

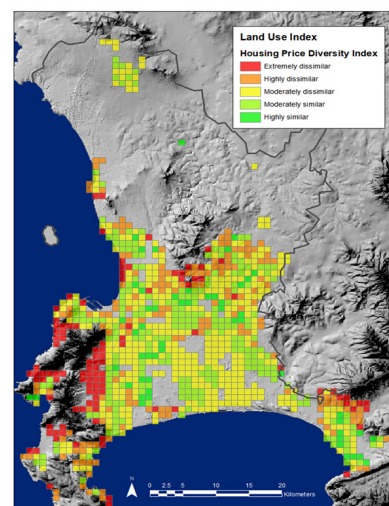
Neighbourhood-Level Land Use Performance Metrics



Cities are looking for new ways to harness spatial data to track their performance in progressively realising their strategic objectives. With spatial transformation being the main strategic focus of the City of Cape Town, the City required land use and housing indices to allow it to track progress in relation to affordable housing and public transport interventions.

Given its experience in indicator development, PDG recognised from the outset that the sustainability of the index is contingent on a design which establishes a pragmatic balance between scientific rigour, sensitivity to intervention and the availability of accurate and regularly updated administrative data. As a first step, PDG had to deconstruct the nebulous concept of 'spatial transformation' into measurable indicators. Then, by testing a range of spatial metrics against South African cities' data resources, PDG designed three new land use indices: , a Land Use Balance Index (to determine job and resident balance per 100ha neighbourhood), a Housing Price Diversity Index (a dissimilarity index which compares the extent to which the spread of neighbourhood-level housing prices approximates citywide patterns), and a Location Equity Index (the distance-attenuated amenity value (i.e. shadow price) of location and a basket of public goods for a notional housing location, given household income). These were demonstrated by using actual policy interventions as case studies.

The key outcome of the project was a satisfied client: *Your understanding of these transformational priorities, the interrelatedness of land use and transport and your ability to translate these complexities into measurable, robust and defensible indices was extremely valuable. In addition, the development of the Housing Price Diversity Index as a measure*



of inclusivity was particularly innovative. Your professional conduct, ability and willingness to engage at all levels across disciplines is further acknowledged, appreciated and valued as an important contribution to the excellent relations within the project team and the ultimate successful development of the UDI. It is not easy to articulate something this complex across a broad range of stakeholders in a way that they can not only understand but that also leads them to engage positively and for this you have a gift.

Project Leader:

Claus Rabe
+27 21 6711402 / claus@pdg.co.za

CUDI PROJECT:

Project Profile: Neighbourhood-Level Land Use Performance Metrics

Client: City of Cape Town (ITS Global lead consultants)

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