# The Copenhagen District and its Population

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#### Abstract

Thanks to its position at the most important waterway between the Baltic and the oceans, Copenhagen has developed to become an urbanized area. It is characterized by the normal division in zones of the modern big town, ranging from the almost depopulated "City" to dormitory towns and satellite towns in the outermost zones. The population figure of Greater Copenhagen is about 1.3 millions. It is foreseen that the anticipated development will create an "Oresund urban area", a conurbation situated partly in Sweden, partly in Denmark.

## The development of Copenhagen (København)

The origin of Copenhagen, the capital of the kingdom of Denmark, is not exactly known; already in the Stone Age small settlements existed, where to-day the Capital, its ports and suburbs are situated. Traces of a farmers' village from about the year 1000 are found in the city of to-day, and at the coast a small fishing-settlement arose with ferryconnections to Scania. By and by the port acquired an increasing importance, which was favoured by the sheltered position at the narrow water between the islands of Sealand (Sjælland) and Amager.

In 1167, Absalon, Bishop of Roskilde and Archbishop of Lund, built a castle on a small island (Slotsholmen) at the port of the town, thence called Havn (= harbour). In 1248 a Hanseatic fleet captured the town. Later, it was given over to the king, and from 1416 Copenhagen has been the residence of the Danish kings.

Until about the year 1620 Copenhagen only covered the area which to-day is occupied of the so-called »City«. The town, at that time counting about 30.000 inhabitants, was — after 1290 — surrounded by moats and ramparts. In 1618 a new town, Christianshavn, was founded from Dutch model on some small islands between Sealand and Amager. For about a century Christianshavn

was considered as a town independent of Copenhagen, although, already in 1619, a bridge was built between Christianshavn and Copenhagen.

From the year 1629 the fortifications of Copenhagen were extended northwards, and during the subsequent decades the area of the town expanded in that direction. At the northeastern end of the fortifications a citadel protected the entrance to the harbour. Later, the fortifications around Christianshavn were enlarged. About 1660 the number of inhabitants of the total city of Copenhagen was in the neighbourhood of 60.000. In the course of the next half of this century a new quarter arose inside the latest ramparts.

In 1660 Denmark adopted the absolute monarchy. This political system resulted in a pronounced centralisation of the administration and of the economic and commercial life. A consequence of this was an increasing prosperity in the Capital, whereas the population did not increase as much as could justifiably have been expected. In 1769 Copenhagen had 80.000 inhabitants, in 1801 101.000. In the meantime, suburbs had grown up outside the ramparts. About 1850 the greater part of the habitation was still found within the intact fortifications. However, already a few years later this area could no longer hold the rapidly increasing population. The commencing industrialization offered the capital such variety of new prospects of occupation that the suburbs grew enormously. The population number increased from 130.000 in 1850 to 261.000 1880 and, in 1901, reached 454.000.

### The geographical delimitation of Copenhagen

In this century the traffic has undergone a radical development. One of the most conspicuous consequences of this is that whereas the employees, a hundred years ago, were domiciled in the immediate neighbourhood of the place of their work, this is no longer the case. It is possible to-day, within ample limits, to choose the domicile independent of the place of work. The strongly reduced time of transport has caused a scattering of the population, primarily in the regions surrounding the big towns. This development is accompanied by a dispersion of the urban occupations; for instance, many industries which work direct for a big town are placed in the environs of the town.

All these factors combined have made the geographical delimitation of Copenhagen a problem, for the solution of which different methods are tried. This question may be considered under different

