

FSO News

21 Sustainable development, regional and international disparities

Neuchâtel, August 2017

City Statistics (Urban Audit)

Living in cities: a comparison between the larger core cities and their commuting zones

Good housing conditions cover the basic needs of people for safety, protection and privacy. In the last 25 years the core city has become an increasingly popular place for families to live. The proximity to services and the large availability of jobs and cultural facilities are a key part of the appeal of the core city, reflected for instance in the low dwelling vacancy rate. In contrast, the commuting zone generally offers more living space, better access to home ownership and less dense neighbourhoods, contributing to a high quality of life. This is shown by data from the City Statistics project on the eight cities of Basel, Bern, Geneva, Lausanne, Lucerne, Lugano, St. Gallen and Zurich and a comparison with the average of all 49 Swiss agglomerations.

Housing conditions form part of the population's material living conditions and are considered one of the eleven dimensions of quality of life according to the OECD's report "How's Life?".¹ Quality of life is a concept that tries to measure the well-being of people. Its dimensions are interconnected. A good education, for example, can lead to a higher income and in this way positively influence housing conditions. Life quality and housing conditions in particular are shaped by the structures and opportunities available in a particular city. Alongside classic economic factors, quality of life is a key pillar of a location's attractiveness and therefore has an important role in urban development policy.

Core city and commuting zone according to City Statistics

The City Statistics enables cities to be analysed at different spatial levels. This publication looks at the:

- Core city = the core of the agglomeration; this corresponds to the political administrative unit of the city concerned.
- Commuting zone = peripheral municipalities of the core city that together with the core city form a cohesive agglomeration area (in Switzerland this is pursuant to the 2012 FSO definition). In the case of Basel and Geneva, only the peripheral municipalities on Swiss territory are considered.

In addition to the core cities and commuting zones of the City Statistics cities, the average values of all core cities and commuting zones in Switzerland are considered for comparative purposes.

This analysis will examine residential, household and population structures as well as the residential environment with its range of services for the eight Swiss cities of the City Statistics. Comparisons will also be made at European level where possible. The City Statistics project is a European project comparing living conditions in towns and cities with more than 50 000 inhabitants.

¹ OECD (2011), How's Life?: Measuring well-being, OECD Publishing

1. How is life in the largest cities?

1.1 Residential structure

Single-family houses frequently imply a higher per capita living space and a private garden. In the core cities of the City Statistics, the share of single-family houses in the number of dwellings is low at 6% in comparison with the average for all Swiss core cities of 9% (G1, reference year 2016). Lugano is an exception with a higher share of single-family houses (15%) than in the other core cities of the City Statistics since its merger in 2013 with a number of rural municipalities such as Bogno, Valcolla and Cimadera. Otherwise larger numbers of single-family houses are generally only found in individual neighbourhoods of the core cities, e. g. Friesenberg and Saatlen in Zurich, Oberbottigen and Weissenstein in Bern or Bruderholz in Basel. One reason for the low share of single-family houses is often a town's structure – that is often shaped by history – with its old centres and administrative boundaries. Switzerland's largest core cities also often have the highest **population density**. With 12 434 and 7124 inhabitants per km², Geneva and Basel are notably far above the average of both the City Statistics cities (4431) and the Swiss core cities in general (1457). However, density levels are not equally high within the core cities. They are often comparably low, for example, in old-town areas where jobs and shops are concentrated.

In the commuting zones of the eight City Statistics cities, the share of single-family houses in all dwellings is around 25% on average and thus four times higher than in the core cities (6%). This also corresponds to the average of 26% for all 49 Swiss commuting zones. With increasing distance from the core city, the share of single-family houses increases whereas the population density decreases. On average, the municipalities in the Swiss commuting zones have a population density of 385 inhabitants per km². Meanwhile, the commuting zones of Zurich and Geneva still have a relatively high population density with 770 and 732 inhabitants per km². Municipalities neighbouring the core cities are particularly densely populated, such as Thalwil, Binningen or Thônex, each having over 3000 inhabitants per km².

