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## ABSTRACTS



## A317 City Scan Method

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This research involves the development of the City Scan methodology to measure, map, scan and assess different parameters that together give insight in the vulnerability of urban areas and neighborhoods. Cities are becoming increasingly vulnerable for climate change and there is an urgent need to become more resilient. The research involved the development of a set of measurement tools that can be applied in different urban neighborhoods in a low-cost lowtech approach with teams of stakeholders and practitioners. The city scan method was tested in different cities around the globe in groups of young professionals and stakeholders in rapid urban appraisals.

The City Scan method was developed by Rotterdam University of Applied Sciences to gather in a short period of time (1-2 weeks) essential data by young professionals and practitioners that enable them to assess the 'level of resilience' of a specific neighborhood or city. The city Scan method aims to use low-cost and low-tech tools and instruments. The first measurements took place in Manila Philippines, then in Rotterdam Netherlands, then in Cebu Philippines. Other city scan are planned in different cities. Parameters that were assessed in Rotterdam are: urban heat, urban water quality, urban air quality, urban floods – infiltration capacity, urban plastic waste pollution.

The City Scan method is being developed, but the first results show that the method gathers valuable multidisciplinary data that is currently not collected. Water quality mapping with free apps gives insight in the water quality at street or neighborhood level. Urban heat measurements at the street level gives insight how heat differs in different neighborhoods and streets. Plastic waste measurements at riverbanks can now be systematically measured and the data will give insight and awareness in the contribution of Plastic waste pollution in our river systems. Infiltration capacity of open spaces and the contribution to reduce floods is not not known.

The City Scan method is a low-cost, low-tech methodology that can be applied in cities around the world. The approach helps policy makers and practitioners to gather valuable data for decision makers in a rapid appraisal at the neighborhood and city level. The results of the City Scan method gives insights and creates awareness and brings together triple helix partners (public, private and academic partners). The participatory approach brings residents and practitioners together and gives insight in local problems, while at the same time collects valuable data about the robustness of neighborhoods.