

# City fact sheets

## WHO European Healthy Cities Network



**World Health  
Organization**

REGIONAL OFFICE FOR **Europe**





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Organization**

REGIONAL OFFICE FOR **Europe**

# **City fact sheets**

## **WHO European Healthy Cities Network**

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## Abstract

This publication is a compilation of facts about cities that were members of the WHO European Healthy Cities Network in Phase V. It includes data on population, economic stability, city twinning, activity and longevity in the Network and core city data on determinants of health.

### Keywords

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HEALTHY CITIES  
INDICATORS  
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# Introduction

Many European cities seek to be designated by the WHO Regional Office for Europe as members for each phase of the WHO European Healthy Cities Network. Applying for designation requires compiling evidence of practical and political commitments to prerequisites, processes and outcomes of a healthy city. One such commitment is participating in evaluation exercises. These evaluations take into account what members of the WHO European Healthy Cities Network do regarding these prerequisites, processes and outcomes.

The overall goal of the WHO European Healthy Cities Network, throughout the phases, has been to put health high on social and political agendas. Evidence continues to accumulate that this is in fact the case. The result of that evidence leads to the production of a range of materials: guidebooks, evidence reviews, scientific articles, tools and expert peer support. Most of these materials talk about healthy cities at an aggregate level.

It has been recognized that most members of the WHO European Healthy Cities Network want to know how they perform in comparison to other members. Throughout the history of the movement, this comparative endeavour has been reflected in the production of case studies. These have been presented at business meetings and international conferences and have been published as books and on the Internet.

Further, early in the evolution of the WHO European Healthy Cities Network, it was recognized that the availability of quantitative information is important for developing city health profiles and city health development plans. Over time, great efforts have been made to accumulate data. This has happened with varying degrees of success.

In the process of evaluating Phase V, the evaluation team considered that it would be possible to access standard quantitative data on members of the WHO European Healthy Cities Network from existing sources and to connect this information with data gathered through questionnaires, case studies and the compulsory annual reporting template. The team accessed European databases, notably from Eurostat and the Organisation for Economic Co-operation and Development (OECD), to data mine information on several key indicators that are important to achieving healthy cities. Eurostat and OECD do not cover all European Member States of WHO, and the team sought to identify similar databases in countries not covered. The team identified data at NUTS 3 levels (NUTS stands for Nomenclature of Territorial Units for Statistics of the European Union, and level 3 covers local government areas). The team shared its data sets with individual cities for validation and clarification.

This publication represents this effort and reflects on some basic facts for members of the WHO European Healthy Cities Network at the end of Phase V. It should be seen as a living document as understanding of health data continues to grow, and healthy cities are among the most dynamic environments on earth. Feedback and corrections are most welcome.

# Amaroussion, Greece



Population (2012): 70 000  
 Population density: 5591 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Twin cities with, since:

- Faenza, Italy
- Nis, Serbia
- Lakatamia, Cyprus

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
	8.8	9.3
	12	7
	0	0
	21	20
	Not available	17
	100	96
	66	211
	Not available	34
	Not available	39
	73	90
	15	14
	9.4	10.5

Further information: <http://en.wikipedia.org/wiki/MarousiGallery>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Arezzo, Italy



Population (2012): 92 000  
 Population density: 260 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



Twin cities with, since:

- Bedford, United Kingdom
- Viseu, Portugal
- Montenars, Italy, 1977
- Saint-Priest, France, 1981
- Eger, Hungary, 1989
- Jaen, Spain, 2006
- Norman, OK, United States, 2009
- Oswiecim, Poland, 2009
- Mount Pleasant, MI, United States, 2010

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Arezzo>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Aydın, Turkey



Population (2012): 171 000

Population density: 410 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Bugulma, Russian Federation
- Le Havre, France
- Montereau-Fault-Yonne, France
- Manchester, United Kingdom

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.aydin.bel.tr>  
<http://en.wikipedia.org/wiki/Aydin>  
<http://data.worldbank.org>

# Barcelona, Spain



Population (2012): 1.64 million  
 Population density: 123 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Montpellier, France, 1963
- Rio de Janeiro, Brazil, 1972
- Monterrey, Mexico, 1977
- Boston, MA, United States, 1983
- Busan, Republic of Korea, 1983
- Cologne, Germany, 1984
- Glasgow, Scotland, United Kingdom
- Manchester, England, United Kingdom
- St Petersburg, Russian Federation, 1984
- São Paulo, Brazil, 1985
- Montevideo, Uruguay, 1985
- Seville, Spain
- Tel Aviv, Israel, 1998
- San Francisco, CA, United States
- Gdańsk, Poland, 1990
- Havana, Cuba, 1993
- Guayaquil, Ecuador
- Kobe, Japan, 1993
- Antwerp, Belgium, 1997
- Istanbul, Turkey, 1997
- Gaza, West Bank and Gaza Strip
- Dublin, Ireland, 1998
- Athens, Greece, 1999
- Isfahan, Islamic Republic of Iran, 2000
- Sarajevo, Bosnia and Herzegovina, 2000
- Valparaiso, Chile, 2001
- Shanghai, China, 2001
- Nicosia, Cyprus, 2004
- Dubai, United Arab Emirates, 2006
- Santa Cruz de la Sierra, Plurinational State of Bolivia, 2008
- Cebu City, Philippines, 2009
- Thiruvananthapuram, India, 2010
- Ho Chi Minh City, Viet Nam, 2009

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.8** (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **2** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **3** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **3** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **36** (2009)

Green space to which the public has access – km<sup>2</sup>: **11** (2009)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **189** (2014) *estimated*

Percentage of commuting trips by public transport (rail, metro, bus, tram): **33** (2012)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **19.7** (2014)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [www.barcelona.cat/healthycity](http://www.barcelona.cat/healthycity)  
<http://en.wikipedia.org/wiki/Barcelona>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Belfast, United Kingdom



Population (2012): 268 000

Population density: *not available*

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Bonn, Germany
- Wonju, Republic of Korea
- Hefei, China
- Belfast, ME, United States
- Nashville, TN, United States
- Cochabamba, Plurinational State of Bolivia

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.3** (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **0** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **3** (2009)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **122** (2014)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **11** (2014)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **81** (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **15** (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **12.3** (2012)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.belfastcity.gov.uk>  
<http://en.wikipedia.org/wiki/Belfast>  
[http://www.detini.gov.uk/ladb\\_2012\\_final\\_.pdf?rev=0](http://www.detini.gov.uk/ladb_2012_final_.pdf?rev=0)  
<http://epp.eurostat.ec.europa.eu> <http://data.worldbank.org>

# Bologna, Italy



Population (2012): 380 000  
 Population density: 2700 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



Twin cities with, since:

- Coventry, United Kingdom, 1984
- Kharkiv, Ukraine, 1966
- La Plata, Argentina, 1988
- St. Louis, MO, United States, 1987
- Portland, OR, United States, 2003
- Thessaloniki, Greece, 1981
- San Carlos, Nicaragua, 1988
- Saint Louis, Senegal, 1991
- Asmara, Eritrea, 1974
- Toulouse, France, 1981
- Tuzla, Bosnia and Herzegovina, 1994
- Valencia, Spain, 1976
- Zagreb, Croatia, 1963

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 12.7 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 70 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 40 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 40 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 79 (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 211 (2010)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: 1366 (2008)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 78 (2008)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

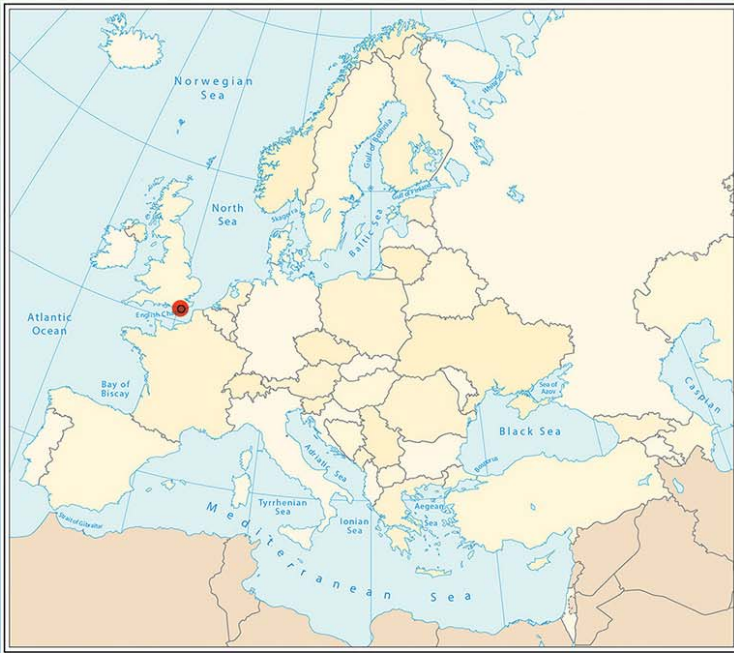
9.4

10.5

Further information: <http://www.comune.bologna.it>  
<http://en.wikipedia.org/wiki/Bologna>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Brighton, United Kingdom



Population (2012): 254 000  
 Population density: *not available*  
 Economy: decline – stable – **growth**  
 Healthy city in:



Twin cities with, since:

- Draveil, France

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 7.6 (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 9 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 7.3 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.brighton-hove.gov.uk>  
<http://en.wikipedia.org/wiki/Brighton>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Brno, Czech Republic



Population (2013): 380 000  
 Population density: *not available*  
 Economy: decline – **stable** – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Dallas, TX, United States, 1991
- Kaunas, Lithuania, 1994
- Kharkiv, Ukraine, 2008
- Leeds, United Kingdom, 2003
- Leipzig, Germany, 1973
- Poznan, Poland, 1966
- Rennes, France, 1965
- Sankt Polten, Austria, 1991
- Stuttgart, Germany, 1989
- Utrecht, Netherlands
- Vienna, Austria, 1998
- Voronezh, Russian Federation, 1967
- Bratislava, Slovakia, 2012
- Moscow, Russian Federation, 2006

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 10.2 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 30 (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 32 (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 21 (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: 94 (2013)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 37 (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 178 (2012)

Green space to which the public has access – km<sup>2</sup>: 67 (2012)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 29 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 57 (2012)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 8.1 (2013)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality (O <sub>3</sub> )	12	7
Air quality (NO <sub>2</sub> )	0	0
Air quality (PM <sub>10</sub> )	21	20
Air quality (PM <sub>2.5</sub> )	Not available	17
Water quality	100	96
Waste	66	211
Green space (surface area)	Not available	34
Green space (public access)	Not available	39
Healthy transport (cycling network)	73	90
Healthy transport (public transport)	15	14
Social indicator (unemployment)	9.4	10.5

Further information: Ministry of Labour and Social Affairs of the Czech Republic

<http://en.wikipedia.org/wiki/Brno>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Brussels, Belgium



**Population (2014):** 1.16 million  
**Population density:** 7210 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Akhisar, Turkey
- Atlanta, GA, United States
- Beijing, China, 1994
- Berlin, Germany
- Breda, Netherlands
- Kyiv, Ukraine
- Kinshasa, Democratic Republic of the Congo
- Ljubljana, Slovenia
- Mexico City, Mexico
- Macau, China
- Madrid, Spain
- Montreal, Canada
- Moscow, Russian Federation
- Sofia, Bulgaria
- Tirana, Albania
- Washington, DC, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **8.1** (2013)

### Environmental indicators

**Air quality** (the mean number of days with exceeded concentrations from six stations in the Brussels region)

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **10** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **36** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **178** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **519** (2011) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **57** (2014)

Green space to which the public has access – km<sup>2</sup>: **30** (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **292** (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **50.8** (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **19.3** (2013)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.brussels.be/artdet.cfm?id=4000>

<http://en.wikipedia.org/wiki/Brussels>

[www.arp-gan.be](http://www.arp-gan.be)

<http://epp.eurostat.ec.europa.eu>

[www.ibgebim.be](http://www.ibgebim.be)

[www.mobielbrussel.irisnet.be](http://www.mobielbrussel.irisnet.be)

[www.observatbru.be](http://www.observatbru.be)

<http://data.worldbank.org>



# Bursa, Turkey



Population (2012): 2.7 million  
 Population density: 258 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V  
 Twin cities with, since:

- Darmstadt, Germany, 1971
- Sarajevo, Bosnia and Herzegovina, 1972
- Multan, Pakistan, 1975
- Oulu, Finland, 1979
- Tiffin, OH, United States, 1983
- Kairouan, Tunisia, 1987
- Denizli, Turkey, 1986
- Lefkosia, Cyprus, 1990
- Anshan, China, 1991
- Bitola, the former Yugoslav Republic of Macedonia, 1996
- Ceadir-Lunga, Republic of Moldova, 1997
- Orda, Kazakhstan, 1997
- Mascara, Algeria, 1998
- Kulmbach, Germany, 1998
- Plevne, Bulgaria, 1998
- Pristina, Kosovo (in accordance with Security Council resolution 1244 (1999)), 2010
- Van, Turkey, 2008
- Rabat, Morocco, 2009
- Bakhchysarai, Ukraine, 2010
- Gyeonggangbuk-do, Republic of Korea, 2010
- Mestani, Bulgaria, 2010
- Mogilev, Belarus, 2013
- El-Hallil, West Bank and Gaza Strip, 2014
- Kınık, Turkey, 2010
- Kutahya, Turkey, 2010
- Bayburt, Turkey, 2010
- Mus, Turkey, 2010
- Bitlis, Turkey, 2010
- Bilecik, Turkey, 2013
- Nigde, Turkey, 2013
- Kars, Turkey, 2002
- Antakya, Turkey, 2010
- Tirana, Albania, 1998
- Kosice, Slovakia, 2000
- Vinnytsa, Ukraine, 2004
- Plovdiv, Bulgaria, 1998
- Ardahan, Turkey, 2010

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 6.1 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 108 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: 95 (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 651 (2011)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 2 (2011)

Green space to which the public has access – km<sup>2</sup>: 28 (2011)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 59 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 27 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 7 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.bursa.bel.tr>

[www.tuik.gov.tr](http://www.tuik.gov.tr)

[www.havaizleme.gov.tr](http://www.havaizleme.gov.tr)

<http://en.wikipedia.org/wiki/Bursa>

<http://data.worldbank.org>

# Çankaya, Turkey



ÇANKAYA BELEDİYESİ



Population (2012): 1 million

Population density: 3100 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Twin cities with, since:

