

THEME	SPATIAL SCALE	PERIOD	ORIGINAL SOURCE HOLDER*	COMMENTS
Air pollution (Escape)^T	Address, PC6	2009	Institute of Risk Assessment Sciences (IRAS), European Study of Cohort for Air Pollution Effects (ESCAPE)	Annual average outdoor air pollution concentrations (e.g., NO ₂ , NO _x , PM _{2.5} , PM ₁₀ , PM _{2.5} absorbance)
Air pollution (Escape)^T	Neighborhood	2009	Institute of Risk Assessment Sciences (IRAS), European Study of Cohort for Air Pollution Effects (ESCAPE)	Annual average outdoor air pollution concentrations (e.g., NO ₂ , NO _x , PM _{2.5} , PM ₁₀ , PM _{2.5} absorbance)
Air pollution ^G PM_{2.5} PM₁₀ NO₂ SOOT (EC)	Address, PC6 (25 m raster)	2013, 2014, 2015, 2016, 2017 (NO ₂ not for 2013)	Institute for Public Health and the Environment (RIVM), Atlas Leefomgeving (ALO), http://www.atlasleefomgeving.nl	Annual average outdoor pollution concentrations modeled / interpolated on the basis of measurement data, traffic data and the physical environment. All data can be viewed in https://www.atlasleefomgeving.nl/kaarten
Air pollution GCN ^G C₆H₆ (benzeen) CO (koolmonoxide) CO (koolmon. p98) PM_{2.5} (fijnstof) PM₁₀ (fijnstof) NH₃ (ammoniak) NO₂ (stikstofdioxide) NO_x (stikstofoxiden) O₃ (ozon) SOOT (EC - roet) SO₂ (zwaveldioxide)	1x1 km	2011-2018 (C ₆ H ₆) 2011-2018 (CO) 2011-2018 (CO) 2007-2018 (PM _{2.5}) 1995-2018 (PM ₁₀) 2011-2018 (NH ₃) 1995-2018 (NO ₂) 2011-2018 (NO _x) 2011-2018 (O ₃) 2011-2018 (SOOT – EC) 2011-2018 (SO ₂)	Institute for Public Health and the Environment (RIVM). GCN large scaled concentration and deposition maps	Annual average outdoor pollution concentrations based on a combination of model calculations and measurements from official measurement locations. SOOT (EC) maps must be seen as indicative only. Apart from 'benzeen' (C ₆ H ₆) and 'koolmonoxide' (CO) modeled future concentrations of all variables are available for the years 2020, 2025 and 2030.

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Accessibility ^T	PC4	1998 till 2003 (yearly), 2005	ABF Research (SWING Vastgoedmonitor 2007)	Data on accessibility (e.g., number of jobs and green spaces that can be reached via the road or by train within a certain time (15, 30, 45, 60 minutes)
Accessibility of population ^T Accessibility of households ^T	PC4	2013	ABF Research (Real Estate Monitor 2015)	Data on accessibility of population and households (e.g., number of individuals and households that can be reached by bike or by car within a certain time (15, 30,45,60 minutes)
Altitude (AHN) ^G	Address, PC6 (raster 50 cm – 25 m)	Ca. 2000 (AHN 1) Ca. 2010 (AHN 2) Ca. 2018 (AHN 3)	Cooperation of provinces, central government and water boards	The altitude map of the Netherlands is a raster product available on different horizontal scale levels ranging from 25 meter resolution (AHN-1) to 50 cm resolution (AHN-3)
Basisregistratie Adressen en Gebouwen (BAG) ^G	Address, PC6 1:2.500 (vector – point/polygon)	2015	Kadaster	Vector dataset with houses, addresses and attribute data on utilization functions, construction year and area.
Bicycle paths BGT and TOP10 ^G	Address, PC6 1:5.000 - 1:10.000 (vector – polygon)	2019	Kadaster	Selections from polygons in the BGT and lines in the TOP10 concerning respectively separate bicycle paths (BGT), designated bicycle lanes or mixed roads (TOP10)

