

The OECD Municipal Migration Database

Dataset access	http://stats.oecd.org/Index.aspx?DataSetCode=MMD		
Contact	CFERegionStat@oecd.org		
Last dataset update	November, 2022		

Database metadata and release notes Updated: November 2022





Table of Contents

Introduction	3
Geographical coverage and data aggregations	4
Indicators' definitions	7
Data sources	9
References	. 11



Introduction

As part of the OECD project The Contribution of Migration to Regional Development (OECD, 2022_[1]), the OECD has engaged in an extensive data collection effort. The resulting novel dataset offers unprecedentedly detailed information on the subnational geography of migration in OECD countries. Based on data from continuous population registers as well as censuses, the database contains population statistics for 22 OECD member countries between 1991 and 2022, primarily at the level of municipalities with a few exceptions such as Germany (districts / Kreise) and the United States and Canada (Counties / Census subdivisions). The main characteristics available at the municipal level include the place of origin (native population, foreign-born population, from EU countries, from non-EU countries), age group, and sex. The data has been collected using National Statistical Offices' APIs when possible (for 19 countries). Data harmonisation ensures consistency of the data over time despite changes to municipal boundaries (Kleine-Rueschkamp, L., Özguzel, C., 2021_[2]).

The rest of this document is organized as follows: the next section details the administrative units used for each country and provides an overview of the data aggregations available in the database, followed by the indicators' definition. The last section lists the data sources used to compile the OECD Municipal Migration database.



Geographical coverage and data aggregations

The Municipal Migration database covers 22 OECD member countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom (England and Wales) and the United States of America.

Data is collected at the municipal level for most countries, or at the most granular level available. Table 1 details for each country the geographical level at which data is available and the corresponding year for the administrative boundaries.

Country Scale Reference Harmonisation year for geography AUS SA2 2016 Harmonised AUT Municipalities (Gemeinden) 2021 Input data was already harmonised BEL Municipalities (Gemeeente/ Commune/ 2021 Harmonised Gemeinde) CAN Census Subdivisions 2016 Harmonised CHE Municipalities (Politische Gemeinden 2019 Input data was already harmonised [DE], Communes [FR]) DEU Administrative districts (Kreise) 2020 Harmonised Input data was already harmonised DNK Municipalities (Kommuner) 2021 ESP 2020 Harmonised Municipalities (Municipios) 2021 FIN Municipalities (Kunnat) Input data was already harmonised FRA Communes 2021 Harmonised GBR Local Authority Districts (LAD) 2018 Input data was already harmonised IRL 2016 Counties Input data was already harmonised ITA 2021 Municipalities (comuni) Harmonised JPN Cities, Towns and Villages (Cho, Shi, Son, 2020 Input data was already harmonised Mura, Machi, Ku) 2018 KOR Municipalities (시군구): Si (시, city), Gun Harmonised (군, county), Gu (구, district) LUX 2021 Communes Input data was already harmonised MEX Municipalities (Áreas Geoestadísticas 2020 Input data was already harmonised Municipales, AGEM) NLD Communes (Gemeente) 2020 Harmonised NOR Municipalities (Kommuner) 2020 Input data was already harmonised PRT Municipalities (Concelhos) 2021 Input data was already harmonised SWE 2021 Municipalities (Kommun) Input data was already harmonised USA Counties 2020 Harmonised

Table 1: Geographical unit of small area unit data



As municipality boundaries tend to change regularly, harmonization on geographical units was needed in some cases for consistent time series (e.g., in Australia and Belgium). The harmonization process is based on the distribution of population within administrative units (Figure 1). Coefficients are applied to the values of administrative units that were merged or split, depending on the share of the population that live in the current administrative units. The final time series are provided for the latest version of the administrative boundaries (reference year for geography listed in Table 1). For some other countries, National Statistical Offices provide already harmonized time series (e.g. Austria and Switzerland).

Figure 1: Harmonization of administrative units over time

In Australia, Wollongong (SA2 2011) was split into Wollongong – West and Wollongong – East (SA2 2016). Using the GHS 2015 population grid (European Commission, Joint Research Centre, Ehrlich, D., Florczyk, A., Pesaresi, M., et al., 2019_[3]), coefficients were applied to Wollongong (SA2 2011) values based on the share of Wollongong's population that lives in Wollongong – West and Wollongong – East.