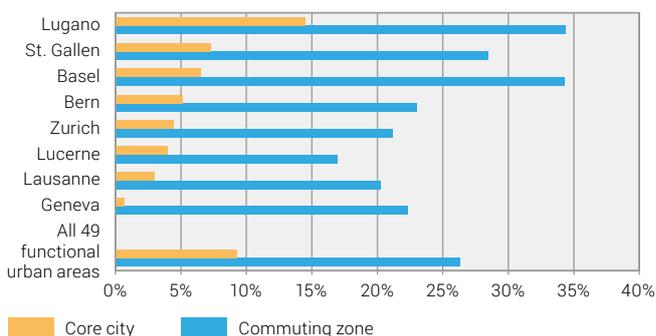
The average **living space** available per person differs between cities of the City Statistics by up to 10 m². Furthermore, we can note a difference between the core cities with an average of 42 m² living space and the commuting zones with 46 m² (G2).

While **home ownership** can cause high initial costs and can lead to greater debt, it also allows people more freedom to shape their lives. In the core cities of the Swiss agglomerations, only around one fifth of households are home owners (G3). In the eight core cities of the City Statistics, the home ownership rate is even lower at 14% on average. In comparison, this rate is more than two times higher in the commuting zones of the eight City Statistics cities (41%). The share of households living in owned dwellings is on average 43% in all of Switzerland's commuting zones.

Single-family houses, 2016

Share in total dwellings

G 1



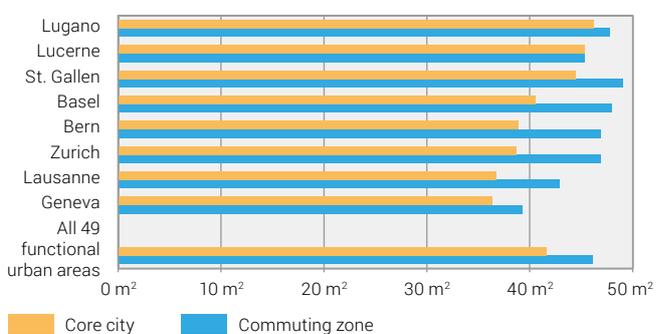
Source: FSO – BDS

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Living space, 2016

Average area of living space per resident in m² ¹

G 2



¹ in occupied dwellings

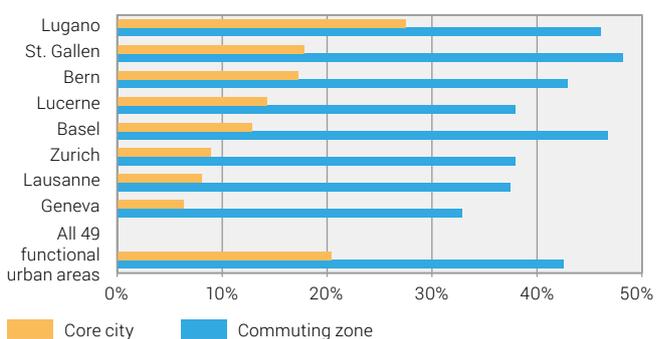
Source: FSO – BDS

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Home ownership, 2016

Share of households living in owned dwellings

G 3



Source: FSO – RS

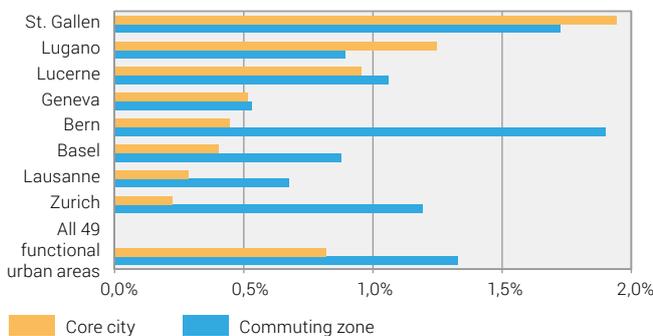
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The share of **empty dwellings** is an important indicator for the ratio between supply and demand of housing (G4). In the core cities of the City Statistics, the share of vacant dwellings is only 0.8% on average. The number of vacant dwellings is particularly low in Zurich, Lausanne, Basel, Bern and Geneva with less than 0.5%. In the eight commuting zones, the share is somewhat higher at 1.1% on average. Lugano and St. Gallen are exceptions: the dwelling vacancy rate in the core city is higher here than in the commuting zones. A high dwelling vacancy rate makes it easier to find a dwelling and tends to cushion rental prices. Looking for suitable accommodation often takes up a lot of time which could otherwise be spent with the family and on leisure activities. Insufficient supply can mean having to choose expensive housing, moving to another neighbourhood or municipality and can, in certain cases, result in a longer commute.