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Bicycle path density ^G	Neighborhood	2019 (for neighborhood boundaries 2016)	Landelijk Fietsplatform, Kadaster	This dataset combines bicycle paths from two lines sources (TOP10 and Landelijk fietsplatform) and one polygon input source (BGT). All data is transformed to polygons and summarized as area density per neighborhood.
Bicycle and walking networks ^G	Address, PC6 1:10.000 (vector - line)	2019 (continuously updated by provider)	Landelijk Fietsplatform and Wandelnet via https://www.routedatabank.nl	These datasets include cycling and walking routes, networks and transport nodes and are based on TOP10 NL road data.
Childcare facilities ^T	PC4	2011 till 2015 (yearly)	National Childcare and Playgroup Register (Real Estate Monitor 2015)	Data on a range of childcare facilities (e.g., number of KDV's, BSO's and playgroups)
Cultural facilities ^T	PC4	2001 till 2007 (yearly)	Museum Association (SWING Vastgoedmonitor 2007) Netherlands Theatre Institute (SWING Vastgoedmonitor 2007) Dutch Federation for Cinematography (SWING Vastgoedmonitor 2007) Adresdata / ABF Research (Real Estate Monitor 2015)	Data on a range of cultural facilities (e.g., number of museums, theatres, poppodia and cinema's)
Educational facilities ^T	PC4	1996 till 2007 (yearly)	Centrale Financiën Instellingen (CFI) (SWING Vastgoedmonitor 2007)	Data on educational facilities (e.g., number of educational facilities and number of students stratified for educational level, sex, and age)

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Food environment healthiness-index ^G	Neighborhood	2016	LOCATUS	Index score (food environment healthiness index) between -5 and + 5 according to FEHI score list by Poelman et al., 2018. The data is aggregated to neighbourhoods using point density kernels to prevent MAUP (Modifiable Areal Unit Problem) issue.
Green space ^G Green space Trees Tree height Shrubs Low vegetation	Address, PC6 (10 m raster)	2017	Institute for Public Health and the Environment (RIVM), Atlas Leefomgeving (ALO), http://www.atlasleefomgeving.nl	Different datasets related to green space were assembled by the RIVM on a 10x10 meter resolution expressed as percentage green, trees, shrubs or low vegetation per grid cell and is derived from the AHN2 and AHN3 files (“Actueel Hoogtebestand Nederland”, resolution of 0.5 m), the BAG buildings (“Basisregistratie Adressen en Gebouwen”) and the Infrared aerial photo (CIR file, resolution of 0.25 m).
Green space density ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	1989, 1993, 1996, 2000, 2003, 2006, 2008, 2010, 2012, 2015	Statistics Netherlands (CBS)	Greenspace density as Z-scores based on CBS soilstatistics (BBG bodengebruiksbestanden). The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).
Health care facilities ^T	PC4	2003-2007 (yearly)	Vestigingen en bedden in de zorg (SWING Vastgoedmonitor 2007)	Data on health care facilities (e.g., number of several specific health care facilities)

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House transactions and average house prices^T	PC4	2000 till 2015 (yearly)	Kadaster (Real Estate Monitor 2015)	Data on transactions and average house prices (e.g., number of transactions stratified for house type, and average house price stratified for house type)
Housing benefits^T	PC4	1998 till 2006 (yearly)	Belastingdienst (SWING Vastgoedmonitor 2007)	Data on housing benefits (e.g., data on recipients and height/sum of housing benefits)
Housing stock^T	PC4	1998 till 2007 (yearly)	ABF Research (SYSWOV 2007)	Data on housing stock. (e.g., number of owner-occupied and rental housing, social rent, and housing stock stratified for house type)
Income^T	PC4	2009, 2012	Statistics Netherlands (CBS)	Data on income (e.g., disposable income, capital and households in PC4 areas)
Key statistical figures^G	100x100 m. (‘CBS vierkantstatistieken’) PC6 / PC4	2011 till 2018 (yearly) 2000 till 2018	Statistics Netherlands (CBS)	The CBS dataset vierkantstatistieken contains basic statistics on number of inhabitants, dwellings, residential density and urbanity for all years and additional statistics from 2011 onwards including densities of and distances to several destination types. Number of available variables in postcode 4 and 6 areas depends of exact year.

