

INTRODUCTION

The Census of Population, Singapore's largest national statistical exercise, is conducted once in ten years by the Singapore Department of Statistics. The Census of Population 2010 was the fifth census after Singapore's Independence, and the fourteenth in the series of census taking in Singapore.

The Census of Population 2010 Statistical Release 3 – Geographic Distribution and Transport is the third and final statistical release of a series of statistical publications on detailed census results. This release provides findings on the key trends and changes relating to the geographic distribution and transport characteristics of the Singapore resident population. The report includes detailed statistical tables to enable more comprehensive study by users as well as a glossary of census concepts and definitions.

Census of Population – Concept and Coverage

The Census of Population 2010 adopted the de jure concept for Singapore's population estimates based on a person's place of usual residence. Under the de jure concept of "usual residence", Singapore residents (citizens and permanent residents) with local addresses and who were not away from Singapore for a continuous period of 12 months or longer were included in the total population count. The non-resident population comprising foreigners who were working, studying or living in Singapore but not granted permanent residence were also included in the total population. The transient population such as tourists and short-term visitors was excluded.

Register-based Census of Population

In the register-based Census, the basic population statistics were compiled using administrative records from multiple sources. The merged administrative records provided the basic population count and characteristics such as age, sex, ethnic group, place of birth, type of dwelling and geographic distribution in Singapore.

Sample Enumeration

To collect additional information not available from administrative sources, some 200,000 households were selected to participate in the sample enumeration. Building on the success and lessons learned from the Census of Population 2000, a tri-modal data collection strategy comprising Internet enumeration, Computer-Assisted Telephone Interviewing (CATI) and face-to-face interviews was adopted to facilitate data collection for the households in the sample.

The option of Internet enumeration was made available to all households selected for the census sample enumeration. Available 24 hours a day, 7 days a week, Internet enumeration provided respondents with the flexibility of responding at any

time they desired. It allowed respondents to provide their survey returns directly to the system without having to go through a third party, i.e. the interviewer.

Respondents, who were not able to complete their returns via the Internet, had the option to provide their returns over the phone with the assistance of telephone interviewers. Households that did not complete their returns via the Internet by a stipulated date were also contacted by telephone interviewers for telephone interviews. The CATI system allowed the telephone interviewer to perform multiple tasks of interviewing, data entry and simple coding simultaneously.

Households were scheduled for face-to-face interviews if they did not respond via Internet and could not be contacted by CATI after several attempts. Those who preferred to provide their information to the trained interviewers could also choose to do so. In the event where the field interviewers failed to contact the respondents in these households, they left appointment slips behind for the respondents to contact the interviewers to schedule a convenient time for an interview.

Unlike the traditional paper and pen approach, the Ultra-Mobile Personal Computer (UMPC) was adopted for field enumeration in Census of Population 2010. The use of technology provided logistic convenience, eliminating the need for printing and transportation of hardcopy survey forms. Automatic branching of questions with consistency checks was also introduced to reduce back-end processing efforts with electronically coded data captured in the field.

Data Processing and Reports

Census returns submitted via the Internet, CATI and field enumeration were captured electronically and updated into the Census database directly without the need for separate data entry back in office. Trained coders performed online computer-assisted coding of data on occupation, industry and education while editors checked on the consistency and completeness of survey returns. The final processing of the census data involved the editing and verification of records to ensure consistency and good quality of the data.

After stringent quality checks and the completion of data processing, multiple aggregated cross-tabulations were generated for analysis of data trends. Statistical reports on specific topics were prepared for public release.