

Bureau of Statistics (Guyana) Data Analyst Coordinator Terms of Reference

I. Position Information

Organization: The Bureau of Statistics Title: Data Analyst Coordinator Reports to: The Chief Census Officer Location: Bureau of Statistics Head Office – 34 Main and Hope Street, South Cummingsburg, Georgetown. Duration: One (1) Year

II. Background

The Bureau of Statistics, which is recognized as the central authority on statistics in Guyana, is a Semi-Autonomous Agency given authority under Section 4 (1) of the Bureau of Statistics Act No. 25 of 1991 and the Statistical Bureau Act Cap 19.09. The responsibilities of the Bureau of Statistics include among others, the function to conduct censuses, collect, compile, analyse, and publish socio-economic and other statistical data.

In this regard, the year 2022 has been declared as the year for the execution of the National Population and Housing Census in Guyana and it is the mission of the Bureau to efficiently analyze, produce and disseminate statistical information covering economic, social and environmental issues in Guyana from data obtained via the Census.

Data produced and disseminated by the Bureau are intended for stakeholders at all levels, local and international, including government agencies, non-governmental organizations, the private sector and private individuals. It is therefore of national importance that the data arising out of Census 2022 is credible, reliable and released in a timely manner. It is also important that the data is presented in a manner that is user-friendly and easily accessible.

As a result, the BOS is seeking to hire a Data Analyst Coordinator who would bring their expert knowledge in using modern applications and techniques to assist the Bureau in analyzing and reporting the Census 2022 data.

III. Objective

The Bureau of Statistics is seeking to employ a data analyst who would work along with the Bureau of Statistics Census Team to analyze and assist in the reporting of the 2022 Guyana Population and Housing Census data using modern techniques in order to deliver the results and findings of the Census in a timely and consumer-centric manner.

IV. Scope of Work

Data Quality Checks and Verification – It is essential that the data received from the Census is authentic and reflective of the population. In this regard, the Data Analyst Coordinator would be expected to put systems in place to assess data quality, engage the relevant personnel to determine the meaning of variances, and provide feedback to the relevant staff on how data quality can be improved. Responsibilities would include:

- Designing a methodology to assess data quality, including tests for normality, homogeneity etc. of the variables;
- Performing initial analysis on data received from the fields to assess the quality of the data; and provide weekly feedback to the Deputy Census Officer in order to improve data quality as necessary;
- Planning and conducting spot checks to determine the accuracy and the credibility of the data received;
- Provide a report detailing the methodology used to assess data quality;
- Provide a report on irregularities encountered and treatment of same.

Data Analysis – The data gathered from the Census exercise is of national importance and would lend evidence to and form basis for future policies at all levels. It is therefore crucial that the data collected from the Census is transformed and presented in a manner that is easy to access and use/read by all stakeholders involved. On this premise, the Data Analyst Coordinator would be expected to:

- Ensure the creation and maintenance of separate databases for the raw and processed datasets;
- Guide and review the application of statistical methods and best practices to manage and optimize statistical quality of the data;
- Anonymize the datasets;
- Assess and identify the Census data needs of stakeholders in order to determine the final outputs;
- Review the data analytics techniques used along with the tables and visualizations produced;

- Review the methodology/codes used to process and analyze the data;
- Assist in creating geospatial and other interactive graphs/charts and data subset to be published online.

Reporting – To conclude the Census 2022 exercise, a formal report should be compiled and made available to the public, which will provide summaries on the data collected and trends based on previous censuses. The Data Analyst Coordinator would be expected to ensure that the finding and results of the Census are accurately reported and interpreted.

Supervisory – The Data Analyst Coordinator will work along with and guide a team of Data Analysts to ensure targets and deadlines are met. The Data Analyst Coordinator would be required to:

- Produce a detailed workplan;
- Prepare a work programme based on the workplan to ensure a coordinated and efficient workflow for the Data Analysts;
- Engage and motivate Data Analysts to produce and meet deadlines effectively and efficiently;
- Laisse with Senior Management to provide updates on work progress;
- Determine work priorities and follow through on tasks;
- Analyze situations carefully and adopt effective course of action to resolve issues arising out of work-related activities.

V. Deliverables

- Workplan and work programme
- Data Tables and Visualizations
- Database of raw data
- Database of finalized Census Data
- Technical report of Census data and findings inclusive of:
 - o Reports on Data Quality and treatment of inconsistencies
 - Documentation of methodologies used to optimize and maintain data quality
 - Summary of findings
 - Codes for all processes and visualizations

VI. Requirements/Qualifications

| Education: | • A minimum of a BSc in Computer |
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| | Science, Mathematics, Data Science, |
| | Statistics, Economics, or related field. A |

| | Masters degree in any of the above listed fields would be preferred. |
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| Work Experience: | At least three years of experience in Data Management, Data Analysis or similar role. |
| Skills and Abilities | Must have excellent data analytical and visualization skills Must possess a working knowledge in the use of statistical packages or data analytical software such as Power BI, Stata or similar. Must have advance knowledge of Microsoft Office Suite. Working knowledge of database management software will be an asset Working knowledge of geospatial modelling will be an asset. Ability to lead and give direction to junior staff Ability to plan work, meet deadlines and work along with a team. Great interpersonal skill, with high levels of professionalism, discretion, tact and integrity. |

VII. Confidentiality

- All planning, related work products and all final outputs of any assignment will be the sole property of the Bureau of Statistics and should not be shared or disclosed with any individual or entity.
- In an effort to ensure and maintain confidentiality of sensitive information persons employed by the Bureau of Statistics are obligated to take its Oath of Secrecy (Cap 19:09 Section 16, Second Schedule). The data obtained by the Bureau of Statistics is strictly confidential and should be treated as such. Any breeches in confidentiality is punishable by law.