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Key statistical figures ^T	PC6	2004, 2010	Statistics Netherlands (CBS)	Data on key figures (e.g., demographics, income, immigrants, housing stock)
Key statistical figures ^G	PC4	1998 till 2017 (yearly)	Statistics Netherlands (CBS)	Data on key figures (sex and age of inhabitants, household composition, % immigrants) with additional statistics from 2015 onwards
Land use ^G	Address, PC6 1:10.000 (vector – polygon)	1996, 2000, 2008, 2010, 2012, 2015	Statistics Netherlands (CBS)	Classification in 9 main land use classes and ca. 40 subclasses. Land use data also exists for 1989, 1993, 2003 and 2006. These datasets can be requested at CBS.
Land use mix / entropy index ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	1989, 1993, 1996, 2000, 2003, 2006, 2008, 2010, 2012, 2015	Statistics Netherlands (CBS)	Land use mix or entropy index as Z-scores based on CBS soilstatistics (BBG bodemgebruiksbestanden). The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).
Land use ^T	PC4	1996 till 2003 (yearly)	Statistics Netherlands (CBS)	Data on land use (e.g., hectares/percentages of urban/rural land use, green spaces, forests, parks traffic, public facilities, recreational areas, etc)

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Livability ^T	PC4	1998, 2002, 2006, 2008, 2010, 2012	Dutch Ministry of the Interior and Kingdom Relations	Data on livability (Livability scores are based on population, social cohesion, public space, safety, level of resources, and housing)
Living environment typology ^T	PC4	2006, 2015	ABF Research (SWING Vastgoedmonitor 2007) Strabo – Bureau voor Ruimtelijk Marktonderzoek (Real Estate Monitor 2015)	Data on area types (e.g., center - urban, outside center, green-urban)
Neighbourhood characteristics ^G	Neighbourhood	1995, 1997, 1999, 2001, 2002, 2003, 2004 , 2005 , 2006 , 2007 , 2008 , 2009 , 2010 , 2011 , 2012 , 2013 , 2014 , 2015 , 2016 , 2017 , 2018 , 2019	Statistics Netherlands (CBS)	Data on neighbourhood characteristics. This concerns data on for example urbanization, population, living, energy consumption, education, labor, income, social security, businesses, motor vehicles, area, land use, average distance to specific facilities, and average number of specific facilities within a radius around occupied addresses in a neighbourhood). We have also neighborhood maps of 1988, 1993 and 1994, but these lack statistical data.
Noise railways 2016 ^G	Address, PC6	2016	Ministry of I&W	Data only available for 'hoofdspoornet' (main railway system) for day and night (noise in Lden)

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Noise Schiphol airport 2016 ^G	Address, PC6	2016 (measurement period nov. 2015-nov. 2016)	Ministry of I&W	Separate data available for day and night (noise in Lden)
Noise traffic - daily mean (mixed road, rail and air) ^T	Address, PC6, PC4	2000, 2004, 2005, 2007 and 2008	PBL Netherlands Environmental Assessment Agency	Modeled data with Empara noise tool with 25x25 m resolution on traffic noise (mixed road, rail and air traffic noise in dB) in 2000, 2004, 2005, 2007 and 2008.
Noise traffic - daily mean (road only) ^T	Address, PC6, PC4	2000, 2004, 2007, 2008, 2010 and 2011	PBL Netherlands Environmental Assessment Agency	Modeled data with Empara noise tool with 25x25 m resolution on road noise in dB in 2000, 2004, 2005, 2007, 2008, 2010 and 2011. Several factors are accounted including traffic intensity, road types and sound barriers.
Noise traffic - national roads ^G (highways)	Address, PC6	2006, 2011 and 2016	Rijkswaterstaat	Separate data available for day and night (noise in Lden)
Offices, retail, and businesses ^T	PC4	1990 till 2014 (yearly)	VROM – DG Ruimte/IBIS (SWING Vastgoedmonitor 2007) Strabo – Bureau voor Ruimtelijk Marktonderzoek (SWING Vastgoedmonitor 2007)	Data on offices, retail, and businesses (e.g., number of leased and owned properties and price/m2)

