in an area with opportunities

Race

Individual willpower and hard work

M

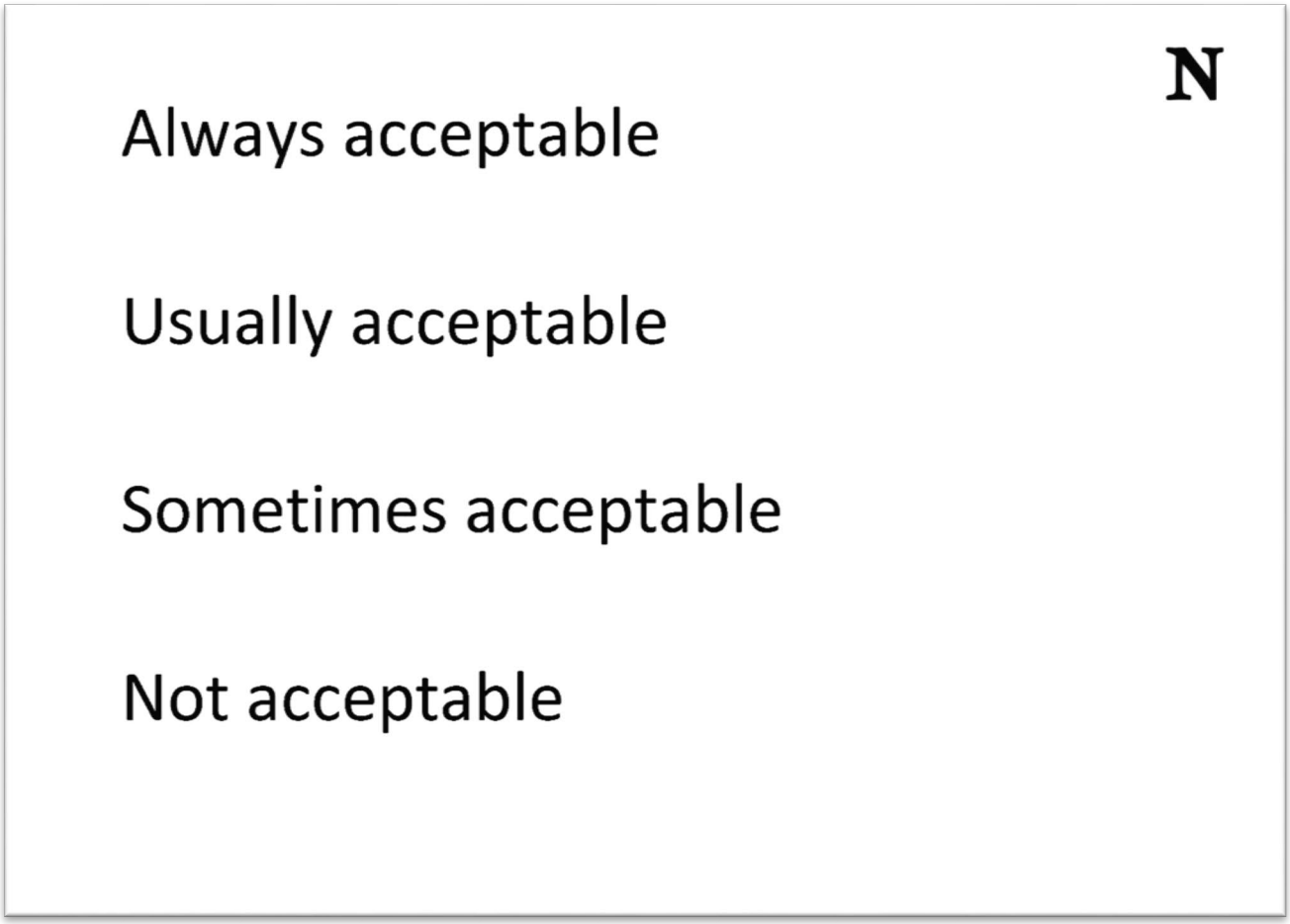
Always

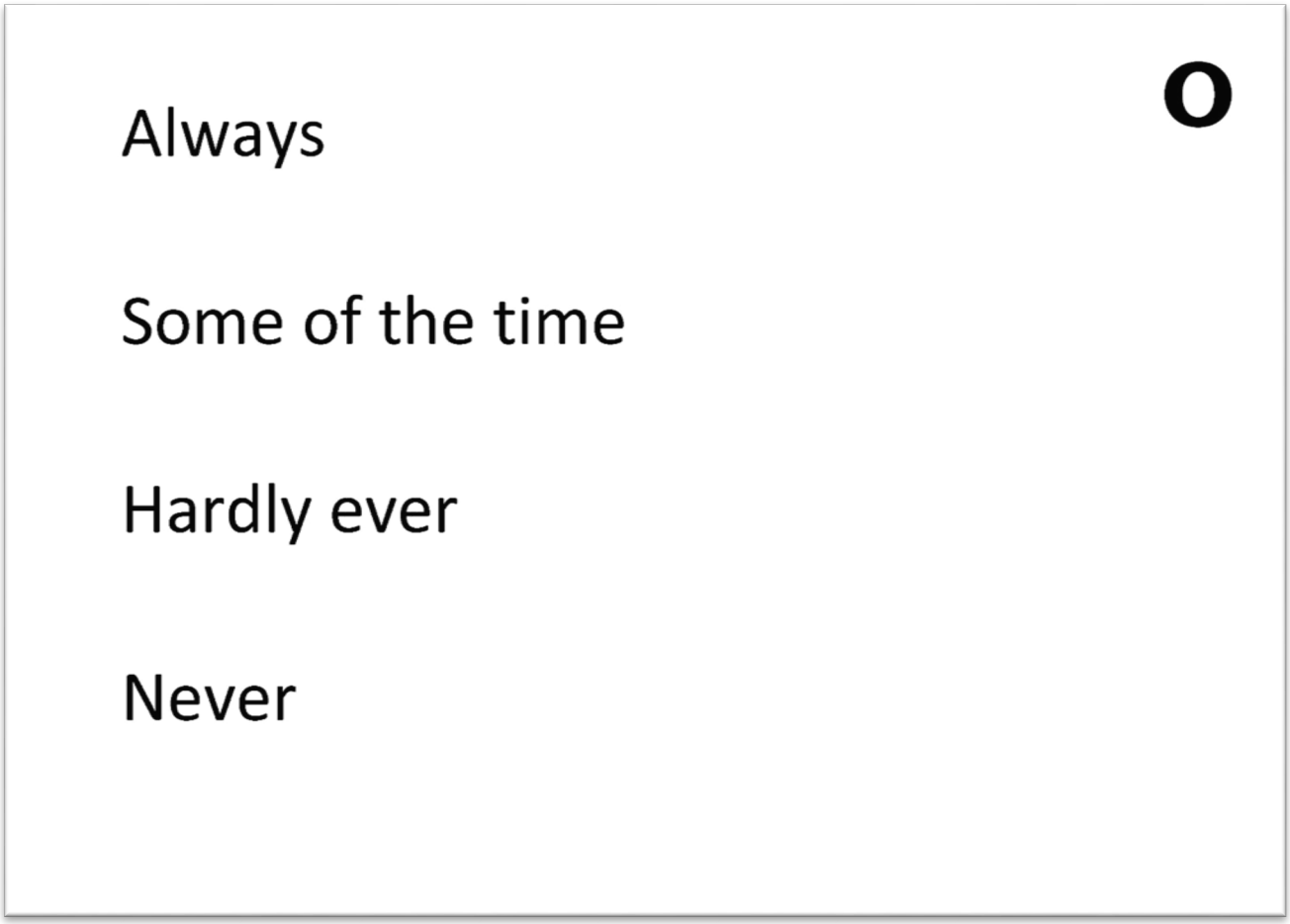
Often

Sometimes

Not at all

Do not know


N
Always acceptable
Usually acceptable
Sometimes acceptable
Not acceptable


Always
O
Some of the time
Hardly ever
Never

P

Not at all

A few days

More than half the days

Nearly every day

5.11 Annexure 11: Referral sheet

GeoSpace
measure it. manage it.

