Airport Catchment Area Database
About ACAD

The database contains catchment area information for 539 European airports with ranges defined by both distance and travel times.

The database contains data for over 30 relevant indicators since 2004. With each new release the amount of data grows as we include the most recent figures, expand the region covered and include more variables.

* Latest available year
The importance of catchment area data

In the increasingly competitive airport industry, having good catchment area data has never been more important.

SEO’s ACAD offers its users solutions for:

- Benchmarking the most important drivers of air travel demand with peer airports
- Input for traffic forecasting studies
- Input for route feasibility analysis
- Important information in airline marketing initiatives
Challenges of collecting high-quality catchment area data

- Data spread over various databases
- Modifiable Area Unit Problem:
  - Data is only available at different spatial and administrative scales/sizes
  - Somehow, regional statistical data (e.g. Eurostat NUTS3) needs to be ‘assigned’ to airports, but airports may be at the border of a certain statistical region, with a catchment area stretching over different statistical regions
- Time series may not be available
- Collection and crunching of data for 500+ European airports is time consuming
Benefits of SEO’s ACAD

SEO’s ACAD provides a comprehensive, ready to use database that will release its users from the difficulties and costs paired with the time consuming processes of data collection, GIS analyses and data manipulation.

The database is very intuitive and does not require any additional software, being compatible with most spreadsheet programs including Microsoft Excel, Stata, SPSS, etc.
The latest version of SEO’s ACAD provides catchment area information for 539 European airports, distributed over 34 countries*.

In future versions, both the amount of airports and countries covered will be expanded.

* Airports and countries included may vary with version of the database.
**Variables**

**Socioeconomic**
- Population
  - Total
  - Active population
  - Share of active population
- GDP
  - Total
  - Per capita
- Employment
  - Total
  - Rate
  - in knowledge intensive sectors
- Tourism data
  - Hotel beds total
  - Hotel beds per capita
  - Establishments total
  - Hotel rooms total
  - Occupancy of hotels
- Education
  - Number of students
- Business development
  - Number of enterprises
- Innovation
  - R&D expenditure
  - Number of patent requests
- Etc.

**Aviation**
- Direct connectivity
  - Total
  - Per capita
- Indirect connectivity
  - Total
  - Per capita
- Hub connectivity
  - Total
  - Per capita
- Airport competition
  - Total amount of competing airports
  - Direct connectivity from other airports
  - Indirect connectivity from other airports
  - Seat capacity from other airports
- Propensity to fly in region
  - Yearly OD trips per capita

*Variables included may vary with version of the database.*
Methodology

For the provision of regional data Eurostat uses the NUTS (Nomenclature of Territorial Units for Statistics) classification, which goes from NUTS-0 (country level) to NUTS-3 (most detailed).

The data assigned to each airport’s catchment area in SEO’s ACAD database is calculated through GIS analysis.

The adjacent figures display 2012 population data on a NUTS-2 and NUTS-3 level around Amsterdam Schiphol airport as an example. Through GIS analysis, the level of population is assigned to the catchment area (in this example 100km) in a manner proportional to the area of each NUTS-region within said catchment area.

The accuracy of the data assigned to each catchment area improves as the level of detail increases in the source of regional data (higher NUTS-level).

Population 2012 AMS (100 km.):
• NUTS-3: 11,632,132
Future updates

SEO continuously strives to improve the quality and coverage of the ACAD. Future developments can be expected in the following areas:

- North America
- Large Cities
- Worldwide population coverage
- Data completion non-EU countries
- Additional variables (ethnicities, international corporate headquarters, etc.)
Travel time areas

Next to catchment areas defined by distances of 50, 75, 100 and 150 km, it is also possible to define catchment areas based on travel times by road.

These new catchment areas provide information that is often more valuable for airlines and airports.

The image on the right shows the travel time catchment areas for Luxembourg airport (LUX) for 30, 60, 90 and 120 minutes.
With the ACAD users can easily explore catchment area developments over time.

The above example shows the growth in population within 100 km of Amsterdam Schiphol airport over the course of 10 years.
Because all information within the ACAD is provided for four different catchment area sizes, it is possible to monitor developments in the airport surroundings at different levels.

The figure above shows the population developments over 10 years for ranges of 50, 75, 100 and 150 kilometers.
With more than 500 European airports, the ACAD allows its users to compare the catchment areas of different airports.

The figure above shows the 2012 population in each catchment area range for seven European airports.
Because of its simplicity, ACAD users can quickly and easily gather all the necessary airport information to help make the right decisions.

