

## Sheet XXXII: Housing structure

*Grzegorz Kowalski*

The housing resources of Łódź (within its administrative boundaries and at the end of 2000), comprised 328 362 dwellings with the total net floorspace of 15 776 m<sup>2</sup>. For the purposes of this study, dwelling is defined as a space for permanent residence, structurally separated by permanent walls within a building, consisting of a premises comprising one or several rooms and auxiliary spaces. (i.e.: foyers, hall, bathroom, toilet, wardrobe, pantry, closet).

Room is a space in the dwelling, separated from other spaces by permanent walls, with a floorspace of not less than 4m<sup>2</sup>, and with day lighting. Kitchens that meet the above criteria are also classified as rooms.

Net floorspace of a dwelling is understood as the total floorspace of all spaces in the dwelling.

The foregoing definitions apply to dwellings and rooms in buildings designed for all season occupancy. The statistics do not include living quarters in summer houses on allotments and in allotment gardens.

The structure of Łódź’s housing resources so defined is very diverse, notwithstanding its less than 200 years’ history. For the purpose of their description, four characteristics were selected:

- housing development ratio
- age of dwellings
- average size of dwellings
- average dwelling occupancy ratio

and illustrated on the relevant maps.

The basic reference units for the characteristics illustrated by the maps are surveying districts. Łódź is divided into 215 such surveying districts, of varied sizes, but generally with uniform land use. Additionally, railway lines were also mapped for being distinctive spatial landmarks.

The source data necessary to prepare the maps were drawn from:

- The Office of Statistics in Łódź, e.g. the following tables:
  - table 1. Dwellings, net floorspace, rooms, and population as per surveying districts
  - table 2. Dwellings as per year of construction and surveying district
  - table 3. Areas of surveying districts in hectares
State as of 31.12.2000
- The IT Bureau, Łódź City Council, i.e. the underlying data for the maps.

Map 1. Housing development ratio

#### Map 1. Housing development ratio

The housing development ratio was determined as the number of dwellings per ha of the surveying district. Within Łódź, this ratio varies from 0.2 per ha to 107.36 per ha, with the average value at 11.20 per ha.

The colour codes indicate seven classification categories characteristic of the housing development ratio in the surveying districts with the given area type.

Category 1 – up to 0.1 per ha – including forest and park areas and other forms of land use with remnants of earlier housing development, where the current land use plan prohibits further development.

Category 2 – from 0.1–1 per ha – including rural areas with farm buildings or new industrial areas with relicts of earlier housing development.

Category 3 – from 1–10 per ha – comprising areas of sparse single-family housing development with prevalent green areas or other types of land use, e.g. industrial.

Category 4 – from 10–25 per ha – comprising densely developed single-family housing development or areas of multi-family housing development, with prevalent areas of other land use, as well as housing areas typical of the rural-urban fringe.

Category 5 – from 25–50 per ha – including dispersed multi-family housing development with buildings up to five storeys in height, or areas of compact multi-family buildings, with prevalent areas of other land use.

Category 6 – from 50–80 per ha – including areas of dispersed multi-family housing development with high-rise buildings above five storeys, or areas of compact city centre multi-family buildings with a large share of areas with other forms of land use.

Category 7 – above 80 per ha – including areas of compact multi-family city centre buildings with negligible proportion of areas with other forms of land use.

A separate symbol was used to mark the category of districts with no housing developments.

Map 2. Age of dwellings

#### Map 2. Age of dwellings

The existing housing resources of Łódź are strongly diversified in terms of their age. The entire housing resources, as at the end of 2000, can be divided into six categories as per the number of dwellings in the surveying districts built in the following periods:

- built before 1918
- built 1918–1944
- built 1945–1970
- built 1971–1978
- built 1978–1988
- built 1989–2000

As at the end of 2000, the housing resources built between 1945 and 1970 accounted for 29%, which was the highest proportion, with those built between 1989 and 2000 being the lowest (only 5.9%). A significant proportion of dwellings, exceeding 30%, were those built before 1945.

Each of the above-described periods was assigned a different colour to help identify the original period of the majority of dwellings in each surveying district.

A separate symbol was used to mark the surveying districts with no housing developments.

## Map 3. Average size of dwellings

The average size of dwellings was determined as a ratio of the sum of the net floorspace to the number of dwellings in each surveying district. In Łódź, this ratio varied at the end of 2000 from 30.0 m<sup>2</sup> to 210.7 m<sup>2</sup>. Average size of dwellings for the entire city was 48.1 m<sup>2</sup>.

Six categories of the average size of dwellings were identified: two for the dwellings below the city average, and four for those above the city average.

The lowest average dwelling size category (up to 39 m<sup>2</sup>) – includes the districts predominantly comprised of old urban buildings originating from before WW2, with a large proportion of single room flats characteristic of that period, as well as districts comprising pre-war exurban developments.

The second category, also below the city average, includes the districts comprising both pre-war urban developments and those with the first large co-operative microdistricts built before 1970.

The third category, above the city average but smaller than 60 m<sup>2</sup> in net floorspace, include the districts comprising pre-war inner-city developments, pre-war single-family and villa developments, and districts with large co-operative microdistricts built after 1970.

Category four (60–75 m<sup>2</sup>) includes the districts comprising new housing co-operative microdistricts and those with single-family developments built before 1970.

The two highest categories include the districts comprising modern single-family villas and residences.

A very clear trend can be seen for the average size of dwelling to increase with time.

A separate category includes the surveying districts with no housing developments.

Map 4. Average dwelling occupancy ratio

#### Map 4. Average dwelling occupancy ratio

Dwelling occupancy is measured by the dwelling occupancy ratio of net floorspace per person (in m<sup>2</sup>). Dwelling occupancy decreases as the ratio increases. In Łódź, as at the end of 2000, this ratio for all surveying districts varied from 10.92 m<sup>2</sup> to 58.24 m<sup>2</sup> per person. The average value for the entire city was 20.24 m<sup>2</sup> per person.

Six categories were defined, three below and three above the city average.

The highest dwelling occupancy, i.e. the lowest dwelling occupancy ratio – up to 15 m<sup>2</sup> per person – is found in the districts comprising older rural developments in the areas incorporated by Łódź after 1945, and in the older parts of Las Łagiewnicki.

Dwelling occupancy above the city average – 15.0 m<sup>2</sup> to 17.5 m<sup>2</sup> per person and 17.5 to 20 m<sup>2</sup> per person – is found in the districts comprising old urban developments (tenement houses), old exurban and rural developments in the rural-urban fringe, as well as the districts with prevalent large co-operative microdistricts, particularly those built before 1970.

Dwelling occupancy just below the city average – from 20.0 m<sup>2</sup> to 23.0 m<sup>2</sup> per person can be observed in the districts comprising inner-city developments, districts with new large co-operative microdistricts, and in the districts with single-family developments built before 1970.

The lowest dwelling occupancy – 23.0–29.0 m<sup>2</sup> per person and above – occurs in the districts comprising pre-war villa-type developments and in those comprising modern residences and single-family developments.

A separate category includes the surveying districts with no housing developments.