- North York, Canada
- Maykop, Russian Federation
- Athens, Greece
- Kyiv, Ukraine
- Havana, Cuba
- Seoul, Republic of Korea
- Sükhbaatar, Mongolia
- Bangui, Central African Republic

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.cankaya.bel.tr>  
[http://en.wikipedia.org/wiki/%C3%87ankaya,\\_Ankara](http://en.wikipedia.org/wiki/%C3%87ankaya,_Ankara)  
<http://data.worldbank.org>



# Cardiff, United Kingdom



Population (2012): 321 000  
 Population density: 2500 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Twin cities with, since:

- Hordaland County, Norway
- Luhansk, Ukraine
- Nantes, France
- Stuttgart, Germany
- Xiamen, China

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 7.8 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 6 (2009)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 6 (2009)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 20 (2014)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 103 (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 17 (2009-13)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 7.8 (2014)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.cardiff.gov.uk>

<http://www.ons.gov.uk>

<https://statswales.wales.gov.uk>

<http://www.askcardiff.com>

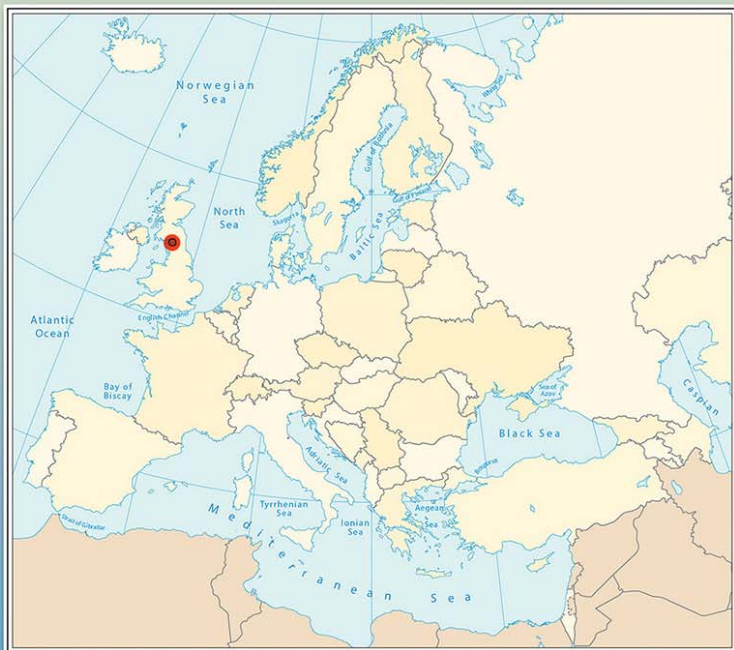
<http://en.wikipedia.org/wiki/Cardiff>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Carlisle, United Kingdom



Population (2012): 105 000

Population density: *not available*

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV **Phase V**

Twin cities with, since:

- Flensburg, Germany
- Slupsk, Poland

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.9 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 5.1 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.carlisle.gov.uk>  
[http://en.wikipedia.org/wiki/Carlisle,\\_Cumbria](http://en.wikipedia.org/wiki/Carlisle,_Cumbria)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Celje, Slovenia



Population (2012): 48 000  
 Population density: 1655 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Grevenbroich, Germany, 1986
- Singen, Germany, 1990
- Slavonski Brod, Croatia, 2010

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.zdravi-gradovi.com.hr/home-eng/who-we-are.aspx>

<http://en.wikipedia.org/wiki/Celje>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Cheboksary, Russian Federation



**Population (2012):** 480 000

**Population density:** 1910 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



**Twin cities with, since:**

- Eger, Hungary
- Santa Clara, Cuba
- Antalya, Turkey
- Rundu, Namibia
- Grondo, Belarus

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.2** (2013)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.11** (2013)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **2.6** (2013)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.54** (2013)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **0.051** (2013)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.17** (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: **100** (2013)

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **1104** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **30** (2014)

Green space to which the public has access – km<sup>2</sup>: **79** (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **17** (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **0.7** (2013)

**Median all Europe (2011)**

**Median, members of the WHO European Healthy Cities Network**

8.8

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** [http://gov.cap.ru/Default.aspx?gov\\_id=81](http://gov.cap.ru/Default.aspx?gov_id=81)  
<http://en.wikipedia.org/wiki/Cheboksary>  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>

# Cherepovets, Russian Federation



Population (2012): 310 000  
 Population density: 2583 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Grande-Synthe, France
- Gorna Oryahovitsa, Bulgaria
- Celje, Slovenia
- Aiud, Romania
- Balakovo, Russian Federation
- Liaoyuan, China
- Klaipeda, Lithuania
- Maladzyechna, Belarus
- Derry, NH, United States
- Montclair, NJ, United States
- Raahe, Finland

## Core data (Vologda Region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 15.1 (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 29.48 (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 13.24 (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 22.17 (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 11.19 (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.03 (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: 1978 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median all Europe (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality		
Sulfur dioxide (SO <sub>2</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 29.48 (2012)	Not available	Not available
Nitrogen oxides (NO <sub>x</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 13.24 (2012)	Not available	Not available
Carbon dioxide (CO <sub>2</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 22.17 (2012)	Not available	Not available
Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 11.19 (2012)	Not available	Not available
Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.03 (2012)	Not available	Not available
Water quality		
Percentage of water pollutants removed from sewage produced: <i>not available</i>	100	96
Waste		
Municipal waste collected in thousands of m <sup>3</sup> : 1978 (2012)	66	211
Green space in cities		
Surface area of green spaces in the city – km <sup>2</sup> : <i>not available</i>	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
Healthy transport		
Length of cycling network (dedicated cycle paths and lanes) – km: <i>not available</i>	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): <i>not available</i>	15	14
Social indicator		
Unemployment		
Unemployed people as % of the economically active population: <i>not available</i>	9.4	10.5

Further information: <http://www.movustug.ru>  
[http://en.wikipedia.org/wiki/Veliky\\_Ustyug](http://en.wikipedia.org/wiki/Veliky_Ustyug)  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>



# Copenhagen, Denmark



**Population (2012):** 560 000  
**Population density:** 6345 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Beijing, China, 2012
- Berlin, Germany
- Curitiba, Brazil
- Marseille, France
- Paris, France
- Prague, Czech Republic
- Reykjavik, Iceland

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 7.3 (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 8 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 33 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 287 (2011)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: 20 (2011)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 350 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 30 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 6.7 (2014)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.kk.dk>

<http://en.wikipedia.org/wiki/Copenhagen>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Cork, Ireland



Population (2012): 119 000  
 Population density: 3194 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Twin cities with, since:

- Cologne, Germany, 1988
- Coventry, United Kingdom, 1969
- Rennes, France, 1982
- San Francisco, CA, United States, 1984
- Swansea, Wales, United Kingdom, 1994
- Shanghai, China, 2005

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.0** (2011) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **10** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **10** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **15** (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **9** (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **19.7** (2011) *estimated*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.corkcity.ie>  
[http://en.wikipedia.org/wiki/Cork\\_\(city\)](http://en.wikipedia.org/wiki/Cork_(city))  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Denizli, Turkey



**Population (2012):** 510 000

**Population density:** 690 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Amasya, Turkey
- Bursa, Turkey
- Mus, Turkey
- Tokat, Turkey
- Almelo, Netherlands
- Pavlodar, Kazakhstan
- Tbilisi, Georgia
- Braila, Romania
- Samara, Russian Federation
- Rhodes, Greece
- Betzdorf, Germany
- Mogilev, Belarus
- Larissa, Greece
- Łódź, Poland
- Damascus, Syria
- Jiaozhou, China
- Sarajevo, Bosnia and Herzegovina
- Muan, Republic of Korea
- Kazvin, Islamic Republic of Iran

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 4.8 (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 230 (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: 92 (2013)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 171 (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 10 (2013)

Green space to which the public has access – km<sup>2</sup>: 10 (2013)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 5 (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 40 (estimated, 2008)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 6.5 (2013)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	Not available	17
Percentage of water pollutants removed from sewage produced	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes	66	211
Surface area of green spaces in the city – km <sup>2</sup>	Not available	34
Green space to which the public has access – km <sup>2</sup>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram)	15	14
Unemployed people as % of the economically active population	9.4	10.5

**Further information:** <http://www.denizli.bel.tr>

<http://en.wikipedia.org/wiki/Denizli>

[www.havaizleme.gov.tr](http://www.havaizleme.gov.tr)

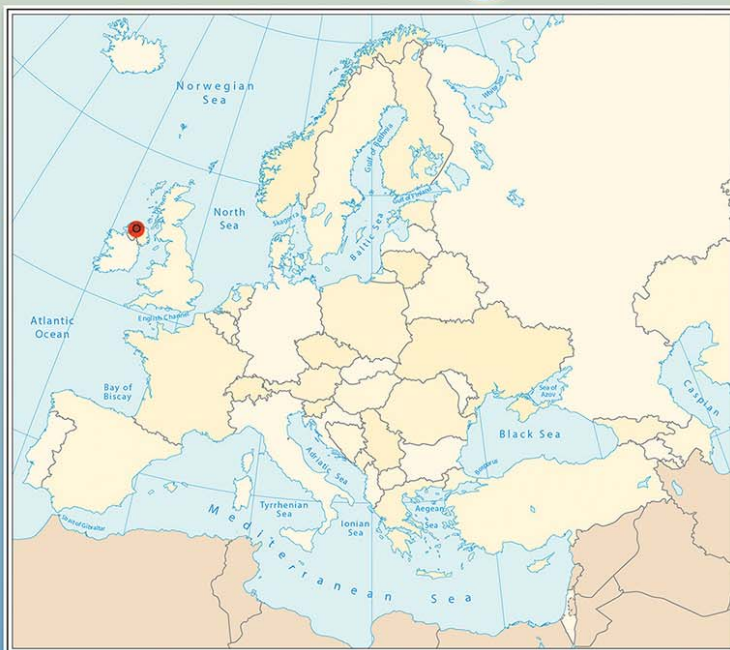
<http://data.worldbank.org>

[www.tuik.gov.tr](http://www.tuik.gov.tr)

[www.saglik.gov.tr](http://www.saglik.gov.tr)



# Derry, United Kingdom



Population (2012): 105 000

Population density: *not available*

Economy: decline – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Coleraine, France

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 6.9 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 1 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 6 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 6 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.derrycity.gov.uk>  
<http://en.wikipedia.org/wiki/Derry>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Dimitrovgrad, Russian Federation



**Population (2012):** 122 000  
**Population density:** 2767 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



## Twin cities with, since:

- Dimitrovgrad, Bulgaria, 1971
- Drogobych, Ukraine, 1974
- Lida, Belarus, 2001
- Kayrakkum, Tajikistan
- Alexin, Russian Federation, 2003
- Obrunsk, Russian Federation, 2011
- Kalinin district of St Petersburg, Russian Federation, 2013

## Core data (Ulyanovsk region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **14.2** (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.92** (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **3.86** (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **3.5** (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **0.8** (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.01** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **2851** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

### Median all Europe (2011)

8.8

### Median, members of the WHO European Healthy Cities Network

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://dimitrovgrad.ulregion.ru>

[www.dimitrovgrad.ru](http://www.dimitrovgrad.ru)

[http://en.wikipedia.org/wiki/Dimitrovgrad,\\_Russia](http://en.wikipedia.org/wiki/Dimitrovgrad,_Russia)

<http://knoema.com/atlas/Russian-Federation>

<http://data.worldbank.org>



# Dresden, Germany



**Population (2012):** 510 000  
**Population density:** 1600 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



**Phase I Phase II Phase III Phase IV Phase V**

**Twin cities with, since:**

- Coventry, United Kingdom, 1959
- St Petersburg, Russian Federation, 1961
- Wroclaw, Poland, 1959
- Skopje, the former Yugoslav Republic of Macedonia, 1967
- Ostrava, Czech Republic, 1971
- Brazzaville, Congo, 1975
- Florence, Italy, 1978
- Hamburg, Germany, 1987
- Rotterdam, Netherlands, 1988
- Strasbourg, France, 1990
- Salzburg, Austria, 1991
- Columbus, OH, United States, 1992
- Hangzhou, China, 2009

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.1** (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: **100** (2009)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **172** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **203** (2013)

Green space to which the public has access – km<sup>2</sup>: **9** (2013)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **401** (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **21** (2008)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **8.7** (2012)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.dresden.de>  
<http://en.wikipedia.org/wiki/Dresden>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Dunkerque, France



**Population (2014):** 70 000

**Population density:** 2100 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Krefeld, Germany, 1974
- Middlesbrough, United Kingdom, 1976
- Gaza, West Bank and Gaza Strip
- Riga, Latvia, 1960
- Rostock, Germany, 1960
- Vitoria, Brazil
- Ramat HaSharon, Israel
- Liberec, Czech Republic

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 4 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 22 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 22 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 107 (2009) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 17.6 (2010)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://en.wikipedia.org/wiki/Dunkirk>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Eskişehir, Turkey



Population (2012): 600 000  
 Population density: 236 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Berlin, Germany
- Changzhou, China
- Chisinau, Republic of Moldova
- Kazan, Russian Federation
- Linz, Austria
- Paju, Republic of Korea
- Paterson, NJ, United States
- Simferopol, Ukraine
- Ganja, Azerbaijan

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

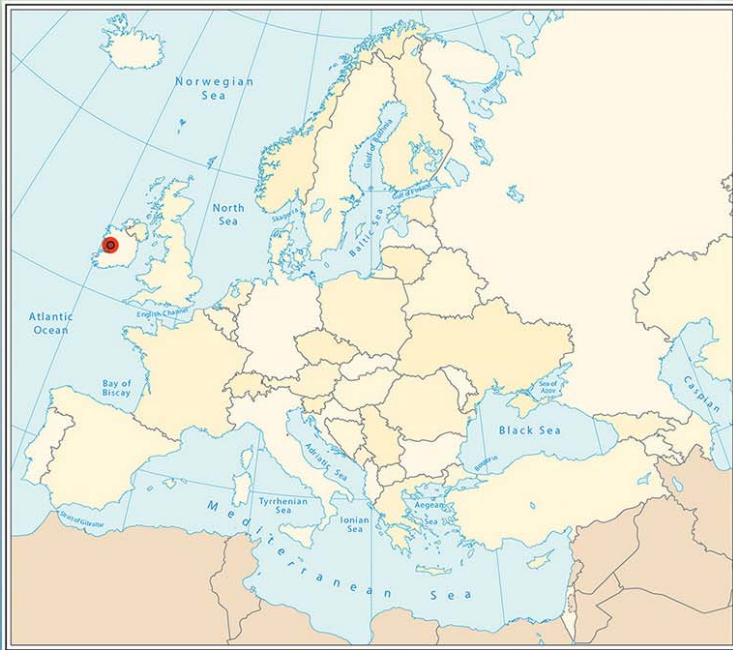
#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality (O <sub>3</sub> )	12	7
Air quality (NO <sub>2</sub> )	0	0
Air quality (PM <sub>10</sub> )	21	20
Air quality (PM <sub>2.5</sub> )	Not available	17
Water quality	100	96
Waste	66	211
Green space (Surface area)	Not available	34
Green space (Public access)	Not available	39
Healthy transport (Cycling network)	73	90
Healthy transport (Public transport)	15	14
Social indicator (Unemployment)	9.4	10.5