GCRO Gauteng City-Region Observatory

CRISIS HOTLINES

Lifeline Crisis
24-hour crisis service
0861 322 322

SA Depression & Anxiety Group (SADAG)
24 hour helpline
0800 456789
SMS: 31393

SADAG
24 hr Suicide crisis line
0800 567567

Childline
24 hr Crisis line & counselling
080 055 5555

COUNSELLING & SOCIAL

Lifeline Counseling
WhatsApp call counselling
065 989 9238

MobieG
Live chat counseling for teens
www.mobieg.co.za

SASSA (Social grants)
011 241 8300
0800 601 011
Braamfontein

Legal Aid
send a please call me to:
079 835 7179
legal-aid.co.za/selfhelp/

GBV HOTLINES

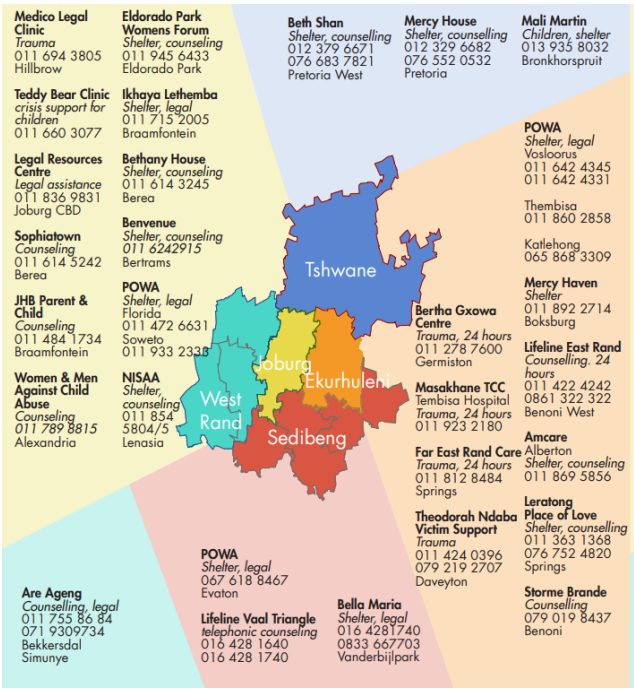
TEARS GBV
SMS help line
*134*7355#

Women Abuse Helpline
Toll-Free Helpline
0800 150 150

GBV Command Centre
24 hour helpline
0800 428 428
*120*7867# for call-back

National Shelter Movement
24-hour helpline
0800 001 005

Study-related questions or concerns:
GeoSpace Call Centre
081 073 2446 or 071 041 0033