Dwelling vacancy rate, 2016

Share of empty dwellings in total number of dwellings

G 4



Source: FSO – BDS, EDS

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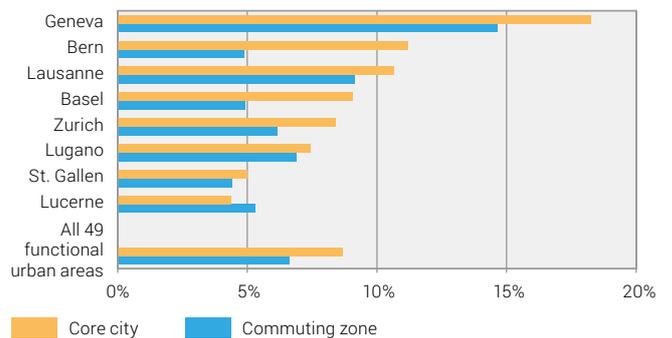
In contrast, in Switzerland's core cities an average of 9% of dwellings are **overcrowded dwellings**, i. e. with more than one person per room.² Pursuant to the OECD's concept of life quality, overcrowded dwellings can lead to negative effects including health problems or among children problems at school as there is insufficient place for concentrated learning. Adequate space is important for personal privacy and a comfortable home environment. Among the core cities of the City Statistics, Geneva (18%), Bern and Lausanne (11% each) have the highest overcrowding rates. In the commuting zones of the City Statistics cities the share of overcrowded dwellings is slightly lower, being similar to the average of all Swiss agglomerations with 7%. Among the commuting zones of the City Statistics cities, Geneva has the highest rate at almost 15%, followed by the Lausanne commuting zone with 9% (G5).

² This corresponds to the Eurostat definition under the City Statistics project and differs from the definition in the 2017 statistical report "Families in Switzerland."

Overcrowded dwellings, 2016

Share of occupied dwellings with more than 1 person per room

G 5



Source: FSO – BDS

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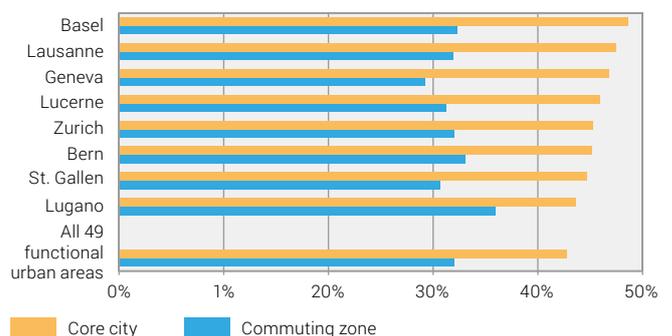
1.2 Household and population structure

The household and population structure between the core city and the commuting zones has tended to become more similar in the last 25 years. However, some differences can still be observed, e. g. persons living alone are far more likely to live in the core cities (G6). In the case of the City Statistics cities, **single-person households** account for around 45% of households, roughly corresponding to the average of the core cities of all Swiss agglomerations (43%). In the commuting zones, the corresponding value is far lower for the average of the City Statistics cities and all the Swiss commuting zones (each at 32%). In the last 25 years, the share of single-person households has on average increased by 4.4 percentage points in all Swiss commuting zones, in all core cities it was on average less than 1 percentage point.

One-person households, 2016

Share of one-person households in total number of private households

G 6



Source: FSO – STATPOP

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In the core cities the share of private households with persons under 18, hereafter referred to as **family households**,³ is smaller than that in the commuting zones (G7). However, this difference is lower than among single-person households. In the core cities of the City Statistics, family households account for 19% of all households, while in the commuting zones this percentage is 26%.

