# Use-cases for WP3

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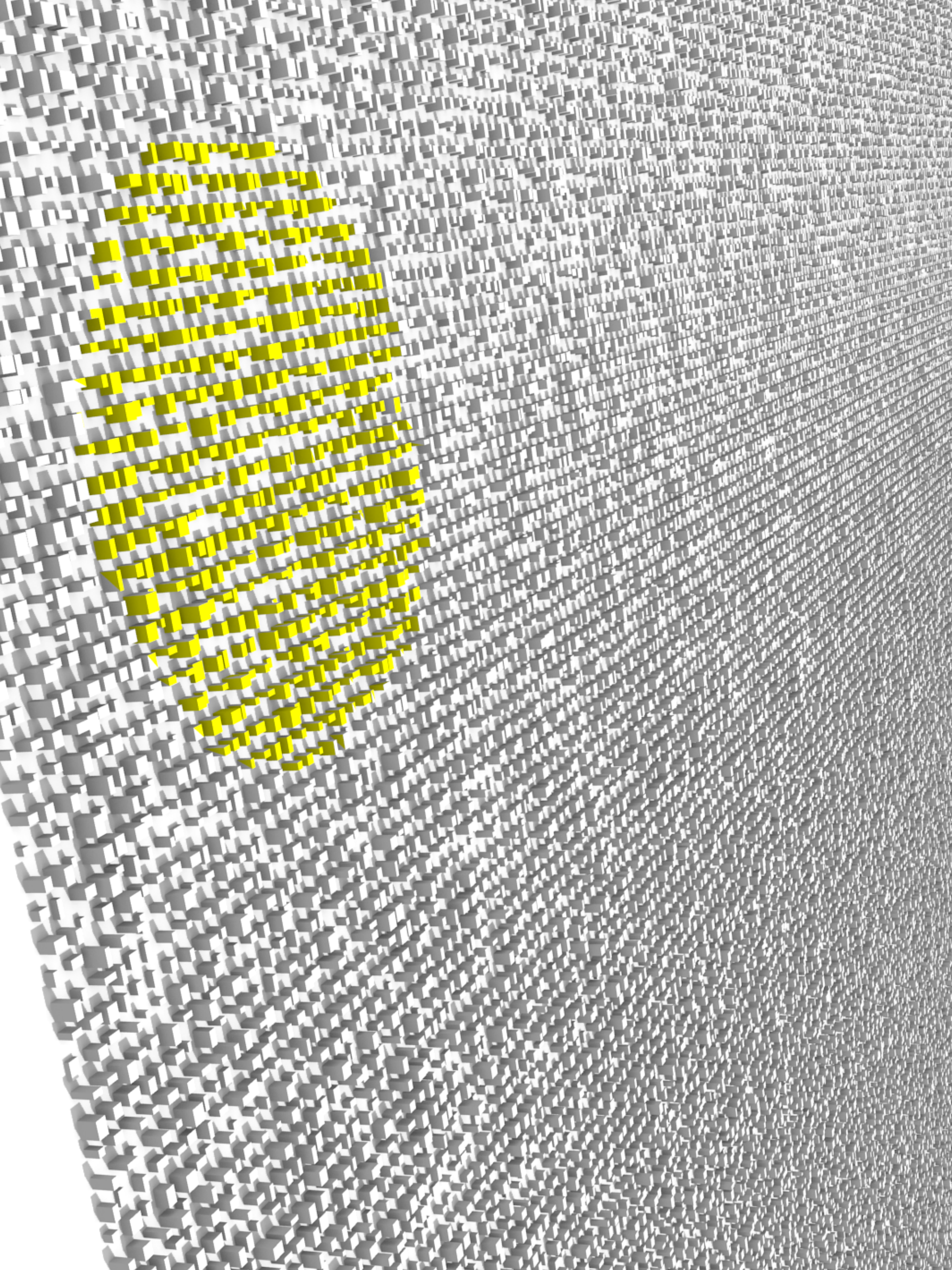
# 1. Estimation of population in an area of interest

- Described in the Annex of D2.8.III.2 INSPIRE Data Specification on Buildings – Technical Guidelines

- Computing the number of inhabitants per building based on the area/volume of the building, height, attributes, …

- Relevant because different LODs produce different results, and it also involves attributes (e.g. building use) which are in practice not available in LOD1