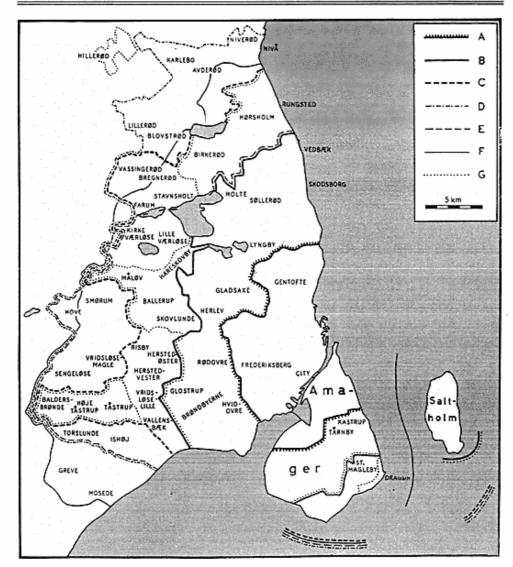


Fig. 1. The delimination of Copenhagen. Frontier lines of A: The "Capital". B: "Greater Copenhagen" according to The Statistical Department. C: "The Metropolitan Region" according to The Statistical Office of Copenhagen. D: The Custom-district of Copenhagen. E: The county of Copenhagen. F: The telephone local district of Copenhagen. G: Municipalities with more than 200 inhab. pr. sq. km.

aspects; for instance, an administrative point of view may be adopted. The municipality of Copenhagen comprises but a small part of the region denominated »Storkøbenhavn« (Greater Copenhagen). It encloses the municipality of Frederiksberg, which, since 1860, has been officially regarded as a suburb of Copenhagen. The municipalities of Copenhagen, Frederiksberg and Gentofte are, in the official conception, considered as the »capital« (fig. 1.). The Statistical Department reckons 9 municipalities in the environs to be suburbs.

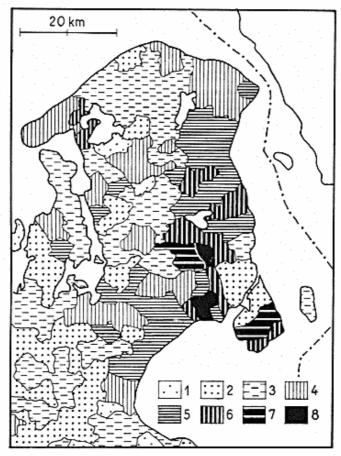


Fig. 2. Net increase and decrease of the population in the municipalities 1950-1955. 1: decrease more than 5 %, 2: decrease 0-5 %, 3: increase 0-5 %, 4: increase 5-10 %, 5: increase 10-25 %, 6: increase 25-50 %, 7: increase 50-100 %, 8: increase more than 100 %.

The Statistical Office of Copenhagen applies the term of suburbs to 19 (environs) municipalities. According to the first-mentioned delimitation (fig. 1.), Copenhagen and its suburbs counted, in 1955, 1.227.126 inhabitants; if using the second division as a base, the so-called \*metropolitan region \*counted\*, in 1955, 1.287.491 inhabitants and, in 1958, 1.310.740 inhabitants. Other demarcations of practical importance appear from fig. 1. With a point of departure in the average time of transport with public means of transport and bicycles, a delimitation was made on the basis of the conditions reigning in 1939; a certain conformity appeared between the 1-hour mean-isochrone and the delimitation now used by the Statistical Department.

The distribution of the population in Copenhagen is identical with the typical distribution in modern big towns. In the 1st zone: the centre (the \*City\*), which almost corresponds to the total area of Copenhagen in 1850, and which, to-day, almost exclusively has Cityfunctions, live (1957) only 35.480 persons = 14.700 per sq.km.. Even more sparsely populated are Christianshavn (5.400 per sq.km.) and the quarters between the City and the lakes (9.600 per sq.km.).

The 2nd zone: the inner quarters from the latter part of the nineteenth century have population densities varying from 13.000 to 25.000 per sq.km.; however, the most densely populated parts of Vesterbro and of the interior Nørrebro have about 90.000 inhabitants per sq.km.. Al these parts of the town show a decreasing population figure.

In the 3rd zone: the outer quarters (Vanløse, Brønshøj, Valby Husum, and others) the population figure is, on the whole, constant, however, at many places with a feeble tendency of decrease. Here, the population density is 6.000-13.000 per sq.km.

In the 4th zone: the inner suburbs, which are primarily residential quarters and dormitory suburbs, the density varies from 3.000 to 8.000 per sq.km., and here the population is greatly increasing, not rarely by more than 20% a year (see fig. 2).

At a bigger distance from the centre the 5th zone: the outer suburbs, the density varies from a few hundreds till about 8.000 inhabitants per sq.km.. Here, the increase of the population, though important enough, is somewhat slower that in the suburbs situated in close proximity to the town.

