

Frequency Tables Disclosure Control for the Abu Dhabi Census 2011

Hanan AlDarmaki*

Statistics Centre–Abu Dhabi, Abu Dhabi, UAE, hialdarmaki@scad.ae

Miriam Hodge

Statistics Centre–Abu Dhabi, Abu Dhabi, UAE, mchodge@scad.ae

Statistics Centre-Abu Dhabi (SCAD) conducted a comprehensive population census for the emirate of Abu Dhabi in 2011 and released the results using online dissemination tools which allow the public to create frequency tables from census data down to small geographic areas having as few as 500 individuals. While increasing data availability, the flexibility of these tools introduced new risks of disclosing information about individual respondents. This paper presents a discussion of the risks for providing access to ad-hoc report generation and the method used by SCAD to mitigate these risks. The method presented is based on random rounding and controls for consistency across multiple output channels. While this method is applied on each output table individually, it ensures that the same frequency count in any table is always rounded to the same value.

Key Words: confidentiality, random rounding