



## Smart cities and official statistics – some ideas

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A smart city aims to make intelligent and informed decisions such that local life gets better. In practice, a smart city often focuses on specific goals, like improving the local mobility situation, monitoring safety and security in specified areas or staying informed of citizens' wellbeing. To achieve such goals, a smart city depends on gathering and analysing data from various origins. These data may range from classical questionnaire-based surveys and administrative sources, to innovative big data sources or dedicated sensor networks for real-time monitoring. An additional driver in The Netherlands is that many responsibilities are being transferred from the central government to the local government level. This will undoubtedly raise the demand for policy-relevant statistical information. The smart city concept is still developing, and in a time of budget cuts it may be difficult to find data and analytical resources. National statistical institutes (NSIs), and other official statistics producers, have by their very nature access to an extensive and high-quality data set. And their staff have skills and expertise to work with all kinds of data from different sources. The in-house data treasure chest of NSIs yields ample analytical opportunities for smart city applications and related local purposes. It may also be possible, e.g. by oversampling existing surveys, to collect additional data relevant for a specific city. Moreover, NSIs may be able to obtain access to external sources like administrative data owned by government bodies and big data kept by private companies; even when these are not made available to others. NSIs furthermore may serve as knowledge centres to exploit economies of scale: an approach that works well in one city can be probably be copied by others. All in all, NSIs are well-placed to become a partner in developing smart city applications. Some warnings must be issued, however. Smart city applications may require real-time analysis of high-frequency data, which is not a traditional activity of NSIs. So either they will have to build up such skills or join forces with, e.g., academic partners who have the required expertise. And privacy protection remains a key precondition in all data analysis. This limits the level of detail that can be provided, which may sometimes clash with the smart city demands. In this contribution we present some general ideas on ways how statistical institutes can contribute to concrete smart city goals and illustrate these with experiences and initiatives in The Netherlands.

**Keywords:** informed decision making, big data, privacy protection, join forces.