Medico Legal Clinic
Trauma
011 694 3805
Hillbrow
Teddy Bear Clinic
crisis support for children
011 660 3077
Legal Resources Centre
Legal assistance
011 836 9831
Joburg CBD
Sophiatown
Counseling
011 614 5242
Berea
JHB Parent & Child
Counseling
011 484 1734
Braamfontein
Women & Men Against Child Abuse
Counseling
011 789 8815
Alexandria
Eldorado Park Womens Forum
Shelter, counseling
011 945 6433
Eldorado Park
Ikhaya Lethemba
Shelter, legal
011 715 2005
Braamfontein
Bethany House
Shelter, counseling
011 614 3245
Berea
Benvenue
Shelter, counseling
011 6242915
Bertrams
POWA
Shelter, legal
Florida
011 472 6631
Soweto
011 933 2333
NISAA
Shelter, counseling
011 854 5804/5
Lenasia
Beth Shan
Shelter, counselling
012 379 6671
076 683 7821
Pretoria West
Mercy House
Shelter, counselling
012 329 6682
076 552 0532
Pretoria
Mali Martin
Children, shelter
013 935 8032
Bronkhorspruit
POWA
Shelter, legal
Vosloorus
011 642 4345
011 642 4331
Thembisa
011 860 2858
Katlehong
065 868 3309
Mercy Haven
Shelter
011 892 2714
Boksburg
Lifeline East Rand
Counselling. 24 hours
011 422 4242
0861 322 322
Benoni West
Amcare
Alberton
Shelter, counseling
011 869 5856
Leratong Place of Love
Shelter, counselling
011 363 1368
076 752 4820
Springs
Storme Brande
Counselling
079 019 8437
Benoni
Bertha Gxowa Centre
Trauma, 24 hours
011 278 7600
Germiston
Masakhane TCC
Tembisa Hospital
Trauma, 24 hours
011 923 2180
Far East Rand Care
Trauma, 24 hours
011 812 8484
Springs
Theodorah Ndaba Victim Support
Trauma
011 424 0396
079 219 2707
Daveyton
Are Ageng
Counselling, legal
011 755 86 84
071 9309734
Bekkersdal
Simunye
POWA
Shelter, legal
067 618 8467
Evaton
Lifeline Vaal Triangle
telephonic counseling
016 428 1640
016 428 1740
Bella Maria
Shelter, legal
016 4281740
0833 667703
Vanderbijlpark
Tshwane
Joburg
Ekurhuleni
West Rand
Sedibeng

5.12 Annexure 12: Interviews per EA where alternative in-field sampling methodology was used

Municipality and Ward	EA	QA Approved interviews
Emfuleni - 74201001	76010546	1
Emfuleni - 74201004	76010251	2
Emfuleni - 74201005	76010037	4
Emfuleni - 74201005	76010176	1
Emfuleni - 74201005	76010275	2
Emfuleni - 74201005	76010277	4
Emfuleni - 74201015	76010260	2
Emfuleni - 74201015	76010553	2
Emfuleni - 74201023	76010116	1
Emfuleni - 74201025	76010032	1
Emfuleni - 74201045	76010685	1
Midvaal - 74202001	76110004	3
Midvaal - 74202002	76110040	1
Midvaal - 74202003	76110071	1
Midvaal - 74202004	76110059	1
Midvaal - 74202004	76110060	1
Midvaal - 74202007	76110165	1
Midvaal - 74202007	76110167	1
Midvaal - 74202007	76110208	3
Midvaal - 74202009	76110088	5
Midvaal - 74202011	76110161	2
Midvaal - 74202012	76110204	2
Midvaal - 74202013	76110055	4
Midvaal - 74202014	76110076	2
Midvaal - 74202014	76110083	3
Midvaal - 74202014	76110087	4
Midvaal - 74202014	76110092	2
Midvaal - 74202014	76110093	1
Midvaal - 74202014	76110096	1
Midvaal - 74202014	76110169	4
Midvaal - 74202015	76110100	1
Midvaal - 74202015	76110103	3