Further information: <http://www.eskisehir-bld.gov.tr>  
<http://en.wikipedia.org/wiki/Eskisehir>  
<http://data.worldbank.org>

# Galway, Ireland



Population (2012): 73 000  
 Population density: *not available*  
 Economy: **decline** – stable – growth  
 Healthy city in:



## Twin cities with, since:

- Aalborg, Denmark, 1997
- Bradford, England, United Kingdom, 1986
- Cambridge, MA, United States, 1997
- Chicago, IL, United States, 1997
- Lorient, France, 1978
- Milwaukee, WI, United States, 2001
- Moncton, Canada, 2002
- Qingdao, China, 1999
- St. Louis, MO, United States, 1977
- Seattle, WA, United States, 1986
- Waitakere City, New Zealand, 2002

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 4.5 (2011) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 14 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 7 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 16.5 (2011) *estimated*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.galwaycity.ie>  
<http://en.wikipedia.org/wiki/Galway>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Glasgow, United Kingdom



Population (2012): 584 000  
 Population density: 3298 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Bethlehem, West Bank and Gaza Strip
- Dalian, China
- Havana, Cuba, 2002
- Lahore, Pakistan
- Marseille, France, 2006
- Nuremberg, Germany
- Rostov-on-Don, Russian Federation
- Turin, Italy
- Cape Town, South Africa

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 10.8 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 2 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 2 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 8.8 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.glasgow.gov.uk>  
<http://en.wikipedia.org/wiki/Glasgow>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Gölcük, Turkey



Population (2012): 146 000

Population density: 640 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 4.2 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 39 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 1 (2014)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 2 (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 20 (2014)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 9.5 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.golcuk.bel.tr>

[http://en.wikipedia.org/wiki/G%C3%B6lc%C3%BCk,\\_Kocaeli](http://en.wikipedia.org/wiki/G%C3%B6lc%C3%BCk,_Kocaeli)

<http://data.worldbank.org>



# Grasse, France



Population (2012): 53 000  
 Population density: 1200 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Grasse>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Győr, Hungary



**Population (2012):** 126 000  
**Population density:** 731 per km<sup>2</sup>  
**Economy:** decline – *stable* – growth  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Kuopio, Finland
- Erfurt, Germany
- Sindelfingen, Germany
- Ingolstadt, Germany
- Colmar, France
- Bryansk, Russian Federation
- Brasov, Romania
- Nazareth Illit, Israel
- Wuhan, China
- Poznan, Poland
- Montevideo, Uruguay

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 11.8 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 11 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 60 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 60 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 75 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 2 (2011)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 33 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 5.7 (2011)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants: 11.8 (2012)	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup> : 11 (2011)	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup> : 0 (2011)	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : 60 (2011)	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : 60 (2011)	Not available	17
Percentage of water pollutants removed from sewage produced: 100 (2008)	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes: 75 (2012)	66	211
Surface area of green spaces in the city – km <sup>2</sup> : 2 (2011)	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km: 33 (2011)	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): <i>not available</i>	15	14
Unemployed people as % of the economically active population: 5.7 (2011)	9.4	10.5

**Further information:** <http://en.wikipedia.org/wiki/Gy%C5%91r>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Helsingborg, Sweden



Population (2012): 126 000  
 Population density: 2529 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Helsingør, Denmark
- Alexandria, VA, United States
- Dubrovnik, Croatia
- Pärnu, Estonia

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 10 (2008)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 3 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 9 (2008)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.helsingborg.se>  
[http://en.wikipedia.org/wiki/Helsingborg\\_Municipality](http://en.wikipedia.org/wiki/Helsingborg_Municipality)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Horsens, Denmark



Population (2012): 80 000  
 Population density: 300 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Nokia, Finland
- Blönduós, Iceland
- Moss, Norway
- Karlstad, Sweden

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.horsens.dk>  
<http://en.wikipedia.org/wiki/Horsens>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Istanbul, Turkey



Population (2012): 13 million  
 Population density: 2725 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Baku, Azerbaijan
- Athens, Greece
- Berlin, Germany
- Barcelona, Spain
- Budapest, Hungary
- Cologne, Germany
- Constanta, Romania
- Durres, Albania
- Florence, Italy
- Kazan, Russian Federation
- London, United Kingdom
- Odessa, Ukraine
- Plovdiv, Bulgaria
- Prague, Czech Republic
- Prizren, Kosovo (in accordance with Security Council resolution 1244 (1999))
- Rotterdam, Netherlands
- St Petersburg, Russian Federation
- Sarajevo, Bosnia and Herzegovina
- Skopje, the former Yugoslav Republic of Macedonia
- Stockholm, Sweden
- Strasbourg, France
- Venice, Italy
- Warsaw, Poland
- Almaty, Kazakhstan
- Amman, Jordan
- Beirut, Lebanon
- Bangkok, Thailand
- Busan, Republic of Korea

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

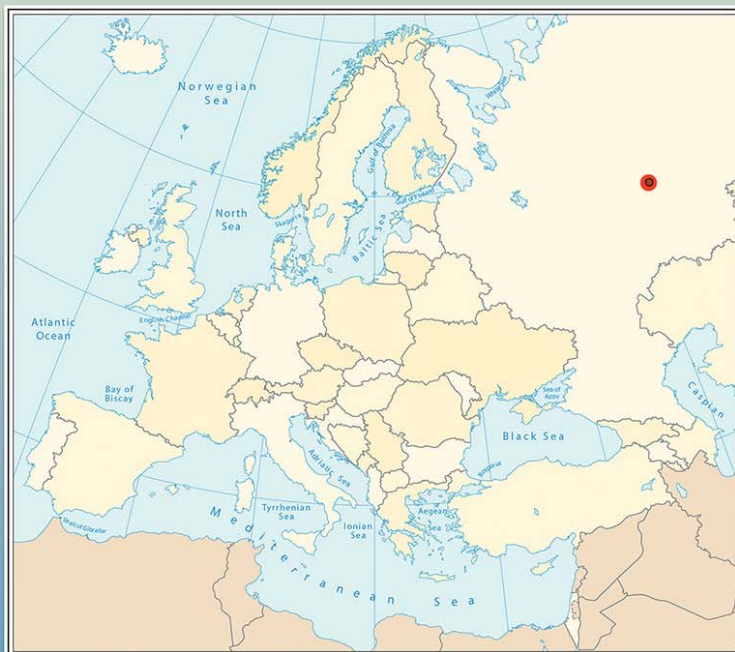
#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality (O <sub>3</sub> )	12	7
Air quality (NO <sub>2</sub> )	0	0
Air quality (PM <sub>10</sub> )	21	20
Air quality (PM <sub>2.5</sub> )	Not available	17
Water quality	100	96
Waste	66	211
Green space (surface area)	Not available	34
Green space (public access)	Not available	39
Healthy transport (cycling network)	73	90
Healthy transport (public transport)	15	14
Social indicator (unemployment)	9.4	10.5

Further information: <http://www.ibb.gov.tr>  
<http://en.wikipedia.org/wiki/Istanbul>  
<http://data.worldbank.org>

# Izhevsk, Russian Federation



**Population (2012):** 640 000  
**Population density:** 2002 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



**Twin cities with, since:**

- Bedzin, Poland, 2004
- Córdoba, Argentina, 2006
- Maracay, Bolivarian Republic of Venezuela, 2006
- Xining, China, 2002
- Tatabanya, Hungary, 1992
- Yambol, Bulgaria, 1999

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 11.4 (2013)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.68 (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 20.1 (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 45.6 (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 0.54 (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 8.45 (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2012)

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: 354 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 34 (2012)

Green space to which the public has access – km<sup>2</sup>: 108 (2012)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 26 (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 0.6 (2013)

**Median all Europe (2011)**

**Median, members of the WHO European Healthy Cities Network**

8.8

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.izh.ru>

<http://www.mzur.ru>

<http://knoema.com/atlas/Russian-Federation>

<http://data.worldbank.org>

<http://udmstat.gks.ru>

<http://en.wikipedia.org/wiki/Izhevsk>



# Izmir, Turkey



Population (2012): 4.0 million

Population density: 333 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV **Phase V**

Twin cities with, since:

- Baku, Azerbaijan, 1985
- Balti, Republic of Moldova, 1996
- Bremen, Germany, 1993
- Kardzhali, Bulgaria, 2008
- Constanta, Romania, 1995
- Mostar, Bosnia and Herzegovina, 1996
- Odense, Denmark, 1991
- Plzen, Czech Republic, 1987
- Split, Croatia, 1996
- Volgograd, Russian Federation, 2006
- Famagusta, Cyprus
- Tel Aviv, Israel, 1998
- Bishkek, Kyrgyzstan, 1991
- Mumbai, India, 1997
- Tianjin, China, 1990
- Turkmenabat, Turkmenistan, 1993
- Wuhan, China, 2013
- Sousse, Tunisia
- Long Beach, CA, United States
- Tampa, FL, United States
- Havana, Cuba

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.skb.org.tr>

[www.skpo.izmir.bel.tr](http://www.skpo.izmir.bel.tr)

<http://en.wikipedia.org/wiki/Kar%C5%9F%C4%B1yaka>

<http://epp.eurostat.ec.europa.eu>

<http://www.skb.org.tr/english/>

<http://www.tuik.gov.tr/UstMenu.dometod=temelist>

<http://data.worldbank.org>

# Jerusalem, Israel



**Population (2012):** 760 000  
**Population density:** 6400 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



**Twin cities with, since:**

- Prague, Czech Republic
- Ayabe, Japan
- Fez, Morocco
- New York City, United States, 1993
- Marseille, France

## Core data

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
<p>● <b>Health indicator</b></p> <p><b>Mortality</b></p> <p>Crude mortality per 1000 inhabitants: <b>4.4</b> (2012)</p>	8.8	9.3
<p>● <b>Environmental indicators</b></p> <p><b>Air quality</b></p> <p>Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: <i>not available</i></p> <p>Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: <i>not available</i></p> <p>Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: <i>not available</i></p> <p>Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: <i>not available</i></p> <p><b>Water quality</b></p> <p>Percentage of water pollutants removed from sewage produced: <b>4</b> (2012)</p> <p><b>Waste</b></p> <p>Municipal waste generated (domestic and commercial), in thousands of tonnes: <i>not available</i></p> <p><b>Green space in cities</b></p> <p>Surface area of green spaces in the city – km<sup>2</sup>: <i>not available</i></p> <p>Green space to which the public has access – km<sup>2</sup>: <i>not available</i></p> <p><b>Healthy transport</b></p> <p>Length of cycling network (dedicated cycle paths and lanes) – km: <b>140</b> (2008) <i>estimated</i></p> <p>Percentage of commuting trips by public transport (rail, metro, bus, tram): <b>43</b> (2008) <i>estimated</i></p>	12 0 21 Not available 100 66 Not available Not available 73 15	7 0 20 17 96 211 34 39 90 14
<p>● <b>Social indicator</b></p> <p><b>Unemployment</b></p> <p>Unemployed people as % of the economically active population: <b>16</b> (2011) <i>estimated</i></p>	9.4	10.5

**Further information:** <http://en.wikipedia.org/wiki/Jerusalem>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Jūrmala, Latvia



Population (2012): 50 000

Population density: 506 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Andia, Portugal
- Ashdod, Israel
- Anaklia, Georgia
- Chaltubo, Georgia
- Jilin, China
- Khanty-Mansiysk, Russian Federation
- Kazan, Russian Federation
- Southwest region of Moscow, Russian Federation
- Samarkand, Uzbekistan
- St Petersburg's Admiralty District, Russian Federation
- Shenyang, China
- Eskilstuna, Sweden
- Jakobstad, Finland
- Gävle, Sweden
- Cabourg, France
- Palanga, Lithuania
- Pärnu, Estonia
- Alushta, Ukraine
- Terracina, Italy
- Türkmenbasy, Turkmenistan

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 14.1 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 0 (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 0 (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2013)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 272 (2010)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 65 (2013)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 65 (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 8.1 (2013)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [www.jurmala.lv](http://www.jurmala.lv) [www.spkc.gov.lv](http://www.spkc.gov.lv)  
[www.nva.gov.lv](http://www.nva.gov.lv)  
<http://en.wikipedia.org/wiki/Jurmala>  
<http://data.worldbank.org>

# Kadiköy, Turkey



**Population (2012):** 570 000  
**Population density:** 12 591 per km<sup>2</sup>  
**Economy:** decline – stable – growth  
**Healthy city in:**



**Twin cities with, since:**

- Agios Ioannis Rentis, Greece, 2003
- Petah Tikva, Israel

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.skb.org.tr> <http://www.skb.org.tr/english>  
<http://www.citypopulation.de/php/turkey-istanbul.phpadm2id=TR10016>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Karsiyaka-Izmir, Turkey



Population (2012): 310 000

Population density: 4800 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://skpo.izmir.bel.tr/content.aspx?MID=101>

[http://epp.eurostat.ec.europa.eu/http://en.wikipedia.org/wiki/Emblems\\_of\\_Turkeymediaviewer/File:Insigne\\_Turciae.svgdata](http://epp.eurostat.ec.europa.eu/http://en.wikipedia.org/wiki/Emblems_of_Turkeymediaviewer/File:Insigne_Turciae.svgdata)

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Kırıkkale, Turkey



Population (2012): 193 000

Population density: 630 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.kirikkale-bld.gov.tr>

<http://en.wikipedia.org/wiki/K%C4%B1r%C4%B1kkale>

<http://data.worldbank.org>



# Klaipėda, Lithuania



Population (2012): 187 000

Population density: *not available*

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV **Phase V**

Twin cities with, since:

- Mannheim, Germany, 1915/2000
- Debrecen, Hungary, 1970/1989
- Kuji, Japan, 1989
- Kariskrona, Sweden, 1989
- Lübeck, Germany, 1990
- Cleveland, OH, United States, 1992
- Cheropovets, Russian Federation, 1992
- Gdynia, Poland, 1993
- Rugen, Germany, 1993
- Kaliningrad, Russian Federation, 1993
- Kotka, Finland, 1994
- Køge, Denmark, 1995
- North Tyneside, United Kingdom, 1995
- Leipaja, Latvia, 1997
- Mogilev, Belarus, 1997
- Szczecin, Poland, 1997
- Leipzig, Germany, 2002
- Odessa, Ukraine, 2004
- Qingdao, China, 2004
- Merida, Bolivarian Republic of Venezuela, 2010

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 12.5 (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 82 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 13.1 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.klaipeda.lt>  
<http://en.wikipedia.org/wiki/Klaipeda>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Kocaeli, Turkey



**Population (2012):** 1.68 million  
**Population density:** 478 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



**Twin cities with, since:**

- State of Maryland, United States, 2011
- Amsterdam, Netherlands, 2011
- Ulsan, Republic of Korea, 2012
- Kassel, Germany, 2012
- Székesfehérvár, Hungary, 2011

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **4.3** (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: **96** (2012)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **555** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **17** (2014)

Green space to which the public has access – km<sup>2</sup>: **17** (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **26** (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **20** (2014)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **10.1** (2013)

**Median, WHO European Region (2011)**

**Median, members of the WHO European Healthy Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.kocaeli.bel.tr>  
<http://en.wikipedia.org/wiki/%C4%Bozmit>  
<http://data.worldbank.org>



# Kuopio, Finland



**Population (2012):** 106 000  
**Population density:** 46 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Győr, Hungary
- Minneapolis, MN, United States
- Winnipeg, Canada
- Jönköping, Sweden
- Trabzon, Turkey
- Svendborg, Denmark
- Pitkyaranta, Russian Federation
- Pskov, Russian Federation
- Castrop-Rauxel, Germany
- Bodø, Norway
- Gera, Germany
- Besançon, France
- Opole, Poland
- Craiova, Romania
- Shanghai Pudong, China

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.5 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 11 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 3 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 96 (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 60 (2011)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 225 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 8 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 10.4 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.kuopio.fi>

<http://www.kuopio.fi/web/english>

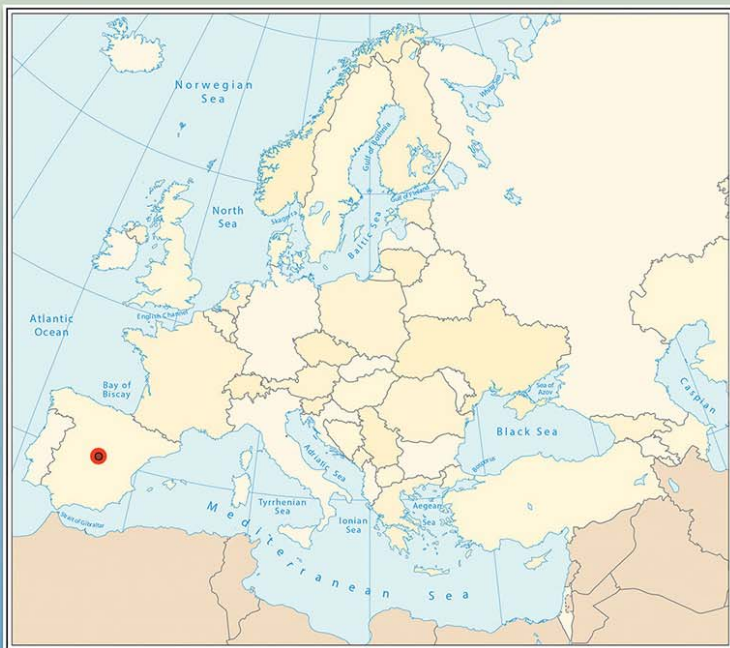
<http://en.wikipedia.org/wiki/Kuopio>

<http://data.worldbank.org>

<http://epp.eurostat.ec.europa.eu>

<http://www.kuopio.fi/web/kaupunkitieto/tilastotieto>

# Leganes, Spain



Population (2012): 184 000  
 Population density: 4328 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Egaleo, Greece
- Somoto, Nicaragua
- Arroyo Naranjo, Cuba
- Conchali, Chile
- Papel Pampa, Plurinational State of Bolivia
- La Guera, Morocco
- Bethlehem, West Bank and Gaza Strip
- Maraca, Ecuador
- Huzhou, China
- Taguist, Morocco

## Core data

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
<b>Health indicator</b>		
<b>Mortality</b>		
Crude mortality per 1000 inhabitants: <i>not available</i>	8.8	9.3
<b>Environmental indicators</b>		
<b>Air quality</b>		
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup> : <i>not available</i>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup> : <i>not available</i>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	Not available	17
<b>Water quality</b>		
Percentage of water pollutants removed from sewage produced: <i>not available</i>	100	96
<b>Waste</b>		
Municipal waste generated (domestic and commercial), in thousands of tonnes: <i>not available</i>	66	211
<b>Green space in cities</b>		
Surface area of green spaces in the city – km <sup>2</sup> : <i>not available</i>	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
<b>Healthy transport</b>		
Length of cycling network (dedicated cycle paths and lanes) – km: <i>not available</i>	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): 12 (2008)	15	14
<b>Social indicator</b>		
<b>Unemployment</b>		
Unemployed people as % of the economically active population: 21.1 (2011)	9.4	10.5

Further information: <http://en.wikipedia.org/wiki/Legan%C3%A9s>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Liège, Belgium



**Population (2012):** 1.04 million  
**Population density:** 2800 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Aachen, Germany
- Cologne, Germany
- Esch-sur-Alzette, Luxembourg
- Lille, France
- Krakow, Poland
- Lubumbashi, Democratic Republic of the Congo
- Maastricht, Netherlands
- Nancy, France
- Plzen, Czech Republic
- Porto, Portugal
- Rotterdam, Netherlands
- Saint-Louis, Senegal
- Szeged, Hungary
- Tangier, Morocco
- Turin, Italy
- Volgograd, Russian Federation

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **11.8** (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **12** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **38** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **38** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: **100** (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **137** (2011) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **71** (2008)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **8.43** (2011)

### Social indicator

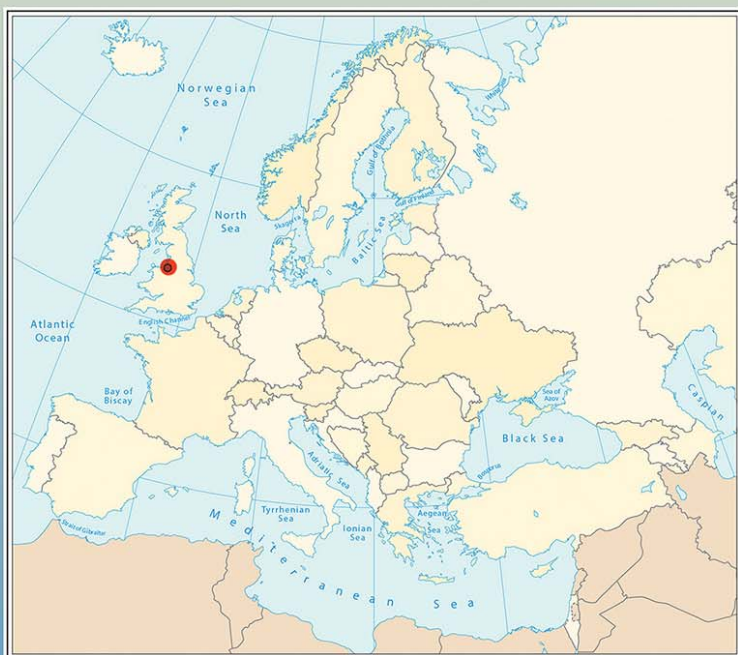
#### Unemployment

Unemployed people as % of the economically active population: **14.8** (2011)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	Not available	17
Percentage of water pollutants removed from sewage produced	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes	66	211
Surface area of green spaces in the city – km <sup>2</sup>	Not available	34
Green space to which the public has access – km <sup>2</sup>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram)	15	14
Unemployed people as % of the economically active population	9.4	10.5

**Further information:** <http://en.wikipedia.org/wiki/Li%C3%A8ge>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Liverpool, United Kingdom



**Population (2012):** 470 000  
**Population density:** 4200 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



**Twin cities with, since:**

- Cologne, Germany, 1952
- New Orleans, LA, United States, 1972
- Dublin, Ireland, 1997
- Odessa, Ukraine, 1956
- Shanghai, China, 1999
- Rio de Janeiro, Brazil, 2004

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.1** (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **4** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **8** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **8** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): **14** (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **11.8** (2012)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://liverpool.gov.uk>  
<http://www.ons.gov.uk>  
<http://en.wikipedia.org/wiki/Liverpool>  
<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Ljubljana, Slovenia



Population (2012): 268 000

Population density: 123 per km<sup>2</sup>

Economy: *decline* – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Athens, Greece, 2000
- Belgrade, Serbia, 2010
- Bratislava, Slovakia, 1967
- Brussels, Belgium, 2004
- Chemnitz, Germany, 1966
- Chengdu, China, 1981
- Cleveland, OH, United States
- Leverkusen, Germany, 1979
- Graz, Austria, 2001
- Moscow, Russian Federation, 2001
- Nottingham, United Kingdom
- Parma, Italy, 1964
- Pesaro, Italy, 1964
- Ploce, Croatia, 1982
- Rijeka, Croatia, 1979
- Sarajevo, Bosnia and Herzegovina, 2002
- Mardin, Turkey, 2003
- Skopje, the former Yugoslav Republic of Macedonia, 2007
- Sousse, Tunisia, 1969
- Tbilisi, Georgia, 1977
- Vienna, Austria, 1999
- Wiesbaden, Germany, 1977
- Zagreb, Croatia, 2001

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 8.1 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 44 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 59 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 59 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 116 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 272 (2008)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 169 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.ljubljana.si/en>  
<http://en.wikipedia.org/wiki/Ljubljana>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Łódź, Poland



**Population (2012):** 750 000  
**Population density:** *not available*  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



## Twin cities with, since:

- Chemnitz, Germany, 1972
- Stuttgart, Germany, 1988
- Lyon, France, 1991
- Vilnius, Lithuania, 1991
- Ivanovo, Russian Federation, 1992
- Kaliningrad, Russian Federation, 2002
- Minsk, Belarus, 1992
- Odessa, Ukraine, 1993
- Tel Aviv, Israel, 1994
- Tianjin, China, 1993
- Rustavi, China, 1994
- Barreiro, Portugal, 1996
- Tampere, Finland, 1996
- Puebla, Mexico, 1996
- Murcia, Spain, 1999
- Örebro, Sweden, 2001
- Lviv, Ukraine, 2003
- Szeged, Hungary, 2008

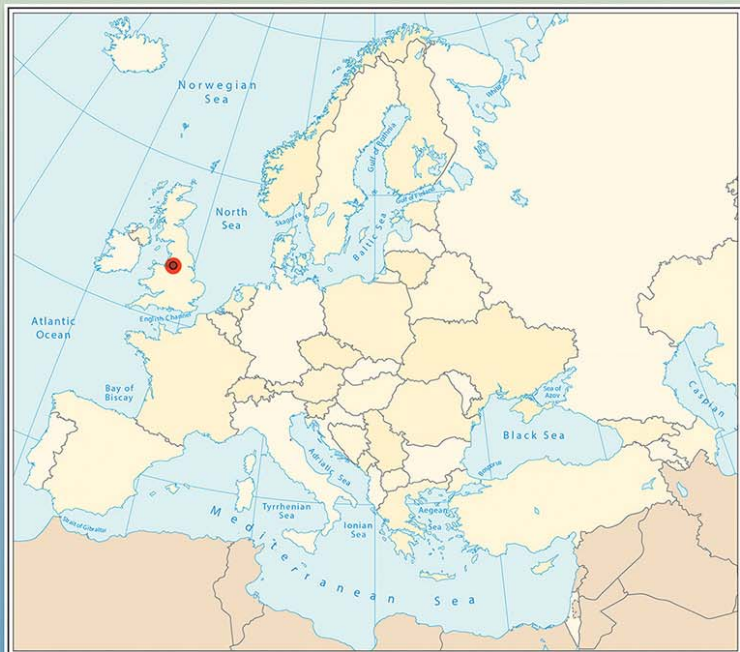
## Core data

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
<p>● <b>Health indicator</b></p> <p><b>Mortality</b></p> <p>Crude mortality per 1000 inhabitants: <b>14.3</b> (2012) <i>estimated</i></p>	8.8	9.3
<p>● <b>Environmental indicators</b></p> <p><b>Air quality</b></p> <p>Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: <b>15</b> (2011)</p> <p>Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: <b>0</b> (2011)</p> <p>Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: <b>76</b> (2011)</p> <p>Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: <b>76</b> (2011)</p> <p><b>Water quality</b></p> <p>Percentage of water pollutants removed from sewage produced: <i>not available</i></p> <p><b>Waste</b></p> <p>Municipal waste generated (domestic and commercial), in thousands of tonnes: <b>211</b> (2012)</p> <p><b>Green space in cities</b></p> <p>Surface area of green spaces in the city – km<sup>2</sup>: <b>28</b> (2008)</p> <p>Green space to which the public has access – km<sup>2</sup>: <b>3340</b> (2008) <i>estimated</i></p> <p><b>Healthy transport</b></p> <p>Length of cycling network (dedicated cycle paths and lanes) – km: <b>99</b> (2014)</p> <p>Percentage of commuting trips by public transport (rail, metro, bus, tram): <i>not available</i></p>	12 0 21 Not available	7 0 20 17
<p>● <b>Social indicator</b></p> <p><b>Unemployment</b></p> <p>Unemployed people as % of the economically active population: <b>11.9</b> (2014)</p>	100 66 Not available Not available 73 15	96 211 34 39 90 14
	9.4	10.5

**Further information:** <http://http://en.wikipedia.org/wiki/%C5%81%C3%B3d%C5%BA>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Manchester, United Kingdom



Population (2012): 460 000

Population density: 4349 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Chemnitz, Germany
- Córdoba, Spain
- Faisalabad, Pakistan
- Kanpur, India
- Los Angeles, CA, United States
- Amsterdam, Netherlands
- Bilwi, Nicaragua
- Rehovot, Israel
- St Petersburg, Russian Federation
- Wuhan, China