In addition to local administrative units, the database also offers different levels of aggregation:

- Degree of urbanisation (level 1) (European Commission, Eurostat, 2021_[4]), which classifies small administrative units into:
 - Cities (densely populated areas),
 - o Towns and suburbs (intermediate density areas),
 - Rural areas (thinly populated areas).
- Functional urban areas¹ (FUAs): a densely inhabited city with its surrounding area (commuting zone) whose labour market is highly integrated with the city (Dijkstra, Poelman and Veneri, 2019_[5]). The methodology, jointly developed by the OECD and the European Commission identifies FUAs consistently across countries, using population density and travel-to-work flows data.
- Large (TL2) and small (TL3) regions. For more information, see the <u>OECD Territorial grid</u>.

¹ For more information on FUAs by country, please see <u>here</u>.



- Access-to-metro typology (Fadic et al., 2019[6]), which classifies small regions (TL3) into:
 - \circ Large metropolitan region,
 - Metropolitan region,
 - o Non-metropolitan region, with access to metropolitan area,
 - o Non-metropolitan region, with access to a small/medium city,
 - Non-metropolitan region, remote.



Indicators' definitions

Native and migrant populations are defined based on two criteria: the country of birth or the nationality, depending on the available data or the definition applied by the national statistical offices. The use of two different definitions is due to limitations in the data available in the different countries. This difference implies inconsistencies across countries for some cases. 'Foreign-born' population in the OECD database can thus refer to national citizens born in another country, foreign-born who are naturalised, or individuals born in the country of residence who do not have the nationality. When data is available, the database also offers a breakdown between EU and non-EU migrant population.

The database also includes gender and five age groups (Less than 14 years old, 15 to 64 years old, more than 65 years old, 15 to 24 years old, 25 to 54 years old) when data is available.

Country	Origin definition	Origin details	Gender details	Age groups	Years available	Comments
AUS	Birthplace	Foreigners/Natives	Yes	Total	2001, 2006, 2011, 2016	-
AUT	Birthplace	Foreigners/Natives	No	Total	2002-2021	-
BEL	Citizenship	Foreigners/Natives	Yes	0-14, 15-64, 65+, 15-24, 25-54	2009-2021	-
CAN	Birthplace	Foreigners/Natives	Yes	Total	2001, 2006, 2016	-
CHE	Birthplace	Foreigners/Natives	Yes	0-14, 15-64, 65+, 15-24, 25-54	2010-2019	-
DEU	Citizenship	Foreigners/Natives/ EU/Non-EU	Yes	Total	1999-2021	Data is provided for the 31st of December. Population counts are allocated to the following year for consistency across countries.
DNK	Birthplace	Foreigners/Natives	Yes	0-14, 15-64, 65+, 15-24, 25-54	2006-2022	-
ESP	Citizenship	Foreigners/Natives/ EU/Non-EU	Yes	0-14, 15-64, 65+	2002-2021	The 0-14 age group corresponds to people aged 0 to 15 in the original data and the 15-64 group to people aged 16 to 64.
FIN	Birthplace	Foreigners/Natives	Yes	Total	1991-2022	Data is provided for the 31st of December. Population counts are allocated to the following year for consistency across countries.
FRA	Citizenship	Foreigners/Natives	Yes	0-14, 15-24, 25-54	2006-2018	Data available only for communes above 2000 inhabitants.
GBR	Birthplace	Foreigners/Natives/ EU/Non-EU	No	Total	2000-2021	-
IRL	Birthplace	Foreigners/Natives	No	Total	2006, 2011, 2016	-
ITA	Citizenship	Foreigners/Natives	Yes	Total	2002-2022	-
JPN	Citizenship	Foreigners/Natives	No	Total	2012-2019	-

Table 2: Indicator's availability



KOR	Citizenship	Foreigners/Natives	Yes	0-14, 15-64, 65+, 15-24, 25-54	2008-2020	-
LUX	Birthplace	Foreigners/Natives	No	Total	2011	-
MEX	Birthplace	Foreigners/Natives	Yes	Total	2020	-
NLD	Birthplace	Foreigners/Natives/ EU/Non-EU	Yes	0-14, 15-64, 65+	1996-2020	-
NOR	Birthplace	Foreigners/Natives	Yes	0-14, 15-64, 65+, 15-24, 25-54	2000-2022	-
PRT	Birthplace	Foreigners/Natives/ EU/Non-EU	Yes	Total	2008-2020	-
SWE	Birthplace	Foreigners/Natives	Yes	Total	2001-2022	Data is provided for the 31st of December. Population counts are allocated to the following year for consistency across countries.
USA	Birthplace	Foreigners/Natives	No	Total	2009-2020	-



Data sources

The OECD Municipal Migration database was compiled using publicly available data. When possible, data collection was done through the National Statistical Offices' APIs. Table 3 provides the data sources for each country.