Midvaal - 74202015	76110112	3
Lesedi - 74203006	76210001	1
Lesedi - 74203008	76210120	3
Lesedi - 74203008	76210122	4
Lesedi - 74203008	76210123	1
Lesedi - 74203008	76210125	6
Lesedi - 74203008	76210139	5
Lesedi - 74203008	76210142	1
Lesedi - 74203009	76210091	1
Lesedi - 74203009	76210092	3
Lesedi - 74203009	76210094	1
Lesedi - 74203009	76210095	4
Lesedi - 74203009	76210097	4
Lesedi - 74203009	76210098	2
Lesedi - 74203009	76210146	3
Lesedi - 74203010	76210104	2
Lesedi - 74203010	76210149	3
Lesedi - 74203010	76210150	5
Lesedi - 74203010	76210151	7
Lesedi - 74203010	76210157	5
Lesedi - 74203012	76210215	1
Rand West - 74205001	76410004	3
Rand West - 74205023	76510073	3
Rand West - 74205023	76510081	5
Rand West - 74205023	76510089	1
Rand West - 74205025	76510353	2
Rand West - 74205026	76510114	3
Rand West - 74205028	76510192	2
Mogale City - 74801017	76310429	4
Mogale City - 74801017	76310430	1
Mogale City - 74801021	76310548	2
Mogale City - 74801022	76310596	2
Mogale City - 74801022	76310597	4
Mogale City - 74801026	76310449	4
Mogale City - 74801026	76310575	2
Mogale City - 74801028	76310637	1

Mogale City - 74801029	76310383	4
Mogale City - 74801029	76310386	3
Mogale City - 74801029	76310436	1
Mogale City - 74801029	76310437	2
Mogale City - 74801029	76310639	1
Mogale City - 74801039	76310391	4
Mogale City - 74801039	76310513	2
Merafong - 74804005	76610189	3
Merafong - 74804014	76610016	3
Merafong - 74804014	76610071	2
Merafong - 74804014	76610072	3
Merafong - 74804014	76610079	2
Merafong - 74804016	76610274	1
Merafong - 74804017	76610300	1
Merafong - 74804019	76610102	5
Merafong - 74804021	76610050	1
City of Ekurhuleni - 79700001	79715306	4
City of Ekurhuleni - 79700001	79715308	3
City of Ekurhuleni - 79700015	79714316	4
City of Ekurhuleni - 79700015	79714741	3
City of Ekurhuleni - 79700016	79714288	4
City of Ekurhuleni - 79700016	79714289	4
City of Ekurhuleni - 79700016	79714398	6
City of Ekurhuleni - 79700016	79714692	6
City of Ekurhuleni - 79700017	79713147	3
City of Ekurhuleni - 79700017	79713148	3
City of Ekurhuleni - 79700018	79710788	3
City of Ekurhuleni - 79700018	79710795	3
City of Ekurhuleni - 79700018	79713923	1
City of Ekurhuleni - 79700018	79713931	3
City of Ekurhuleni - 79700018	79714138	3
City of Ekurhuleni - 79700018	79714142	2
City of Ekurhuleni - 79700019	79713791	2
City of Ekurhuleni - 79700019	79713803	4
City of Ekurhuleni - 79700019	79713806	1
City of Ekurhuleni - 79700020	79710767	4

City of Ekurhuleni - 79700020	79713617	2
City of Ekurhuleni - 79700020	79713618	2
City of Ekurhuleni - 79700020	79713622	4
City of Ekurhuleni - 79700020	79713624	5
City of Ekurhuleni - 79700020	79713783	3
City of Ekurhuleni - 79700022	79713102	4
City of Ekurhuleni - 79700022	79713110	2
City of Ekurhuleni - 79700022	79713527	2
City of Ekurhuleni - 79700022	79713528	4
City of Ekurhuleni - 79700022	79713577	4
City of Ekurhuleni - 79700023	79712912	4
City of Ekurhuleni - 79700023	79712931	3
City of Ekurhuleni - 79700023	79713956	2
City of Ekurhuleni - 79700024	79713872	2
City of Ekurhuleni - 79700024	79714040	3
City of Ekurhuleni - 79700024	79714044	2
City of Ekurhuleni - 79700024	79714048	4
City of Ekurhuleni - 79700025	79714675	5
City of Ekurhuleni - 79700027	79713771	1
City of Ekurhuleni - 79700027	79713772	3
City of Ekurhuleni - 79700027	79713777	4
City of Ekurhuleni - 79700028	79712898	4
City of Ekurhuleni - 79700028	79712905	3
City of Ekurhuleni - 79700028	79712908	2
City of Ekurhuleni - 79700028	79713850	1
City of Ekurhuleni - 79700031	79712766	1
City of Ekurhuleni - 79700031	79712812	3
City of Ekurhuleni - 79700031	79712819	1
City of Ekurhuleni - 79700031	79713207	1
City of Ekurhuleni - 79700032	79713183	3
City of Ekurhuleni - 79700035	79712569	1
City of Ekurhuleni - 79700035	79713459	1
City of Ekurhuleni - 79700035	79713460	4
City of Ekurhuleni - 79700037	79712779	4
City of Ekurhuleni - 79700038	79711112	1
City of Ekurhuleni - 79700039	79712558	4