Outside the last-mentioned regions, which are undeniably to be considered as integrating parts of the Capital, a transition zone is stretching, where habitation and industrial and commercial life are more or less depending on the Capital. This dependence, which is varying strongly from one locality to another, is most often greatest in the vicinity of the most important lines of communication; this contributes to throwing in relief the stelliform characteristic of the outskirts of the modern city. Ancient provincial towns like Helsingør (Elsinore), Hillerød, Roskilde and Køge, all of which are situated at a distance of 30-45 km. from the centre, have become, during the last decenniums, residence for a rather big mass of population working in Copenhagen, amounting to 10-15% of the able population of these town. Further, they have become the seat of a number of industries working predominantly or totally for the market in Copenhagen. However, in addition to these new functions they are continuously occupying the role of towns serving the catchment areas: local commercial and industrial centres for the surrounding rural districts. Contrary to this there are districts of a purely rural character — situated between the rays of communication lines — which stretch far in the direction of Copenhagen, and where the urbanization and other influences exercised by the metropolis are feeble or even nil; this is true of the regions around Sengeløse-Ledøje and Vallensbæk, etc.

In this connection it should be mentioned that according to the prevailing systems of delimitation the isle of Saltholm (in 1955: 16 sq.km., with 22 inhabitants) in the municipality of Tårnby constitutes an integrating part of the Copenhagen district; this isle is a plain with a maximum height of 2 m. above sea-level; the soil consists of limestone and is covered with salt-meadow vegetation.

# The present-day population-development in the Copenhagen district

The development of the population within the two most current demarcations of the Copenhagen district (B. and C. in fig. 1) appears from the following table:

	Delimitation B.	Delimitation C
1st February 1901	515.879	532.057
1st February 1921	742.970	768.844
5th November 1930	843.618	874.980
5th November 1940	1.007.993	1.014.464
7th November 1950	1.168.340	1.216.654
1st January 1959	1.251.832	1.326.422

The figures up to and including 1930 indicate the population which was present at the time of the census; the figures from and including 1940 the domiciled population.

The population of the Copenhagen municipality reached its maximum in 1950; since, a decrease has taken place and is now continuing at a rate of ¾-1% annually. The population of Frederiksberg, which also culminated in 1950 is now feebly declining, while the population of Gentofte is stationary. These three municipalities compose the »Capital« (delimitation A. in fig. 1), whose population figure is now decreasing by 7-9 % annually. The cause of this development is the fact that a continuously increasing part of the »Capital« adopts a »City-character«, and that young families settle and get their children in new habitation quarters, surrounding the old quarters. Concequently, the environs of the Capital include municipalities in strong growth (fig. 2); among these, Brøndbyerne and

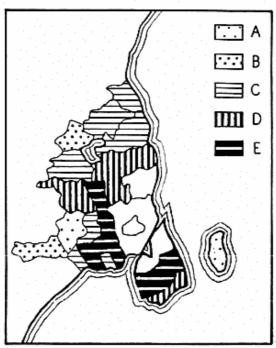


Fig. 3. Percentage of the active population in the municipalities of the Metropolitan Region working in Copenhagen proper. A: less than 20 %. B: 20-30 %.
C: 30-40 %. D: 40-50 %. E: more than 50 %. (The isle of Saltholm considered as a unit apart).

Herlev have more than doubled their population figure during the quenquennium 1950-1955, and a number of other municipalities in the environs have also undergone a strong growth in this period. After 1955 the environning municipalities have shown a tendency of a more uniform growth.

The intensive urbanization which has developed in proximity to the railway stations seems to have been transformed into a more general, less pronounced urbanization of more extensive areas; this is a natural result of the fact that the importance exercised by motor-cars and other motor-vehicles on the daily transport is constantly increasing. Another consequence is that there are almost no limits to the choice of residence; this allows to give the preference to esthetic considerations by choosing the site in coastal regions, in undulating land, at the edge of a wood or of a lake. A combination of these factors has caused the expansion of the Copenhagen district towards north, in the sub-glacial stream-trenches of North Sealand filled with lakes and woods. To the west and to the southwest of Copenhagen, in a flat and fertile moraine-land, the relief of the landscape is far from being as attractive and, therefore, has not invited to an expansion of the same dimensions.