Since 1990 the share of family households in the core cities of the City Statistics has increased slightly (+0.9 percentage points). The greatest increase was recorded by Zurich (+3.4), ahead of Bern (+1.7), Lugano (+1.7), Basel (+1.3) and Geneva (+1.2). Exactly the opposite trend has been seen in the commuting zones of these cities, where the share of family households has fallen by 4.7 percentage points on average since 1990.

Taking into consideration Switzerland as a whole and regardless of area type, there has been a downward trend in family households over the past 25 years (−4.5 percentage points). In areas without urban influence, a decline of 10 percentage points has been observed. The general trend is thus in contrast with the aforementioned increase in family households in the core cities of the City Statistics. Consequently, the largest cities have become relatively more attractive to families.

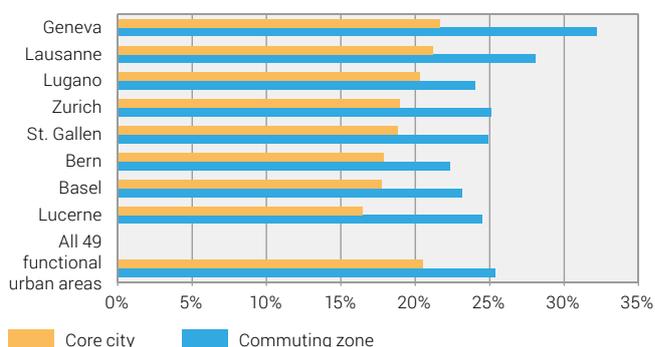
These opposing developments result in a spatial assimilation of the proportions of single-person and family households in Switzerland.

There are no major differences regarding **age structure** between the core city and commuting zones if the proportions of younger persons (0–14 years) and older persons (>65 years) are

Family households, 2016

Share of households with persons under 18 years of age in total number of private households

G 7



Source: FSO – STATPOP

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considered. In all Swiss core cities, around 13% of the population is on average made up of children up to 14 years, while in the commuting zones this percentage is 15%. Among the population aged 65 years and over, the difference between the core city and the commuting zone is less than one percentage point: in the core cities of the Swiss agglomerations, older persons account for 17.6% of the population, while in the commuting zones this figure is 18.2% (T1).

Demographic context, 2016

T1

	Permanent resident population	Population density	Youth dependency ratio	Old-age dependency ratio	Population 0–14 years	Population 65+ years	Foreigners
		Inhabitants per km ²	<20/20–64 year-olds	65+/20–64 year-olds	Share in %	Share in %	Share in %
Core city							
Zurich	396 955	4 514	24.9	23.2	13.4	15.7	32.0
Geneva	198 072	12 434	27.0	24.4	13.5	16.1	48.3
Basel	169 916	7 124	25.7	30.3	12.6	19.4	36.5
Lausanne	135 629	3 278	29.8	23.2	14.4	15.2	42.9
Bern	131 554	2 549	23.9	26.5	12.5	17.6	25.2
Lucerne	81 295	2 794	24.1	29.9	11.6	19.4	24.2
St. Gallen	75 538	1 918	27.5	26.9	13.0	17.4	30.4
Lugano	63 583	837 ¹	29.0	35.8	12.9	21.8	38.1
All 49 core cities	2 326 002	1 457	28.1	27.4	13.6	17.6	32.4
Commuting zone							
Zurich	937 314	770	33.2	28.1	15.5	17.4	25.0
Geneva	381 155	732	39.4	26.9	17.4	16.2	35.4
Basel	371 095	552	32.6	35.3	14.2	21.0	22.0
Lausanne	273 666	374	36.4	26.7	16.4	16.4	30.0
Bern	279 340	383	32.6	34.7	14.4	20.8	13.9
Lucerne	144 796	554	33.3	29.2	14.9	17.9	19.0
St. Gallen	90 322	323	35.3	30.2	15.5	18.3	15.7
Lugano	87 454	384	32.3	33.6	14.3	20.2	26.8
All 49 commuting zones	3 760 853	385	34.2	29.9	15.4	18.2	23.9

¹ due to Lugano's merger with seven rural communities on 14.04.2013

Sources: FSO – STATPOP, AREA

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³ This corresponds to the Eurostat definition under the City Statistics project and differs from the definition in the 2017 statistical report "Families in Switzerland."