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Parking density ^G	Neighborhood	2019	Kadaster / RDW	Derived from dataset 'Parking places'. Statistical summaries have been made for the neighborhood borders of 2016. Variables include: total number of parking places, number of parking places per household, number of parking places per hectare, ratio number of cars / number of parking places.
Parking places ^G	Address, PC6 1:2.500 – 1:10.000	2019 (public/paid parking space) 2015 (private built-up parking space)	Kadaster / RDW	This dataset is a combination of data from the BGT, TOP10, BAG and RDW. The BAG data for private built-up parking spaces concerns the year 2015, the other data concerns 2019. Data is produced as polygon data and as derived point data.
Population and Households ^T	PC4	1998 till 2014 (yearly)	Statistics Netherlands (CBS)	Data on population and households (e.g., number of men and women stratified for age, number of households stratified for type, and information on immigrants)

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Population density ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	Yearly from 2000 to 2017 (100 m res.) 1995, 1997, 1999 (neighborhood res.)	Statistics Netherlands (CBS)	Population density as Z-scores based on CBS vierkantstatistieken (100x100 meter grid) for the years 2000 until 2017 and CBS buurtstatistieken for the years 1995, 1997 and 1999. The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).
Post offices ^T	PC4	2005	Postkantoren B.V. (SWING Vastgoedmonitor 2007)	Data on post offices (e.g., number of post offices (per 10000 residents))
Poverty ^G	PC4 / neighbourhood	2017	The Netherlands Institute of Social Research (SCP)	Percentage of 'poor' people according to SCP definitions per postcode 4 area and neighborhood in 2017
Primary education ^T	PC4	2001 till 2015 (yearly)	The Education Executive Agency of the Dutch Ministry of Education, Culture, and Science (Real Estate Monitor 2015)	Data on facilities regarding primary education. (e.g., number of schools and number/percentage of pupils stratified for age and sex)

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Public transport stops ^G	Address, PC6 (points)	2015 (update 2018)	Geodienst Rijksuniversiteit Groningen / databank Nationale Data Openbaar Vervoer (NDOV)	This is a point dataset with all public transport stops in the Netherlands (bus, ferry, metro, taxi, tram). Train stations are not part of this dataset. Public transport data is also available via OpenStreetMap, but less complete.
Railway stations / lines ^G	Address, PC6 (points/ lines)	2019	Prorail Database – made available by Esri Nederland Datasets.	This is a point and line dataset with respectively all railway stations in the Netherlands classified in different station types and the route network of all railways.
Retail and service destinations density ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	1989, 1993, 1996, 2000, 2003, 2006, 2008, 2010, 2012, 2015	Statistics Netherlands (CBS)	Retail and service destinations density as Z-scores based on CBS soilstatistics (BBG bodemgebruiksbestanden). The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).
Retail outlets ^T	PC4	2004 till 2019 (yearly)	Locatus	Various exposure measures on retail outlets specific for category of retail (e.g., fastfood outlets, supermarkets, greengrocers)

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Road density ^G	Neighbourhood	2015	Kadaster	The (car)road density is derived from the dataset TOP10 NL 2015 (line feature layer WEGDEEL_HARTLIJN).
Road speed – national roads ^G	Address, PC6 (lines)	2004-2012 (yearly) 2013-current (monthly)	Rijkswaterstaat, Ministry of Infrastructure and Water Management; WEGGEG-bestand RWS	This dataset contains the maximum speed per road section of the national roads
Road speed – all roads NWB ^G	Address, PC6 (lines)	2016-current (monthly)	Rijkswaterstaat, Ministry of Infrastructure and Water Management; WKD - WegKenmerken Database	This dataset contains the maximum speed limits per road section of all roads in the NWB (Nationaal WegenBestand)
Secondary education ^T	PC4	2005 till 2015 (yearly)	The Education Executive Agency of the Dutch Ministry of Education, Culture, and Science (Real Estate Monitor 2015)	Data on facilities regarding secondary education. (e.g., number of schools, and number/percentage of students stratified for sex, age, and educational level)
Side walk density ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	1989, 1993, 1996, 2000, 2003, 2008, 2012, 2015, 2019	Kadaster	Side walk density as Z-scores based on Basisregistratie Grootchalige Topografie (BGT). The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).