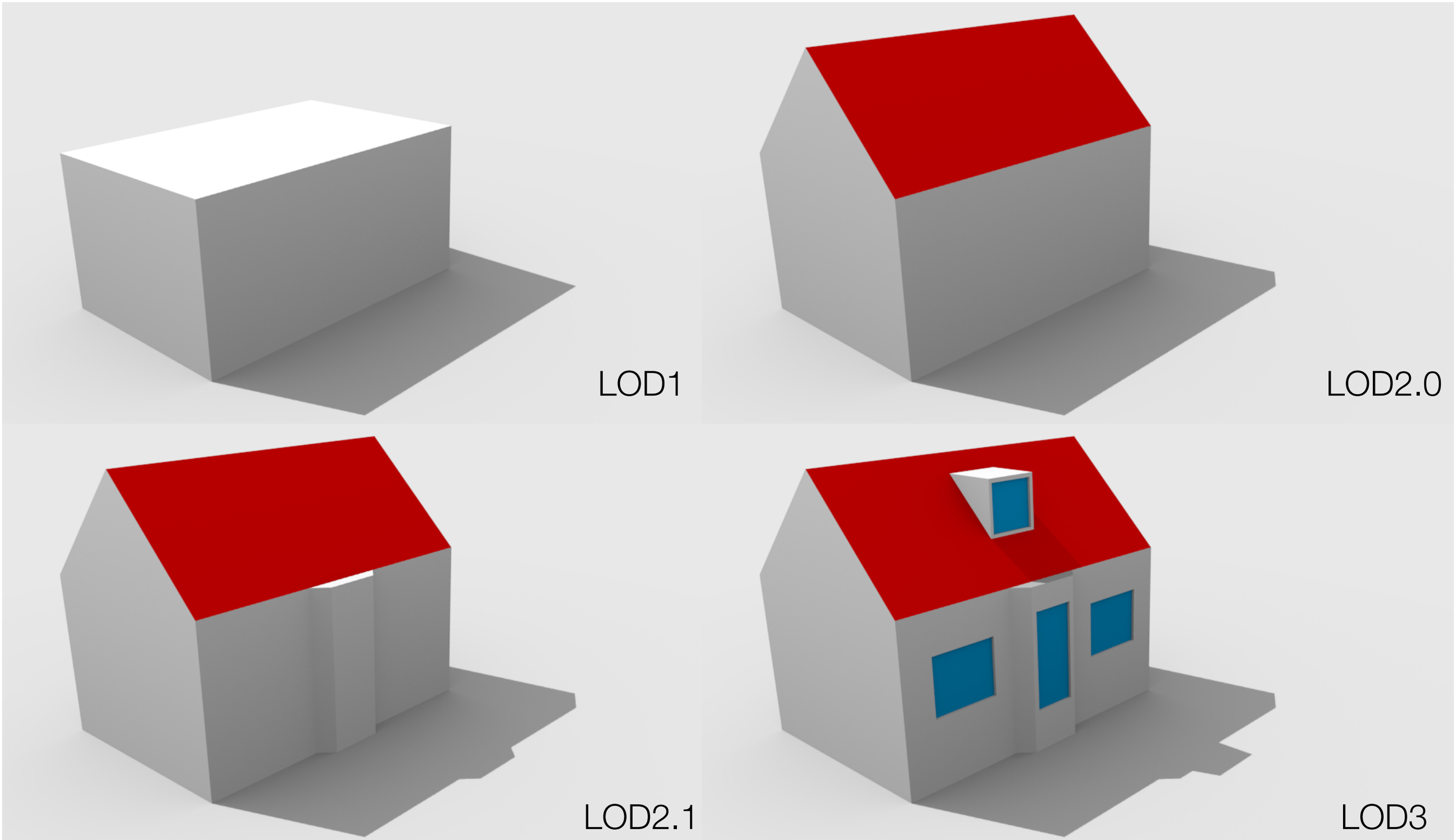
# 2. Determination of property taxes

- Applicable to jurisdictions where property taxes are determined from the size and use of the building (e.g. Italy)

- Determined from volume and other geometric parameters

- Boeters, R., 2013. Automatic enhancement of CityGML LoD2 models with interiors and its usability for net internal area determination. MSc thesis, Delft University of Technology.

# 3. Shadow modelling



# 3. Shadow modelling

- Regulation in Dutch cities, such as the Hague
- Different LODs cast a different shadow
- Semantics not relevant
- Room for creating customised LODs suited for this use-case