On average, the **share of the foreign resident population** in the Swiss core cities is 32%. Of the eight City Statistics cities, the core city of Geneva has the highest share of foreigners in the permanent resident population with almost 50%. It is followed by Lausanne and Lugano with values of 43% and 38% respectively. The lowest share of foreigners can be found in Bern, Lucerne and St. Gallen. In the commuting zones, the share of the foreign resident population is generally lower than in the core cities. On average in Switzerland this share is just under 24%. High values are once again seen in Geneva (35%), Lausanne (30%) and Lugano (27%), but also in Zurich (25%).

1.3 Spatial distribution

An interesting question is where certain household types and population groups are most frequently found in the core cities and commuting zones – such as households with an above average number of members. Households that are bigger than the Swiss average (2.2 persons) are often found in neighbourhoods with many single-family houses. In the core cities of the City Statistics, these are, for example in Zurich, the neighbourhoods Friesenberg, Saathlen and Leimbach. In Bern, larger households are mostly located in Weissenstein, in Lucerne in Littauerberg, in Lausanne in the neighbourhoods Sauvabelin, Sallaz and Vers-chez-les-Blancs and in Lugano in Cureggia, Barbengo and Pambio-Noranco. Many of these neighbourhoods with correspondingly high shares of families tend to be located on the edges of the core cities, with good connections to the centres by public transport.

The foreign population is rather uniformly distributed in the core cities with slightly higher shares in certain peripheral areas. However, these are rarely the single-family house neighbourhoods that are described above. In the commuting zones, the share of the foreign population – as seen already – is far lower than in the core city with around 24% in the City Statistics cities. Exceptions include some individual municipalities such as Chavannes-près-Renens (52%) and Renens (52%) near Lausanne or Spreitenbach (52%) and Schlieren (46%) outside Zurich. With increasing distance from the core city, the share of foreign nationals decreases.

2 How accessible are services in the residential environment?

Good provision of services and goods that are required in everyday life in the immediate residential environment is of crucial importance to the quality of life, as most people wish to fulfil their needs as quickly as possible and with minimum physical effort. Below we will consider the accessibility of eight selected basic services in further detail. These include grocery stores, compulsory schools, upper secondary schools (vocational education, Matura, etc.), doctors, pharmacies, nursing homes, fitness and sports facilities and public transport stops.

In the core cities the accessibility of the specified basic services is generally better than in the commuting zones. In the core cities, the population has the shortest distance to public transport stops, grocery stores and compulsory schools. On average these services are almost always located at less than 500 m and usually within 400 m of the place of residence (for the reference year 2011, G8). A greater distance must be travelled by people who wish to go to pharmacies, nursing homes or upper secondary schools. The latter are situated furthest from residential buildings, i. e. over 1.1 km on average for all Swiss core cities. Residents of Geneva and Basel have the shortest distances to services within the City Statistics core cities. In Geneva, all the specified basic services can be reached within 500 m. This is also the case in Basel with the exception of upper secondary schools. In Lugano, the services are far wider spread. While on average public transport stops can be reached within 200 m, the average distance to grocery stores and compulsory schools is around 500 m. Pupils have to travel particularly long distances to attend upper secondary schools with an average distance of over 1.6 km. These comparatively long distances for a core city may be explained by Lugano's special structure: since merging with other municipalities in 2013 the rural neighbourhoods of Valcolla und Bogno have been considered part of Lugano's core city.