City of Ekurhuleni - 79700039	79712962	1
City of Ekurhuleni - 79700043	79712485	2
City of Ekurhuleni - 79700072	79713203	2
City of Ekurhuleni - 79700073	79713219	2
City of Ekurhuleni - 79700074	79712231	1
City of Ekurhuleni - 79700076	79712501	4
City of Ekurhuleni - 79700088	79710033	1
City of Ekurhuleni - 79700088	79710035	2
City of Ekurhuleni - 79700088	79710050	4
City of Ekurhuleni - 79700091	79714552	3
City of Ekurhuleni - 79700091	79714751	5
City of Ekurhuleni - 79700092	79712632	2
City of Ekurhuleni - 79700092	79712636	2
City of Ekurhuleni - 79700092	79713826	4
City of Ekurhuleni - 79700094	79711131	1
City of Ekurhuleni - 79700094	79711145	1
City of Ekurhuleni - 79700094	79711799	2
City of Ekurhuleni - 79700097	79713046	3
City of Ekurhuleni - 79700097	79713047	1
City of Ekurhuleni - 79700104	79714513	2
City of Ekurhuleni - 79700104	79714518	4
City of Ekurhuleni - 79700104	79714527	4
City of Ekurhuleni - 79700105	79711877	4
City of Ekurhuleni - 79700105	79712740	2
City of Ekurhuleni - 79700105	79712749	2
City of Ekurhuleni - 79700106	79710679	3
City of Ekurhuleni - 79700106	79711158	1
City of Ekurhuleni - 79700106	79711160	4
City of Ekurhuleni - 79700106	79712391	2
City of Johannesburg - 79800009	79810957	1
City of Johannesburg - 79800009	79811159	2
City of Johannesburg - 79800010	79810945	1
City of Johannesburg - 79800023	79811001	3
City of Johannesburg - 79800023	79811186	1
City of Johannesburg - 79800023	79811202	3
City of Johannesburg - 79800023	79811476	3

City of Johannesburg - 79800032	79815540	3
City of Johannesburg - 79800053	79812150	1
City of Johannesburg - 79800054	79812655	1
City of Johannesburg - 79800055	79811120	3
City of Johannesburg - 79800056	79811482	3
City of Johannesburg - 79800056	79812628	3
City of Johannesburg - 79800065	79813275	2
City of Johannesburg - 79800067	79812285	3
City of Johannesburg - 79800069	79813896	2
City of Johannesburg - 79800071	79813814	3
City of Johannesburg - 79800072	79812730	4
City of Johannesburg - 79800072	79814887	1
City of Johannesburg - 79800072	79814900	3
City of Johannesburg - 79800073	79812303	2
City of Johannesburg - 79800073	79812311	2
City of Johannesburg - 79800073	79814456	1
City of Johannesburg - 79800074	79812318	2
City of Johannesburg - 79800074	79812326	2
City of Johannesburg - 79800074	79812330	5
City of Johannesburg - 79800074	79814753	3
City of Johannesburg - 79800081	79814507	3
City of Johannesburg - 79800083	79813853	1
City of Johannesburg - 79800083	79813856	4
City of Johannesburg - 79800083	79813861	3
City of Johannesburg - 79800083	79814363	1
City of Johannesburg - 79800084	79814404	2
City of Johannesburg - 79800084	79814714	5
City of Johannesburg - 79800086	79813625	3
City of Johannesburg - 79800087	79814038	3
City of Johannesburg - 79800087	79814042	1
City of Johannesburg - 79800087	79814047	1
City of Johannesburg - 79800087	79814446	4
City of Johannesburg - 79800088	79813120	2
City of Johannesburg - 79800090	79814776	3
City of Johannesburg - 79800090	79814794	3
City of Johannesburg - 79800090	79814873	1