Table 3: Data sources

Country	Source	Tables/Variables
AUS	Australian Bureau of Statistics (ABS.Stat Developer API)	Tables T08 Country of Birth of Person by Sex and Census 2016, Country of Birth of Person by Sex (SA2+)
AUT	Statistics Austria (STATcube platform)	Table Population at the beginning of the year since 2002 (regional status of 2020)
BEL	Be.Stat API	Table TF_SOC_POP_STRUCT: Population by place of residence, nationality, marital status, age and sex
CAN	2016 Census Profile Web Data Service (WDS), and <u>Census Profile archives</u>	For 2016: Immigration and citizenship: Total - Citizenship for the population in private households - 25% sample data, Total - Selected places of birth for the immigrant population in private households - 25% sample data. For 2006: Immigrant status and period of immigration: Non-immigrants, Immigrants. For 2001: Immigration Characteristics: Canadian-born population, Foreign-born population.
CHE	Federal Statistical Office (BFS)	FSO table number px-x-0103010000_201: Permanent and non- permanent resident population by institutional units, citizenship (category), place of birth, sex and age class
DEU	Destatis (GENESIS API)	Tables 12411-0016 and 12521-0041
DNK	Statistics Denmark, Databank API	Tables FOLK1C: Population at the first day of the quarter by region, sex, age, ancestry, country of origin and time (2008-2021), KRBEF3: Population 1. January by region, age, sex, ancestry, citizenship, country of origin and time (2006-2007) and BEF3: Population 1. January by region, age, sex, ancestry, citizenship, country of origin and time (1980-2005)
ESP	INE (National Statistical Institute of Spain)	Tables 33571 Population by sex, municipalities, nationality (Spanish/foreigner) and age (large groups) and 33572 Population by sex, municipalities and nationality (main nationalities)
FIN	Statistics Finland's PxWeb API	Table 11rp Country of birth according to age and sex by region, 1990-2020
FRA	INSEE (DonneesLocales - V0.1 API)	Population totale par sexe, Age et nationalité, croisement SEXE-AGE4-INATC
GBR	Office for National Statistics	Population of the UK by country of birth and nationality
IRL	CSO PxAPIv1 API	Table CNA31: Census Time Series (16), Usual Residence and Place of Birth (CTSRB), Population (CNA31)
ITA	Istat	Dataflow 164_164
JPN	E-STAT (Official Statistics of Japan)	Table 0000020201, variables A2101, A2301
KOR	KOSIS	111_DT_1B040A10_Y for foreigners, 101_DT_1B040M5_Y for total population
LUX	data.public.lu API	Dataset ID: 5d3ef3094384b02964cd4026/Ressource ID: db7ea3fe-1694-4d47-bc5b-eabdb36b3c7a
MEX	Indicator Bank API	Indicators 6200205259, 6200205268, 6200205284, 1002000001, 1002000002 and 1002000003.
NLD	CBS Statline Web Services	Table 70648ned
NOR	SSB (National Statistical Institute of Norway)	Tables 07459 and 07110
PRT	Statistics Portugal API	Tables 0009107, 0003182, 0008273



SWE	SCB API	Table BE/BE0101/BE0101E/InrUtrFoddaRegAlKon: Swedish and foreign-born population by region, age and sex. Year 2000 - 2020
USA	American Community Survey (ACS 5-year estimates)	Variables B05002_001E and B05002_013E



References

Dijkstra, L., H. Poelman and P. Veneri (2019), "The EU-OECD definition of a functional urban area", *OECD Regional Development Working Papers*, No. 2019/11, OECD Publishing, Paris, https://doi.org/10.1787/d58cb34d-en.

European Commission, Eurostat (2021), *Applying the degree of urbanisation : a* ^[4] *methodological manual to define cities, towns and rural areas for international comparisons :* 2021 edition, Publications Office, <u>https://data.europa.eu/doi/10.2785/706535</u>.

European Commission, Joint Research Centre, Ehrlich, D., Florczyk, A., Pesaresi, M., et al. (2019), *GHSL Data Package 2019: public release GHS P2019*, Publications Office, <u>https://doi.org/doi:10.2760/062975</u>.

Fadic, M. et al. (2019), "Classifying small (TL3) regions based on metropolitan population, low density and remoteness", *OECD Regional Development Working Papers*, No. 2019/06, OECD Publishing, Paris, <u>https://doi.org/10.1787/b902cc00-en</u>.

Kleine-Rueschkamp, L., Özguzel, C. (2021), "Going Granular: The new OECD Municipal ^[2] Migration database", OECD Statistics Newsletter 75.

OECD (2022), *The Contribution of Migration to Regional Development*, OECD Regional ^[1] Development Studies, OECD Publishing, Paris, <u>https://doi.org/10.1787/57046df4-en</u>.