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 6.9 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 2 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 10 (2008)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 10 (2008)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 229 (2008)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 11.8 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.manchester.gov.uk>  
<http://en.wikipedia.org/wiki/Manchester>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Milan, Italy



**Population (2012):** 1.3 million  
**Population density:** *not available*  
**Economy:** decline – *stable* – growth  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Chicago, IL, United States, 1962
- Lyon, France, 1967
- Frankfurt, Germany, 1969
- Birmingham, United Kingdom, 1974
- Dakar, Senegal, 1974
- Shanghai, China, 1979
- Osaka, Japan, 1981
- Tel Aviv, Israel, 1997
- Bethlehem, West Bank and Gaza Strip, 2000
- Toronto, Canada, 2003
- Krakow, Poland, 2003
- Melbourne, Australia, 2004
- Guadalajara, Mexico, 2008
- Dubai, United Arab Emirates, 2010

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **10.1** (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **61** (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **35** (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **81** (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **77** (2010)

#### Water quality

Percentage of water pollutants removed from sewage produced: **74** (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **666** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: **22** (2013)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **160** (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **7.7** (2013)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://en.wikipedia.org/wiki/Milan>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Modena, Italy



Population (2012): 183 000  
 Population density: 1000 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV **Phase V**

Twin cities with, since:

- Almaty, Kazakhstan
- Benxi, China
- Highland Park, IL, United States
- Linz, Austria
- Londrina, Brazil
- Novi Sad, Serbia
- St. Paul, MN, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 10.9 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 79 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 1 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 80 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 80 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 56 (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 129 (2010)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.comune.modena.it>  
<http://en.wikipedia.org/wiki/Modena>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Montijo, Portugal



Population (2012): 41 000  
 Population density: 14 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

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96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [http://en.wikipedia.org/wiki/Montijo,\\_Spain](http://en.wikipedia.org/wiki/Montijo,_Spain)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Nancy, France



Population (2014): 260 000  
 Population density: 7000 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 21 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 8 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 8 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 136 (2009) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 13.6 (2010)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

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21

20

Not available

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96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [http://en.wikipedia.org/wiki/Nancy,\\_France](http://en.wikipedia.org/wiki/Nancy,_France)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Nantes, France



Population (2012): 290 000  
 Population density: 4400 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 188 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 9 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 9 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 307 (2009) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 11.2 (2010)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

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0

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21

20

Not available

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96

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211

Not available

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Not available

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14

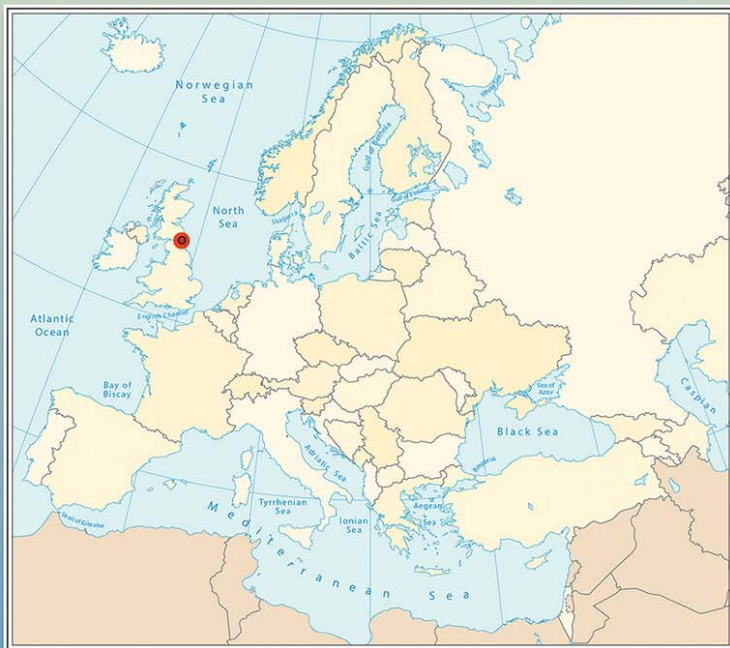
9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Nantes>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Newcastle, United Kingdom



Population (2012): 272 000  
 Population density: *not available*  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Atlanta, GA, United States
- Bergen, Norway
- Gelsenkirchen, Germany
- Groningen, Netherlands
- Halfa, Israel
- Nancy, France
- Newcastle, Australia

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 8.5 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 6 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 7 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 147 (2011-2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 68 (2010)

Green space to which the public has access – km<sup>2</sup>: 17 (2010)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 100 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): 14 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 11 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [www.knownewcastle.org.uk](http://www.knownewcastle.org.uk) <https://www.newcastle.gov.uk>  
[http://en.wikipedia.org/wiki/Newcastle\\_upon\\_Tyne](http://en.wikipedia.org/wiki/Newcastle_upon_Tyne)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Nilüfer, Turkey



Population (2012): 270 000

Population density: 690 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Chalette, France
- Nicolayev, Ukraine
- Braila, Romania
- Nizami, Azerbaijan
- Tokai, Japan
- Havana, Cuba
- Umeå, Sweden
- Ardino, Bulgaria
- Keara, Latvia
- Sirdenya, Kazakhstan
- Peja, Kosovo (in accordance with Security Council resolution 1244 (1999))

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.nilufercity.eu>  
[http://en.wikipedia.org/wiki/Nil%C3%BCfer,\\_Bursa](http://en.wikipedia.org/wiki/Nil%C3%BCfer,_Bursa)  
<http://data.worldbank.org>



# Novi Sad, Serbia



**Population (2012):** 360 000  
**Population density:** 2183 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV **Phase V**

## Twin cities with, since:

- Banja Luka, Bosnia and Herzegovina
- Budva, Montenegro
- Changchun, China
- Dortmund, Germany
- Gomel, Belarus
- Illiopolis, Greece
- Modena, Italy
- Nizhny Novgorod, Russian Federation
- Norwich, United Kingdom
- Pécs, Hungary
- Timisoara, Romania

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **11.3** (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **20** (2012)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2012)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **32** (2012)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **0** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **106** (2008)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **33** (2013)

Green space to which the public has access – km<sup>2</sup>: **13** (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **65** (2010)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **8** (2009)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **17.9** (2013)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

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7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

### Further information:

<http://www.novisad.rs/novi-sad-danas>

<http://www.novisad.rs/eng/novi-sad-today>

[http://en.wikipedia.org/wiki/Novi\\_Sad](http://en.wikipedia.org/wiki/Novi_Sad)

<http://www.novisad.rs/gradska-uprava-za-saobra-i-puteve>

[http://www.nsz.gov.rs/live/dokumenti/statisti\\_ki\\_bilteni\\_nsz\\_-\\_2013.\\_godina.cid11155](http://www.nsz.gov.rs/live/dokumenti/statisti_ki_bilteni_nsz_-_2013._godina.cid11155) [www.eko.vojvodina.gov.rs](http://www.eko.vojvodina.gov.rs)

<http://www.novisad.rs/biciklisticke-staze> [http://atisma.home.xs4all.nl/Studija%20zelenih%20i%20rekreativnih%20povrsina\\_print.pdf](http://atisma.home.xs4all.nl/Studija%20zelenih%20i%20rekreativnih%20povrsina_print.pdf)

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Novocheboksarsk, Russian Federation



**Population (2012):** 130 000

**Population density:** *not available*

**Economy:** decline – stable – **growth**

**Healthy city in:**



**Twin cities with, since:**

- Klimovsk, Russian Federation
- Sterlitamak, Russian Federation
- Zatec, Czech Republic

## Core data (Chuvash Region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **13.3** (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.37** (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **4.02** (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **1.78** (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **0.19** (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.04** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **1913** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

**Median all Europe (2011)**

**Median, members of the WHO European Healthy Cities Network**

8.8

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** [http://gov.cap.ru/Default.aspx?gov\\_id=82](http://gov.cap.ru/Default.aspx?gov_id=82)  
<http://en.wikipedia.org/wiki/Novocheboksarsk>  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>



# Novosibirsk, Russian Federation



**Population (2012):** 1.397 million  
**Population density:** 2935 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



**Twin cities with, since:**

- Daejeon, Republic of Korea, 2001
- Changchun, China, 1994
- Minneapolis, MN, United States
- Varna, Bulgaria
- Sapporo, Japan, 1990
- Minsk, Belarus

## Core data (Novosibirsk region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 13.6 (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 49.3 (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 39.7 (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 34.4 (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 42.6 (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.14 (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: 3313 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median all Europe (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality		
Sulfur dioxide (SO <sub>2</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 49.3 (2012)	Not available	Not available
Nitrogen oxides (NO <sub>x</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 39.7 (2012)	Not available	Not available
Carbon dioxide (CO <sub>2</sub> ) emitted from fossil-fuel combustion in thousands of tonnes per year: 34.4 (2012)	Not available	Not available
Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 42.6 (2012)	Not available	Not available
Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.14 (2012)	Not available	Not available
Water quality		
Percentage of water pollutants removed from sewage produced: <i>not available</i>	100	96
Waste		
Municipal waste collected in thousands of m <sup>3</sup> : 3313 (2012)	66	Not available
Green space in cities		
Surface area of green spaces in the city – km <sup>2</sup> : <i>not available</i>	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
Healthy transport		
Length of cycling network (dedicated cycle paths and lanes) – km: <i>not available</i>	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): <i>not available</i>	15	14
Social indicator		
Unemployment		
Unemployed people as % of the economically active population: <i>not available</i>	9.4	10.5

**Further information:** <http://www.novo-sibirsk.ru>  
<http://en.wikipedia.org/wiki/Novosibirsk>  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>

# Oeiras, Portugal



Population (2012): 171 000  
 Population density: not available  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [http://en.wikipedia.org/wiki/Oeiras\\_Municipality,\\_Portugal](http://en.wikipedia.org/wiki/Oeiras_Municipality,_Portugal)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Østfold County, Norway



Population (2014): 285 000

Population density: 66 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Bohuslän, Sweden

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.3 (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 2467 (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 3.8 (2014)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.ostfold-f.kommune.no>  
<http://en.wikipedia.org/wiki/Ostfold>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Ourense, Spain



Population (2012): 336 000  
 Population density: not available  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 10.2 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 16.7 (2012) *estimated*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Ourense>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Padua, Italy



Population (2012): 212 000

Population density: 2300 per km<sup>2</sup>

Economy: decline – *stable* – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Nancy, France, 1964
- Freiburg, Germany, 1967
- Boston, MA, United States, 1983
- Handan, China, 1988
- Iasi, Romania, 1995
- Beira, Mozambique, 1995
- Coimbra, Portugal, 1998
- Cagliari, Italy, 2002
- Zadar, Croatia, 2003

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 12.3 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 104 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 93 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 93 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 46 (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 151 (2010)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Padua>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Pärnu, Estonia



Population (2012): 44 000

Population density: *not available*

Economy: decline – stable – **growth**

Healthy city in:



Twin cities with, since:

- Siauliai, Lithuania
- Jelgava, Latvia
- Gran, Norway
- Helsingborg, Sweden
- Södertälje, Sweden
- Oskarhamn, Sweden
- Vaasa, Finland
- Helsingør, Denmark
- Siófok, Hungary
- Ocean City, MD, United States
- Portsmouth, NH, United States
- Sochi, Russian Federation

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
	8.8	9.3
	12	7
	0	0
	21	20
	Not available	17
	100	96
	66	211
	Not available	34
	Not available	39
	73	90
	15	14
	9.4	10.5

Further information: <http://www.parnu.ee/lang/eng>  
<http://en.wikipedia.org/wiki/Parnu>  
<http://data.worldbank.org>



# Pécs, Hungary



Population (2012): 158 000  
 Population density: *not available*  
 Economy: decline – **stable** – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Arad, Romania
- Cluj-Napoca, Romania
- Fellbach, Germany
- Graz, Austria
- Kutahya, Turkey
- Lahti, Finland
- Dijon, France
- Grenoble, France
- Lyon, France
- Novi Sad, Serbia
- Olomouc, Czech Republic
- Osijek, Croatia
- Seattle, WA, United States
- Silven, Bulgaria
- Terracina, Italy
- Tucson, AZ, United States
- Tuzla, Bosnia and Herzegovina

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 13.1 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 22 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 14 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 48 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 11 (2008)

Green space to which the public has access – km<sup>2</sup>: 1058 (2008)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 5 (2008) *estimated*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 13 (2011)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	Not available	17
Percentage of water pollutants removed from sewage produced	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes	66	211
Surface area of green spaces in the city – km <sup>2</sup>	Not available	34
Green space to which the public has access – km <sup>2</sup>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram)	15	14
Unemployed people as % of the economically active population	9.4	10.5

Further information: <http://en.wikipedia.org/wiki/P%C3%A9cs>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Poznań, Poland



**Population (2012):** 560 000  
**Population density:** 2100 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V  
**Twin cities with, since:**

- Assen, Netherlands, 1992
- Brno, Czech Republic, 1966
- Kharkiv, Ukraine, 1998
- Győr, Hungary, 2008
- Hannover, Germany, 1979
- Nottinghamshire, United Kingdom, 1994
- Jyväskylä, Finland, 1979
- Kutaisi, Georgia
- Nablus, West Bank and Gaza Strip
- Pozuelo de Alarcón, Spain
- Ra'anana, Israel, 2010
- Rennes, France, 1998
- Shenzhen, China, 1993
- Toledo, OH, United States, 1991
- Bay City, MI, United States, 1997

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **10.3** (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **12** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **4** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **88** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **88** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **204** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **38** (2008)

Green space to which the public has access – km<sup>2</sup>: **2981** (2008)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **105** (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality (O <sub>3</sub> )	12	7
Air quality (NO <sub>2</sub> )	0	0
Air quality (PM <sub>10</sub> )	21	20
Air quality (PM <sub>2.5</sub> )	Not available	17
Water quality	100	96
Waste	66	211
Green space (surface area)	Not available	34
Green space (public access)	Not available	39
Healthy transport (cycling network)	73	90
Healthy transport (public transport)	15	14
Social indicator (unemployment)	9.4	10.5

**Further information:** <http://www.poznan.pl/mim/main/enot-availability-administration-of-the-city-of-poznan,p,8270.html>