City of Johannesburg - 79800090	79814980	1
City of Johannesburg - 79800090	79815123	1
City of Johannesburg - 79800091	79814764	4
City of Johannesburg - 79800091	79815223	2
City of Johannesburg - 79800091	79815235	4
City of Johannesburg - 79800093	79814166	3
City of Johannesburg - 79800093	79814833	4
City of Johannesburg - 79800093	79814841	4
City of Johannesburg - 79800093	79815956	3
City of Johannesburg - 79800093	79816085	2
City of Johannesburg - 79800094	79816095	2
City of Johannesburg - 79800094	79816322	7
City of Johannesburg - 79800094	79816484	4
City of Johannesburg - 79800094	79816486	4
City of Johannesburg - 79800094	79816509	4
City of Johannesburg - 79800096	79816354	3
City of Johannesburg - 79800097	79814293	3
City of Johannesburg - 79800097	79814617	4
City of Johannesburg - 79800097	79815171	1
City of Johannesburg - 79800097	79815468	3
City of Johannesburg - 79800097	79815498	2
City of Johannesburg - 79800097	79815582	1
City of Johannesburg - 79800097	79815620	4
City of Johannesburg - 79800097	79815621	2
City of Johannesburg - 79800101	79815803	3
City of Johannesburg - 79800101	79815814	5
City of Johannesburg - 79800103	79814796	1
City of Johannesburg - 79800103	79814807	3
City of Johannesburg - 79800103	79814816	12
City of Johannesburg - 79800103	79814819	2
City of Johannesburg - 79800103	79815382	1
City of Johannesburg - 79800106	79814143	3
City of Johannesburg - 79800106	79815397	4
City of Johannesburg - 79800106	79815849	5
City of Johannesburg - 79800109	79812352	2
City of Johannesburg - 79800109	79815267	2

City of Johannesburg - 79800109	79815270	2
City of Johannesburg - 79800112	79816297	4
City of Johannesburg - 79800112	79816299	2
City of Johannesburg - 79800114	79815760	2
City of Johannesburg - 79800115	79814162	2
City of Johannesburg - 79800115	79815061	3
City of Johannesburg - 79800115	79815820	2
City of Johannesburg - 79800115	79815936	2
City of Johannesburg - 79800117	79814059	2
City of Johannesburg - 79800117	79814062	1
City of Johannesburg - 79800117	79814066	4
City of Johannesburg - 79800117	79814966	3
City of Johannesburg - 79800118	79813473	3
City of Johannesburg - 79800118	79813482	2
City of Johannesburg - 79800118	79813701	1
City of Johannesburg - 79800125	79810971	2
City of Johannesburg - 79800125	79811060	3
City of Johannesburg - 79800132	79815913	4
City of Johannesburg - 79800132	79816287	4
City of Johannesburg - 79800132	79816300	3
City of Johannesburg - 79800134	79813234	1
City of Johannesburg - 79800134	79815673	1
City of Tshwane - 79900001	79911897	2
City of Tshwane - 79900002	79913419	1
City of Tshwane - 79900004	79912660	1
City of Tshwane - 79900004	79913452	1
City of Tshwane - 79900005	79913241	2
City of Tshwane - 79900005	79913251	1
City of Tshwane - 79900041	79912182	1
City of Tshwane - 79900042	79911026	2
City of Tshwane - 79900042	79911035	1
City of Tshwane - 79900042	79911068	2
City of Tshwane - 79900042	79911798	2
City of Tshwane - 79900044	79910157	1
City of Tshwane - 79900045	79910129	1
City of Tshwane - 79900045	79911336	3