The figure above shows a quick comparison between the 100 km catchment areas of 6 German airports. With an increasing number of variables included in the database (33 in the last version), the analysis possibilities and applications are extensive.
Top 20 European airports

Population (2015)

1 - Düsseldorf Weeze (NRN), DE
2 - Eindhoven (EIN), NL
3 - Maastricht (MST), NL
4 - London Luton (LTN), UK
5 - Birmingham (BHX), UK
6 - Düsseldorf (DUS), DE
7 - London Heathrow (LHR), UK
8 - Antwerp (ANR), BE
9 - Liege (LGG), BE
10 - Cologne-Bonn (CGN), DE
11 - East Midlands (EMA), UK
12 - Dortmund (DTM), DE
13 - London Stansted (STN), UK
14 - Brussels (BRU), BE
15 - London City (LCY), UK
16 - Münster-Osnabrück (FMO), DE
17 - London Gatwick (LGW), UK
18 - Southampton (SOU), UK
19 - Doncaster-Sheffield (DSA), UK
20 - Manchester (MAN), UK

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Airp ort Ca tchment Area Da ta base

50km 75km 100km 150km

Rank by population within 50km
Other examples

Top 20 airports with fastest growing GDP on European continent and daily flights

GDP development Brno airport for periods 2004 until 2015

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### Schiphol (AMS)

**Netherlands**

#### Demographic
- **Population**: 5,476,309
- **Work force**: 3,731,720 (68.1%)
- **Households**: 2,120,060
- **People w th tertiary education**: 914,237 (16.7%)

#### Economic
- **GDP (mln € & € per capita)**: 225,235 (41,129)
- **Employed**: 2,455,065 (65.8%)
- **Unemployed**: 100,483 (3.9%)

#### Tourism
- **Hotel beds**: 67,524
- **Hotel rooms**: 33,495
- **Hotel nights (per year)**: 12,761,152 (0.5178)
  - **Hotel nights by non-residents**: 8,507,960 (66.7%)

#### Business Development
- **Business start-ups**: -
- **R&D expenditure**: -
- **Households w th broadband internet acces**: 1,454,750 (68.6%)

#### Aviation
- **Direct connectivity**: 3,914
- **Indirect connectivity**: 5,305
- **Hub connectivity**: 32,540
- **Direct connectivity (competing airports)**: 1
- **Competing airports (incl. airforce bases)**: 1

#### GDP Development
- **2004**: 150,000
- **2006**: 200,000
- **2008**: 250,000
- **2010**: 300,000
- **2012**: 350,000
- **2014**: 400,000

#### Labour market
- **Employed (millions)**: 3.0
- **Unemployment rate**: 2006 - 8%

#### Airports
- **Connectivity (TMD)**
- **Fader value**
- **Share of total flights provided**
- **2004**: 0
- **2006**: 15

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**seo amsterdam economics**
Quick comparisons

### Brussels Airport (BRU)
- **Year:** 2008
- **Radius:** 50

### Airports
- **Brussels South Charleroi (CRL)**
- **Antwerp International (ANR)**
- **Liege Airport (LGG)**
- **Oostende/Brugge (OST)**

#### GDP (growth wrt previous year)
- **BRU:** 2.7%
- **CRL:** 3.1%
- **ANR:** 2.4%
- **LGG:** 3.4%
- **OST:** 1.6%

#### GDP per capita (growth wrt previous year)
- **BRU:** 2.3%
- **CRL:** 2.4%
- **ANR:** 1.5%
- **LGG:** 1.4%
- **OST:** 1.2%

#### Work force
- **BRU:** 25.0%
- **CRL:** 24.1%
- **ANR:** 43.3%
- **LGG:** 47.3%
- **OST:** 6.3%

#### Tertiary educ.
- **BRU:** 6.5%
- **CRL:** 17.2%
- **ANR:** 14.6%
- **LGG:** 52.9%
- **OST:** 4.3%

#### Employed
- **BRU:** 51.2%
- **CRL:** 47.7%
- **ANR:** 6.1%
- **LGG:** 4.5%
- **OST:** 0.3%

#### Unemployed
- **BRU:** 4.0%
- **CRL:** 11.0%
- **ANR:** 6.5%
- **LGG:** 1.0%
- **OST:** 7.4%

#### Population
- **BRU:** 2.7 million
- **CRL:** 3.1 million
- **ANR:** 2.4 million
- **LGG:** 3.4 million
- **OST:** 1.6 million

#### Hotel beds and occupancy rate (growth wrt previous year)
- **BRU:** 0.0%
- **CRL:** 0.0%
- **ANR:** 0.0%
- **LGG:** 0.0%
- **OST:** 0.0%
More information?

For a quotation or further questions, please do not hesitate to contact us.

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