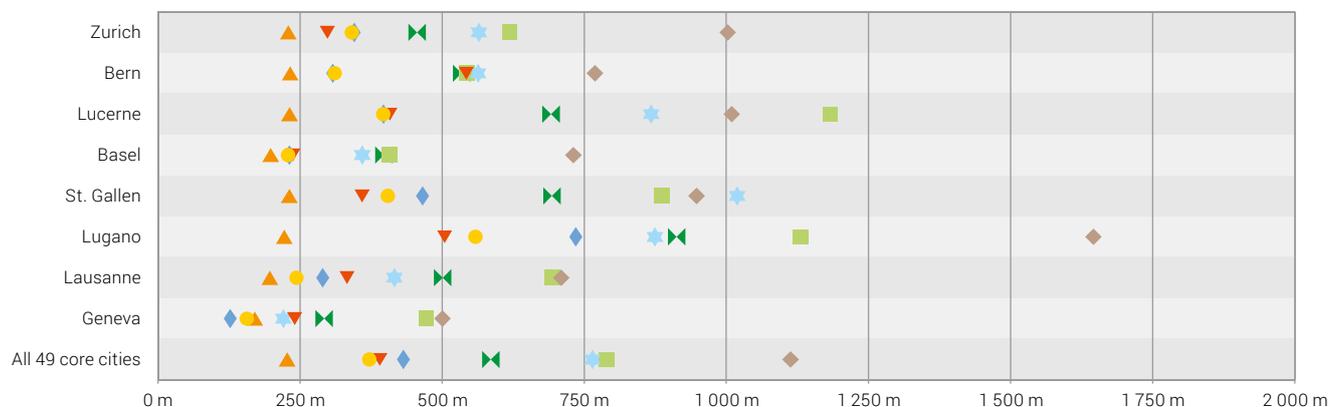
Distances to public transport stops, grocery stores and compulsory schools are also the shortest among all basic services in the commuting zones. The average distance to these services in all of the City Statistics cities is less than one kilometre. Far greater distances must be travelled to reach pharmacies, nursing homes or upper secondary schools. The shortest distances can be found once again in Geneva: the residents of the commuting zones in this area can find all basic services with the exception of post-compulsory schools within a vicinity of 1.5 km. Even the distance to upper secondary schools in Geneva is short at 2.5 km compared with the average of all commuting zones in Switzerland (3.2 km). Upper secondary school pupils in the commuting zones of Bern and Lugano have to travel particularly long distances (4.5 km in each commuting zone).

Accessibility of services for the population

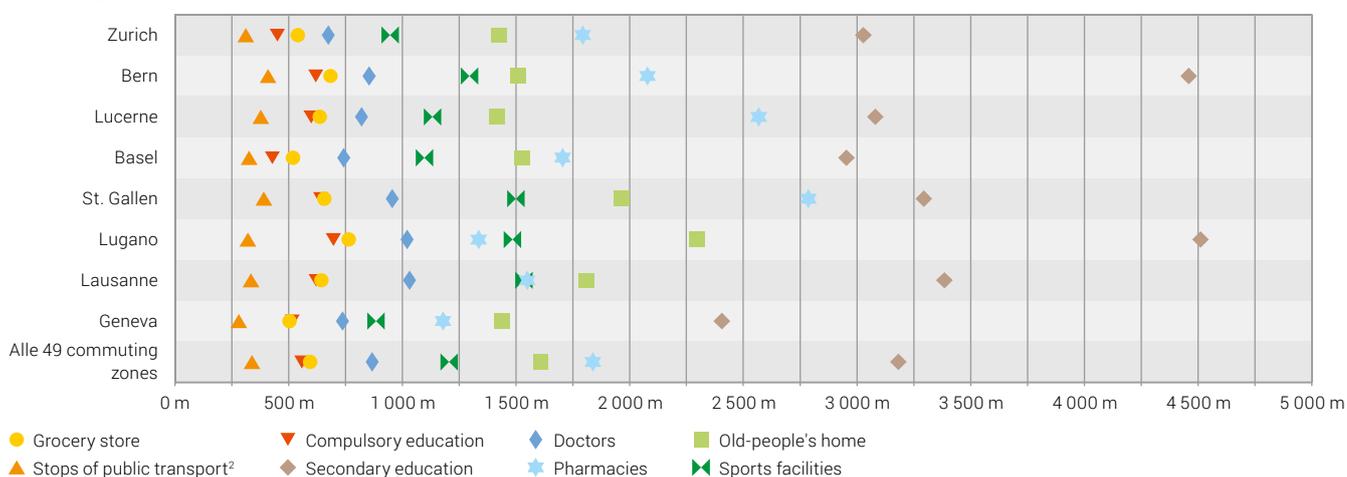
Mean distance¹ to the closest service, 2011

G 8

Core city



Commuting zone



¹ Distances calculated based on road network

² Values for the year 2015

3 How do our European neighbours live?

International comparisons of cities are only possible with certain limitations as the data availability for neighbouring countries varies quite considerably. For instance, the core cities and the commuting zones of German cities have separate evaluations while for the other countries only data on the core cities and entire agglomerations (i. e. core city plus commuting zone) exist.