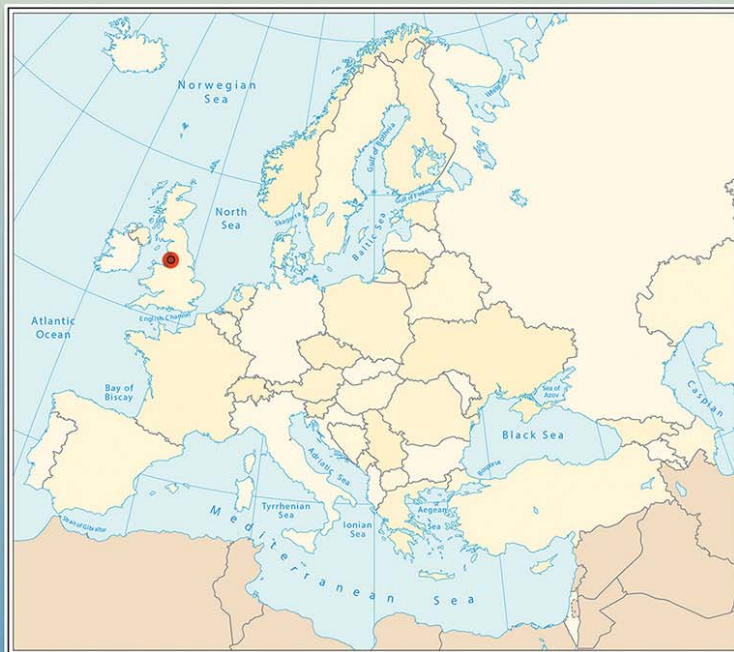
<http://en.wikipedia.org/wiki/Pozna%C5%84>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Preston, United Kingdom



**Population (2012):** 141 000

**Population density:** 949 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



Phase I Phase II Phase III Phase IV **Phase V**

**Twin cities with, since:**

- Almelo, Netherlands
- Kalisz, Poland
- Nimes, France
- Recklinghausen, Germany

## Core data

### ● Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **8.0** (2011)

### ● Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **0** (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **6** (2008)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **17** (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **52** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **8** (2010)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **55** (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **14** (2011)

### ● Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **10.2** (2011)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://www.preston.gov.uk>

<http://www.lancashire.gov.uk/corporate/web/?siteid=6120&pageid=41424>

<http://en.wikipedia.org/wiki/Preston>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Ptolemaidas, Greece



Population (2012): 40 000

Population density: 171 per km<sup>2</sup>

Economy: *decline* – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Enkomi, Cyprus
- Most, Czech Republic

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://en.wikipedia.org/wiki/Ptolemaida>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Rennes, France



**Population (2012):** 210 000

**Population density:** 4100 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



**Phase I Phase II Phase III Phase IV Phase V**

**Twin cities with, since:**

- Exeter, United Kingdom, 1956
- Rochester, NY, United States, 1958
- Erlangen, Germany, 1964
- Brno, Czech Republic, 1965
- Shendai, Japan, 1967
- Leuven, Belgium, 1980
- Setif, Algeria, 1982
- Cork, Ireland, 1982
- Almaty, Kazakhstan, 1991
- Dogon, Mali, 1995
- Poznan, Poland, 1998
- Sibiu, Romania, 1999
- Jinan, China, 2002

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 5 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 5 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 5 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **188** (2009) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **10.4** (2010)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality (O <sub>3</sub> )	12	7
Air quality (NO <sub>2</sub> )	0	0
Air quality (PM <sub>10</sub> )	21	20
Air quality (PM <sub>2.5</sub> )	Not available	17
Water quality	100	96
Waste	66	211
Green space (surface area)	Not available	34
Green space (public access)	Not available	39
Healthy transport (cycling network)	73	90
Healthy transport (public transport)	15	14
Social indicator (unemployment)	9.4	10.5

**Further information:** <http://en.wikipedia.org/wiki/Rennes>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Rijeka, Croatia



Population (2012): 144 000  
 Population density: 2923 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Twin cities with, since:

- Bitola, the former Yugoslav Republic of Macedonia
- Faenza, Italy
- Este, Italy
- Genoa, Italy
- Rostock, Germany
- Ljubljana, Slovenia
- Kawasaki, Japan
- Yalta, Ukraine
- Cetinje, Montenegro
- Qingdao, China
- Pittsburgh, PA, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.zdravi-gradovi.com.hr/home-eng/who-we-are.aspx>  
<http://en.wikipedia.org/wiki/Rijeka>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Rotterdam, Netherlands



Population (2012): 600 000  
 Population density: 2969 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Baltimore, MD, United States, 1985
- Burgas, Bulgaria, 1976
- Constanta, Romania, 1976
- Dresden, Germany, 1988
- Esch-sur-Alzette, Luxembourg, 1958
- Gdansk, Poland, 1977
- Havana, Cuba, 1983
- Cologne, Germany, 1958
- Lille, France, 1958
- Liège, Belgium, 1958
- Shanghai, China, 1979
- St Petersburg, Russian Federation, 1984
- Turin, Italy, 1958

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.1 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 1 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 21 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 21 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2010)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 319 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 10.6 (2012)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	Not available	17
Percentage of water pollutants removed from sewage produced	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes	66	211
Surface area of green spaces in the city – km <sup>2</sup>	Not available	34
Green space to which the public has access – km <sup>2</sup>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram)	15	14
Unemployed people as % of the economically active population	9.4	10.5

Further information: <http://www.rotterdam.nl>  
<http://en.wikipedia.org/wiki/Rotterdam>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Samara, Russian Federation



**Population (2012):** 1.14 million  
**Population density:** 2151 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



## Twin cities with, since:

- Zhengzhou, China
- St. Louis, MO, United States
- Stara Zagora, Bulgaria
- Stuttgart, Germany
- Denizli, Turkey
- Koper, Slovenia

## Core data (Samara region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 13.9 (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 16.5 (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 19.7 (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 10.5 (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 1.12 (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.21 (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: 12 099 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

### Median all Europe (2011)

8.8

### Median, members of the WHO European Healthy Cities Network

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

**Further information:** <http://city.samara.ru>  
[http://en.wikipedia.org/wiki/Samara,\\_Russia](http://en.wikipedia.org/wiki/Samara,_Russia)  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>



# San Fernando, Spain



Population (2012): 40 000

Population density: 3100 per km<sup>2</sup>

Economy: *decline* – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Montigny-le-Bretonneux, France
- Badalona, Spain

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): 12 (2008)

### Social indicator

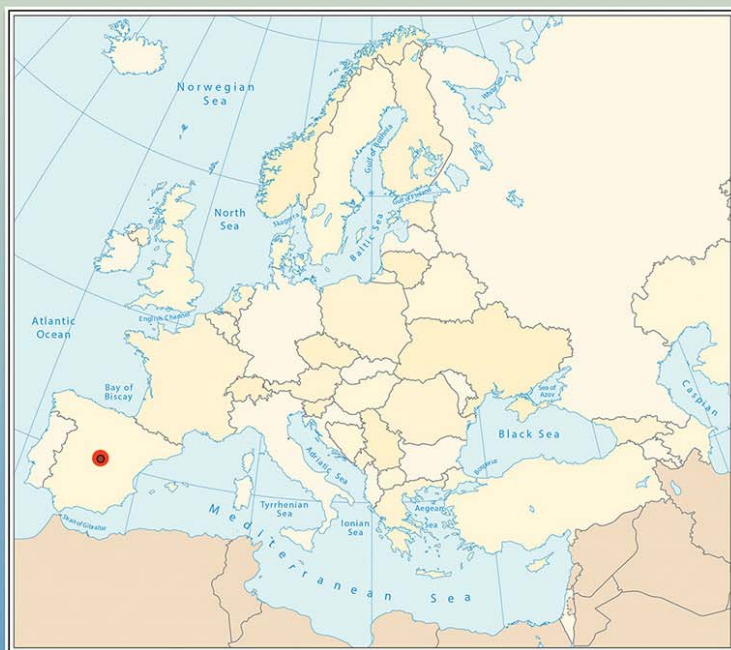
#### Unemployment

Unemployed people as % of the economically active population: 23.9 (2011)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Mortality	8.8	9.3
Air quality		
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup> : <i>not available</i>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup> : <i>not available</i>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	Not available	17
Water quality		
Percentage of water pollutants removed from sewage produced: <i>not available</i>	100	96
Waste		
Municipal waste generated (domestic and commercial), in thousands of tonnes: <i>not available</i>	66	211
Green space in cities		
Surface area of green spaces in the city – km <sup>2</sup> : <i>not available</i>	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
Healthy transport		
Length of cycling network (dedicated cycle paths and lanes) – km: <i>not available</i>	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): 12 (2008)	15	14
Social indicator		
Unemployment		
Unemployed people as % of the economically active population: 23.9 (2011)	9.4	10.5

Further information: [http://en.wikipedia.org/wiki/San\\_Fernando,\\_C%C3%A1diz](http://en.wikipedia.org/wiki/San_Fernando,_C%C3%A1diz)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# San Sebastián, Spain



Population (2012): 80 000  
 Population density: 3686 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Daira de Bojador, refugee camps in Algeria
- Marugame, Japan
- Plymouth, United Kingdom
- Trento, Italy
- Wiesbaden, Germany
- Reno, NV, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 4.4 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 12.7 (2011) *estimated*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [http://en.wikipedia.org/wiki/San\\_Sebasti%C3%A1n](http://en.wikipedia.org/wiki/San_Sebasti%C3%A1n)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Sandnes, Norway



Population (2014): 72 000  
 Population density: 237 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Nyborg, Denmark
- Pernio, Finland
- Mariestad, Sweden

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 5.6 (2014)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 12 (2014)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2014)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 0 (2014)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 0 (2014)

#### Water quality

Percentage of water pollutants removed from sewage produced: 76 (2014)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 22 (2014)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 6 (2014)

Green space to which the public has access – km<sup>2</sup>: 170 (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 130 (2014)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 2.1 (2014)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.sandnes.kommune.no>  
<http://en.wikipedia.org/wiki/Brighton>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Sant Andreu de la Barca, Spain



Population (2012): 27 000

Population density: 4200 per km<sup>2</sup>

Economy: *decline* – stable – growth

Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [http://en.wikipedia.org/wiki/Sant\\_Andreu\\_de\\_la\\_Barca](http://en.wikipedia.org/wiki/Sant_Andreu_de_la_Barca)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Sarajevo, Bosnia and Herzegovina



Population (2012): 311 000

Population density: *not available*

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Barcelona, Spain
- Zagreb, Croatia
- Ljubljana, Slovenia
- Salt Lake City, UT, United States
- Cairo, Egypt
- Dubrovnik, Croatia
- Lillehammer, Norway
- Skopje, the former Yugoslav Republic of Macedonia
- Konya, Turkey

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: total deaths: 4704 (2010)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: total number of people unemployed: 8023 (2012)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.sarajevo.ba/en>  
<http://en.wikipedia.org/wiki/Sarajevo>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Seixal, Portugal



Population (2012): 180 000  
 Population density: 1725 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 7.5 (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 14 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 75 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 75 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 72

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): 14 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 14.1 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

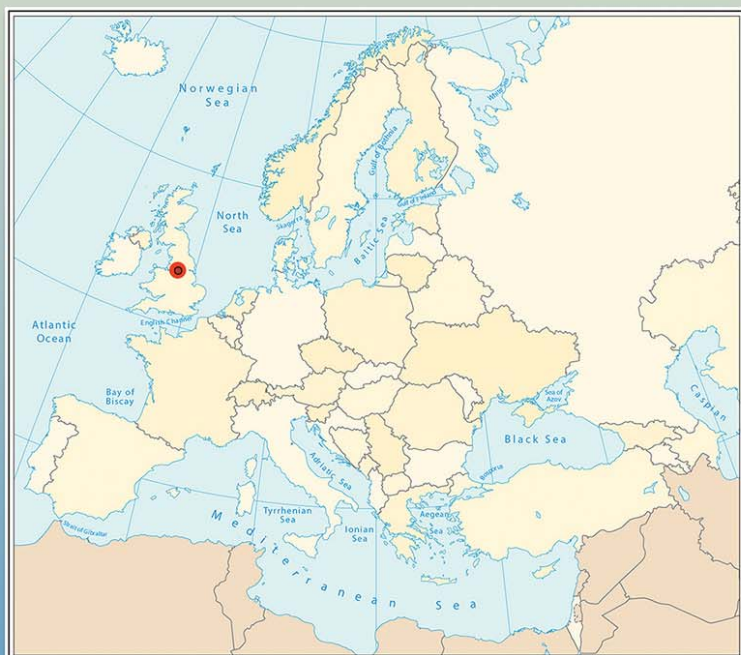
9.4

10.5

Further information: [http://en.wikipedia.org/wiki/Seixal\\_Municipality](http://en.wikipedia.org/wiki/Seixal_Municipality)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Sheffield, United Kingdom



Population (2012): 530 000

Population density: 1500 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Anshan, China
- Bochum, Germany
- Donetsk, Ukraine
- Estelí, Nicaragua
- Kawasaki, Japan
- Kitwe, Zambia
- Pittsburgh, PA, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 8.5 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 19 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 19 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 10 (2011)

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
Crude mortality per 1000 inhabitants	8.8	9.3
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup>	Not available	17
Percentage of water pollutants removed from sewage produced	100	96
Municipal waste generated (domestic and commercial), in thousands of tonnes	66	211
Surface area of green spaces in the city – km <sup>2</sup>	Not available	34
Green space to which the public has access – km <sup>2</sup>	Not available	39
Length of cycling network (dedicated cycle paths and lanes) – km	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram)	15	14
Unemployed people as % of the economically active population	9.4	10.5

Further information: <http://www.sheffield.gov.uk>  
<http://en.wikipedia.org/wiki/Sheffield>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# St Petersburg, Russian Federation



**Population (2012):** 5.0 million  
**Population density:** 3390 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



## Twin cities with, since:

- St. Petersburg, FL, United States
- Antwerp, Belgium, 1958
- Aarhus, Denmark, 1989
- Bangkok, Thailand, 1997
- Barcelona, Spain, 1984
- Bethlehem, West Bank and Gaza Strip, 2003
- Bordeaux, France, 1991
- Cape Town, South Africa, 2001
- Colombo, Sri Lanka, 1997
- Chengdu, China, 1998
- Daegu, Republic of Korea, 1997
- Dresden, Germany, 1961
- Santa Cruz de Tenerife, Spain
- Edinburgh, United Kingdom, 1995
- Gdansk, Poland, 2001
- Graz, Austria, 2001
- Göteborg, Sweden, 1962
- Hamburg, Germany, 1957
- Havana, Cuba, 2000
- Helsinki, Finland, 1993
- Ho Chi Minh City, Viet Nam, 1977
- Isfahan, Islamic Republic of Iran, 1999
- Istanbul, Turkey, 1990
- Kotka, Finland, 1997
- Le Havre, France, 1965
- Los Angeles, CA, United States, 1990
- Lyon, France, 1993
- Manchester, United Kingdom, 1956
- Melbourne, Australia, 1989

