

# Age cohort shift analysis methodology

CSIR, Built Environment

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This method was developed in early 2014 when the release of official migration data from StatsSA was delayed. By making use of population information, it is possible to look at population movement trends. Age cohort shift analysis provides an indication of in- and/or out-migrations by tracking the spatial distribution of a certain category of people from 1996 to 2011. Mesozones, as a spatial unit of analysis, are used to determine the trends in spatial distribution of certain age cohorts. For example comparing the spatial distribution of the cohort aged 0-9 in 1996 and where they find themselves as 15-24 year olds in 2011, provides an indication of where young adults have most likely moved to (given influences such as mortality etc.) but without the knowledge of where people are coming from or going to. This will show whether this specific age cohort stayed the same (no in-migration) or whether it grew significantly (in-migration).

In order to derive the level of migration within an area, an age cohort analysis was conducted. Age cohorts of ten year intervals were prepared. The change was measured over a period of 15 years calculating the change between the 1996 and 2011 censuses. The age cohorts used for the analysis were the 0-9; 10-19; 20-29; 30-39; 40-49; 50-59; 60+ year old people of 1996. This alignment allows for a more accurate analysis of the impact of the working age population on migration trends due to the 0-9 year olds of 1996 being the entrants in the working age group in 2011, namely the 15-24 year olds. The table below shows the 1996 and 2011 corresponding age cohorts. All descriptions used, based on this method, refer to the 2011 age cohort, unless otherwise specified.

CSIR cohort description	Entrants	Young adult seekers	Adult strivers	Middle age grinders	Transitioners	Retired	Vulnerable
1996	0-9	10-19	20-29	30-39	40-49	50-59	60+
2011	15-24	25-34	35-44	45-54	55-64	65-74	75+



## References

Mans, G., Maritz, J., Van Niekerk, W., Van Huyssteen, E., Beukes, A., Green, C. & Kok, P. (2014). *Background Research Paper: Module 1: Demographic Change*. Unpublished Report for the SACN. Pretoria: CSIR

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