# Case Statement, Urban Quality of Life Indicators Working Group

## WG Charter

The aim of the WG is to identify methodological and data-related opportunities and barriers to the use of interoperable open access datasets in the economic, social, and environmental domains that can be used to build comparable indicators of Urban Quality of Life (UQoL) in a global setting.

## **Value Proposition**

In theory open data infrastructures and open government initiatives should be able to provide data that can be used to derive indicators that are repeatable and support inter and intra city comparative analysis. However, is this the case? This working group will draw upon existing initiatives in US, Europe, Canada and Australia to address this question and identify and assess data methodological and data-related strengths and barriers to the development of UQoL indicators. A select number of cities will be used to compute one or more comparable UQoL indicators and examine key aspects such as scale, data quality, temporality, provenance, etc…. Given the extent to which social media and web resources may increasingly become useful data sources for the development of dynamic UQoL, the WG will also begin to consider methods to develop a dedicated UQoL data dictionary useful for data mining.

## Engagement with existing work in the area:

This working group is led by three large scale initiatives: the Australian Urban Research Infrastructure Network (AURIN) the Infrastructure for Spatial Information in Europe (INSPIRE), and Urban Big Data Centre (UBDC) in the UK. There is also opportunity for other such large-scale research initiatives to be actively involved in this working group.

In the context of Australia, AURIN is supporting the formulation and distribution of national benchmarked small area indicators products including:

* OECD comparable and other selected small areas indicators
* Small area wellbeing and quality of life
* Small area indicators of disadvantage for the indigenous population
* Australian national datasets for social and health indicators
* An analytical platform for the integration of VicHealth Survey and Spatial Objective Contextual Data.

In the context of the EU, INSPIRE is the legal framework establishing an infrastructure across the 28 member states to share environmental and spatial information and services. Building on this platform (http://inspire-geoportal.ec.europa.eu/), new institutional projects at the European Commission Joint Research Centre complement official data from public administrations with dynamic data from sensor networks and the public to develop new indicators of wellbeing and quality of life in urban areas.

In the UK, the UBDC at the University of Glasgow (http://urbanbigdatacentre.ac.uk/) is a unique ESRC-funded research centre to address social, economic and environmental challenges facing cities. UBDC brings interdisciplinary expertise of urban social scientists and data scientists from University of Glasgow and five partner universities of Edinburgh, Cambridge, Reading, Bristol and Illinois-Chicago to seek solutions in addressing such challenges.

The University of Toronto has also agreed to participate with a focus on Toronto’s Open data and work on an urban data ontology.

Other groups to be engaged in the project include:

* RDA Geospatial IG
* Global Cities Institute
* OECD group on indicators of well-being, and WEBCOSI project ([www.webcosi.eu](http://www.webcosi.eu))
* European Statistical System Task Force on Big Data and Official Statistics (TBC)
* OGC – Urban Planning Working Group (TBC)

## Work Plan

The WG will operate in the following way:

* The working group will assess data methodological and data-related opportunities and barriers to the creation of dynamic UQoL indicators using a range of available open data sources. Selected UQoL indicators will be tested across two or more continents.
* The project will produce a report of the findings in putting together the datasets and indicators across the selected cities, and identify other potential sources of data that need opening up.
* The indicators will be hosted in a suitable open data platform. However, these indicator products are being recreated to expose the strengths and weaknesses of the underlying data and will not serve as an indicator toolkit for decision-makers to use.
* The WG will assess the feasibility of developing a dedicated urban data dictionary, leveraging existing thesauri and dictionaries such as the INSPIRE feature concept dictionary, the General Environmental Multilingual Thesaurus, EuroVOC, etc. and augmented by folksonomies derived from social networks data mining.
* The WG will meet bi-monthly quarterly via Google Hangouts or Skype and email will be used to share information in the group on a regular basis.
* The RDA website will be used to manage the working group’s web presence and shared documents
* The WG plans to be an evolving group and will endeavour to stay on track in scope through feeding any additional opportunities back up to the RDA Geospatial Interest Group for consideration.
* Kick-off meeting RDA in Amsterdam in September 2014 by Project team to review progress.
* The WG will promote its activities through relevant mailing lists through the RDA, AURIN, INSPIRE, UBDC and social media updates.

