

The effects of building density and dwelling size on population Density and the demand for urban services

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Abstract: Building density index is used as a means for controlling population density. Emphasize on controlling the building density as well as providing adequate housing, resulted in adopting the policy of construction of small housing units. However, this policy would result in an increase in the number of housing units within the same building density, and hence a direct increase of the population density. This paper investigates the relationship between these two policies and their effects on both population density and the demand for urban services.

The relation between building density and population density and services needed is indirect, through the number of dwelling units. An increase in building density does not necessary mean an increase in population density. An increase in building density, while controlling the number of dwelling units, would provide opportunity for building larger dwelling units, as well as semi-private service areas.

Larger dwelling units as well as providing semi-private physical facilities would decrease the demand pressure on urban public services. On the other hand decreasing dwelling size within the same building density would increase the population density and the pressure on services would grow exponentially. It is concluded that for appropriate urban planning, controlling, both building density as well as the number of dwelling units is necessary.