## Core data (St Petersburg region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **11.8** (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **5.1** (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **25.8** (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **16.2** (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **0.92** (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.05** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **8794** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **1.1** (2012)

### Median all Europe (2011)

8.8

Not available

Not available

Not available

Not available

Not available

100

66

Not available

Not available

73

15

9.4

### Median, members of the WHO European Healthy Cities Network

9.3

Not available

Not available

Not available

Not available

Not available

96

Not available

34

39

90

14

10.5

Further information: <http://eng.gov.spb.ru/gov>

<http://petrostat.gks.ru>

<http://knoema.com/atlas/Russian-Federation>

<http://data.worldbank.org>

[http://en.wikipedia.org/wiki/Saint\\_Petersburg](http://en.wikipedia.org/wiki/Saint_Petersburg)



# Stavropol, Russian Federation



Population (2012): 366 000

Population density: 1440 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Des Moines, IA, United States
- Beziers, France
- Pazardzhik, Bulgaria
- Temuco, Chile
- Yerevan, Armenia

## Core data (Stavropol region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 12 (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 4.1 (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 15.3 (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: 5.6 (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: 0.29 (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: 0.1 (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: 3877 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median all Europe  
(2011)

8.8

Median, members  
of the WHO  
European Healthy  
Cities Network

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

96

66

Not available

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://stavropol.stavkray.ru>  
<http://en.wikipedia.org/wiki/Stavropol>  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>

# Stockholm, Sweden



**Population (2012):** 1.9 million

**Population density:** 330 per km<sup>2</sup>

**Economy:** decline – stable – **growth**

**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Tirana, Albania
- Warsaw, Poland
- Kyiv, Ukraine
- Tunis, Tunisia
- Cali, Colombia
- Sarajevo, Bosnia and Herzegovina, 1997
- St Petersburg, Russian Federation, 1992
- Istanbul, Turkey
- Podgorica, Montenegro
- Reykjavik, Iceland
- Riga, Latvia
- Khemisset, Morocco

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 8 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 0 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 1 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 1 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 1 (2011) *estimated*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 439 (2011) *estimated*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 761 (2011) *estimated*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 6.5 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

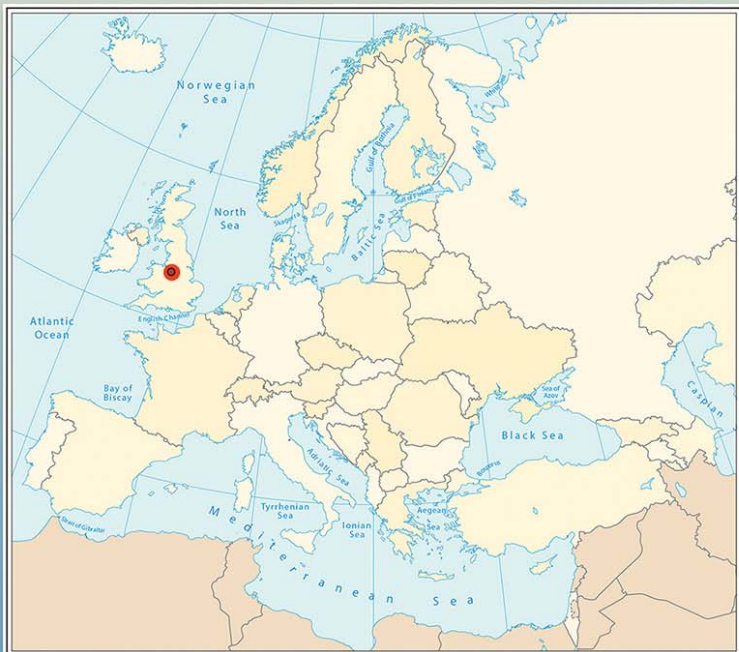
9.4

10.5

**Further information:** <http://www.stockholm.se>  
[http://en.wikipedia.org/wiki/Stockholm\\_Municipality](http://en.wikipedia.org/wiki/Stockholm_Municipality)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Stoke-on-Trent, United Kingdom



Population (2012): 239 000  
 Population density: 2565 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Erlangen, Germany

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.3 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 13 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 13 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 113 (2012-2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 93 (2010)

Green space to which the public has access – km<sup>2</sup>: 17 (2010)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): 9 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

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Not available

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Not available

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Not available

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9.4

10.5

Further information: <http://www.stoke.gov.uk>

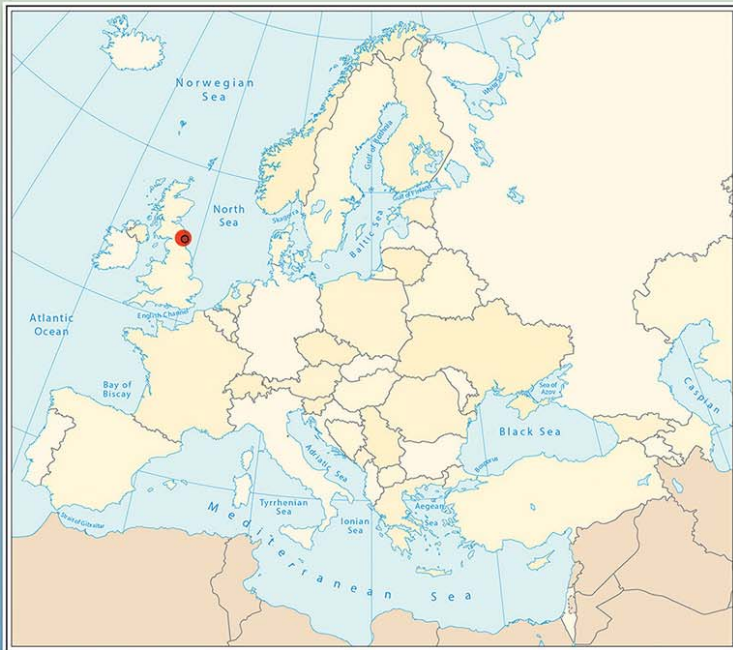
<http://www.staffs.ac.uk>

<http://en.wikipedia.org/wiki/Stoke-on-Trent>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Sunderland, United Kingdom



Population (2012): 280 000

Population density: 2003 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Twin cities with, since:

- Essen, Germany
- Saint-Nazaire, France
- Washington, DC, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.9 (2011)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 2 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 13 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

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Not available

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Not available

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Further information: <http://www.sunderland.gov.uk>  
[http://en.wikipedia.org/wiki/Sunderland,\\_Tyne\\_and\\_Wear](http://en.wikipedia.org/wiki/Sunderland,_Tyne_and_Wear)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Swansea, United Kingdom



Population (2012): 230 000  
 Population density: 601 per km<sup>2</sup>  
 Economy: decline – stable – **growth**  
 Healthy city in:



Phase I Phase II Phase III Phase IV **Phase V**

Twin cities with, since:

- Mannheim, Germany
- Sinop, Turkey
- Pau, France
- Cork, Ireland
- Bydgoszcz, Poland

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.9** (2010) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **9.7** (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

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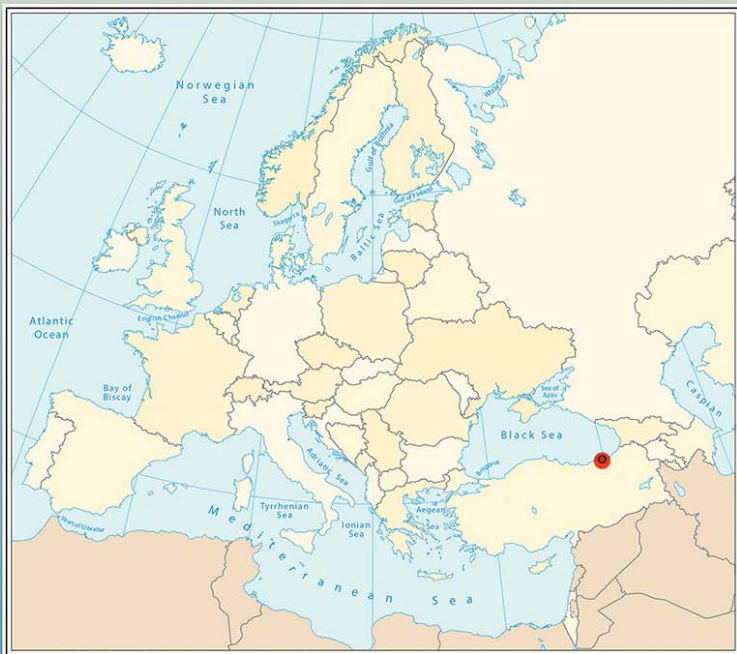
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9.4

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Further information: <http://www.swansea.gov.uk>  
<http://en.wikipedia.org/wiki/Swansea>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Trabzon, Turkey



Population (2012): 229 000

Population density: 1700 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Amasya, Turkey
- Batumi, Georgia, 2000
- Dortmund, Germany, 2013
- Kuopio, Finland, 1977
- Kaunas, Lithuania, 1987
- Purwakarta, Indonesia, 2011
- Rasht, Islamic Republic of Iran, 2000
- Rizhao, China, 1997
- Sochi, Russian Federation, 1993
- Szigetvar, Hungary, 1998
- Zanzan, Islamic Republic of Iran, 2001
- Chicago, IL, United States

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

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Not available

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Further information: <http://www.trabzon.bel.tr/default1.htm>

<http://en.wikipedia.org/wiki/Trabzon>

<http://data.worldbank.org>



# Turin, Italy



Population (2012): 910 000  
 Population density: 7000 per km<sup>2</sup>  
 Economy: decline – **stable** – growth  
 Healthy city in:



## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 11.2 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 31 (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 4 (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 105 (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 105 (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: 71 (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 497 (2010)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: 1808 (2008)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 120 (2008)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

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Not available

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Not available

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10.5

Further information: <http://en.wikipedia.org/wiki/Turin>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



**Population (2012):** 180 000

**Population density:** 741 per km<sup>2</sup>

**Economy:** decline – stable – *growth*

**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

**Twin cities with, since:**

- Gothenburg, Sweden, 1946
- Aarhus, Denmark, 1946
- Bergen, Norway, 1946
- St Petersburg, Russian Federation, 1953
- Gdansk, Poland, 1958
- Rostock, Germany, 1963
- Varna, Bulgaria, 1963
- Constanta, Romania, 1963
- Cologne, Germany, 1967
- Szeged, Hungary, 1971
- Bratislava, Slovakia, 1976
- Florence, Italy, 1992
- Tianjin, China, 2000
- Tartu, Estonia

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **10.3** (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **0** (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **8** (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **0** (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: **98** (2008)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **90** (2011)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **31** (2013) (Parks maintained by the city)

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **355** (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **9** (2008)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **12.5** (2011)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

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Not available

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Not available

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Not available

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9.4

10.5

**Further information:** <http://www.turku.fi>

<http://en.wikipedia.org/wiki/Turku>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Udine, Italy



Population (2012): 99 000

Population density: 1800 per km<sup>2</sup>

Economy: decline – **stable** – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Resistencia, Argentina
- Dilijan, Armenia
- Villach, Austria
- Windsor, Canada
- Medellin, Colombia
- Vienne, France
- Esslingen am Neckar, Germany
- Schiedam, Netherlands
- Velenje, Slovenia
- Albacete, Spain
- Norrköping, Sweden
- Neath Port Talbot, Wales, United Kingdom

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 11.6 (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 81 (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 6 (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 15 (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 16 (2013)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: 2 (2012)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 39 (2012)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 7.9 (2012)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

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Not available

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Not available

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9.4

10.5

Further information: Yearly Report 2012 of the Municipality of Udine

<http://en.wikipedia.org/wiki/Udine>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>

# Ulyanovsk, Russian Federation



**Population (2012):** 610 000  
**Population density:** 1937 per km<sup>2</sup>  
**Economy:** decline – stable – *growth*  
**Healthy city in:**



**Twin cities with, since:**  
 • Macon, GA, United States

## Core data (Ulyanovsk region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **14.2** (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.92** (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **3.86** (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **3.5** (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **0.8** (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.01** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **2851** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

**Median all Europe (2011)**

**Median, members of the WHO European Healthy Cities Network**

8.8

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

100

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Not available

Not available

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Not available

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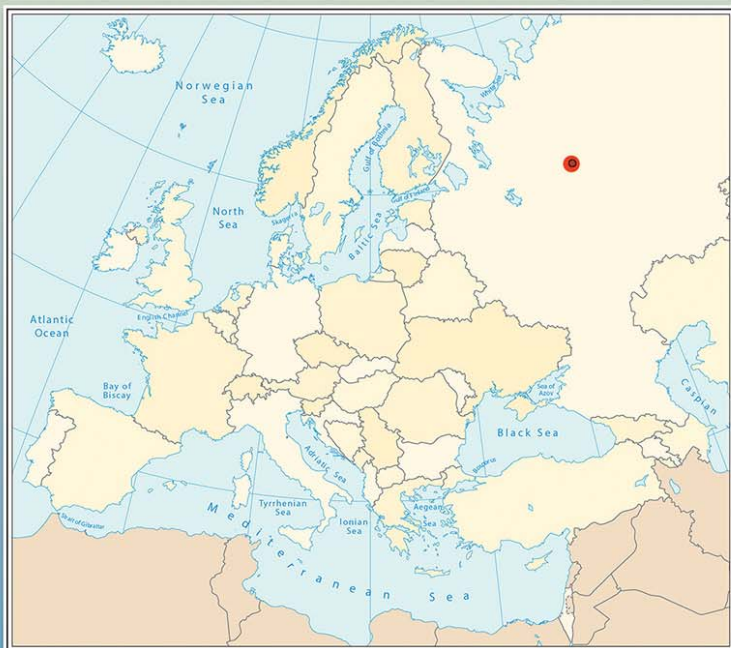
9.4

10.5

**Further information:** <http://www.ulmeria.ru>  
<http://en.wikipedia.org/wiki/Ulyanovsk>  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>



# Veliky Ustyug, Russian Federation



Population (2012): 61 000  
 Population density: *not available*  
 Economy: decline – stable – **growth**  
 Healthy city in:



## Core data (Vologda Region)

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **15.1** (2012)

### Environmental indicators

#### Air quality

Sulfur dioxide (SO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **29.48** (2012)