**Actions:**

* Review sets of existing indicators and ISO 37120:2014 – Sustainable development of communities – Indicators for city services and quality of life. (Month 1)
* Select case studies cities (Month 2)
* Identify a minimum set of QoL indicators that can be developed and tested based on open government and open access datasets. (Month 3)
* Create similar existing indicators comprising subjective and objective data from the selected case study cities. (Month 3-6)
* Analyse the differences and similarities in underlying data collection and indicator formation methodologies and develop a research needs statement regarding data/sensor fusion and data linkage methods that will be necessary to undertake comparative work. This will include common metadata standards, ontologies etc… (Months 6-9).
* Assess the feasibility and methodological challenges in developing a dedicated urban dictionary to support data mining from on-line databases. (Months 9-12).
* Identify the barriers to open access to the data necessary to build the selected indicators, and provide recommendations to RDA on possible action to remove such barriers (Months 12-15)

**Outcomes**

1. Month 1 A concise review report on existing indicators and ISO 37120:2014
2. Month 2 The list of the selected case study cities
3. Month 3 – A minimum set of QoL indicators
4. Month 3-6 – Create indicators for selected case study cities
5. Months 6-9 Report describing the differences in indicator formation across cities and develop research needs statement.
6. Months 9-12 Workshops with end users (researchers, policy-decision makers and community groups), and feasibility study on urban data dictionary.
7. Month 12-15: Report to RDA on opportunities and barriers to open access to data necessary to develop key QoL indicators.

## Adoption Plan

The Urban Quality of Life indicators will be made available on an open data platform and communication of these indicators for comment and use will be made available to researchers, citizens and government organisations both during their development and their assessment. This is an important component to provide input into the final report which will outline the fit for purpose of the data sets and UQoL indicators. The report will be circulated to the Global Cities Institute who are leading implementation of the ISO37120 and those participating cities.

## Initial Membership:

Chris Pettit (AURIN, Australia, Co-chair)

Max Craglia (European Commission, JRC Co-chair)

Piyushimita (Vonu) Thakuriah (University of Glasgow, UK, Co-Chair)

Mark Fox (Global Cities Institute, University of Toronto, Canada)

Suchith Anand (University of Notthingham, UK)

[Charalampos Thanopoulos](https://rd-alliance.org/user/2659%22%20%5Co%20%22View%20user%20profile) (Agro-know)

Chrysi Tsinaraki (EU / JRC)

George Gartner (TU Vienna)

Elizabeth Griffin (Dominion Astrophysical Observatory, Canada)

Melanie Davern (University of Melbourne, Australia)

Malcolm Wolski (Griffith University, Australia)

Tracey Lauriault (National University of Ireland Maynooth, Ireland)

Glenn Geers – (NICTA, Australia)

Pascal Perez (University of Wollongong , Australia)

 Dr Godwin Yeboah (Aberdeen University, Scotland)

[Herman Stehouwer](https://rd-alliance.org/user/67) (Tilburg – Netherlands)

Jose M Paez (Universidad Politecnica de Madrid)

Nick Casey (City of Melbourne)

Pireet Veeroja (University of Melbourne)

Raul Marino (University of Melbourne)

Robert Tanton (University of Canberra)

Seraphim Alvanides (Northumbria University, Newcastle, UK)

Simon Cox (CSIRO, Melbourne)

Suchith Anand (Nottingham University, UK)

Thomas Blaschke (University of Salzburg, Department of Geoinformatics - Z\_GIS)

Stephanie Keyers (ANDS, Melbourne)

Timea Biro (Trust-IT Services)

Yolanda Meleco (RDA US)