## The "Øresundsstad" (The Øresund urban area)

The continued growth of the Copenhagen district has rendered possible a fusion with the surrounding towns. The coast of the Sound, from Køge until north of Helsingør, is to-day lined with an almost uninterrupted row of habitations, and towards Hillerød and Roskilde we find dormitory towns and commencing satellite towns along railways and roads. On the east coast of the Sound, in Sweden, a corresponding development takes place and, further, an interchange within habitation and industrial and commercial life is going on between these two coasts. This interchange is most distinct at Helsingør—Hälsingborg: at this place of the Sound, which here is only  $3\frac{1}{2}$  km. broad, and where the passage only takes 20 minutes, a considerable daily traffic takes place between domiciles in Denmark and places of work in Sweden, and vice versa. A totality of all the crossings of the Sound to-day gives about 13 million persons per year; this figure is increasing rather much.

Danish and Swedish town-planning experts are to-day foreseeing, in their plans, the ȯresundsstad« (see fig. 4) as a future reality A relevant factor in this connection is that the importance of the frontier between Denmark and Sweden is decreasing. From all responsible parts it is recognized that a bridge across the Sound is necessitated by the greatly increasing traffic between Scandinavia and Central Europe. If the »Øresundsstad« develops as foreseen, the local traffic will become so enormous that it will be necessary to build two bridges, one between Helsingør and Hälsingborg and one between Copenhagen and Malmö across Amager and Saltholm. Certain circles go in for the project of establishing Saltholm as a central air-port and the Swedish island Ven as a recreation area or as a centre for the production of energy of the district (for instance an atomic power station).

The greatest handicap of the Sound in its capacity of communication-line is the barrier of limestone which stretches from Sealand south of Copenhagen across Amager and Saltholm to the coast of Scania southwest of Malmö, and which only allows the passage of ships of less than 20 feet draught, whereas it is possible for ships up to about 30 feet draught to enter the ports of Copenhagen and Malmö. As the size of the new constructed ships is more and more increasing a deepening of the channels in the Sound will be necessary; otherwise, this area will inevitably loose of the advantages drawn from its position at the shortest passage between the Baltic and the oceans.

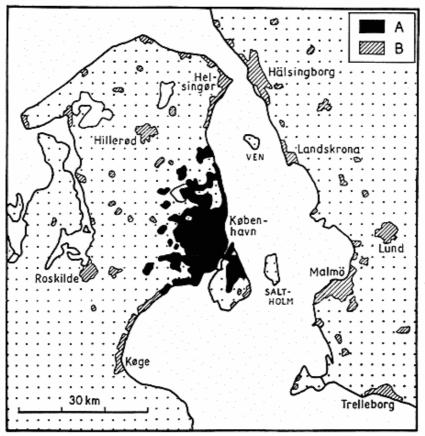


Fig. 4. The Øresund region. A: urban areas inside the Copenhagen Metropolitan Region. B: other urban areas in the Øresund region.

Within the area planned to form part of the ȯresundsstad«, the most important agglomerations are the following:

In Denmark: figures in every 1.000 persons	In Sweden: figures in every 1.000 persons
Greater Copenhagen 1.326	Malmö 236
Helsingør31	Hälsingborg 76
Roskilde	Lund 40
Hillerød	Landskrona 29
Køge	

This combination would give an estimated population of 1,8 millions of inhabitants about 1960. The most optimistic town-planning experts are foreseeing an ȯresundsstad« with 2,5 millions of inhabitants in the year 2000.

#### LITERATURE

Aagesen, Aa. (1942): Om Københavns geografiske Afgrænsning. Geogr. Tidsskr. 45. København.

Atlas of Denmark II. Aage Aagesen (1960): The Population. Editor: The Royal Danish Geographical Society. København.

Bruun, Daniel (1921): Danmark.

Copenhagen Statistical Office: Stastistical Yearbook (annual).

Reumert, Johs. (1929): The Commercial-Geographic Importance of the Situation of Copenhagen. Supplement to Geogr. Tidsskr. 1929.

Statistical Department, København: The census-population, etc. various ed. Trap: Danmark. (Denmark, a topographical handbook). 1st-5th ed. København.