Nitrogen oxides (NO<sub>x</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **13.24** (2012)

Carbon dioxide (CO<sub>2</sub>) emitted from fossil-fuel combustion in thousands of tonnes per year: **22.17** (2012)

Solids emitted from fossil-fuel combustion in thousands of tonnes per year: **11.19** (2012)

Hydrocarbons (excluding methane) emitted from fossil-fuel combustion in thousands of tonnes per year: **0.03** (2012)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste collected in thousands of m<sup>3</sup>: **1978** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median all Europe  
(2011)

8.8

Median, members  
of the WHO  
European Healthy  
Cities Network

9.3

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

Not available

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Not available

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Not available

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10.5

Further information: <http://www.movustug.ru>  
[http://en.wikipedia.org/wiki/Veliky\\_Ustyug](http://en.wikipedia.org/wiki/Veliky_Ustyug)  
<http://knoema.com/atlas/Russian-Federation>  
<http://data.worldbank.org>

# Venice, Italy



**Population (2012):** 271 000

**Population density:** 639 per km<sup>2</sup>

**Economy:** decline – *stable* – growth

**Healthy city in:**



Phase I Phase II Phase III **Phase IV** Phase V

**Twin cities with, since:**

- Shiraz, Islamic Republic of Iran
- Islamabad, Pakistan, 1960
- Palembang, Indonesia
- Suzhou, China, 1980
- Bangkok, Thailand
- Tallinn, Estonia
- Pereira, Colombia
- Istanbul, Turkey, 1993
- Sarajevo, Bosnia and Herzegovina
- Yerevan, Armenia, 2011
- Banjarmasin, Indonesia
- Aveiro, Portugal, 1998
- Nuremburg, Germany, 1999
- Buenos Aires, Argentina
- Qingdao, China, 2001
- St Petersburg, Russian Federation, 2006
- Thessaloniki, Greece, 2003
- Fort Lauderdale, FL, United States, 2007
- Wolverhampton, United Kingdom
- Most, Czech Republic
- Dubrovnik, Croatia, 2012

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **13.4** (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **45** (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **64** (2013)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **85** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: **94** (2013)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **165** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: **8029** (2013)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **106** (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **8.6** (2013)

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

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Not available

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Not available

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Not available

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**Further information:** <http://www.comune.venezia.it/flex/cm/pages/ServeBLOB.php/L/EN/IDPagina/1>

<http://en.wikipedia.org/wiki/Venice>

<http://epp.eurostat.ec.europa.eu>

<http://data.worldbank.org>



# Viana do Castelo, Portugal



Population (2012): 90 000

Population density: not available

Economy: *decline* – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 9.5 (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 38 (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): 5 (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 12.5 (2011)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

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Not available

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Not available

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Not available

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10.5

Further information: <http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Vienna, Austria



**Population (2012):** 1.8 million  
**Population density:** 4259 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV Phase V

## Twin cities with, since:

- Belgrade, Serbia, 2003
- Bratislava, Slovakia, 1993/2003
- Brno, Czech Republic, 1998
- Budapest, Hungary, 1990
- Istanbul, Turkey, 2010
- Kyiv, Ukraine, 1991
- Moscow, Russian Federation, 1991
- Tel Aviv-Jaffa, Israel, 2005
- Tunis, Tunisia
- Warsaw, Poland, 2001
- Zagreb, Croatia, 1994

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **9.3** (2013)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **26** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **39** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **39** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: **100** (2011)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **1055** (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **189** (2014)

Green space to which the public has access – km<sup>2</sup>: **130** (2014)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **1246** (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): **36** (2011)

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: **8.4** (2013)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

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Not available

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Not available

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14

9.4

10.5

**Further information:** <http://www.statistik.at>  
<http://www.vcoe.at>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

<https://www.wien.gv.at/statistik>  
<http://en.wikipedia.org/wiki/Vienna>



# Villanueva de la Cañada, Spain



Population (2012): 18 000

Population density: 542 per km<sup>2</sup>

Economy: *decline* – stable – growth

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Le Vézinet, France, 2006
- Metepec, Mexico, 1999
- Madaba, Jordan, 2005
- Royston, United Kingdom, 2011

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 3.1 (2012)

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: 1 (2013)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: 0 (2013)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: 11 (2012)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: 100 (2013)

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: 3 (2013)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: 15 (2013)

Green space to which the public has access – km<sup>2</sup>: 2 (2013)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 13 (2013)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 5.5 (2013)

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: [www.ayto-villacanada.es](http://www.ayto-villacanada.es)  
[http://en.wikipedia.org/wiki/Villanueva\\_de\\_la\\_Cañada](http://en.wikipedia.org/wiki/Villanueva_de_la_Cañada)  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Vitoria-Gasteiz, Spain



Population (2012): 236 000  
 Population density: 860 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



## Twin cities with, since:

- Anaheim, CA, United States
- Angouleme, France
- Cogo, Equatorial Guinea
- Lagouria, Western Sahara
- Ibague, Colombia
- Kutaisi, Georgia
- Victoria, TX, United States
- Vitoria, Brazil

## Core data

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
<b>Health indicator</b>		
<b>Mortality</b>		
Crude mortality per 1000 inhabitants: 7.5 (2012)	8.8	9.3
<b>Environmental indicators</b>		
<b>Air quality</b>		
Number of days annually ozone (O <sub>3</sub> ) concentrations exceed 120 µg/m <sup>3</sup> : <i>not available</i>	12	7
Number of days annually nitrogen dioxide (NO <sub>2</sub> ) concentrations exceed 200 µg/m <sup>3</sup> : <i>not available</i>	0	0
Number of days annually particulate matter (PM <sub>10</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	21	20
Number of days annually particulate matter (PM <sub>2.5</sub> ) concentrations exceed 50 µg/m <sup>3</sup> : <i>not available</i>	Not available	17
<b>Water quality</b>		
Percentage of water pollutants removed from sewage produced: <i>not available</i>	100	96
<b>Waste</b>		
Municipal waste generated (domestic and commercial), in thousands of tonnes: <i>not available</i>	66	211
<b>Green space in cities</b>		
Surface area of green spaces in the city – km <sup>2</sup> : <i>not available</i>	Not available	34
Green space to which the public has access – km <sup>2</sup> : <i>not available</i>	Not available	39
<b>Healthy transport</b>		
Length of cycling network (dedicated cycle paths and lanes) – km: <i>not available</i>	73	90
Percentage of commuting trips by public transport (rail, metro, bus, tram): 12 (2008)	15	14
<b>Social indicator</b>		
<b>Unemployment</b>		
Unemployed people as % of the economically active population: <i>not available</i>	9.4	10.5

Further information: <http://en.wikipedia.org/wiki/Vitoria-Gasteiz>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Warsaw, Poland



**Population (2012):** 1.7 million  
**Population density:** 3304 per km<sup>2</sup>  
**Economy:** decline – stable – **growth**  
**Healthy city in:**



Phase I Phase II Phase III Phase IV **Phase V**

## Twin cities with, since:

- Astana, Kazakhstan, 2002
- Berlin, Germany, 1991
- Budapest, Hungary, 2005
- Buenos Aires, Argentina, 1992
- Coventry, United Kingdom, 1957
- Chicago, IL, United States, 1960
- Düsseldorf, Germany, 1989
- Grozny, Russian Federation, 1997
- The Hague, Netherlands, 1991
- Hamamatsu, Japan, 1990
- Hanoi, Viet Nam, 2000
- Harbin, China, 1993
- Île-de-France, France, 1990
- Istanbul, Turkey, 1991
- Kyiv, Ukraine, 1994
- Madrid, Spain, 1981
- Moscow, Russian Federation
- Oslo, Norway, 2005
- Paris, France, 1999
- Rio de Janeiro, Brazil, 1997
- Riga, Latvia, 2002
- Saint-Etienne, France, 1995
- St Petersburg, Russian Federation, 1997
- San Diego, CA, United States, 1960
- Seoul, Republic of Korea, 1996
- Taipei, Taiwan, China, 1995
- Tel Aviv, Israel, 1992
- Vienna, Austria, 2001
- Vilnius, Lithuania, 1998

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: **10.8** (2012) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: **7** (2011)

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: **0** (2011)

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **58** (2011)

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: **58** (2011)

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: **548** (2012)

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: **86** (2008)

Green space to which the public has access – km<sup>2</sup>: **3678** (2008)

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: **291.8** (2008)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

**Median, WHO  
European Region  
(2011)**

**Median, members  
of the WHO  
European Healthy  
Cities Network**

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

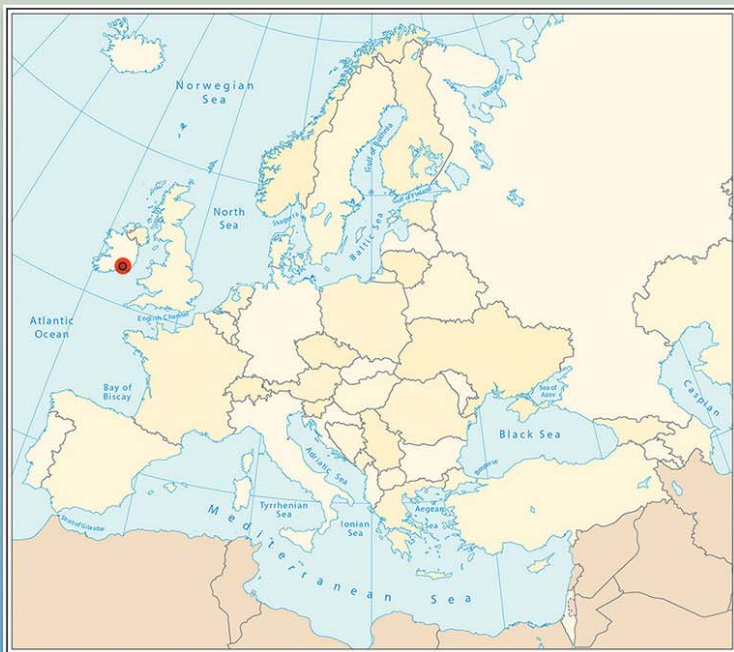
14

9.4

10.5

**Further information:** <http://www.um.warszawa.pl/en>  
<http://en.wikipedia.org/wiki/Warsaw>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>

# Waterford, Ireland



Population (2012): 46 000  
 Population density: 1100 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Twin cities with, since:

- Waterford, CT, United States
- Rochester, NY, United States
- St. John's, Canada
- Saint-Herblain, France

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: 7.5 (2011) *estimated*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: 19 (2011)

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: 22.2 (2011) *estimated*

	Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
	8.8	9.3
	12	7
	0	0
	21	20
	Not available	17
	100	96
	66	211
	Not available	34
	Not available	39
	73	90
	15	14
	9.4	10.5

Further information: <http://www.waterfordcouncil.ie/en>  
<http://en.wikipedia.org/wiki/Waterford>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>



# Yalova, Turkey



Population (2012): 204 000

Population density: 730 per km<sup>2</sup>

Economy: decline – stable – **growth**

Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Bonn, Germany
- Ohrid, the former Yugoslav Republic of Macedonia
- Suwon, Republic of Korea
- Medgidia, Romania
- Batumi, Georgia

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO  
European Region  
(2011)

Median, members  
of the WHO  
European Healthy  
Cities Network

8.8

9.3

12

7

0

0

21

20

Not available

17

100

96

66

211

Not available

34

Not available

39

73

90

15

14

9.4

10.5

Further information: <http://www.yalova.bel.tr>  
<http://en.wikipedia.org/wiki/Yalova>  
<http://data.worldbank.org>

# Zagreb, Croatia



Population (2012): 780 000  
 Population density: 4200 per km<sup>2</sup>  
 Economy: *decline* – stable – growth  
 Healthy city in:



Phase I Phase II Phase III Phase IV Phase V

Twin cities with, since:

- Mainz, Germany, 1967
- St Petersburg, Russian Federation, 1968
- Tromsø, Norway
- Lisbon, Portugal, 1977
- Pittsburgh, PA, United States, 1980
- Ahmedabad, India, 1962
- Buenos Aires, Argentina, 1972
- Kyoto, Japan, 1972
- Shanghai, China, 1980
- Bologna, Italy, 1963
- Budapest, Hungary
- Vienna, Austria
- Sarajevo, Bosnia and Herzegovina
- Ljubljana, Slovenia
- London, United Kingdom
- Podgorica, Montenegro
- Prizren, Kosovo (in accordance with Security Council resolution 1244 (1999))

## Core data

### Health indicator

#### Mortality

Crude mortality per 1000 inhabitants: *not available*

### Environmental indicators

#### Air quality

Number of days annually ozone (O<sub>3</sub>) concentrations exceed 120 µg/m<sup>3</sup>: *not available*

Number of days annually nitrogen dioxide (NO<sub>2</sub>) concentrations exceed 200 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>10</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

Number of days annually particulate matter (PM<sub>2.5</sub>) concentrations exceed 50 µg/m<sup>3</sup>: *not available*

#### Water quality

Percentage of water pollutants removed from sewage produced: *not available*

#### Waste

Municipal waste generated (domestic and commercial), in thousands of tonnes: *not available*

#### Green space in cities

Surface area of green spaces in the city – km<sup>2</sup>: *not available*

Green space to which the public has access – km<sup>2</sup>: *not available*

#### Healthy transport

Length of cycling network (dedicated cycle paths and lanes) – km: *not available*

Percentage of commuting trips by public transport (rail, metro, bus, tram): *not available*

### Social indicator

#### Unemployment

Unemployed people as % of the economically active population: *not available*

Median, WHO European Region (2011)	Median, members of the WHO European Healthy Cities Network
8.8	9.3
12	7
0	0
21	20
Not available	17
100	96
66	211
Not available	34
Not available	39
73	90
15	14
9.4	10.5

Further information: <http://www.zagreb.hr>  
<http://en.wikipedia.org/wiki/Zagreb>  
<http://epp.eurostat.ec.europa.eu>  
<http://data.worldbank.org>  
<http://www.stampar.hr/Default.aspxsec=177>





The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

#### Member States

Albania  
Andorra  
Armenia  
Austria  
Azerbaijan  
Belarus  
Belgium  
Bosnia and Herzegovina  
Bulgaria  
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Cyprus  
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Switzerland  
Tajikistan  
The former Yugoslav Republic of Macedonia  
Turkey  
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Ukraine  
United Kingdom  
Uzbekistan

# City fact sheets

## WHO European Healthy Cities Network

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Regional Office for Europe**

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