In the cities of neighbouring countries, the share of private households that live in single and two-family houses varies considerably. In the German City Statistics core cities, around 26% of households live in single or two-family houses. In all core cities of Switzerland, this value is around 12%. In the German cities close to Switzerland such as Constance, Freiburg im Breisgau or Karlsruhe this share is less than 20%. In the French cities of Strasbourg, Grenoble and Annecy, 20% of households also live in single or two-family houses, while this is the case for as many as 30% of households in Besançon. In the commuting zones in Germany, on average more than 60% of households live in single or two-family houses, which also applies to the commuting zones of cities close to Switzerland such as Karlsruhe (61%), Freiburg im Breisgau (51%) and Constance (48%).

Home ownership is found at similar levels as the share of single-family houses in the core city and commuting zones. Consequently, in the German core cities of the City Statistics, on average around 30% of households own their homes while this share is almost 58% in the German commuting zones. Therefore, the share of households owning their home in Germany is far higher in the cities than it is in Switzerland. The population density in the German and Swiss core cities is almost identical with 1422 or 1457 inhabitants per km².

The household structure is similar in Switzerland to its European neighbours. Single-person households are also mostly found in the core cities. For example, they account for 46% of households in the German core cities, while their respective share in the commuting zones is around 35%. The difference between the core city and the commuting zones, however, is less marked when it comes to family households. In Germany, for example, these make up 18% of all households in the core cities and 22% in the commuting zones. In contrast, in France this difference is slightly greater than in Germany. In Besançon the share of family households in the core city is 24% and in its commuting zone 47%. Similar values can be found in Grenoble with a 25% share in the core city and 36% in the commuting zone. In Strasbourg and Annecy, the difference between the core city and commuting zone is 12% and 13% respectively. Accordingly, the age structure of the population in the core cities and commuting zones is also quite similar. In Germany, children under 18 years and people aged 65 and over are even equally represented in both of the specified areas.

General and methodical remarks on the City Statistics

"City Statistics (Urban Audit)" present the living conditions in European cities based on various key figures and indicators. Switzerland has taken part in this project since 2009 and publishes data at agglomeration, core city, and neighbourhood level. The City Statistics project is conducted and further developed on an ongoing basis under the auspices of the Federal Statistical Office (FSO) and in cooperation with the Federal Office for Spatial Development (ARE), the State Secretariat for Economic Affairs (SECO) and the cities Zurich, Geneva, Basel, Bern, Lausanne, Lucerne, St. Gallen and Lugano.

Further information can be found here: www.urbandit.ch

Basic data information

In the City Statistics, the values of the Buildings and Dwellings Statistics (BDS) and the Population and household statistics (STATPOP) from a certain reference year correspond to the values on 31.12. of the respective previous year (in accordance with Eurostat's directives).

For comparisons between the years 1990 and 2016, the 1990 population census was used, harmonised with the STATPOP definition. The definition of agglomeration depends on the reference year, i. e. for 1990 the agglomeration definition from 1990 was used while for 2016 the 2012 FSO definition was used. This should ensure that the core cities and commuting zones correspond to the realities of the respective years.

The accessibility of services was calculated as part of the Federal Statistical Office's "Population Services" project, on the basis of the Swiss road network. The distance between the centre of every inhabited hectare and the location of the nearest service provider was key here. The distances were weighted according to population numbers. The railway network and transport connections on foreign territory were not considered for methodological reasons.

Merger of municipalities in Lugano in 2013

The municipality of Lugano merged in 2013 with seven other municipalities during which the city's permanent resident population increased by 6000 inhabitants (+10%) and the area by 4400 hectares (+137%). This development should be considered when interpreting the results.

Notes on European data

The European data comes from Eurostat's City Statistics database and refer to years 2011–2013 unless otherwise indicated. The German data were calculated from the German Urban Audit by its statistical agency in Mannheim. The Ruhr area was not considered when analysing commuting zones as the core cities in this region are too close together. The commuting zones of the central core cities of the Ruhr area are also core cities on the boundary of the Ruhr area.

Data status

The latest data available up to the editorial deadline of mid-April were used for all evaluations.

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