

# **Canadian Urban Environmental Health Research Consortium**

Date range: 1983 – 2022 (various)

All CANUE data currently available at Population Data BC and the years they are available for. For further information on each data file and included fields, see <a href="https://www.canuedata.ca/metadata.php">https://www.canuedata.ca/metadata.php</a>

## **Air Quality Datasets**

Data File Name	Years Available	Description
Air Pollution Index	2012, 2013, 2014	Air Pollution Index
Smoke Exposure	2010-2022	The Canadian Optimized Statistical Smoke Model
Nitrogen Dioxide (NO2)	1984-2016	NITROGEN DIOXIDE - annual land use regression-based concentration estimate, 1984 to 2012
Ozone (O3)	2002-2015	GROUND-LEVEL OZONE - annual modelled concentration estimate, 2002 to 2015
Fine Particulate Matter (PM2.5 v1)	2000-2012	FINE PARTICULATES (PM2.5) - 3-year running annual satellite-based concentration estimate
Fine Particulate Matter (PM2.5 v2)	2000-2016	Air Quality Fine Particulate Matter (PM2.5 v2)
Fine Particulate Matter (PM2.5 v3)	2000-2018	Air Quality Fine Particulate Matter (PM2.5 v3)
Fine Particulate Matter (PM2.5 v4)	1998-2020	Air Quality Fine Particulate Matter (PM2.5 v4)
Fine Particulate Matter (PM2.5 v5)	1998-2021	Air Quality Fine Particulate Matter (PM2.5 v5)
Sulfur Dioxide (SO2)	2007-2015	SULFUR DIOXIDE - 3-year running annual OMI satellite-based concentration estimate

## **Greenness Datasets**

Data File Name	Years Available	Description
AVHRR - NDVI	1985-2013	AVHRR ANNUAL and GROWING SEASON NDVI - annual mean and maximum, and growing season (May 1st to Aug 31st) maximum normalized difference vegetation index
Landsat - Annual	1984-2019	LANDSAT ANNUAL MEAN NDVI - annual mean normalized difference vegetation index files
Landsat - Growing Season	1984-2019	LANDSAT ANNUAL MEAN NDVI - growing season
Landsat - Greenest Pixel	1984-2017	LANDSAT ANNUAL MEAN NDVI - greenest pixel
MODIS - Annual Mean	2000-2023	MODIS ANNUAL MEAN NDVI - annual mean normalized difference vegetation index files
MODIS - Annual Max	2000-2023	MODIS ANNUAL MAX NDVI - annual max normalized difference vegetation index files
MODIS - Growing Season Mean	2000-2023	MODIS ANNUAL MEAN NDVI - annual mean normalized difference vegetation index files (growing season)
MODIS - Growing Season Max	2000-2023	MODIS ANNUAL MAX NDVI - annual max normalized difference vegetation index files (growing season)
Tree Canopy Coverage	2010, 2015	Tree Canopy Coverage
Vegetative Greenness Fractions	1984-2016	percentage of green vegetation within each 30m x 30m pixel, indication of both area coverage and intensity of all green vegetation within a pixel

# **Neighbourhood Datasets**

Data File Name	Years Available	Description
Active Living Environments	2006, 2016	CANADIAN ACTIVE LIVING ENVIRONMENTS- community active living friendliness, 2006 and 2032
Can-BICS Metrics	2021	CANADIAN BIKEWAY COMFORT AND SAFETY CLASSIFICATION SYSTEM (CAN-BICS)  METRICS (NHBIC_AVA_YY)
Canadian Marginalization Index	1991, 1996, 2001, 2006, 2016	CANADIAN MARGINALIZATION INDEX - indices of SES at the dissemination level
Street Network Files - DMTI Spatial Inc	1994-2018	Street network files from DMTI Spatial Inc
Hydrology Files - DMTI Spatial Inc	1983-2019	Hydrology files from DMTI Spatial Inc.
Gentrification, Urban Interventions, and Equity	2016	The Gentrification, Urban Interventions, and Equity (GENUINE) Tool is a map-based gentrification tool for Canadian metro areas.
Material and Social Deprivation Index	1991, 1996, 2001, 2006, 2011, 2016, 2021	The National Material and Social Deprivation Indices (MSDI)
Nighttime Light	1992-2013	DMSP-OLS NIGHTTIME LIGHT - annual average nighttime brightness
Canadian Access to Employment	2016	ACCESS TO EMPLOYMENT - measures of employment in Canada's eight largest urban regions
Building Density	2019	Measure of building density for all Canadian postal codes
Facility Index	2019	Neighborhood Facility Index
Green Roads	2016	Neighborhood Green Roads
Noise	1991-2019	Neighborhood Noise
Proximity Measures - StatsCan	2019	Neighborhood Proximity Measures - StatsCan
Street Connectvitiy	2019	Neighborhood Street Connectivity
Urban Sprawl	2011, 2016	Neighborhood Urban Sprawl
Public Transportation	2019	Neighborhood Public Transportation
Can-FED Dataset	2018	CANADIAN FOOD ENVIRONMENT DATASET (CAN-FED)
Spatial Accessibility Measures	2021	Spatial Accessibility Measures - access to services and amenities calculated for both public transportation and active transportation
Dwellings Needing Repair	2016, 2021	Dwellings Needing Repair - proportion of dwellings needing major repair taken from census datasets

## **Weather Datasets**

Data File Name	Years Available	Description
Land Surface Temperature	2015-2021	LAND SURFACE TEMPERATURE
Local Climate Zone	1986, 1991, 1996, 2001, 2006, 2011, 2016	LOCAL CLIMATE ZONES - categorized descriptions of climate zones located at postal code level
Water Balance Metrics	1985-2015	Weather Water Balance Metrics
Climate Metrics	1983-2015	Climate Metrics