City of Tshwane - 79900047	79910548	4
City of Tshwane - 79900047	79910553	3
City of Tshwane - 79900047	79910904	1
City of Tshwane - 79900048	79910405	2
City of Tshwane - 79900048	79910628	1
City of Tshwane - 79900050	79913326	4
City of Tshwane - 79900050	79913328	1
City of Tshwane - 79900050	79913334	3
City of Tshwane - 79900050	79913340	3
City of Tshwane - 79900052	79911143	1
City of Tshwane - 79900052	79911146	1
City of Tshwane - 79900052	79912762	1
City of Tshwane - 79900053	79912112	1
City of Tshwane - 79900053	79912961	3
City of Tshwane - 79900054	79912977	1
City of Tshwane - 79900055	79911940	4
City of Tshwane - 79900056	79912304	5
City of Tshwane - 79900057	79910721	4
City of Tshwane - 79900057	79910747	2
City of Tshwane - 79900057	79910857	3
City of Tshwane - 79900058	79912085	4
City of Tshwane - 79900058	79912100	5
City of Tshwane - 79900061	79910420	1
City of Tshwane - 79900061	79910425	1
City of Tshwane - 79900064	79910049	1
City of Tshwane - 79900064	79910275	2
City of Tshwane - 79900065	79910704	2
City of Tshwane - 79900065	79910732	3
City of Tshwane - 79900066	79910867	1
City of Tshwane - 79900066	79911558	1
City of Tshwane - 79900069	79910365	4
City of Tshwane - 79900069	79910670	2
City of Tshwane - 79900070	79910312	3
City of Tshwane - 79900070	79910324	2
City of Tshwane - 79900070	79910661	3
City of Tshwane - 79900070	79910789	3

City of Tshwane - 79900077	79910022	1
City of Tshwane - 79900077	79910500	5
City of Tshwane - 79900078	79910374	1
City of Tshwane - 79900078	79910375	1
City of Tshwane - 79900078	79910381	2
City of Tshwane - 79900078	79910754	4
City of Tshwane - 79900079	79910822	3
City of Tshwane - 79900079	79910825	4
City of Tshwane - 79900079	79910924	1
City of Tshwane - 79900079	79910996	3
City of Tshwane - 79900079	79911007	2
City of Tshwane - 79900082	79910599	3
City of Tshwane - 79900082	79910603	1
City of Tshwane - 79900082	79910604	1
City of Tshwane - 79900083	79910567	4
City of Tshwane - 79900083	79910579	4
City of Tshwane - 79900084	79912109	5
City of Tshwane - 79900084	79912117	2
City of Tshwane - 79900085	79910164	4
City of Tshwane - 79900085	79910175	2
City of Tshwane - 79900085	79910181	1
City of Tshwane - 79900085	79910182	4
City of Tshwane - 79900085	79910184	4
City of Tshwane - 79900085	79911461	2
City of Tshwane - 79900085	79912227	2
City of Tshwane - 79900088	79914764	1
City of Tshwane - 79900091	79910086	3
City of Tshwane - 79900091	79910102	2
City of Tshwane - 79900091	79910642	2
City of Tshwane - 79900091	79911165	3
City of Tshwane - 79900092	79911114	3
City of Tshwane - 79900096	79913249	3
City of Tshwane - 79900098	79913365	2
City of Tshwane - 79900098	79913374	2
City of Tshwane - 79900098	79913484	2
City of Tshwane - 79900099	79914753	5

City of Tshwane - 79900101	79910077	3
City of Tshwane - 79900101	79910635	2
City of Tshwane - 79900101	79910640	1
TOTAL		**923**