
Compact urban development is today widely pursued on sustainability, cost-effectiveness, equity, health, and place-making grounds. Starting with an examination of the different benefits related to urban density, this thesis investigates the complexity and multidimensionality of the densification process.

Establishing that improperly planned, compaction creates undesirable urban environments and undermine residents’ quality of life, the research identifies five necessary conditions to successful densification. Suitable compact development is accompanied by a mix of uses, a provision of public transit, a social inclusiveness, and an access to open space, along with the increase of residential density.

Based on this conclusion, five performance indicators of suitable density are selected and aggregated into a composite index aiming to assess density holistically. This work is concluded by applying the created index to two particularly relevant density case studies: Portland (OR) Downtown Waterfront Urban Renewal Area and Amsterdam IJburg.