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Socio-economic status ^T	PC6	2008	Statistics Netherlands (CBS)	Data on socio-economic status (e.g., high/low incomes, benefits)
Socio-economic status scores ^G	PC4, neighborhood	PC4: 1998, 2002, 2006, 2010, 2014, 2016, 2017 Neighborhood: 2016	The Netherlands Institute of Social Research (SCP)	Socio-economic status scores (Socio-economic scores are based on: education, income and position in the labor market)
Special education ^T	PC4	2004 till 2015 (yearly)	The Education Executive Agency of the Dutch Ministry of Education, Culture, and Science (Real Estate Monitor 2015)	Data on facilities regarding special education. (e.g., number of schools, and number/percentage of students stratified for sex)
Sport accommodations ^G	Address, PC6	2011-2017 (data collection period)	Mulier Instituut	Point data on type and location of sport accommodations

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Sport accommodations ^T Sport associations ^T Sport facilities ^T	PC4	2010 till 2015 (yearly) 2006 till 2015 (yearly) 2001 till 2007 (yearly)	Royal Dutch Athletics Federation (Real Estate Monitor 2015) Voetbalgids.com (Real Estate Monitor 2015) Skibanen in Nederland (Real Estate Monitor 2015) Royal Dutch skating Association (Real Estate Monitor 2015) ZwembadGids (Real Estate Monitor 2015) Royal Dutch Baseball and Softball Federation (Real Estate Monitor 2015) Royal Dutch Korfbal Union (Real Estate Monitor 2015) Royal Dutch Lawn Tennis Federation (Real Estate Monitor 2015) Dutch Rugby Association (Real Estate Monitor 2015) Voetbalgids.com (Real Estate Monitor 2015) BSvL – Nederlandse Sport Almanak (NSA) (SWING Vastgoedmonitor 2007)	Data on sport accommodations, sport associations, and sport facilities (e.g., number of specific sport accommodations, sport associations and sport facilities).
Street connectivity ^{GT}	Address, PC6, PC4, 25 m raster and neighborhood	1989, 1993, 2001, 2003, 2012, 2015, 2019	Kadaster / DANS-KNAW	Street connectivity as Z-scores based on TOP10 road intersection data. The address level data is produced for 8 different neighborhood radii (150-, 250-, 350-, 500-, 750-, 1000-, 1650 and 2000 meter).

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Temperature (daily average, minimum and maximum) ^{GT}	1x1 km	1961-current (daily update)	KNMI (Koninklijk Nederlands Meteorologisch Instituut) DataCentrum	This dataset involves grid files of interpolated daily average temperature values for the Netherlands, based on 33-35 KNMI automatic observation stations. From the available time period data was downloaded and converted to tif format and linked to PC6 centroids for the days from 1 October 2017 to 30 June 2018.
Topography (TOP10 NL - Basisregistratie Topografie (BRT)) ^G	Address, PC6 1:10.000	2003, 2005, 2010, 2011, 2012, 2013, 2015, 2019	Kadaster	Vektor data (points, lines, polygons) regarding road and water infrastructure, terrain features, built-up area, etc. Note that specific data on roads is available in the NWB (Nationaal Wegen Bestand) from 1982 onwards.
Topography – large scale (Basisregistratie Grootchalige Topografie - BGT) ^G	Address, PC6 1:5.000	2017, 2019	Kadaster	Vector dataset with detailed topographic features, such as sidewalks, parking places, tree locations, street furniture, etc.
Traffic incidents ^G	Address, PC6	2003 t/m 2017	Bestand geRegistreerde Ongevallen Nederland (BRON)	Provided via ESRI NI datasets
Travel time ^T	PC4	2011	Object Vision B.V.	Data on travel time between all PC4 areas

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[Walkability Index](#)^{GT}

Address, PC6, PC4,
neighborhood

1989, 1993, 1996, 2000, 2003,
2006, 2008, 2010, 2012, 2015

VUmc Amsterdam, GECCO project

Composite score based on six components:
1) Population density, 2) Density of retail
and service destinations (retail
environment), 3) Land-use mix, 4) Street
connectivity (intersection density), 5) Green
space, 6) Side walk surface area.

* Terms and conditions may apply via the original source holders

^T Data available as table data only, converted to GIS data on request

^G Data available as GIS data, extracted to table data on request

^{GT} Data available as GIS AND table data